Univerza *v Ljubljani*

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SKUPNI INTERDISCIPLINARNI PROGRAM DRUGE STOPNJE KOGNITIVNA ZNANOST
V SODELOVANJU Z UNIVERSITÄT WIEN, UNIVERZITA KOMENSKÉHO V BRATISLAVE IN
EÖTVÖS LORÁND TUDOMÁNYEGYETEM

Klemen Trupej

Formulation of guidelines for a more ethical user experience design

Master Thesis

Ljubljana, 2021

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Mentor: doc. dr. Toma Strle

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Izvleček

Naslov: Izdelava smernic za bolj etično oblikovanje uporabniške izkušnje

Oblikovanje uporabniške izkušnje (angl. User Experience Design – UXD) mnogokrat ni osnovano na etičnem razmisleku zato oblikovalec uporabniške izkušnje nima smernic, na katere bi se lahko naslonil pri razmisleku o etičnih implikacijah UXD. Kljub temu da trenutno obstajajo npr. GDPR regulacije – za mobilne aplikacije in spletne strani – (General Data Protection Regulation (GDPR) – Official Legal Text, n.d.) in regulacije znotraj platform (App Store in Google Play – samo za mobilne aplikacije), ki ne dovoljujejo aplikacij z npr. žaljivo, brezčutno vsebino (App Store Review Guidelines - Apple Developer, n. d.), ali ščitijo varovanje zasebnosti, je področje v glavnem neregulirano. Ta manko etičnega razmisleka o implikacijah UXD odpira vrata nemoralnim praksam v UXD: ustvarjanju škodoželjnih vmesnikov, ki vodijo uporabnika v klikanje neželenih gumbov, izvajanju A/B raziskav znotraj aplikacij in spletnih mest brez vednosti uporabnika, manipuliranju vedenja uporabnikov, zlorabljanju zasebnosti, neupoštevanju uporabnikove avtonomije in drugim. V svojem magistrskem delu sem želel razmisliti, kako bi lahko tendenca k vrlinam vodila do manj nemoralnih praks, in s tem postaviti osnovo za smernice za bolj etično oblikovanje uporabniške izkušnje. Pri diskusiji etike v UXD sem uporabil sodobni praktični pristop v etiki, etiko vrlin, ki postavlja v ospredje karakterne značilnosti moralnega odločevalca ali t. i. deležnika (Hursthouse, 2014; Kawall, 2014; Van Zyl, 2018). V proces UXD je vpletenih več deležnikov, med drugim naročnik, oblikovalec uporabniške izkušnje, oblikovalec uporabniškega vmesnika, programer, tekstopisec in uporabnik. V svojem delu sem želel predstaviti pomembnost karakterja vseh vključenih in ne samo npr. naročnika ali oblikovalca uporabniške izkušnje.

Za dosego cilja sem definiral osnovne korake, ki so skupni pri izdelavi različnih artefaktov v UXD (osredotočil se bom na mobilne aplikacije, spletne strani in programe), in ugotavljal, kateri deležniki so vključeni v vsakega od procesov in kakšne so njihove odgovornosti (torej kakšne naloge ima vsak od njih; npr. oblikovanje uporabniškega vmesnika je naloga oblikovalca). Raziskal sem, kako UXD vpliva na ljudi, in sicer kdaj je lahko dobrodejen, koristen in kdaj škodljiv. Ta del dela je bil, skupaj z odgovornostmi deležnikov, osnova za razmislek o povezavi med tendenco do vrlin in področjem oblikovanja uporabniške izkušnje.

Rezultat dela je predlog smernic, tj. predstavitev konkretnih primerov, kako bi naravnanost agentov do vrlin lahko vodila do specifičnih vedenj, ki bi lahko predsta-

vljala bolj etični UXD. Končni razmisleki dela bodo objavljeni na kolaborativni spletni strani, ki bo k sodelovanju povabila strokovnjake s tega področja.

Ključne besede: oblikovanje uporabniške izkušnje, uporabniški vmesnik, interakcija med človekom in računalnikom, etika, etika vrlin, vrline

Abstract

User experience design (UXD) often appears unethical, and creators of user experience do not have guidelines that could assist with moral decisions. Even though there are GDPR regulations (General Data Protection Regulation (GDPR) – Official Legal Text, n.d.) for mobile applications and websites, and platforms specific regulations (App Store and Google Play – only for mobile applications), that do not allow applications with insulting nature (App Store Review Guidelines - Apple Developer, n.d.), or are trying to protect privacy, the field is mainly unregulated. This shortcoming of thinking about ethics could open doors to unethical practices in UXD, such as creating malicious user interfaces that trick users into clicking certain buttons, performing 'behind the scenes' A/B research inside the mobile applications or websites without users' knowledge, manipulating users through user-experience, abusing privacy of users, and others. In this thesis, I discuss how disposition towards virtuous behavior could lead to a more ethical UXD and create a foundation for guidelines. In the discussion about ethics, I use one of the three contemporary approaches in normative ethics, called virtue ethics, which puts forth the character of a person who is making a moral decision, i.e., an agent (Hursthouse, 2014; Kawall, 2014; Van Zyl, 2018). In the process of UXD, there are more agents included, such as artifact originator (client), user experience designer, user interface designer, developer, copywriter, and user. In my work, I present and stress the importance of all the agents included, and not only artifact originator or user experience designer.

To reach the goal of my thesis, I defined the basic steps that could be common to the creation of different UXD artifacts, with a focus on mobile applications, websites, and software, and defined the agents involved in this process. Further, I defined the responsibilities of each of the agents (e.g., designing the user interface for a user interface designer). Additionally, I presented how UXD could be beneficial or harmful, and I used this knowledge to discuss how disposition to virtuous behavior could lead to more ethical, and avoid unethical, UXD.

The result of the thesis are guidelines, presenting concrete examples of how each of the agents, being disposed to virtuous behavior, could contribute to a more ethical UXD. The final thoughts will later be published on a collaborative website that would invite other experts from the field to contribute.

Keywords: user experience design, user interface, human-computer interaction, ethics, virtue ethics, virtues

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Contents

CHAPTER I

Introduction

"Good character, from the agent's point of view is not so much character that is seen to be biologically necessary or desirable as it is character that one wants in the choices one must make between persons and between possible selves."

– EDMUND PINCOFFS (PINCOFFS, 1986, P.68)

User experience design (UXD) is a field that was developed from the concept of 'user experience', a term first mentioned by Dan Norman in Human-Computer Interaction (HCI) (Norman et al., 1995). The rationale behind this term's creation was to recognize the need to create higher quality products that add a qualitative perspective to products from HCI, products that focus on the person's experience while using them. UXD started way before that (probably already with mobile phones' invention, once the screen with choices was available). Since then, it developed to the extent that it now provides quality artifacts which became an essential part of our everyday life. We rely on email applications, reminders, calendars, messaging applications, social media, and others, all of which could enhance our well-being or help us with the limitations of being a human. At the same time, unfortunately, some of these artifacts could become harmful, and worse yet, some creators create artifacts that intentionally abuse privacy, manipulate users, trick them and disrespect them, all of which is against the definition of user experience design. As a designer that works in the UXD field, I experienced practices that were many times against my values, such as clients creating an artifact with the intention to earn money from users, performing background research without the knowledge of the user, collecting data of the user, or generally making decisions without thinking about how users could be affected. This kind of behavior would be prohibited in other fields, where ethics is more intensely discussed, such as in medicine or psychotherapy. UXD is not regulated, and creators can do many things freely, some of which have questionable moral implications. All things considered, I chose to do more research

on the topic of ethics in UXD, present basic guidelines, and provide them in the form of a website where I will invite other experts from the field to feedback and contribute.

In this chapter I will present my research plan: present the problem, goals, research questions, and a method.

I.1 The problem

This master thesis will focus on the need for ethics in the field of UXD. At this point, there is no unified source to guide and encourage authors of UXD to create more ethical artifacts.

As mentioned above, authors are mainly free when creating UXD products, having the possibility to create them in a manipulative way to users, disrespecting their privacy and integrity, among others. Examples of this kind of behavior are malicious user-experiences or user interfaces, where users are tricked into clicking certain things benefiting the creator of the artifact (Conti & Sobiesk, 2010), persuading users with techniques of psychological targeting (Matz et al., 2017), doing A/B testing inside the artifacts without users' knowledge (Siroker & Koomen, 2013), collecting digital footprints and adapting content based on them (Matz et al., 2017).

It is possible to find attempted discussions on ethics and UXD; however, they can be mostly found in the popular press, or personal blogs (Fordham, 2019; Kiess, 2019) and are primarily not based on a more extensive philosophical discussion. Further, it is possible to find moral values originating from the field of value-sensitive design, mentioning protecting privacy, safety, and trust (Hoven, 2015). However, also in this field, ethical implications for UXD users are not discussed in detail (Jacobs & Huldtgren, 2018).

The harmful implications that UXD could have suggest the need to thoughtfully discuss ethics in the field, primarily because artifacts sometimes affect the lives of millions of people.

I.2 Goal and research questions

The main goal of this thesis is to formulate guidelines for a more ethical user experience design. For the argument on ethics, I chose a normative theory approach of virtue ethics. The decision for this approach will be discussed in *Chapter IV*.

To achieve the goal, I want to answer two main questions:

A. What is the potential immoral behavior of agents included in the field of UXD?

B. What is the connection between virtuous behavior and moral/immoral practices in UXD?

By answering those questions, I expect to have an adequate foundation for formulating guidelines.

I.3 Method

I will approach answering the first question in the following steps:

1. I will define the field of UXD, the process that is common to artifacts created in the field, and the agents included in the process. I will later define their responsibilities or tasks each of them has in the process *(Chapter II - User Experience Design)*. By this, I expect to obtain a better overview of the areas where artifacts could be harmful (e.g., user interface designer being included in the process means I have to research how user interface design could potentially be harmful).

2. I will identify some of the existing research on the beneficial and harmful effects of UXD *(Chapter III - Effects of UXD)*. With the results from the first point, I expect to obtain better keywords that could be used when searching for relevant studies.

3. Based on examples of the beneficial and harmful effects of UXD and the identified agents involved in the creation of UXD artifacts and their responsibilities, I will identify potential immoral behaviors of agents involved in the field of UXD.

I will approach answering the second question in the following steps:

1. I will briefly discuss the contemporary approaches to ethics and defend my decision on choosing virtue ethics *(Chapter IV - Ethics)*.

2. I will present virtue ethics in detail, and how the field defines right action *(Chapter V - Virtue Ethics and Virtues)*.

3. I will combine the results from the first research question, and the knowledge of contemporary virtue ethics, and argue how disposition to virtuous behavior could affect UXD *(Chapter VI - Connecting Virtues and UXD)*.

Finally, I will use the thesis results to try and formulate guidelines for a more ethical UXD *(Chapter VIII - Formulating Guidelines)*. At the end of the thesis, I will discuss the drawbacks of the thesis and its success in reaching the goal *(Chapter IX - Discussion)*.

CHAPTER II

User Experience Design

"A good profession, whether it be medical, legal, academic or otherwise,
is one that is committed to a central human good.
Hence, any profession that is committed to, and promotes,
normal psychophysical functioning, the pursuit of knowledge,
rationality, integrity, friendship, social interaction, or development
of and acting from the virtues, is a good profession."

– CANDACE UPTON (UPTON, 2014, P. 169)

II.1 What is UXD

User experience (UX), as a part of a field of Human-Computer Interaction (HCI), was first mentioned by Dan Norman (Norman et al., 1995), who developed the term to define the creation of higher quality products that add a qualitative perspective to HCI and put the product user in focus. Specifically, UX is defined by perceptions and responses of users that result from the use (or anticipated use) of a system, product, or service (ISO 9241-210:2019), ranging from a person's experience in the supermarket to their experience while reading a book, using a faucet or a mobile application.

Designing for this experience is the field of user experience design (UXD), where authors of the product try to predict the best experience for the user (usually by performing research and/or having previous experience in designing) to create a product with a user-friendly experience and an aesthetic interface, where applicable (Kremer & Lindemann, 2016). Even though the term UXD is, following the ISO definition, found in many fields (such as the above-mentioned market experience design or book experience design), the term is mostly used in connection to digital artifacts (Miller, 2015), i.e., mobile applications, desktop software, and websites. Those artifacts will also be the focus of my thesis.

To provide usable UXD artifacts, a designer must, therefore, focus on the end-user and design for them. The creation of the product involves steps that are similar to all artifacts, be it a website, a mobile application, or a desktop application. For example, designers often must do research (either compare a new product to already existing ones or do user testing to test their prototypes and the like), design the information architecture, such as how the information is going to be displayed in the application, and design the user interface, the aesthetical part of the artifact, among others. In the next section, I will provide a detailed overview of those steps, using three different manuals of UXD from the recent years (Faranello, 2016; Hamm, 2014; Rosenzweig, 2015).

II.2 User Experience Design Process

This thesis will derive guidelines for a more ethical user experience design with the help of a normative theory called virtue ethics, which puts forth a person's character when judging the rightness of an act (Hursthouse, 2014). In UXD, usually, people with different roles work together (e.g., client, developer, designer) and the ethical implications of an artifact often do not depend solely on the user experience designer. I am proposing we should therefore focus on all agents involved in the process, including the tasks they are responsible for. For example, if a mobile application appears to violate the privacy of the user, it is not necessary that the user experience designer had knowledge about it; theoretically, a developer could be the one violating it with how they wrote the code (e.g., collecting data in the background, because the client wanted to do so). Another example is harmful content of a forum, that was created by users, and not creators. With all these factors considered, I decided it is important to obtain an overview of all people involved in UXD process and specify which tasks they are responsible for. With the selection of tasks, I assume to have a better overview of where UXD could potentially harm people. Also, I expect to have a better overview for discussing ethics in connection to UXD.

Extracted from different manuals on UXD published in recent years (Faranello, 2016; Hamm, 2014; Rosenzweig, 2015), the creation of UXD usually follows the below-mentioned steps:

- **Preliminary Research**
- **Information Architecture/Building Wireframes/Prototyping**
- **Usability Testing**
- **User Interface (UI) Design**

- **Artifact Development**
- **Adaptation**

Sometimes, steps might be different (e.g., some do research also before the prototyping or some also include marketing as a part of it); in my thesis I will focus on the process described above as it involves, in my experience, the most typical steps. Furthermore, for the purpose of the thesis, it is not essential how the steps follow each other, but it is rather important to define the general tasks of each of the agents included in the process.

II.2.1 Preliminary Research

At the beginning of the project, a definition of what exactly the project is about is typically set. The artifact originator (e.g., client or company) defines the idea and the scope of the project. Then, the user experience designer usually starts with preliminary research, where they are trying to answer questions, such as who is going to use the artifact, what are going to be the functionalities of the artifact, what does the artifact originator want to achieve with the product (by interviewing the originator), define technology that is going to be used and its restrictions and do a competitive analysis, i.e., seeing which artifacts with a similar theme already exist and how the new product is different from them and what could be improved (Hamm, 2014). The process can also start with preliminary potential user research, trying to discover their wishes about the future product, such as asking potential users what kind of features they could imagine needing. With these results, user experience designers can better understand the expectations that might be different from their own (as a designer, one can predict what a potential user could like, but this does not necessarily resonate with what they would, in fact, desire).

Agents involved:

- **Artifact originator (client)** – creating the idea of the artifact and defining its scope
- **User experience designer** - research, user testing, competitive analysis
- **(Potential) user**- taking part of user testing (interviews)

II.2.2 Information Architecture / Building Wireframes / Prototyping

In the next stage, a user experience designer's objective is to create prototype/wireframes[1] based on the preliminary research. Usually, a starting point is information architecture design (IA), a specification of a navigational system and the artifact's structure, making it clear for users to understand (Rosenzweig, 2015). IA could involve the following parts (Hamm, 2014):

- **Creating a high-level map of the artifact** (navigations, e.g., the menu on the top of the website)
- **Building flowcharts** - defining exact decision-making maps (e.g., how the user will come from one screen to another)
- **Defining personas** - possible different user types that could use the app
- **Defining use cases** - defining how the personas could use the artifact and how would they differ in using it
- **Arranging the staging of the content** (content hierarchy or how the content is placed and divided in the artifact)
- **Writing text for the content**

Next, a user experience designer usually makes a clickable prototype that supports the next phase, usability testing. Developer(s) (i.e., programmers) of the artifact are usually a part of the process, providing information on potential functional improvements and technological limitations. Copywriters could also be a part of this process by providing the final text included in the artifact (a copywriter, an artifact originator, a user experience designer, and a developer could sometimes be the same person).

Agents involved:

- **Artifact originator** - overview of the project and feedback
- **User experience designer** - prototype design
- **Developer** - technology feedback
- **Copywriter** - writing the copy

1 Wireframes are sketches of the content of the application. These sketches include the positions of the navigation, the content, positions of potential pictures, among others. This step does not include design; the focus is on the functionality. This step is also essential to shorten the time the whole design process is taking. If all the content and elements are clearly defined in the wireframe stage, and the client is satisfied with it, then the design process does not have to have many iterations.

II.2.3. Usability Testing

After the prototype is built, it is usually tested with potential users (Rosenzweig, 2015). Here, user experience designers like to observe where the adaptations to the prototype should be made for a better user experience. This part of the process is usually repeated after the artifact is already created to improve it; once a mobile application is released, a company usually tests it to see how it performs with the users and improves the product. One way this is achieved is with the process called A/B testing; they release different versions of an artifact with different functions to different groups of users and measure which one performs best (e.g., one group of users receive a streaming music application with a play button in the middle of the screen and one group with the button on the bottom of the screen). The results of the testing are implemented, and an improved version of the prototype (or final artifact) is made. Some execute this step after the user interface was designed; some also do usability testing before (after the prototype was built).

Agents involved:

- **Artifact originator** - overview of the project and feedback
- **User experience designer** - usability testing
- **Developer** - technology feedback
- **Copywriter** - adapting or writing a potential additional copy
- **(Potential) user** - testing the prototype

II.2.4. User Interface Design

The next step is designing the interface based on the wireframes. User Interface Design (UI) is defined as "all components of an interactive system (software or hardware) that provide information and controls for the user to accomplish specific tasks with the interactive system." (ISO 9241-210:2019(En)). In this step, user experience designer transforms wireframes (adapted from the previous step) into a functional and visually appealing product. The designer needs to know the basic rules of visual language to, e.g., stress important information, guide the user visually, make the experience pleasant on the eye, easy to read, among others.

Agents involved:

- **Artifact originator** - overview of the project and feedback
- **User interface designer** - user interface design
- **Developer** - technology feedback
- **Copywriter** - adapting or writing a potential additional copy
- **(Potential) user** - testing the prototype

II.2.5. Artifact development

In this phase, developers transform the final designed prototype into a working artifact (some start with the development process already from the wireframes). This step is an iterative process of going back and forth, creating alpha and beta versions of the artifact, and continually improving it before the launch[2]. Developers create those versions of artifacts to test the functionality and stability of it inside the team before the release.

Agents involved:

- **Artifact originator** - overview of the project and feedback
- **User experience designer** - possible adaptations
- **User interface designer** - possible adaptations
- **Developer** - developing the artifact
- **Copywriter** - adapting or writing a potential additional copy

II.2.6. Adaptation

After the artifact is launched, feedback is commonly gathered from users that help artifact creators gather ideas for improvements, new functions, or other possible updates. Some of the processes described above are repeated (research, user testing, prototyping, user experience design, user interface design, development), and updated versions of the artifact are published.

Agents involved:

- **Artifact originator** - overview of the project and feedback
- **User experience designer** - user testing, adaptations, and updates
- **User interface designer** - adaptations and updates
- **Developer** - adaptations and updates
- **Copywriter** - adaptations and updates
- **User** - artifact usage and possible feedback

2 In this step, some experts are talking about agile UXD, which is a term that "grew out of efforts in the 1990s to find a better development method for producing software" (Brown, 2013, p. 2). This process's main objective is to prevent every person from working separately and instead promote collaboration and precise processes following a specific set of values. As Agile UXD is a more significant, separate field, it will not be considered in the thesis.

II.3. User Experience Design Framework

This section will outline the UXD framework that will be later used in the ethics discussion section *(Chapter VI)*. The framework consists of agents involved in creating, recreating, and using the artifacts and their tasks. It is as follows:

Agents	*Tasks*
Artifact Originator(s)	• Creation (the idea of the project) • Defining the scope of the project • Having an overview of the process • Providing feedback
User Experience Designer(s)	• Preliminary research • Prototype design • Usability testing • Adapting the artifact
User Interface Designer(s)	• User interface design • Adapting the artifact
Developer(s)	• Technology feedback • Development of the artifact • Adapting the artifact
Copywriter(s)	• Writing the copy • Adapting the copy
User(s)	• Participating in preliminary research • Testing the prototype • Using the artifact • Giving feedback

Table 1: User Experience Design Framework

CHAPTER III

Effects of UXD

"What you do not want done to yourself, do not do to others."

– CONFUCIUS (CONFUCIUS, 2010, P. 149)

In this chapter, I will present some of the recent discoveries on how people can be affected by UXD, and how it can be both beneficial and harmful. UXD artifacts (websites, mobile applications, software) became part of our daily lives, and are deeply ingrained in how we perceive the world, how we communicate with each other, how we organize our lives, and how we enjoy and entertain ourselves, among others. It is a bigger part of some people's lives and smaller of other's. However, in the contemporary world, it is mostly impossible for a person not to get in touch with UXD artifacts such as those on mobile phones or computers used at work. We are presented with solutions that should supposedly make our lives easier, such as writing a scientific paper in a user-friendly interface or using an easy-to-use calendar, so we do not forget our appointments. But unfortunately, we are often confronted also with the negative, exploitative side of UXD, the one where artifacts abuse our privacy, track us, manipulate us through the knowledge of how our mind works. All this leads to a need to talk about ethics in the field.

The following sections will describe some of the benefits the field of UXD brings to people and some of the harmful effects it could have. These will be later used as examples for discussing about ethics in the field.

III.1 Examples of beneficial UXD

III.1.1 Cognitive offloading

One of the beneficial functions of UXD is cognitive offloading. In cognitive science, this term relates to "the use of physical action to alter the information processing requirements of a task to reduce cognitive demand" (Risko & Gilbert, 2016, p. 677). Physical action in UXD would be using an application or software to ease the cognitive demand on a person. Examples include calendar applications, reminder applications, and websites that store information, among others. It is a way to offload cognition into-the-world to eliminate the need for an internal representation (Risko & Gilbert, 2016). For example, by storing an appointment in the calendar application, one could rely on it remembering and reminding about the event, leading to less potential anxiety (that one could forget an event) and no need to have to remember it oneself.

The possibility of cognitive offloading could be beneficial especially for people with impaired cognitive abilities[3]. It also has important practical implications in education, where students could benefit from UXD artifacts to alleviate their cognitive load (Risko & Gilbert, 2016).

Offloading — Prospective memory

Prospective memory involves carrying out an intended action(s) at an appropriate time or circumstance in the future. If a person needs to remember to perform a particular action at a given time, such as attending a doctor's appointment a week from now, this is called time-based prospective memory; if a person needs to remember to perform a specific task or set of tasks in appropriate circumstances in the future, this is called event-based prospective memory (McDaniel & Einstein, 2007). Both versions are referred to as intention offloading; a person offloads the responsibility onto the environment to create triggers for delayed intentions (Gilbert, 2015). UXD artifacts such as reminder mobile or desktop applications, where users can write down tasks they have to perform at a certain point in the future, or calendars where people write down future appointments, could help users retain more information that is possible by their human memory. More examples of artifacts that act as these kinds of extensions are navigational applications, timers, alarm clock applications,

3 Cognitive offloading could be beneficial for those who have impaired cognitive abilities, but with metacognitive awareness of their impairment, meaning that they are aware of their disability (Risko & Gilbert, 2016).

and task management applications, among others. The more prominent advantages of offloading parts of one's cognition to external artifacts could be easing the load of the limited capacity of human memory and representations being more durable and less prone to distortions than those stored internally (Gilbert, 2015).

Offloading – Transactive memory

In transactive memory systems, knowledge is distributed across two or more individuals in a way that a system as a whole knows more than any individual (Peltokorpi, 2008). Recent research extends this notion to human-technology transactive systems (Risko & Gilbert, 2016), which takes into account UXD artifacts such as websites of knowledge or search engines. Through these artifacts, knowledge is easily accessible, and these platforms act like an external memory source that one can access at any time.

III.1.2 Learning & motivation

Another area where UXD artifacts show as beneficial is in learning and motivation. For example, language learning mobile and web applications are suggested to have a positive effect on vocabulary acquisition and listening comprehension skills (Rosell-Aguilar, 2016). Generally, learning mobile and web applications have been shown to have great potential to augment traditional learning, e.g., medical students use them for searching for complex information such as drug guides, or they can be used to support trainee doctors to provide information when senior doctor is not available and thus potentially providing enhanced patient care (Kamel Boulos et al., 2014). To further expand the possibilities of traditional learning, UXD products such as online learning platforms provide easily accessible databases and enable students to learn anytime or anywhere and easily communicate with peers and instructors, all of which is shown to enhance studies (Shuib et al., 2015a). Online learning platforms and online video applications have also proven useful, for example, when the global pandemic forced people to study and work from home.

To additionally motivate users, designers are many times using techniques of gamification, which is a design approach that introduces game elements such as achievement badges, levels, a competition to attract and create a game-like experience (Hamari et al., 2014). This approach has been shown to make some tasks more enjoyable and supporting human needs, such as the need for competence or achievement and thus potentially increase motivation (Tang & Zhang, 2018).

III.1.3 Health

UXD artifacts in the healthcare area are thought to have positive benefits for people who struggle with health issues. Research shows that mobile applications could help people with obesity to lose weight by playing games in augmented reality (Cicció & Quesada, 2017) or simply by helping them track and monitor their food intake (Kamel Boulos et al., 2014). The latter function could also help people with diet restrictions, like ketogenic diets for people with epilepsy.

Mobile applications also show potential in supporting people with addictions by providing emotional and instrumental support (McTavish et al., 2012) and it is suggested that they could generally improve treatment and motivation (Kamel Boulos et al., 2014). Other areas of health where UXD artifacts are thought to be supportive are mental health issues (Sucala et al., 2017; Zhang et al., 2015), dementia, asthma (Kamel Boulos et al., 2014), autism (Fabri & Andrews, 2016), rehabilitation (Wang & Zheng, 2018) or they can help track person's daily activity levels, keeping track of women's menstrual cycles, tracking sleep, noise exposure or keeping clinical documents.

III.1.4 Communication

Communication artifacts have become essential parts of our lives, and new ways of communication have changed the way we communicate (Margolis, 2015). Communication became faster and easier and brought many possible advantages. Products such as email and messaging applications could not only be beneficial in day-to-day communication, but also support the optimization of the processes in fields like medicine. For example, one study has shown how hospital communication through encrypted message application contributed to the reduction in outpatient visits and unnecessary referrals and improved care of major burn injuries through more effective prehospital communication (Martinez et al., 2018).

III.1.5 Interpersonal relationships

Social media applications and other websites facilitate connections among people with health issues, such as anxiety, schizophrenia, depression, diabetes, chronic pain, and autism spectrum disorders (Kuo et al., 2014; Merolli et al., 2013, 2014; Välimäki et al., 2016). Because of the potentially stigmatizing nature of their disease, it was reported that they find it easier to share concerns about their disease and support each other online rather than in person; being online is supposed to provide them with confidentiality about their person (Primack & Escobar-Viera, 2017).

Also, there is a potential of social media to form bonds, especially around emotional concerns, and it is also used for forming peer to peer relationships in young adults, an important task in their development (Primack & Escobar-Viera, 2017).

III.2 Examples of harmful UXD

III.2.1 Addictive behavior and mental health

It has been suggested that using UXD artifacts could result in addictive behavior and dependence, which could lead to problems such as emotional stress, damaged relationships, and attention deficit disorder (Shuib et al., 2015b). Further, stimulating experiences can sometimes lead to uncontrolled use, despite negative repercussions on one's personal and social life (Noë et al., 2019). Good examples of stimulation from UXD are social media applications that are designed in a way to make users prolong their usage with an infinite scrolling interface that lacks stopping cues or makes them come back, e.g., the user comes back to check who liked their picture or what new is happening or presenting them with regular stimulating notifications (Noë et al., 2019). This and other functions of UXD artifacts could lead to excessive attention to artifacts, uncontrolled dedication, and preoccupation with them, which are factors of possible addictive behavior (Coyne et al., 2019). Although the APA (American Psychiatric Association) has not yet included smartphone or internet addiction in their official list of mental disorders (not included in the Diagnostic and Statistical Manual of Mental Disorders, DSM-5), the areas are highly researched and suggesting correlations between addiction and excessive and uncontrolled use of smartphones and UXD artifacts (Coyne et al., 2019; Trowbridge et al., 2018). Furthermore, it has been suggested that artifacts like social media could contribute to or worsen mental disorders such as depression, anxiety, sleep, and eating disorders (Coyne et al., 2019). Fear of missing out or need for a physical touch could result in excessive use of mobile phones and thus worsen the pre-existing mental disorder conditions (Elhai et al., 2016).

III.2.2 Memory

With the ongoing development of UXD artifacts such as search engines and other databases, we have constant access to information, and in just few short steps, we can get solutions to complex mathematical tasks or answers to natural phenomena we are curious about. Offloading transactive memory in this human-technology relation nowadays enables us to offload much more of what we were storing internal-

ly before the invention of the internet. Although digital databases help us alleviate our cognitive load because we do not have to remember everything, there are also, arguably, potential downsides to overly using and relying on them. Research shows that people are more prone to remember where to find specific information rather than knowing it, or that they tend to forget items that they think will be available externally and remember the ones that they think are not (Sparrow et al., 2011). One could say that these are positive effects of offloading transactive memory, however on the other side, a concern is raised that we are becoming too symbiotic with our technology tools to the extent that own cognition is changing (e.g., change of our memory abilities, attention). It has been suggested that people who grew up with internet technology, called 'digital natives,' display different cognitive profiles to ones that adopted it later in life, called 'digital immigrants.' Digital natives were shown to gravitate towards shallow information processing, have increased distractibility and poor executive control abilities, which could lead to structural changes in the brain (Loh & Kanai, 2016).

III.2.3 Distraction and attention

Research has suggested that UXD artifacts could affect attention; they can act as a distraction from daily tasks like working, studying, or simply living, or even become hazardous, potentially causing car accidents or street bumping accidents. For example it was observed that social media tends to provide interruptions (especially because of its mobility) and could therefore be associated with multitasking (Primack & Escobar-Viera, 2017), i.e., divided attention. This kind of interrupted attention has been associated with negative cognitive outcomes, e.g., where two or more tasks are performed simultaneously, performance on the tasks is worse when they are performed together versus when they are performed separately (Farmer et al., 2018). Furthermore, multitasking has been related to decreased ability to sustain attention, poor academic performance, decreased subjective well-being, a higher level of depression and anxiety (Primack & Escobar-Viera, 2017), and deficient self-regulation that could lead to addictive behavior (David et al., 2015).

When it comes to artifacts affecting drivers, it has been shown that when a driver checks his applications on the phone while driving, their visual information processing is delayed, which could be a great contributor to car accidents (Ishida & Matsuura, 2001). It has also been shown that drivers who used mobile phones missed more red lights than drivers without distractions (Strayer & Johnston, 2001). Besides drivers, accidents caused because of distractions are shown to be very high also among pedestrians, causing injuries like concussions, fractions, or sprains (Nasar & Troyer, 2013).

III.2.3 Privacy, tracking, and psychological targeting

The ways UXD can affect person's privacy is, for example, by creating artifacts that track their activity while using it, by collecting digital footprints, i.e., traces a person leaves behind while using the internet (comments, likes), or by doing background experiments based on user's behavior. It is known that private companies generate a lot of money from the collection, use and sale of personal data; data brokers collect user information gathered from social media and other footprints and sell it for marketing purposes (Beake, 2014). If one knows the unique psychological characteristics and motivations of a person, one can use this information for psychological persuasion[4], such as influencing a person to vote for a specific candidate, buy more often (as products are tailored to their taste), click on an advertisements tailored to them (Matz et al., 2017), among other examples. Therefore, creators can design their artifacts in a way that takes advantage of this kind of knowledge. To further make UXD artifacts more attractive and usable, user experience designers use experimenting techniques such as A/B testing, where they show different versions of an artifact to different people and track their behavior to see which variation is the most effective at turning them to customers. This experiment usually takes place in the background without user's knowledge and has been shown as successful in political campaigns, using images or buttons that were, after testing, shown to have the greatest success (Siroker & Koomen, 2013).

4 People's personality profiles have been predicted from blogs, social media profiles and posts or personal websites. By this assessment large group of people can be influenced through the application of psychological mass persuasion, either for their own good (like eating healthier) or against their best interest (e.g., persuading them to gamble) (Matz et al., 2017).

III.2.4 Malicious user experience and user interface

The benefits of user experience design are often directed towards someone else's end than the users' (e.g., artifact originator). This happens through tricks and exploitations of the user through user experience and interface. In this section, I will describe some of the malicious techniques where user experience designers (or other agents) use the knowledge of how people behave as users with a purpose to implement deceptive functionality that is not in the best interest of users.

- **Exploiting pre-attentive processing by distraction** - attracting the user's attention away from their current task by exploiting perception, particularly pre-attentive processing[5] (Conti & Sobiesk, 2010). In a user interface, this can be achieved by using movement (blinking or moving content, especially advertisements), distracting audio, intense hues, colors, and size (tricking users into clicking a prominent red button), to name a few (Gray et al., 2018).

- **Manipulative navigation** – information architecture that is supposed to guide the user towards user experience designer's goals (Conti & Sobiesk, 2010). An example is subscription screens that appear in the freshly installed application where users are forced to go through the process of subscribing, even though a free version is available.

- **Sneaking and lying** – hiding or disguising important information from the user. The intention is to make users perform an action that they might object to if they had knowledge of it (Gray et al., 2018). The most common example is continuing a subscription without informing the user, or presenting users with free trials and not informing them when the subscription will start. Another example is disingenuous behavior, such as sneaking things into the basket or installing additional software one did not ask for, or advertising a monthly price for a product while switching to a yearly price at the checkout (Conti & Sobiesk, 2010; Gray et al., 2018).

5 Pre-attentive processing is described as a "nonconscious mental life," i.e., activity that precedes conscious mental activity – our brain filters and processes which information is important (Schweizer, 2001).

• **Obfuscation** – hiding desired information (Conti & Sobiesk, 2010); for example, when one tries to cancel a subscription or delete the account, the user's desired options are light grey, and the button for continuing subscription is red and big.

• **Infinite scrolling** – presenting content as 'never-ending,' i.e., lacking any stopping cues, which could lead to prolonged usage of the artifact (Noë et al., 2019).

III.2.5 False information

Search engines and social media allow us to find information quickly and easily. Unfortunately, it often happens that the stated facts found are false. Examples are spreading false beliefs on the way vaccinations work and their effects on people, stating false facts on certain health risks, or generally nurturing false beliefs about diseases, symptoms, treatment, and prevention (Wu & McCormick, 2018). Further, there are high occurrences of spreading false news reports in media with fabricated, misleading, or negligently written content; reasons for false reporting could be simple accidental mistakes, negligent reporting, or planned, strategic manipulation (Vos et al., 2019).

III.2.6 Cyberbullying

Users of UXD products can 'exercise' their freedom of speech through social media. They are partially hidden or completely hidden (have anonymous profiles), providing the opportunity to harm other users by cyberbullying; including posting derogatory comments, posting humiliating pictures, or threatening someone electronically. Cyberbullying goes one step further from regular bullying because it reaches unlimited audiences, and the postings are not time-limited, but stay there in a permanent state (Kowalski et al., 2014; Nixon, 2014). The most affected groups are adolescents worldwide (Craig et al., 2020), and they have reported increased depressive effects, loneliness, suicidal behavior, anxiety, and other somatic symptoms (Nixon, 2014).

III.3 Beneficial vs. harmful user experience design

It appears that sometimes, the same function of UXD could be beneficial, and at the same time, harmful. For example, having an option to offload the part of one's memory could help a person, but at the same time harm them, or one person may

get addicted by some functions (like gamification) of UXD, while another does not. Therefore, it is difficult to draw a strict line between the beneficial and harmful parts of UXD. It is also difficult to predict what effects some functions have on people before the artifact is present on the market for some time. However, as there are reactions to one's product that appear to be consistent (such as adverse effects of infinite scrolling) among people, one can say that a product is potential harmful. In this case, a person has a responsibility to act accordingly (either artifact originator by adapting the artifact or user by adapting their behavior).

III.4 The need for ethics in UXD

As a graphic designer and a user experience designer[6], I observed that designers often could not be very picky about which projects they want to work on. Because of monetary reasons and the need to gain experience, they sometimes (and very often at the beginning of the career) need to accept projects that they do not necessarily want to do because projects appear to be unethical. Design often, unfortunately, serves a manipulative function of attracting people by being aesthetically pleasing, which often does not necessarily mean that the presented product is good or has no (intentional) harmful effects. Design and marketing agencies appear, in my experience, to preserve themselves by doing manipulative designs repetitively, and I rarely had a feeling that people asked themselves about the moral nature of it. The same goes for clients that hire freelance designers. Examples of this kind include telling a designer to do as they are told, because the client is 'a god' and designer is just a tool for execution, a tool to make things 'pretty and attractive for users' or in general, not respecting the designer's profession and experience or taking advantage of the knowledge that designer does not have much choice with choosing the clients they work for. Next, asking designers to put certain things in designs because they will 'pop out and get attention from the user' or the phrases used by clients that are laughed at in designer's world like 'make my logo bigger' or 'I know that users want this, what you did is not interesting for users.' The list could go on, and I am certain that other agents included in the process have similar experiences they could share. In my perception, all these acts feel like some clients (or other agents involved) have no problem disregarding their acts' potential wrongness and how they affect users and others involved in the process.

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6 My focus in graphic design narrowed to website and application design, and I gained experience mostly in those fields; therefore, I call myself partly user experience designer. UXD, as we know it today, was starting to gain momentum in the last years, and everyone that was previously designing websites automatically became a UXD. Now the terms are getting more precise, and also, there are studies where one could study only UXD or UI, apart from graphic design.

The danger of this kind of ignorance of others presents itself crucial in user experience design where products reach millions of people, affecting their lives daily. As I described in detail in this chapter, in addition to being manipulative, sometimes artifacts can contribute to addictive behavior and violate privacy; this all appears to be for the means of the people creating the artifacts and not the end-users. This kind of disregard for people's well-being for one's own end is prohibited and punished in many other fields, like medicine or psychotherapy. If one imagined that a psychotherapist would violate a person's privacy or manipulate them or harm them in any other way, this would often result in them losing the license, if not worse. We cannot say the same for the field of UXD or design in general; therefore, I want to dedicate the work in this thesis to walk a step closer to a more ethical UXD.

In the next chapter, I will briefly describe the field of ethics, compare three contemporary normative approaches, and defend my position to choose virtue ethics for creating guidelines for more ethical UXD.

CHAPTER IV

Ethics

"If we judge the actions of ourselves or others simply by their effects in the world, we end up unable to distinguish accidentally or ironically useful actions (or slips on banana peels) from actions that we actually morally admire and that are morally good and praiseworthy. "

– MICHAEL SLOTE (SLOTE, 2001, P. 39)

IV.1. Introduction

Ethics is an immense field in philosophy that tries to answer questions ranging from *What is the nature of ethics and moral reasoning* to *What we can instruct a human being to do in a specific situation*. Responding to these questions and the hues in between, philosophers of contemporary ethics work in three main subfields: metaethics, normative ethics, and applied ethics[7] (Crisp, 2012).

Metaethics *(beyond ethics)* is concerned with topics such as *Why human beings have morals*, *Are we born with predispositions for a good moral character*, or *What are our passions behind moral behavior*. In general, metaethics is discovering the status and meaning of moral language (O'Neill, 2001). Answering the chief initial question *Do moral properties exist* divides philosophers into two main subfields: affirmative responders are called moral realists, while those who respond negatively to the questions are known as moral anti-realists (Kirchin, 2012).

In normative ethics (also normative ethical theory), philosophers attempt to answer *What we ought to do*. The field's main objective is to articulate and justify the fundamental principles that help answering the mentioned question, meaning find-

7 Some authors consider applied ethics as a subfield of normative ethics; but the fields are generally considered as separate (Roth, 2005).

ing a universal 'formula' that could help us solve moral problems (Driver, 2005). Contemporary normative ethics is divided into three main theories: consequentialism, non-consequentialism (deontology), and virtue ethics, with the reasoning being their distinguishing factors (Frischhut, 2019).

With the help of normative ethics, historical examples in ethics, and other sources, applied ethics tries to solve day-to-day cases, e.g., animal rights, under which circumstances is abortion legal, or human rights. There is no consensus on the definition of applied ethics; in academic circles, scholars tend to view the field as a large body of codes that define desirable actions (Roth, 2005). This thesis will be practicing applied ethics by trying to derive guidelines for user experience design with the help of a normative theory.

In the next sections, I will describe each of the normative theories in more detail. I chose virtue ethics as an approach for the thesis; I will contrast this theory to the other two and elaborate on why I think virtue ethics theory is an interesting approach to UXD ethics.

IV.2. Normative ethics

Contemporary normative ethics considers three branches or theories to be a valid base for a discussion on *What one ought to do*. The latter being a central question in normative ethics, each of these theories has a different approach to the answer (Frischhut, 2019).

Consequentialism considers the good-of-the-outcome, i.e., the best outcome for most people (Shaw, 2014). Non-consequentialism (deontology) says that specific actions are wrong in themselves, not just because they have harmful consequences. Following this, rules that ought not to be broken emerge (Guyer, 2016). Virtue ethics takes the opposite approach of the previous two and considers a person's moral character as the center of judgment on ethical problems (Hursthouse, 2014).

IV.2.1 Consequentialism

Consequentialism follows a basic rule which essentially allows for 'mathematical' calculation of ethical decision-making[8] (Gensler, 1998; Shaw, 2014). One is supposed to make a decision based on the assessment of consequences for the people involved. As Shaw puts it:

> *"[C]onsequentialism asserts that the morally right action for an agent to perform is the one that has the best consequences or that results in the most good."*
> *(Shaw, 2014, p. 28)*

> *or as Gertken describes:"[A]n act is morally right if and only if (and because) its outcome realizes at least as much value (or at least as much value of a certain sort) as all alternative outcomes that the agent can bring about."*
> *(Gertken, 2019, p. 137)*

Utilitarianism is the most prominent branch of consequentialism, and focuses on well-being and bases decision making on choosing the action that brings the greatest expected net well-being (Shaw, 2014), or that "maximizes the balance of pleasure over pain for everyone affected by our action" (Gensler, 1998, p. 140), or that follows the greatest happiness principle: greatest happiness for the greatest number of people (Kagan, 1998). By the theory of consequentialism, one cannot create a mobile application where private data is collected in the background to sell it to other people (without the knowledge of the user) because this action serves few people (ones who gain from collecting and selling data) and harms most of the others (users who do not want to share their data and do not even know they were sharing it). The same conclusion comes out of the happiness principle.

Most consequentialism versions are agent-neutral, which means they are not considering or being dependent on agent's internal states but instead on the external outcome (Shaw, 2014). There are some agent-relative theories, which at least partially consider the agent (Gertken, 2019), but not in a way that a decision came from agent's wish to have an intention, but rather in the sense of decision affecting them.

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8 An example of a calculation based on Gensler (1998). If I have two decisions (A, B) and three people (P1, P2, P3) involved that would feel the consequences of my final decision, I can check how I would feel for each of them if I would make a decision A or decision B. I can put a person's feeling in a number using two extremes, +5 and -5, 1–5 meaning a positive feeling, (-1)–(-5) meaning a negative feeling, 0 is neutral. After I check with P1, P2, and P3 how it would feel for them to make a decision A or B, I calculate the sum of numbers for decision A and the sum of decision B. It is a person's duty to make a decision that has a bigger sum. This is an example of utilitarian decision-making.

Reasons for not choosing consequentialism as the main theory for UXD ethics

I. Following consequentialism, it is easy to dismiss minorities and their opinions, which would not be favorable in the topic of UXD (or, my judgment, any other field). For example, if a company is deciding to simplify their application and a smaller group of people would be satisfied using a certain function in the application and most not, then by the main theories of consequentialism, we would not care about the smaller group of people, even if the ratio is 49% to 51%. If one has a successful application, that means that we would ignore a big part of society, which seems unreasonable.

II. Overall, it is my judgment, that using consequentialism rules could be helpful in certain situations, and a person having a disposition towards virtuous behavior would use it when it is appropriate, however I posit that using it as an only theory calls for unreasonable results like the one described above. Furthermore, presenting a person with a consequentialist formula does not teach them about why an act is right and does not contribute to personal growth as teaching or learning virtues potentially could.

III. The goal of the thesis is to focus on a character of a person, and as consequentialism is agent-neutral, this theory becomes irrelevant.

IV.2.2 Non-consequentialism (deontology)

The most visible branch of deontology is Kantian, a form of normative ethics stating that some things are right or wrong in themselves. Following the maxims premise, Kantian deontologists believe that we are supposed to follow certain rules like *Do not lie* or *Do not kill innocent people*.

Kant developed the following categorical imperative:

> *"Act only according to that maxim by which you can at the same time will that it become a universal law."*
> *(Kant & Timmermann, 2012, p. 71)*

Maxims are general principles of actions we adopt that have to be universally applicable, which is to say we should act only according to maxims that every person could adopt (Guyer, 2016; McNaughton & Rawling, 2014).

Deontology presents itself as an agent-relative theory, saying that there is a

reference for acting within a person (McNaughton & Rawling, 2014). An example from McNaughton and Rawling (2014) is that if I am required to take care of my family, and you are required to take care of yours, we have distinct aims. However, deontology is, in my view, essentially an agent-neutral theory since the act does not necessarily come from within a person but from the categorical imperative being projected onto this person. If I am required to take care of my family, it does not necessarily follow that I want to take care of it. Further, if I am required to want (which sounds silly), it still does not mean that I will grow to really want; I still follow obligations that do not rise from within me.

Reasons for not choosing deontology as the main theory for UXD ethics

I. Universal laws, in my opinion, create rigidness, and one rule cannot apply to all situations. Ethics is too complex to have a rule one could follow in every case (an example is a *Do not kill an innocent person* duty of a human being, having difficulties in applications like euthanasia, or *Do not lie* being problematic when lying would be beneficial for a person). Ethics based on universal laws, rules, or contracts is trying to make a very layered and diverse field structured, which inevitably calls for infinite numbers of sub-rules to universal laws or sub-versions of deontology (e.g., if we realize that a person would be allowed to lie in some cases, we would likely have to make a new rule or a set of subrules). Furthermore, if I would present rules as do not violate user's privacy to agents involved in UXD (or any other field), this would not tell them anything about why violating privacy is not right. Instead, it would be more valuable to focus on treating other people through virtuous behavior or being benevolent towards them. If a person would be directed on, e.g., being humane towards others, they would consequentially respect user's privacy (or communicate with them if they absolutely would, for some reason, have to violate it). Additionally, being humane towards others would not only affect the field of privacy, but also other aspects of UXD (as being humane would mean respect a human being as a whole) and agent's life.

II. In my mind, duties do not really show a person why something is a duty or following them does not necessarily mean one genuinely wants to do the right act. Even though deontologists say that we have a duty to do good or a constraint not to harm anyone (McNaughton & Rawling, 2014), this does not necessarily mean that a person doing good is actually good by their intention. Kant describes the agent's actions as moral if they are moved to act by the cognition 'I ought to act morally' (Yost, 2017). In my

view, having a rule inside one's mind that you ought to do something is having a forceful connotation (I have to do something) and is not telling anything about why it would be good to act morally. It is different if a person is doing something not because they ought to do it, but because they want to do it and know why (e.g., I have to be sincere vs. I want to or I would like to be sincere). If they ought to do it, and they follow it because they know they ought to follow the rule, they could know very little about why that rule is right. Further, it is not necessary that they really do want to do what is right (even if they do it) in comparison of their wanting to act morally, because they thinks acting morally is the right (or humane or virtuous) thing to do and they want to act like that. A good example of what rules bring to the first person comes from Confucius: *"Imagine a person who can recite the several hundred Odes by heart but, when delegated a governmental task, is unable to carry it out, or when sent abroad as an envoy, is unable to engage in repartee. No matter how many Odes he might have memorized, of what use are they to him?"* (Confucius & Slingerland, 2003, p. 141).

III. Deontology, together with consequentialism, tries to, in my view, objectify morals, making them disembodied and independent from humans (including emotions, character, experience). A large area of cognitive science provides evidence against this possibility of an old-fashioned, fully rational capability of a human being where both objectivistic theories are displayed (Slingerland, 2010).

IV.2.3 Virtue ethics

Virtue ethics puts forth the person's character making moral judgments and eschews or minimizes the rules, consequences, or other agent-neutral acts. In this theory, the virtues of the person become essential, and sound judgment is their consequence. A person does an act because they sincerely want to do so and it is right for them. The person's actions are manifestations of their character, values, and commitment (Roth, 2005).

Historically, virtue ethics dates back to the beginnings of Western philosophy, with Plato and Aristotle, but it has much older origins in Eastern philosophy with Buddhism and Confucianism. Buddhism echoes virtue ethics by talking about excellences of character (Hursthouse, 2014) and cultivating virtues rather than being guided by rules (Davis, 2014). Taking the Aristotelian notion of the virtue being an equilibrium of the mean between deficiency and excess (e.g., the mean between cowardice and rashness is courage), it follows the middle way to avoid or extinguish the suffering. The mindful Buddhist practitioner should avoid vices like attachment

and greed, aversion and hatred, ignorance, and delusion by practicing three cardinal virtues of non-attachment and selflessness, loving-kindness and benevolence, wisdom and understanding (Davis, 2014). In Confucianism, a good person with a noble character, called *junzi*, is a person possessing attributes like humanness or benevolence, ritual propriety (proper ritual behavior), moral righteousness, wisdom (Loy, 2014), courage and filial piety (Van Norden, 2007). Confucianism also focuses on the idea of a good, worthwhile life, possessing the virtues being necessary for leading it (Hursthouse, 2014).

Leading a good life, achieving the highest human good, or originally *eudaemonia*[9] was for Aristotle the final good a human being can achieve by practicing virtues (Aristotle et al., 2009). People strive to live a eudaemonic life, but only the ones practicing practical wisdom, or phronesis, have a true grasp of it (Hursthouse, 2014). The latter was for Aristotle, one of the chief intellectual virtues, he described it as an ability of a person to deliberate well about what is good for themselves in the sense of what sort of things lead to a good life in general (Aristotle et al., 2009). A person with practical wisdom is the one people seek to gain advice on what to do in a certain situation in life or how to improve oneself to become a person with phronesis (Hursthouse, 2014). This is not related to medical or some other scientific or art field, but in the way of living a life. Becoming a person with practical wisdom requires knowledge not only of universals but also particulars. One needs the experience to become wise, and it is therefore not found in young people (Aristotle et al., 2009). For example, when a young person is told by a wiser person that some universal (e.g., not everyone is to be trusted) is true, they can be skeptical about it and realize it only by encountering real-life particulars (e.g., someone betraying them).

A person with phronesis has virtues, and they developed them by finding the equilibrium[10] between extremes; an excess and a deficiency (both called vice). For a person to be courageous, for example, they need to find a mean between being reckless and being a coward. If they go to excess, they will render themselves making reckless decisions that harm them (e.g., starting a fight with a much stronger person than them), and if they go into another opposite, they will be afraid of everything and render themselves a coward.

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9 Most modern literature uses the term eudaemonia. Happy life, happiness, or good life seem to narrow down the true meaning of eudaemonia, which is regarded more as flourishing, achieving the highest human good (Baril, 2014).

10 Aristotle's virtue ethics is commonly known as the theory of the mean or moderation, meaning that virtue is exactly in between vice and excess; some modern virtue ethicists are defining it rather as an equilibrium, or a proper balance (Gottlieb, 2009)

A good analogy for the doctrine of the mean comes from Gottlieb:

> *"Imagine an old-fashioned pair of scales. The empty scales consist of a pivot and a cross-bar with two pans. If the pivot is in the correct place, and the cross-bar is balanced on it, the scales are in equilibrium. Then, when an amount to be weighted is placed in one of the pans, the amount needed to balance it in the other pan will be the correct amount. The scales will work correctly. A virtuous human being is analogous to the empty scales that are correctly balanced. When something happens, the virtuous human, who is properly balanced, will respond and act in the correct way. The human being who lacks a balanced disposition will not have the right emotions and act correctly in the right situatio[n]."*
> *(Gottlieb, 2009, p. 23)*

Contemporary virtue ethics describes virtues as character traits or excellence of the character. As Hursthouse describes, the latter is a settled state of a person, a certain way they are through and through (Hursthouse, 2014). A person with an excellent character will have the disposition to act in a certain way for certain reasons, not just based on their emotional impulse. Feelings are involved in a part of how the agent feels about what they do. Overall, a person must do something because they want to do it, and they do it gladly and not because they have a hidden agenda.

Additional reasons for choosing virtue ethics as the main theory for UXD ethics

In the sections on consequentialism and deontology, I presented some of the arguments for virtue ethics. Generally said, I want to focus my thesis on the character of agents rather than formulating rules or calculating consequences (or any other approach). As already argued, working on one's character (virtues) would improve not just the field of UXD ethics, but also other fields of a person's life. Once a person is directed towards virtues (e.g., gaining knowledge on improving oneself, trying to be compassionate, humane), the person will have a benevolent tendency towards others, and this has the potential to affect not just UXD but also how a person treats others in general. In my thesis, I will present how disposition to virtuous behavior could contribute to a more ethical, more considerate UXD. I understand that virtue ethics has its drawbacks (discussed more in detail in *Chapter VIII*), one being that virtues are, contrary to rules, not something one can force on others[11], people have

11 One cannot force a person to be brave, maybe one can suggest it, but they have to decide themselves if they want to be brave.

to choose them themselves. Another is that virtues are not providing enough guidance (like consequentialism and deontology do). These are valid drawbacks; nevertheless, if at some point we as a society would not focus our moral behavior on virtues, rather than rules or formulas, we would lose the possibility to experience how it could be if we could trust each other more, be able to rely on each other more or be more compassionate to each other, rather than overly relying on the judicial system and rules. To my mind, it would be worth trying to direct moral reasoning to what makes us human, and perhaps during the path, we will find solutions for drawbacks and other things we could see now impossible.

I chose virtue ethics as the main approach for my work; therefore, I will dedicate the next section to present how this normative theory explains moral life. I will start with the definition of a virtuous person and continue with premises that define right action and guide a person to make a virtuous decision. Lastly, I will present which are the core virtues mentioned in contemporary virtue ethics.

I want to acknowledge that a few approaches or branches of virtue ethics exist (eudaimonistic, agent-based, and pluralistic virtue ethics). I decided not to specify which exact approach I will take and rather collect general ideas of the field. Firstly, it would overly complicate the thesis and weigh its focus too heavily on ethics' argumentation. Secondly, focusing on virtues and being well-motivated is the core of all approaches (Van Zyl, 2018), and this will be sufficient for the goal of the thesis.

CHAPTER V

Virtue ethics and virtues

"If the will be set on virtue, there will be no practice of wickedness."

– CONFUCIUS (CONFUCIUS, 2010, P. 29)

V.1 Virtuous person

In virtue ethics, virtues are considered as *ethikai aretai*, excellences in character (Hursthouse, 2014) or qualities in character (Woodruff, 2018). A virtuous person (VP) possesses courage, compassion, temperance, benevolence, truthfulness, among others, or as Yuval puts it:

> *"The VP is someone who embodies ethical requirements, and who "gets it right" on every occasion: someone who is able to identify the correct course of action in any situation and invariably pursues it."*
>
> *(Yuval, 2014, p. 141)*

Both Hursthouse's and Yuval's descriptions have a negative connotation of a perfectionistic tendency; one could misunderstand that a virtuous person is only a perfect agent with perfect character traits, which sounds non-human. One could also assume that being virtuous is unachievable and unreachable. Firstly, there will always be times when a virtuous person will do an act that is not virtuous. If that were not true, then we would live our lives like "perfect robots", with no need of growth; having virtues would be the same as getting a plug-in that one would get and extend his cognition with.

Secondly, virtues are perfections in themselves, but the virtuous person is not. Virtues are characteristics one strives to achieve but will never fully possess. It

would be silly to say "Now a person is at a part of their life where they fully achieved a virtue of courage. From now on, they will always act courageously."

Lastly, if the person with perfect virtues would be the only one considered virtuous, then I can confidently say that no one on the planet would be virtuous, which would render virtue ethics a worthless theory or just as an abstract concept.

Overall, one could also conclude that a VP is perfection in a definition. If only a person who possesses the virtues is virtuous and virtues are perfections, then VP would have a non-human, unnatural characteristic of perfection and therefore not exist. I would not like to base my thesis on the possibility of this kind of misunderstanding, as it can be misleading, misunderstood, and presented in the form of unrealistic expectations. As it is my wish to present the results of the thesis online, and I can expect people from different backgrounds to read about ethics in connection to UXD, I would rather present a virtuous person and virtues as ideals, or better said, guides (to avoid the negative connotation of an ideal) on how one can become a better person or how one can decide on the rightness of an act (e.g., by asking themselves what would a perfectly virtuous person do in their place or what would virtue of courage guide them to do in a certain situation). I will explain this in more detail in the following section.

V.2 Virtue ethics, right action, and motive

Virtue ethics defines morality with reference to the character of the agent. What is right to do in a particular situation is what a virtuous character would do. Some of the popular premises of right action are as follows: "An action is right if and only if it is what a virtuous agent would characteristically do in the circumstances." and "An action is right if and only if it is overall virtuous." (Van Zyl, 2014, p. 118-119)

Instead of formulating rules, virtue ethics focuses on a person and defining right actions as those that would be performed by virtuous agents (Van Zyl, 2014). Therefore, an agent deciding in a situation would ask themselves: "Would a person with a virtue X perform this action if they would be in the situation I am in?" or "Can I say that this action is virtuous and it comes from an admirable inner state?" (Kawall, 2014). If they do not find the answer to these (or similar) questions, they can reach out to a person they perceive as more virtuous than themselves and ask them what they would do.

It can sometimes happen that a person can appear to do the right act, but their intentions were self-serving. For example, a rich person can donate money to a charity, but they intend to improve their outer image (therefore, they let everyone

know through social media they did that) and not actually supporting the charity. A person could appear as they are doing a virtuous act, but that would be difficult to confirm because it seems they are manipulating others for their end, which is not in line with virtue. Contemporary virtue-ethicists therefore also include a person's motivation as a driving force of an act. An agent has to perform a particular type of act for the right reasons, with the right attitude and emotions (Van Zyl, 2018). As Slote describes it:

> *"An act is right (morally acceptable) if and only if it comes from good or virtuous motivation involving benevolence or caring (about the well-being of others) or at least doesn't come from bad or inferior motivation involving malice or indifference to humanity."*
> *(Slote, 2001, p. 38)*

Or as Hursthouse illustrates the point:

> *"What you do does not count as right unless it is what the virtuous agent would do, say, 'tell the truth, after much painful thought, for the right reasons, feeling deep regret, having put in place all that can be done to support the person on the receiving end afterwards.' Only if you get all of that right are you entitled to the satisfactory review of your own conduct, and we want the children, and the insensitive arrogant doctors, and ourselves to grant that simply making the right decision, and telling the truth just wasn't good enough to merit approval."*
> *(Hursthouse, 2006, p. 109)*

Therefore, a well-motivated person is doing an act because they do it for its own sake and not because of motives, agendas or because someone told them to (Aristotle et al., 2009)[12]. Furthermore, a virtuous person will make mistakes; never from malice, but rather from lack of knowledge or in affect (also argued by Aristotle et al., 2009). They take mistakes as things they can learn from and improve.

This work will use the above premises of right action when arguing why some acts in UXD could be considered right or not. For example, I will ask myself if a person with good motivation would do malicious acts that appear in the field, such as abusing someone's privacy, selling private information of a person, or using research on human cognition for their own benefit. Furthermore, I will also refer to virtues and try to answer if a person with a disposition to, e.g., honesty, would do

12 "The agent also must be in a certain condition when he does them; in the first place he must have knowledge, secondly he must choose the acts, and choose them for their own sakes, and thirdly his action must proceed from a firm and unchangeable character." (Aristotle, Nicomachean Ethics, 1105a30–34)

acts like this. Therefore, I will use the following section to introduce the core virtues of the field.

V.3 Virtues

In contemporary virtue ethics, virtues are described as dispositions[13] to act in certain ways. They are good character traits and are considered traits that are praised or admired. Their opposites are vices or bad character traits (Van Zyl, 2018). Virtues were first described and argued by Aristotle as the mean, or equilibrium (as Gottlieb, 2009 argues) between excesses, i.e., deficiency and vice. In *Table 2* there is a list of Aristotle's virtues extracted from his Nicomachean ethics (adapted from Gottlieb, 2009 & Nussbaum, 2013).

Contemporary virtue ethics still refers to most of those virtues; modern virtue ethicists embrace honesty, courage, temperance, benevolence, kindness, generosity, and justice as standard inventory, all of which promote the good of others (Upton, 2014; Van Zyl, 2015). Virtues are argued and categorized by philosophers in virtue theory, a field that focuses on questions about the possibility of virtue, nature, and types of virtue (Van Zyl, 2018). Often, authors try to isolate which virtues are important for a certain field, e.g., for the environment (Sandler, 2007), for the judicial system (Farrelly & Solum, 2008), or for a medical profession (Oakley & Cocking, 2001). It is my judgment that for the purpose of my work, it is not necessary to analyze different accounts of virtues and arguments for them; I rather want to focus on how having a disposition to virtues could improve UXD. Moreover, discussing which virtues are essential for the field would, in my view, not be a fruitful discussion; I would find it limiting if I would state that there are only four virtues that are important for the UXD field. If I say that I intend to appeal to a person's character, then I want to appeal to their whole character, not just a part of it. Growing towards virtue does not include just one virtue, but it is rather a disposition to virtuous behavior (Woodruff, 2018); it would be silly to meet a person who would choose two virtues, like from a restaurant menu but others they would not find interesting. Once a person has a disposition to, e.g., honesty, they would inevitably have to face courage, kindness, and other virtues.

In the following section I will describe the standard list of virtues more in detail and show examples of how they could connect to the field of UXD.

13 Virtue is a trait of character, and a trait of character is a disposition (Upton, 2014).

Sphere	*Vice of deficiency*	*Mean (Virtue)*	*Vice of excess*
Fear and confidence; fear of important damages, especially death	Cowardice	**Courage**	Rashness
(Physical) pleasures and pains	Insensibility	**Temperance, Moderation**	Intemperance
Management of one's personal property, where others are concerned	Stinginess	**Generosity**	Wastefulness
Giving on a large scale	Nigardliness	**Magnificence**	Vulgarity
Honor and dishonor	Pusillanimity	**Magnanimity**	Vanity
Anger	Iniriscability	**Mildness**	Irascibility
Truthfulness in speech	Self-depreciation	**Truthfulness**	Boastfulness
What is pleasant in amusement	Boorishness	**Wittiness**	Buffoonery
The rest of what is pleasant in life	Quarrelsomeness	**Friendliness**	Obsequiousness
Shame	Shamelessness	**Modesty**	Shyness
Distribution of limited resources	Suffering injustice	**Justice**	Injustice (caused by greed)

Table 2: Aristotle's virtues (adapted from Gotlieb, 2009 & Nussbaum, 2013)

V.3.1 Honesty

An honest person is described as one having a disposition to believe, desire, and act in an honest way (when appropriate) and display the following forms of behavior: truthfulness (being disposed to reliably telling the truth when appropriate[14]), being respectful of property (being disposed to respect the property of others), proper compliance (being disposed to reliably follow the relevant rules in a situation when they are fair and appropriate), fidelity to promises (being disposed to reliably keep promises when appropriate), forthrightness (being disposed to reliably give a complete presentation of facts when appropriate). Acts like lying, cheating, deceiving, misleading, promise-breaking are not in line with the virtue (Miller, 2017). Honesty is also connected to humility, which refers to humbleness, awareness of one's own limits and self-acceptance, and honestly without illusions (Comte-Sponville, 2013).

An example from UXD

It was described in the chapter on the effects of UXD that there are cases when agents manipulate users for their own benefit or violate their privacy without users knowing, which would, following virtue ethics, not be in line with the virtue of honesty.

V.3.2 Courage

Aristotle defined courage as a mean between rashness and cowardice (Aristotle et al., 2009). A person with excess will do acts that will harm them with no benefit to themselves or others, and a person with the deficiency will be overly passive in life, fearing it. Generally, courage is an act of overcoming fear (Putman, 1997); it is a disposition of a person to confront fear (as opposed to being fearless) with a tendency to master it and awareness of the incurred risk being with a proportion to the ends one seeks (Comte-Sponville, 2013). Major fears that a person could have are fear of physical harm or death (physical harm connected not only to being harmed from outside but harming oneself - lifestyle behaviors like overeating), fear of losing ethical integrity or authenticity (if one does not act), fear of losing control, fear of going crazy or intense anxieties or fear of the low quality of life, among others (Putman, 1997).

14 'When appropriate' refers to when there are good moral reasons. It is, in my judgment, important to note that no-one is a perfectly honest person (or any other-virtue-person), as Miller describes it: "an honest person is someone who does not rutinely lie, "steal, cheat, break promises, and deceive others for no good moral reasons." (Miller, 2017, p. 239)

An example from UXD

Artifact originator's disposition to courage (and also other virtues, like honesty) would be to stand behind the mistakes they made in the past (and were harming users, e.g., social networks selling private information), and apologize to their users.

V.3.3 Temperance

Temperance is most often referred to the ability to have self-control over bodily and life pleasures, and the ability to manage or monitor one's emotions, motivations, and behavior. Furthermore, temperance in a person is demonstrated by responding to the mistakes of other people with gentleness and compassion, trying to be forgiving, balancing pleasures (like drinking or sex), and seeking enjoyment in moderation (Vainio, 2016).

An example from UXD

The virtue of temperance could guide users to use them in moderation and avoid excessive usage, even though it could make them feel good (like scrolling through customized infinite content in the infinite scrolling function on a social media application).

V.3.4 Benevolence

Benevolence is described as the disposition to have a genuine, altruistic concern for others, i.e., to take pleasure in the well-being of others or having a general desire for the good of others (Blackburn, 2016; Hubbard et al., 2016). An agent with a benevolent disposition would have concern for others as an end in itself and not for their own benefit (Van Zyl, 2015).

An example from UXD

In UXD, benevolence could be a general tendency of all agents to make artifacts directed towards users and later adapting the artifacts based on what is beneficial for users. Generally, UXD should be a benevolent field, as it is user-centered, not creator-centered.

V.3.5 Kindness

Someone with the virtue of kindness is thought to have the disposition to be concerned and protect and promote others' well-being; kindness is an extension of benevolence, its argued to be its expression (Wilson, 2016). A kind person's motive is to have concern for others; the activity is an expression of the concern, and the

end is the expressed concern for the benefit of others (Driver, 2001). Closely related to the virtue of kindness is modesty; as Wilson describes it:

> *"To be modest is to be disposed to present your accomplishments/positive attributes in a way that is sensitive to the potential negative impact on the well-being of others, where this disposition stems from a concern for that well-being."*
> *(Wilson, 2016, p. 78)*

An example from UXD

A kind thing to do would be to invest time to adapt the pricing of an expensive artifact to different income classes (e.g., students, unemployed).

V.3.6 Generosity

For a person to have a virtue of generosity, they have to perform actions stably over time so that what is bestowed by their actions is of value to a receiver (they will give something of theirs to another person); the actions have to have an altruistic desire, and they have to be morally supererogatory and not morally required (Miller, 2018). Simply put, the generous person will do the generous act out of consideration of others and not because they realize it is generous (Driver, 2001).

An example from UXD

An artifact originator could show the virtue of generosity by donating part of their earnings (e.g., sometimes applications are downloaded and used by millions of people, generating larger amounts of income) for a good cause.

V.3.7 Justice

A person who has the disposition to be just is described as someone who develops and maintains justice between themselves and others (Woodruff, 2018), where justice usually refers to conformity to the law, equality or proportionality, or fairness (Comte-Sponville, 2013). Justice is not about learning rules and "blindly" following them (as, e.g., deontology prescribes), but it possesses the right desires and consequentially doing the right acts because one has a right state-of-character (Aristotle et al., 2009). Acts like selfishness, tyranny, temptations that strain human-goodness, overconfidence in one's own justice, bullying, unequal distribution are expressions of failure of a virtue (Woodruff, 2018).

An example from UXD

If an agent (e.g., artifact originator) would realize that their product is harmful to people in some way (e.g., their product would present high occurrences of distracting people, showing addictive behavior, or their product is becoming a platform for the spread of false information), the right thing to do would, by virtue of justice (and also other virtues, like courage), be to either adapt the artifact or remove it from the market if adapting it would not be possible. Knowingly causing them harm would not be in line with virtuous behavior.

CHAPTER VI

Connecting virtues and UXD

"What is a virtue? It is a force that has or can have an effect.
Hence the virtue of a plant or a medication, which is to cure, or of a knife,
which is to cut, or of a human being, which is to will and to act in a human way."

– ANDRE COMTE-SPONVILLE (COMTE-SPONVILLE, 2013, P. 2)

In this chapter, the objective is to connect virtues with acts of selected agents in UXD. I will argue how each of the agents involved in the process of UXD contributes to the artifact being ethical. For that, I will use the summarized UXD framework (presented again on the *Page 42*) that I defined in *Chapter II*, examples of potentially harmful and beneficial effects from *Chapter III*, and additional examples from my experience as a user experience designer.

When considering if the particular act would be the right act to do, I will use the following definitions of right acts from virtue ethics:

"An action is right if and only if it is what a virtuous agent would characteristically do in the circumstances."
(Van Zyl, 2014, p. 118-119)

"An action is right if and only if it is overall virtuous."
(Van Zyl, 2014, p. 118-119)

"An act is right (morally acceptable) if and only if it comes from good or virtuous motivation involving benevolence or caring (about the well-being of others) or at least does not come from bad or inferior motivation involving malice or indifference to humanity."
(Slote, 2001, p. 38)

Agents	*Tasks*
Artifact Originator(s)	• Creation (the idea of the project) • Defining the scope of the project • Having an overview of the process • Providing feedback
User Experience Designer(s)	• Preliminary research • Prototype design • Usability testing • Adapting the artifact
User Interface Designer(s)	• User interface design • Adapting the artifact
Developer(s)	• Technology feedback • Development of the artifact • Adapting the artifact
Copywriter(s)	• Writing the copy • Adapting the copy
User(s)	• Participating in preliminary research • Testing the prototype • Using the artifact • Giving feedback

Table 1: User Experience Design Framework

Furthermore, I will use the following questions that could help with thinking about the rightness of an act:

> *"Would a person with a virtue X perform this action if they would be in the specific situation?" or "Can I say that this action is virtuous and it comes from an admirable inner state?"*
> *(Kawall, 2014)*

In the context of UXD, I will consider the set of basic virtues that appear to be a standard in contemporary virtue ethics: honesty, courage, temperance, benevolence, kindness, generosity, and justice (Upton, 2014; Van Zyl, 2015).

VI.1. Importance of all agents

I will discuss the rightness of an act in UXD from every agent's perspective because all agents' character traits are important, with the AO being of central importance. The AO presumably has an overview of the whole project and has the final say in what is to be implemented in the application, and therefore carries the most moral responsibility.

Other agents involved (e.g., user experience designer or developer) are also important, as they could potentially, being ill-oriented, implement functions that are unethical or guide artifact originator into a direction that is pointing to unethical behavior. In my experience, clients trust designers and developers with their knowledge and in certain cases could be led to believe that certain functions are useful for users when they are not. On the other hand, designers and developers more disposed to virtuous transactions could help artifact originators by providing a product with a better user experience; therefore, their actions and knowledge could contribute to more ethical artifacts.

Furthermore, the possibility of more ethical artifacts would be higher if more agents involved would have the disposition to grow towards virtues. They could support each other and learn from the experience each person has. As it was suggested by Woodruff, growing towards a virtue is a lifelong project that requires serious commitment, one could grow by learning from others and mistakes they make along the path (Woodruff, 2018).

VI.2 Agents and virtues

VI.2.1 Artifact Originator

1. Artifact originator (AO) can mean multiple things; it can be an external client, it can be user experience designer themselves (sometimes designers come up with ideas for artifacts themselves and execute the whole idea alone), there can also be multiple clients. No matter who the originator is and how many there are, the responsibilities and connected virtues that come with being in this role are the same and they can be applied to one person or many of them.

2. Let us say that AO is a benevolent person, a person who is directed towards a good relationship with their users and have the disposition towards honesty, courage, and other chief virtues. It is difficult to say that unethical products would emerge from this disposition, as even if this accidentally happens, as soon as AO realized it, they would adapt the artifact or remove it from the market. An example would be a product that is shown to have a high occurrence of causing addictive behavior (Coyne et al., 2019; Shuib et al., 2015b; Trowbridge et al., 2018) or causing attention disruptions (Farmer et al., 2018; Primack & Escobar-Viera, 2017), among others. If AO would have the disposition to follow virtues, namely justice, this is a thing that they would not let happen and would try to come up with fixes that would remove harmful consequences or remove the product from the market if that would not be possible. Continuing with this kind of product would not be in line with AO's virtues and intentions, especially benevolence, as the artifact is harming users. If AO would, by a possible circumstance, not have a choice to remove the artifact, they would, presumably, honestly communicate that with their users and apologize for any harm it could cause. Additionally, if AO would get the information that their artifact has high occurrences of harm to a certain group of people like worsening mental disorders, having harmful effects on the attention of adolescents, their product being used for the spread of false beliefs or misinformation, or even causing accidents (Coyne et al., 2019; David et al., 2015; Ishida & Matsuura, 2001; Nasar & Troyer, 2013; Primack & Escobar-Viera, 2017; Shuib et al., 2015b;

Strayer & Johnston, 2001; Trowbridge et al., 2018; Vos et al., 2019; Wu & McCormick, 2018), it would be not in line with AO's benevolent relationship to the user (or virtues of justice or kindness) to ignore these suggestions. The AO disposed towards virtues would try to find a better solution for their product, minimizing the negative effect. Like certain medications are removed from the market or not even allowed to enter it because of the harm they can cause to some people, it does not make sense that we are, on the other side, ignorant about the effects of things like UXD products.

3. If, in general, we have an AO who had a bad motivation and decided that their relationship to the user is not of importance to them, then an artifact has a high probability of becoming unethical. In my experience, AO's often start creating a product from the point-of-view which will be beneficial to them only, not caring about the consequences that come to users. Examples of this are intentionally creating games knowing they have addictive components, creating applications to gather user's data and selling it to other companies, and creating social media applications based on the knowledge that they could be potentially addictive and thus bring more income to the AO. All of those behaviors have nothing in common with the AO's benevolent relationship towards the user, and a person oriented towards virtuous behavior would not act like that. If one intentionally starts creating a product knowing user's weaknesses would bring them benefit, we can instead talk about exploitative rather than virtuous behavior.

4. An AO with good intentions towards other people (and following virtues of justice and kindness) would put a fair price on their product and make it available for people in different classes (students, people without jobs, disabled people, among others), as a person who would respect other people and their life situations most likely would. Unfair pricing of the product most likely shows a vice of greediness or ignorance. If an artifact is an industry-standard and a student needs it to study and develop, then putting an unreasonable price (e.g., a thousand euros) would be unfair, as the student most likely cannot afford it at that point. If there is a benevolent AO, they would be directed towards finding a solution that would support the people rather than unreasonably take away from them.

5. AO has an overview of the project and provides feedback. That means they are involved in (or at least informed about) the steps that are created further. The outcomes of the responsibilities of all people involved in the process are additional responsibilities of the AO; AO's dispositions will dictate the moral outcome of the responsibilities from the user experience designer, user interface designer, developer, and other agents. Therefore, if the AO realizes something is harming the user at any point of the process, a benevolent AO would act, as benevolence would tell them to orient themselves towards a good relationship with the user.

VI.2.2 User experience designer

1. User experience designer (UXd) tries to answer questions like who will use the artifact, what does AO want to achieve with the product, define technology that is going to be used, do interviews with users, and create the user experience and prototype for further development. Once the artifact is on the market, they are adapting and updating it.

2. If there is a malevolent UXd or malevolent AO, the outcomes of their work will likely be unethical. I included AO, as it can happen that UXd is solely doing what they are told by their client. If in this case, UXd is willingly collaborating in ill-intended acts while having other choices, like other clients or projects they could work on, this does not reflect any virtuous acting. It is hard to say for certain why they are behaving like that. Likely, there is a self-interest characteristic involved, because consciously using others or being ill-directed towards others has a self-beneficial component; one gains by intentionally using others (e.g., money, recognition), which is the opposite of what person have a disposition towards virtues of justice or kindness would do. If the UXd has no other choice but to collaborate on the project (because of monetary or other reasons), one could not say they are not being disposed to virtue. Even though they take part in unethical practices, it is not their choice to do so and they will, likely, be oriented towards finding a better opportunity.

3. Disrespecting users' privacy, tracking users, and psychological targeting are common issues in UXD (Beake, 2014; Matz et al., 2017; Siroker & Koomen, 2013). There are fields of work where respecting the user's privacy is a common-sense characteristic or even law; it is expected from medical doctors to do so. If one imagines a medical doctor disclosing a patient's sensitive private data and be exposed, this would affect doctor's license or reputation. In UXD, there are companies or products where a history of privacy abuse and tracking users were publicly known issues. Nevertheless, these products exist even now[15] (with similar privacy issues). It is hard to state why creators do such things; one could presume that it is for monetary gains of AO or other agents involved. Whatever the reason, these kinds of acts are not in line with virtuous behavior. The right to privacy is a fundamental human right that a just person would respect. Assumably, there are cases where following and tracking other people would be necessary for an application. In these cases, a person with a virtuous disposition would inform the user about such actions and ask for permission, and if this not possible, at least inform them and ask for understanding.

4. Another common form of ill-intention towards users is creating malicious user experiences like sneaking additional costs, lying about the actual prices, guiding users in the interface towards the goal of creators, manipulative navigation, and infinite scrolling (Conti & Sobiesk, 2010; Gray et al., 2018; Noë et al., 2019). Marketing has become a regular part of our daily lives, and we have grown accustomed to advertisements, having websites and applications covered with moving banners grabbing our attention, and applications and websites trying to lure us in with offers. Used to a degree where it feels for me like these kinds of user experiences became a distraction I have, as a user, learned to ignore. But this feels far from a product having a good user experience or creators being respectful towards me. Likely, the manipulative interfaces bring AO's and UXD's monetary benefits as they guide users to either pay for a subscription, being led to not cancel it, watch advertisements, even

15 There are GDPR laws in Europe that try to prevent some issues with privacy (General Data Protection Regulation (GDPR) – Official Legal Text, n.d.). Here I wanted to discuss how a general tendency to disrespect privacy is not in line with virtue.

customized ones based on tracking, that bring money. It would be hard to argue that there is a vice in wanting to earn money, but wanting to make money by tricking people is not an act of virtuous behavior. This behavior shows disrespect towards the user by violating transparency, being untruthful and deceiving, acts of which an honest person would not do. If a person believes that their artifact deserves a specific price, they will try to be honest and present this price to the end-user and accept that some will accept its worth and some will not (temperance for balancing pleasures). Forcing users to watch advertisements, tricking them into subscriptions, or even trick less self-sufficient people, like children, into buying subscriptions or watching advertisements is the opposite of virtue; it seems cowardly and vulgar.

5. Gamification and gaming are other areas where the UXd could become exploitative towards users. Gamification elements could be items such as rewards, badges and scores that players compete with each other to gain. While gamification can be beneficial for users, there is also a strong possibility that such elements may contribute to addictive behavior (Hamari et al., 2014). Indeed, they may be designed for this very reason. If game designers are aware of these potentially harmful effects but do not act to mitigate them then this may reveal that creators have ill-intentions, or at least do not care about negative side effects. A more benevolent and honest person might decide to design the interface to reduce harmful side effects. Ignoring them means ignoring that your artifact is hurting other people, which is not in line with having a good relationship with users (and being honest or just with them). In the case of a highly addictive game, benevolent creators would remove it from the market, limit it, or adapt it to a degree that would lower the possibility for addictive behavior.

6. A part of UXD is also doing usability research with other users, which is usually a job of the UXd (as they design the experience). The relevant question in this area would be why the research is performed in the first place or what is the purpose of it. If the UXd (or any other agent in the process) uses the research with the intention to earn more money or take any other advantage of users, and they are aware that researching user's needs will make their product more successful, they are ill-intended towards the user. Namely,

they are greedy and unjust (which does not reflect a person disposed to virtues, it is not in line with the virtue of temperance), even if the act alone is not unethical (as the product could actually be a useful one). For example, suppose an online shop is organizing user research intending to find behavior patterns that could make users buy more products so that the shop can earn more money. In that case, this does not reflect dispositions to benevolence or honesty. Likely, they will target users' weaknesses, like tendencies to compulsive buying or boredom, and adapting the platform based on findings, as they do not consider users' well-being. Instead, they seem to be willing to exploit users and find patterns of behavior from which they can benefit. If, on the other hand, the same shop organizes user research intending to improve the experience for the user, and they would be disposed towards virtues, they would not exploit the weaknesses of the user, but rather try to make shopping a pleasant, user-friendly experience and try to consider their weaknesses by helping them avoid them, rather than triggering them on purpose.

7. Another form of research is 'behind-the-scenes' research called A/B testing or analyzing the user behavior (like analytics applications) (Matz et al., 2017; Siroker & Koomen, 2013). In this case, the essential question would again be the intention of the UXd (or any other agent) behind conducting the research. If the UXd is doing that for monetary benefits or any other personal benefits exploiting the user, this is not in line with virtuous behavior. For example, it would be difficult to argue that A/B testing in a political campaign, where they test which button or image is more attractive for users to click, is an act that is in line with being sincere towards the user. The message here is 'I will present you with an imagery and/or buttons that will be more attractive to you as a human being, and therefore increase the chances of winning the campaign' rather than 'I will present myself and my intentions sincerely to you, and then you can decide whether you would like to vote for me or not.' Furthermore, users are often not aware that this kind of research is being done in the background; it may be in small print somewhere in the terms and conditions that rarely anyone reads, and it serves the purpose of being there just because it has to be. If users are not aware and do not agree to be monitored, it would be hard to argue

that this is in line with virtues, as it would be hard to argue that stalking a person is.

8. Further, having a solution of Terms and Conditions or Privacy Policy on every website and product does not benefit anyone and does not allow for a good user experience. It seems that it is protecting the AO or other agents from being prosecuted by law; in my judgment, the more important question would be if those would be necessary if agents involved would generally care about their relationship to users, and if there would not be companies that are exploiting users[16]. For example, it would likely not be necessary to have websites overly complicated by cookie, privacy policy, and service terms consents if users could rely on the artifact of agents. And because this is often not the case, users have to agree multiple times per day to things they are, most likely, not even reading or perceiving it as an annoyance. Thus, if they want to feel protected, they have to be annoyed, which seems like a questionable quality of UXD. In my view, inventing laws for everyone, because some of bigger companies were known to exploit people, is not fair for the ones who were considering their relationships to users important, and still are. This would call for a different kind of resolution, one that would rather block problematic companies' behavior and allow a comfortable user experience for others.

VI.2.3 User-interface designer

1. User interface designer (UId) designs the product's interface (the visual part) and adapts it after it has been released to the public. UId can be a separate person or an AO or UXd themselves. As with previous agents, the same virtues apply to any agent that is involved in this step.

2. An ill-intended UId can design interfaces that guide users into clicking certain buttons or elements in the interest of UId (or AO or UXd) and not in the user's interest. For example, buttons that are highly saturated, buttons that are bigger or greyed-out options that

16 While such a point may be accused of naivety, the argument advanced here is not to dismantle all rules, as I am well aware that rules are needed to protect people. Rather, I am suggesting that if we were more inclined to support personal growth rather than relying on rules, we could reduce their necessity.

would be relevant for the user, manipulative imagery, among others (Conti & Sobiesk, 2010; Gray et al., 2018). A benevolent, honest UId would focus on the user and try to make the interface pleasant for the user and not use the interface as a tool for manipulation.

3. There are situations where UId's job is isolated; they are involved exclusively in designing the pleasant interface, but the intention of AO or UXd is not to benefit the user but to use design as a tool to lure them into the artifact, keep using it, which benefits the creators. By seeing the product, one could say that it is good-looking and pleasant to use, which benefits the user and is directed towards them. Still, there is a difference if one uses design to make things pleasant for the user or manipulate the user. Firstly, there is a difference in how the UId is treated. If design is being used as manipulation, the UId trying to be benevolent will likely not enjoy designing with this knowledge in mind compared to knowing that they are designing a beneficial artifact. Secondly, it is still not in line with virtue to use design as a tool for manipulation, even though it benefits people. Similar to a situation when a person is doing something good for you, but it turns out they have a benefit for themselves in mind (with this, I mean a conscious benefit for themselves, not an apparent benefit of making them feel good, which comes as a natural consequence, without a person doing an act because of it). If you realize that they benefited from helping you, it feels different, as if this act would be purely an act of kindness. Back to design, manipulative user interfaces change the role of design from being a complement to a good function to masking the bad function (this is how design gets a negative or manipulative connotation). When a design is used as a tool for manipulation, it is not a user experience design or design centered towards users, but towards the creators, which users will, in my experience, inevitably feel in a way.

VI.2.4 Developer

1. In UXD, a developer is a person that has the role of programming the software. The developer can be a separate person or UXd or AO themselves.

2. Assumably, the developer is involved in the whole process and gives feedback. In my experience, developers check the artifact

prototypes to see how complicated it is to execute functions, provide suggestions for improvements (e.g., suggest functions that would make the artifact less complicated, user-friendly or faster to load). A benevolent developer would be oriented towards the user (as a benevolent person is by definition), therefore suggesting improvements that would benefit the user (e.g., optimizing the website to be faster to load and more efficient to use).

3. Furthermore, a benevolent developer would also be directed towards the user while developing the artifact and, later, adapting it. Similar to other agents, it can happen that a developer is solely executing what was directed to them, and if they have limited choices, it would be hard to say that they are ill-oriented. If, on the other hand, they are intentionally collaborating or even contributing to the mistreatment of users, then this is not reflecting virtuous behavior.

4. Malicious code (hacking, hidden tracking, privacy abuse, infecting computers, among others) harms the users for the benefit of agents involved (e.g., monetary benefits) in the process, which is not a virtuous thing to do, as everyday intentional maltreatment of people for your own good is not.

VI.2.5 Copywriter

1. Similar to visual language, it is suggested that marketing can have a manipulative role; in UXD, this could happen through copywriting. It appears that manipulative marketing is not truthful about presenting the product (Sher, 2011), but rather uses techniques to make users believe the product is better or the best. In this case, copywriters exaggerate the quality of the product, using false arguments or appealing to users' emotions, like fears. Using words like better or best (e.g., our product is named the best in the market, our product is better than), up to (save up to 30%, which leads user to believe they will save 30%), acts, and helps (our product could help with this and that), copywriters are believed to present false or deceiving facts about their product (Schrank, 1996). An act of deception or being untruthful is not in line with any of the virtues (especially honesty). Therefore, the benevolent copywriter would write truthful facts about their product and present their product

(the content and the marketing of it) sincerely. Similar reasoning goes for malevolent creators of content that is spreading false beliefs or the content used to manipulate people into believing false information (like it was shown in the previous chapter regarding vaccination, false media reports, among others)

2. If a copywriter found out that their text is harmful to users in any way, a benevolent copywriter would adapt it accordingly.

VI.2.6 User

1. Users who use the artifact also have a responsibility to act not to hurt other people, such as the people they interact with inside the artifacts, creators, and themselves.

2. It has been shown that artifacts are built in a way that could potentially cause addictive behavior or make users come back and use the artifact (Coyne et al., 2019; Noë et al., 2019; Shuib et al., 2015). I will take an analogy of cigarette addiction where users are known to become dependent on nicotine (which is most likely not comparable in the strength of the addiction, but just to get another perspective). Why addiction to cigarettes could happen in the first place is probably because cigarettes exist and the responsibility for existence is on the producers' side and not on the users' side (like responsibility for the existence of the UXD artifact is on creators' side). Once the user lights a cigarette, there is partial responsibility on their side, as they were, most likely, not forced to light it up. Suppose, for whatever reason, they continue to light up and become addicted. In that case, the responsibility for the existence of an addictive substance lies with the producer, but partial responsibility for addiction and the continuation of use lies with the user. Similarly, there is a responsibility for the existence of an addictive UXD artifact with the creators, and partial responsibility for using an addictive application (like a social networking application) is with users. In virtue ethics, there is a virtue of temperance, which is referred to as an ability to have self-control over bodily and life pleasures, and in the case of UXD, this ability could refer to limiting usage of artifacts (social networks, games, websites). It is not my intention to be ignorant towards the facts that addictions could be hard to overcome, or even being aware of them, but to state that

there is partially a responsibility (or even a possibility to overcome the addiction) on the user.

3. Creators of an artifact will, benevolent or not, always create based on a user's profile, as something that would not be attractive for the user will not be successful. Therefore, it would be my suggestion for users to educate themselves or that well-intended creators provide examples of how users could be exploited. By this, they could avoid ill-intended creators and maybe choose substitutes.

4. Social media and other UXD products provide platforms where users can 'exercise' their freedom of speech. This often leads to online bullying, disrespecting other users, and maltreating them (Craig et al., 2020; Kowalski et al., 2014; Nixon, 2014). There is no need to say that acts like this are not in line with virtue, and users that have a disposition to virtuous behavior would not act in this way and probably try to help people affected if possible. Also, there is a responsibility on the AO and UXd to act if their products are used for cyberbullying.

5. Stealing artifacts like computer software or applications or abusing platforms for sharing stolen artifacts is an issue that is already addressed by governments or companies with the consequences of punishment (either by money or by the prison). Stealing is surely not a virtue, but, in my view, the attempt to limit it is not by punishing people or sending them to prison, but rather by finding ways to make applications more accessible and affordable for users and educating people on the consequences of stealing for the affected.

CHAPTER VII

Formulating guidelines for a more ethical UXD

"Self-knowledge is at the heart of every virtue."

– PAUL WOODRUFF (WOODRUFF, 2018, P. 29)

VII.1 Formulating guidelines

Contemporary virtue ethics argues that each of the virtues generates a rule or prescription, called v-rules, as *Do what is courageous*, and the vices prohibition, as *Do not do what is cowardly* (Hursthouse, 2014). Through my thesis, I argued against rules and would, therefore, for the sake to avoid pressuring a person deciding ("I have to do something" or "I should not do something"), rather avoid v-rules. Also, I want to avoid the possible perfectionistic tone of guidelines and instead formulate them as suggestions or tendencies that agents could have. If I would present guidelines in a form, for example, *Do what is just*, this would eventually follow to deontological sub-rules as *Do not manipulate users through the user interface*, or *Respect the privacy of the users*. This formulation can point people towards following a rule rather than thinking about what could be better. In this case, I argue, questions like *What would a person inclined to virtue do in a specific situation* or *How would a person with a disposition to act fair or justly react in the specific situation?* would fit better.

Additionally, I want to present the possible outcomes of growing towards virtue in user experience design for all the agents involved. I will propose them based on the discussion from the previous chapter and formulate them to 'suggest' a tendency rather than demand it.

Lastly, I will also propose a website where those guidelines would be published, inviting experts from the field to contribute.

VII.2 Agents and guidelines

Guidelines will consist of the following points:

1. a definition of who each of the agents is and what are their responsibilities,
2. a statement that would give the specific agent guidance for the right action,
3. a summary of dispositions,
4. a discussion of every point from the summary.

VII.2.1 Artifact Originator

1. Who artifact originator is, and what are their responsibilities

Artifact originator (AO) can mean multiple things: it can be an external client, user experience designer themselves (sometimes designers come up with ideas for artifacts themselves and execute the whole idea alone), or multiple clients. Some of AO's main responsibilities are the creation of the project, defining the scope of the project, having an overview, and providing feedback.

2. Guidance for right action

How would an AO, someone who treats others with honesty, respect, justice, and benevolence, among other virtues, act in a specific situation? How would they approach building, adapting, and updating a product?

3. Possible dispositions

AO would be *inclined* to:

- create products that are beneficial to users;
- observe what is happening with his product once it is released, and adapt or remove products that are harming users; further, AO would be disposed to observe how the users react to their product,

try to gather feedback, and further improve it;

- respect the privacy of users, and not abuse it for other self-serving purposes (if they would in special cases need to collect certain data, AO would be disposed to honest communication about that and asking for understanding);

- be honest with the user regarding the content of his product, and be open about its worth, i.e., pricing;

- build trust with his users, not use them for self-serving purposes, manipulate them, or harm them in other ways.

4. Discussion of dispositions

This section will include the discussion from the previous chapter for every point from the summary of dispositions. For example:

AO would be disposed to observe what is happening with his product once it is released and adapt or remove products that are harming users.

If AO got the information that their artifact is harming a certain group of people, as suggested from research shown in the previous chapter (worsening mental disorders, having harmful effects on the attention of adolescents), it would be not in line with their benevolent relationship to the user (or virtues of justice or kindness) for AO to ignore these suggestions. AO disposed towards virtues would, presumably, try to find a better solution for their product, minimizing the negative effect. Like certain medications are removed from the market or not even allowed to enter it because of the harm they can cause to some people, it does not make sense that we are, on the other side, ignorant about the effects of things like UXD products.

For the sake of not repeating parts of the thesis, further points from the previous chapter will not be included.

VII.2.2 User Experience Designer

1. Who user experience designer is, and what are their responsibilities

User experience designer (UXd) designs the user experience of the product. UXd can also be the AO if they are creating the product. UXd tries to answer questions like who will use the artifact, what does AO want to achieve with the product, define technology that

is going to be used, do interviews with users, and create the user experience and prototype for further development. Once the artifact is on the market, UXd is, presumably, adapting and updating it.

2. Guidance for right action

How would a UXd, someone who treats others with honesty, respect, justice, and benevolence, among other virtues, act in a specific situation? How would they approach designing the user experience, adapting, and updating it?

3. Possible dispositions

UXd would be *inclined* to:

- create user experiences that are focused on users and improving their experiences, and do not originate out of self-serving purposes;
- observe what is happening with the product once it is released and adapt the experiences shown to be harming users. Further, UXd would be disposed to observe how the users react to the product, try to gather feedback, and further improve it;
- respect privacy of users, and not abusing it for self-serving purposes;
- avoid building user experience for self-serving purposes, manipulating users, or harming them in other ways (e.g., track them, use their psychological profiles for psychological targeting, using gamification for self-serving purposes);
- perform and use user research (e.g., usability research, A/B testing) for the genuine purpose of improving the user experience and not for self-serving purposes. If research needs to be done in the background (A/B testing), UXd would have the disposition to inform users honestly about its purpose and ask for allowance.

4. Discussion of dispositions

VII.2.3 User Interface Designer

1. Who user interface designer is, and what are their responsibilities

User interface designer (UI) is a person that is designing the visual part of the product. UId can be a separate person or an AO or UXd themselves.

2. Guidance for right action

How would a UId, someone who treats others with honesty, respect, justice, and benevolence, among other virtues, act in a specific situation? How would they approach designing the interface, adapting it, and updating it?

3. Possible dispositions

UId would be *inclined* to:

- design an interface in a way that is appealing and understandable for the user;
- avoid using design as a manipulation tool, for self-serving purposes, but rather a tool that complements a good user-experience;
- observe what is happening with the product once it is released, and adapt the product if something seems to bother users (by gathering feedback);
- respect privacy of users, and not abusing it for other, self-serving purposes;

4. Discussion of dispositions

VII.2.4 Developer

1. Who developer is and what are their responsibilities

A developer is a person that has the role of programming the product. A developer can be a separate person or UXd or AO themselves.

2. Guidance for right action

How would a developer, someone who treats others with honesty, respect, justice, and benevolence, among other virtues, act in a specific situation? How would they approach developing, adapting, and updating a product?

3. Possible dispositions

Developer would be *inclined* to:

- develop the product in a way that is beneficial to users;
- observe what is happening with the product once it is released, and adapt the product if it seems that it is not working correctly for users (by gathering feedback, collecting bugs);
- respect the privacy of users, and not abusing it for other, self-serving purposes;
- avoid implementing malicious code in the product, one that would manipulate users or disrespect them in any other way;

4. Discussion of dispositions

VII.2.5 Copywriter

1. Who copywriters are and what are their responsibilities

A copywriter is a person that writes the textual content for the product and its marketing. A copywriter can be a separate person or a UXd or AO themselves.

2. Guidance for right action

How would a copywriter, someone who treats others with honesty, respect, justice, and benevolence, among other virtues, act in a specific situation? How would they approach writing, adapting, and updating a text for a product?

3. Summary of dispositions

A copywriter would be *inclined* to:

- be honest about presenting the product to the user, honest about its content and quality, a copywriter would be disposed to avoid writing deceiving, manipulative texts, exaggerate or present false facts;
- create a good reading experience for the user.

4. Discussion of dispositions

VII.2.5 User

1. Who users are and what are their responsibilities

Users are the ones using the final artifact. Besides using the artifact, some users participate in user research and prototype testing.

2. Guidance for right action

How would a user, someone who treats others with honesty, respect, justice, and benevolence, among other virtues, act in a specific situation? How would they approach using the product and collaborating on its improvement?

3. Summary of dispositions

A user would be *inclined* to:

- be temperate when using UXD products;
- present their feedback from their experience of the product honestly;
- act in line with virtues towards other users using the artifact;
- act in line with virtues towards the creators of the artifact;
- respectfully using the artifact, and not abusing it for self-serving purposes;
- educate themselves about how they can be manipulated through UXD products and avoid products that could harm them.

4. Discussion of dispositions

VII.3. Collaborative website

VII.3.1 Translation of the thesis to the website

I want to present the findings from my thesis on a website that would invite other experts from the field to collaborate and contribute. By publishing the website, I hope that it will slowly grow into a helpful resource for creators of UXD artifacts, not only providing the discussion on ethics of UXD, but also resources to how one could become a better creator (more about that topic also in the *Chapter VIII*).

VII.3.2 Structure and the content of the website

1. **Landing page**

- Description of the project and of the term UXD that would be used throughout the website

2. **Background**

- Virtue ethics
- Right action
- Chief virtues and its description

3. **UXD ethics**

- Why all the agents are important for UXD ethics
- Artifact originator (responsibilities, right action, a summary of dispositions, discussion of dispositions)
- User Experience Designer (responsibilities, right action, a summary of dispositions, discussion of dispositions)
- User Interface Designer (responsibilities, right action, a summary of dispositions, discussion of dispositions)
- Developer (responsibilities, right action, a summary of dispositions, discussion of dispositions)
- Copywriter (responsibilities, right action, a summary of dispositions, discussion of dispositions)
- User (responsibilities, right action, a summary of dispositions, discussion of dispositions)

4. **Support the project**

- Ideas for improvements
- Feedback

Additionally, my suggestion would be to develop a certificate, which would be a badge that a UXD artifact could obtain, having content beneficial to users and having a general tendency to be directed towards the good for users. The badge could help users distinguish between potentially harmful and beneficial products.

CHAPTER VIII

Discussion

"The character, then, must somehow be there already with a kinship to virtue, loving what is noble, and hating what is base"

– ARISTOTLE (ARISTOTLE ET AL., 2009, P. 199)

VIII.1. Evaluation of the results of the thesis

VIII.1.1 Potential drawbacks of the process

There are few drawbacks that would, in my view, need further work. It could be that UXD process includes more agents, especially when it comes to the next steps, after the artifact is finished, like, e.g., people involved in marketing the product. Also, agents could have more responsibilities. Not getting all the agents involved and missing some responsibilities, the results would lack potentially important aspects of UXD, including defining the more beneficial and harmful effects of the field. I was aware that it would be difficult for me to define all the agents and all the potential immoral acts that could come with it, as the field is broad and my experience is limited. Therefore, I stated that I wanted to provide the foundation that could be further improved through the website with the help of other experts from the field.

When connecting disposition to virtuous behavior with potential immoral acts, I used the premises for right action from virtue ethics and the virtues that come with it. The way I understand courage or justice could be very different from how someone else perceives it. Virtues could have different meanings for different peo-

ple, and there is no stable anchor to define them. For example, how a person gentle in personality shows compassion is likely different from how a person not as gentle does (assuming that there are different ranges of gentleness in people's personalities). Further, how a person from one culture defines virtue is different from how a person from another does. This could lead to different reasoning and conclusions; another person working on the same topic would probably formulate the results differently or add another vital perspective, which is also why I decided to publish my work online.

As the thesis was based on virtue ethics, the results have the same drawbacks as this field has, some of which I will discuss in the following subsection.

VIII.1.2 Potential drawbacks of virtue ethics

Virtue ethics and the problem of right action

A common argument against virtue ethics is that it does not provide a recipe for action (Van Zyl, 2018). It has been argued that rather than telling a person what a right action is, the theory focuses on telling a person who to be (Hursthouse & Pettigrove, 2018). The response to that were v-rules (Hursthouse, 2014), which are the deontological prescriptions one gets after following a virtue, for example, *Do what is kind* for a virtue, and *Do not do what is unkind* for a vice. As I have already argued in the previous chapter, with this kind of formulation, virtue ethics goes back to deontological rules, which can steer people towards actions, thus raising the question of whether the intentions are generated from the individual's morality or them following a rule. Therefore, I formulated my guidelines in a way of suggestions. For example, it sounds more realistic to say that the right action is something that a person would be *inclined or disposed to do* contrary to what they *would do*. I believe this because the softer version allows one to be the person who makes mistakes, where the other does not.

People not wanting to follow virtue ethics

Also the question arises of what if someone does not want to do something virtuous. How does one deal with acts that come from this kind of behavior? Growing away from rule-orientated ethics would give us the opportunity to focus on people who would like to be more virtuous but lack the knowledge or skills to become this.

When people, including UXD agents, gain knowledge and skills and the self ap-

preciation to put virtue ethics into their everyday life, they will be able to claim their own rights and promote those of others.

However there may also be people choose not to follow a path of virtue ethics, even when given the ability to develop. In those cases, there would be nothing virtue ethics could do for them and thus, rule-oriented ethics (or any other) would still be needed. But I am confident if good intentions and self-improvement were discussed more, and there was more education available on this topic, we would need fewer rules

Still, if a bigger part of society would appreciate virtues over rules, we would have to adapt the system we have and address those people who deviate from virtue differently than we do now. I understand this is easier said than done and maybe also sounds utopian; however, I believe it to be a valuable approach.

Perfectionistic tendency of virtue ethics

Virtue ethics talks about *a virtuous person*, *virtues*, and *virtuous behavior* as predispositions for ethics. Words and phrases associated with the theory could provide a feeling of perfectionism to a person reading about it. It seems tricky to guide someone to act as a virtuous person would or to follow virtues. If a person who does not read about ethics is presented with statements like *Be courageous,* or *Do what a just person would do*, or *The act is right if a kind person would do it*, which has a danger of sounding unrealistic. Words like benevolence, compassion, justice could have a negative 'charge', e.g., overuse of the movement of self-compassion or force of it onto people could bring a negative 'charge' to a word compassion, and this charge could, imaginably, lead to resistance or negative feeling about the virtue and learning more about it.

All things considered, I attempted to phrase the guidelines in a softer way to remove the pressure of someone being forced to do something, but rather encourage someone to think.

VIII.2. Next steps

As previously discussed, to address the drawbacks of the thesis, I intend to present the results on a website, where I would invite other experts from the field to comment and contribute and adapt the guidelines accordingly. Considering the time it would take to gather feedback and update the content, it would likely take longer for the content to become a reliable source for one to search for the right action. If not else, it could become a platform that would open more discussion on UXD ethics.

Furthermore, it would be valuable to address not only creators' relationships with users, but also ones they have with each other. In my experience, designers are often unreasonably undervalued when it comes to their knowledge, which stems from aesthetics being a thing familiar to everyone; therefore, many times, other creators frame opinions around it. If a designer's decisions and proposals are not valued as something that came out of their expertise, it is hard for a designer to keep their integrity. Also, it is often a case that a designer and developer have trouble working together; often, a designer disregards a developer's work and vice versa. Complaints appear that sometimes developers feel like designers are over-designing things, making their lives more complicated, and sometimes designers, on the other side, feel like developers are executing their designs in another way that designers imagined. This leads to tensions, and it is often hard to work like that. For that reason, I want to explore further how virtue ethics could contribute to those and similar issues that appear.

To address the drawbacks of the virtue ethics approach, I think the field would need to be further explored and improved. During the research and writing my thesis, I developed a passion for virtue ethics and realizing its potential drawbacks brought me to my goal to work on its potential improvements. Considering all things I stated regarding drawbacks, it is my intuition that ethics should rather be defined as relationship-based, meaning that relationships are the ones that are central to ethics - relationship to oneself, other people, animals, environment, and others. Further, a starting point for this is one's personal decision to work on the relationship and improve it. Many questions remain open when thinking about the next steps, for which more substantial research would be needed. I hope to have an opportunity to dive deeper in this direction.

CHAPTER IX

Concluding remarks

"In the Book of Poetry are three hundred pieces, but the design of them all may be embraced in one sentence— "Having no depraved thoughts."

– CONFUCIUS (CONFUCIUS, 2010, P. 11)

The objective of this thesis was to formulate guidelines for a more ethical user experience design. To reach this goal, I tried to answer two research questions: the potential immoral behavior of agents included in UXD, and the connection between virtuous behavior and presented moral/immoral practices. I first needed to define the agents and what tasks they have where harmful experiences for users could emerge. Main agents that appear in the UXD process are artifact originator (AO; the client or the person who creates the product), user experience designer (UXd; a person who designs the experience of the product), user interface designer (UId; a designer of the visual part product), developer (a programmer), and a copywriter (creator of the text and the content of the product). Sometimes, all of these agents are different people; sometimes, one agent takes more roles, which sums the responsibilities of all roles. Creators have tasks that are involved in the creation of the artifact and its adaptation. After defining tasks, I researched which potential beneficial and harmful effects of the field could be.

It was suggested that UXD could, on one side, help people in day-to-day tasks by offloading their memory to an artifact (e.g., calendars, reminders), by providing artifacts that help with learning and communication, and support users when it comes to their health and building interpersonal relationships. On the other side, UXD artifacts often appear as harmful; it has been argued that they can contribute to addictive behavior, potentially worsen the mental health of affected groups, act as a distraction and affect memory. Also, through artifacts, creators sometimes

track users, disrespect their right to privacy, and design artifacts to manipulate users for self-serving purposes. Sometimes users also contribute to artifacts becoming harmful, e.g., by using them for cyberbullying or spreading false beliefs. Through these behaviors, UXD artifacts often appear unethical and therefore present a need to discuss ethics in the field. From the three contemporary normative ethics approaches, I chose virtue ethics, which focuses on a person's character and its development, in contrast to rules or calculations that the other two approaches provide. The main reason for choosing this field was because working on a person's character is a long-term solution for ethics, which would not affect only a field of UXD, but also other areas of person's life. In my approach, I focused on the character of all agents involved in the process, as they could all contribute to the artifact being unethical. I attempted to connect the premise for the right action from virtue ethics (saying that an act is right if a virtuous person would do it) and core virtues: benevolence, honesty, kindness, justice, generosity, temperance, and courage with the field of UXD. Through that, I could better argue that harmful effects are something that a person who would care about their relationship with users would not do or try to repair if they would appear. Issues like fair pricing, privacy, tracking users, psychological profiling, selling data, manipulating users, users mistreating other users were addressed, and after the discussion, guidelines were formulated. Guidelines consist of presenting four sections for every agent, i.e., who the agent is and their responsibilities, premise for right action for the agent, a summary of their dispositions towards users, and a discussion of each of dispositions. The thesis reached its goal, and the research questions were answered. I argued that it has some drawbacks, firstly because of the method, and secondly because of virtue ethics' general difficulties. One could define more agents, more responsibilities, and more examples of how UXD could affect people. Addressing the drawback, I proposed to create a website where the results would be presented and ask experts from the field to comment and contribute.

Further, virtue ethics has been criticized for not providing valuable guidance and having perfectionistic tendencies, which could affect the thesis's results. V-rules were the answers of authors of the field, which, I argued, sound deontological. I, therefore, proposed a softer, more realistic version of it, e.g., what would a person that would be disposed to courage do, rather than what would a courageous person do. I think the first version makes the person think, where the second one could create a pressure of a rule and demand perfection. Further, I defended a view that phrases in virtue ethics (e.g., virtues, virtuous person, virtuous behavior) have a danger of presenting a good person as someone perfect, which is away from the reality, where also good people make (sometimes big) mistakes, and do not treat

others in line with virtue. Therefore, I conclude that more research would be needed in virtue ethics to address those and other possible additional drawbacks.

CHAPTER X

Appendix

X.1 Abbreviations

AO - Artifact originator

UI - User Interface

UId - User Interface Designer

UXD - User Experience Design

UX - User Experience

UXd - User Experience Designer

VP — Virtuous Person

X.2 Extended abstract in Slovene

X.2.1 Uvod

Področje oblikovanja uporabniške izkušnje (UXD) je nastalo kot predlog Dana Normana (Norman et al., 1995), ki je poudaril pomembnost dodajanja kvalitativne perspektive k produktom s področja stika med človekom in računalnikom (angl. Human-Computer Interaction). Artefakti so bili prisotni že prej (verjetno s pojavom prvih telefonov, kjer je uporabnik lahko izbiral med različnimi možnostmi), njihovo nadgrajevanje pa je pripeljalo do produktov, ki so postali nepogrešljiv del našega vsakdana. Digitalni koledarji, aplikacije za e-pošto, opomniki, aplikacije za komunikacijo, socialna omrežja in drugi artefakti nam omogočajo olajšan vsakdan in celo pomagajo pri naših omejitvah, ki jih imamo kot ljudje. Žal pa so večkrat UXD izdelki lahko hote ali nehote škodljivi (tudi zaradi njihovih ustvarjalcev). Izkoriščanje zasebnosti, manipulacija in splošno nespoštovanje uporabnikov nakazujejo na potrebo po etični diskusiji področja.

Cilj tega magistrskega dela je bil izdelati smernice za bolj etično oblikovanje uporabniške izkušnje. Do tega cilja sem želel priti preko dveh raziskovalnih vprašanj:

A. Kakšna so potencialna nemoralna vedenja deležnikov, vključenih v UXD?

B. Kakšna je povezava med vrlinami in moralnimi/nemoralnimi praksami v UXD?

Na vprašanje A sem poskušal odgovoriti najprej z določitvijo glavnih deležnikov, vključenih v proces UXD, in njihovih odgovornosti (X.2.2), nato pa na podlagi tega raziskati potencialna nemoralna vedenja (X.2.3). Za čim bolj celosten odgovor na vprašanje B sem začel z raziskovanjem področja praktične etike (X.2.4) in nato izbranega pristopa etike vrlin (X.2.5). Nato sem povezal rezultate iz vprašanja A z vrlinami in predpostavkami o pravilnem ravnanju s področja ter prikazal, zakaj so nekatera dejanja neetična (X.2.6). Ta diskusija je bila podlaga za izdelavo smernic (X.2.7) in končno diskusijo, kjer sem argumentiral, kakšne so potencialne pomanjkljivosti mojega pristopa in kakšni bi lahko bili naslednji koraki (X.2.7).

X.2.2 Oblikovanje uporabniške izkušnje

Z uporabo treh priročnikov UXD iz zadnjih let (Faranello, 2016; Hamm, 2014; Rosenzweig, 2015) sem določil glavne korake, ki so skupni artefaktom iz UXD:

pripravljalne raziskave, izdelava informacijske arhitekture, ogrodja in prototipa,

testiranje uporabniške izkušnje, oblikovanje uporabniškega vmesnika, programiranje in nadaljnje nadgrajevanje ter prilagajanje artefakta. Ti koraki so razdeljeni med deležnike, tako kot je prikazano v *Tabeli 1*.

Deležnik(i)	*Naloge*
Naročnik(i)	• Izdelava (ideja) produkta • Definicija obsega projekta • Pregled nad projektom • Dajanje povratnih informacij ostalim deležnikom
Oblikovalec (oblikovalci) uporabniške izkušnje	• Pripravljalne raziskave • Oblikovanje izkušnje in prototipa • Testiranje uporabniške izkušnje • Nadgradnja in prilagajanje artefakta
Oblikovalec (oblikovalci) uporabniškega vmesnika	• Oblikovanje uporabniškega vmesnika • Nadgradnja in prilagajanje artefakta
Programer(ji)	• Povratne informacije glede izbire tehnologije • Programiranje artefakta • Nadgradnja in prilagajanje artefakta
Tekstopisec (tekstopisci)	• Oblikovanje vsebine in pisanje teksta • Prilagajanje vsebine
Uporabniki	• Sodelovanje pri pripravljalnih raziskavah • Testiranje prototipa • Uporaba artefakta • Dajanje povratnih informacij

Tabela 1: Deležniki procesa v UXD in njihove predvidene naloge

X.2.3 Učinki področja UXD

Raziskave učinkov UXD na ljudi sugerirajo, da so artefakti lahko koristni, npr. na področjih kognitivnega razkladanja (angl. cognitive offloading), učenja in motivacije, zdravja, komunikacije in medsebojnih odnosov. Artefakti, kot so koledarji, opomniki, strani, ki shranjujejo informacije, spletni iskalniki, omogočajo ljudem, da odložijo del svojega spomina na zunanji artefakt in olajšajo potrebo po interni reprezentaciji (Risko & Gilbert, 2016). Pri učenju se je pokazalo, da lahko aplikacije izboljšajo uporabnikovo znanje tujega jezika (Rosell-Aguilar, 2016), pomagajo pri motivaciji uporabnikov (Hamari et al., 2014) in podpirajo študente pri študiju (Shuib et al., 2015a). Potencialni dobrodejni učinki UXD artefaktov so se pokazali tudi pri pacientih s prekomerno težo s pristopom igranja iger v razširjeni resničnosti (angl. augmented reality) (Cicció & Quesada, 2017) in pri pomoči z nadzorom vnosa hrane (Kamel Boulos et al., 2014); pri pacientih z duševnimi boleznimi, kot sta depresija in anksioznost (Sucala et al., 2017; Zhang et al., 2015); pri pacientih z demenco, astmo (Kamel Boulos et al., 2014), avtizmom (Fabri & Andrews, 2016) in drugih. Artefakti so uporabni tudi pri vsesplošnih zdravstvenih dejavnikih, kot so telesna aktivnost, spanje, preverjanje jakosti zvokov v okolju ipd. UXD artefakti lahko pomagajo tudi pri vsakodnevni komunikaciji (Margolis, 2015) in olajšajo oblikovanje odnosov med ljudmi z dušenimi motnjami (Kuo et al., 2014; Merolli et al., 2013, 2014; Välimäki et al., 2016).

Po drugi strani pa raziskave kažejo na potencialno povečanje možnosti odvisniškega obnašanja, ki ga ustvarjalci aplikacij lahko sprožijo z namernim izdelovanjem stimulativnih izkušenj, kot so všečkanje slik, stimulativna obvestila in neskončno pomikanje (angl. infinite scrolling) po artefaktu (Noë et al., 2019; Shuib et al., 2015b). Artefakti kot socialna omrežja imajo potencial, da poslabšajo stanje obstoječih duševnih motenj (Coyne et al., 2019), stanja, kot so strah pred zamujanjem nečesa in potreba po fizičnem dotiku, lahko ljudi vodijo do prekomerne uporabe artefaktov in s tem poslabšanja motenj (Elhai et al., 2016). Artefakti lahko tudi škodijo, ker mnogokrat služijo kot odvrnitev pozornosti, kar lahko vodi do slabše sposobnosti pri ohranjanju pozornosti, slabše uspešnosti in subjektivnega zmanjšanja dobrega počutja (Primack & Escobar-Viera, 2017). Kadar pride do namernega izkoriščanja uporabnikov, se poleg namernega vključevanja stimulativnih elementov uporabniške izkušnje pojavljajo izkoriščanje zasebnosti in prodaja osebnih podatkov (Beake, 2014), profiliranje, psihološko prepričevanje in prilagajanje vsebine (Matz et al., 2017), vključevanje ostalih manipulativnih elementov, kot so premikajoči se elementi, utripajoča vsebina (reklame), manipulativna navigacija, skrivanje pomembnih informacij ali prisiljevanje uporabnika v sklepanje naročnin (Conti & Sobiesk, 2010; Gray et al., 2018). Da pa artefakt postane neetičen, so lahko ob ustvarjalcih

odgovorni tudi uporabniki, npr. s širjenjem lažnih prepričanj (Vos et al., 2019; Wu & McCormick, 2018) ali kibernetskim ustrahovanjem (angl. cyberbullying) (Kowalski et al., 2014; Nixon, 2014).

Čeprav ima včasih lahko UXD pozitivne in negativne učinke, je z moje perspektive pomembno to, da ustvarjalci opazujejo, kako se ljudje na njihov izdelek odzivajo in ga primerno prilagodijo, če ugotovijo, da je lahko škodljiv.

X.2.4 Etika

Področje etike je razdeljeno na področje metaetike, praktične etike in aplikativne etike (Crisp, 2012). V delu sem izbral praktični pristop etike vrlin, pregledal še ostala dva pristopa praktične etike – konsekvečno etiko ter deontološko etiko – in argumentiral izbiro prvega pristopa. Konsekvenčna etika se pri izbiri moralno pravilnega dejanja naslanja na izbiro dejanja, ki ima najboljše posledice za največje število vključenih ljudi (Shaw, 2014), deontološka etika se naslanja na pravila, kot so »ne laži«, ki izhajajo iz Kantovega kategoričnega imperativa (Guyer, 2016; McNaughton & Rawling, 2014), etika vrlin pa na karakter človeka in njegovo napredovanje (Hursthouse, 2014). Za delo sem izbral etiko vrlin, ker ostala dva pristopa ne povesta zares človeku, zakaj je nekaj narobe in mu ne sugerirata, da razmisli o svoji osebnostni relaciji do dejanja. Poenostavljeno, pri konsekvenčni etiki se oseba odloča na podlagi računanja posledic (Gensler, 1998; Shaw, 2014), kar lahko vodi npr. do nespoštovanja manjšin, takšen način pa ne pove osebi, zakaj je nekaj prav ali narobe. Podobno velja za deontološko etiko, ki podaja pravila, kar ne pomeni, da se oseba, ki se odloča, zaveda, da je nekaj prav.

Etiko vrlin sem izbral, ker sugerira odločevalcu, da razmisli o vrlinah in kako bi oseba, ki bi bila nagnjena k sledenju vrlin, v določeni situaciji reagirala (Hursthouse, 2014). Da bi lahko oseba postala dober moralni odločevalec, bi potrebovala izkušnje, delo na osebnostni rasti, željo, da ne želi raniti ljudi (Woodruff, 2018), in tudi povezavo z drugimi ljudmi s podobnimi težnjami, da ji pomagajo, če ne bi znala dalje (Van Zyl, 2018). Takšna oseba bi se bila potencialno sposobna samostojno odločati ne samo glede področja UXD, ampak tudi v ostalih vidikih svojega življenja. Etika vrlin ima ravno tako kot ostali področji slabosti, ki jih bom predstavil in argumentiral v razdelku X.2.9.

X.2.5 Etika vrlin in vrline

Sodobna etika vrlin definira pravilno dejanje kot takšno, ki bi ga oseba, ki sledi vrlinam (angl. virtuous person), naredila (Hursthouse, 2014; L. Van Zyl, 2014).

Nadalje, dejanje je pravilno, kadar izhaja iz pravilne motivacije, ki vključuje dobrohotnost in skrbnost do druge osebe (Slote, 2001). Etika vrlin se tako ne osredotoča na podajanje pravil, ampak na apeliranje človeka, da naredi dejanje, ker to izhaja iz njega in si to pristno želi (Hursthouse, 2014; Van Zyl, 2018). Vrline so definirane kot odličnosti v karakterju, so dispozicije k dejanjem in predstavljajo nekaj, k čemur človek stremi, in smer, v katero osebnostno raste (Woodruff, 2018). Najpogostejše vrline, omenjene v sodobnih pristopih, so iskrenost, pogum, zmernost, dobronamernost, prijaznost, radodarnost in pravičnost. V delu sem uporabil definicijo pravilnega dejanja in vrline kot vodili, kar mi je pomagalo pri diskusiji o učinkih UXD na ljudi.

X.2.6 Povezovanje vrlin in učinkov področja UXD na ljudi

Pri diskusiji o učinkih sem argumentiral, da so pomembni vsi agenti, ki so vključeni v proces, ker se namreč včasih zgodi, da ni samo naročnik slabonameren, ampak tudi oblikovalec ali programer, ki lahko napačno vodi naročnika. Nadalje, tudi uporabniki prispevajo k etičnosti produkta, in sicer s tem, kako produkt uporabljajo. Pri povezovanju vrlin z odgovornostmi agentov in učinki UXD sem argumentiral, da bi npr. pošten ali pravičen naročnik najverjetneje poskrbel, da njegovi produkti ne bi imeli slabih učinkov, kot so možnost zasvajanja ali vplivanja na motnje pozornosti. Dobronameren naročnik bi zelo verjetno izdeloval produkte, ki bi podpirali ljudi, kot se je to pokazalo v raziskavah, in ne bi bil usmerjen v izkoriščanje zasebnosti in manipuliranje ljudi, ker bi to bilo v nasprotju z dobronamernostjo, poštenostjo in pravičnostjo. Ravno tako bi najverjetneje bil pošten pri postavljanju cene svojega produkta in bi ga, če bi bilo možno, ocenil na različne načine, tako da bi bil dostopen osebam z različnimi finančnimi zmožnostmi.

Pošten, pravičen, iskren in dobronameren oblikovalec uporabniške izkušnje bi ravno tako spoštoval zasebnost in integriteto uporabnikov in ne bi bil usmerjen v izdelovanje manipulativnih izkušenj ali na kakšen drug način izkoriščal uporabnika. Ko bi delal raziskave z uporabniki, bi se usmerjal v raziskovanje izboljšanja izkušnje za uporabnika v uporabnikovo korist in ne iz lastnih koristi. Pošten in dobrobiten človek namreč ne bi izkoriščal drugih v svoj prid. Podobno velja za oblikovalca uporabniškega vmesnika, ki bi oblikovanje uporabljal kot dopolnilo k dobri uporabniški izkušnji in ne za manipulacijo uporabnika. Programer, ki bi bil usmerjen v dobro uporabnika, bi najverjetneje predlagal tehnologije, ki bi dodatno koristile uporabniški izkušnji in ne bi vključeval kode, ki bi sledila uporabniku, vdirala v njegov računalnik ali kako drugače škodila uporabniku. Pošten tekstopisec bi iskreno predstavil produkt in ne bi bil usmerjen v neiskrenost ali pretiravanje o kvaliteti svojega produkta, ravno tako bi bila izkušnja vsebina, usmerjena v dobro uporabnika in ne v

prid tekstopisca ali ostalih deležnikov. Uporabniki, ki zmerno uporabljajo artefakte, bi bili usmerjeni k omejevanju uporabe in izobraževanju, kar bi jim omogočalo izogib škodljivim artefaktom. Pošteni, dobronamerni in pravični uporabniki bi spoštovali druge uporabnike in ravno tako izdelovalce artefaktov, ne bi bili usmerjeni v krajo ali izkoriščanje artefaktov v svoj prid.

X.2.7 Izdelava smernic za bolj etično oblikovanje uporabniške izkušnje

Pri izdelavi smernic sem za vsakega od agentov opisal, kdo agent je, oblikoval smernico za pravilno ukrepanje, povzetek njegovih dispozicij in diskusijo vsake od dispozicij. S tem menim, da bi celostno predstavil vsakemu agentu, kako bi njegova dobronamernost proti uporabniku prispevala k bolj etičnemu UXD. Npr.:

Naročnik

1. Kdo je naročnik in kakšne so njegove naloge/odgovornosti

Naročnik (AO) je lahko zunanji klient, oblikovalec uporabniške izkušnje (včasih oblikovalci izdelajo produkt v celoti sami), lahko je več klientov ipd. Glavne odgovornosti AO-ja so idejna zasnova produkta, definiranje obsega, pregled nad procesom in dajanje povratnih informacij.

2. Smernice za pravilno ukrepanje

Kaj bi AO, ki bi bil usmerjen v dobronamernost drugih in v poštenost, iskrenost, pogumnost, zmernost, prijaznost, radodarnost in pravičnost, naredil v določeni situaciji? Kako bi pristopil h ustvarjanju produkta, njegovemu nadgrajevanju in prilagajanju?

3. Povzetek dispozicij

AO bi bil usmerjen:

- k ustvarjanju produktov, ki bi bili koristni za uporabnike;
- k opazovanju, kaj se dogaja z njegovim produktom, ko je enkrat na trgu, in bi ga prilagodil ali odstranil, če bi se izkazalo, da škodi uporabnikom; nadalje bi bil AO slošno usmerjen v opazovanje, kako uporabniki reagirajo na njegov produkt, poskušal bi zbrati povratne informacije in nadalje nadgraditi produkt;

- k spoštovanju zasebnosti uporabnikov in ne izkoriščanju le-te v svoj prid (če bi to zares moral, bi iskreno obvestil uporabnika, mu razložil, zakaj to mora storiti in ga prosil za razumevanje);
- k poštenosti do uporabnikov glede vsebine in vrednosti produkta.

4. Diskusija dispozicij

Primer diskusije ene od dispozicij:

AO bi bil usmerjen k opazovanju, kaj se dogaja z njegovim produktom, ko je enkrat na trgu, in bi ga prilagodil ali odstranil, če bi se izkazalo, da škodi uporabnikom; nadalje bi bil AO splošno usmerjen v opazovanje, kako uporabniki reagirajo na njegov produkt, poskušal bi zbrati povratne informacije in nadalje nadgraditi produkt.

Če bi AO dobil informacijo, da njegov artefakt povzroča škodo določeni skupini ljudi (poslabšanje duševnih bolezni, negativni učinki na pozornost), ne bi bilo v skladu z njegovo dobronamernostjo do uporabnika, da bi ignoriral ta dejstva. AO, ki bi bil usmerjen v vrline, bi najverjetneje poskušal najti boljšo rešitev, ki bi minimizirala negativne učinke.

Podobno bi nadaljeval z ostalimi dispozicijami. Cel postopek bi bil ponovljen za ostale deležnike.

X.2.8 Diskusija

Ocenjujem, da sem na raziskovalni vprašanji uspešno odgovoril z določenimi potencialnimi pomanjkljivostmi, ki bi potrebovale nadaljnjo pozornost. Možno je, da je v UXD vključenih več agentov in da imajo ti več odgovornosti, kar bi lahko privedlo do definicije več nemoralnih vedenj. Zavedal sem se, da bo težko zajeti celotno področje, ker je namreč zelo obsežno, ravno tako pa so moje izkušnje omejene. Zato sem se odločil, da bom smernice predstavil na spletni strani, kjer bom povabil strokovnjake s področja k sodelovanju in nadgrajevanju.

Nadalje, potencialne pomanjkljivosti, ki jih ima področje etike vrlin, odsevajo tudi na UXD. Ena od glavnih kritik področja je, da ne daje dovolj dobrih navodil za pravilno ukrepanje (Van Zyl, 2018), ampak se bolj osredotoča na to, kdo človek je (Hursthouse & Pettigrove, 2018). Odgovor avtorjev področja je bil, da jih daje, in sicer v obliki v-pravil (angl. v-rules), ki so deontološka navodila in so posledica sledenju vrlini (Hursthouse, 2014). Npr.: »Delaj, kar je pravično,« je pravilo, ki izhaja iz vrline

pravičnosti. V delu sem argumentiral, da bi se želel izogniti dajanju pravil in se raje v čim večji meri osredotočil v preoblikovanje pravil v sugestije oziroma dispozicije. S tem menim, da bi se izognil pritisku in možnemu pojavu odporov ter raje usmeril deležnika v razmišljanje.

Etika vrlin pogosto omenja vrline, zelo redko pa je, vsaj po moji izkušnji, možno najti, kaj vrline zares pomenijo in kako so lahko relativne od človeka do človeka. Moja perspektiva je, da bi bilo treba za celostno prestavitev področja in njegovo kredibilnost definirati tudi ta manko. Menim torej, da bi bile potrebne nadaljnje raziskave.

Mislim, da je generalni vtis etike vrlin perfekcionističen. Uporaba besednih zvez kot so vrlina, sledenje vrlinam, bodi pogumen, ravnaj, kot bi pogumna oseba ravnala, se lahko sliši nerealno, lahko daje občutek starševstva in predstavi dobro osebo kot nekoga, ki je popoln. Vse to lahko, po mojem mnenju, vodi do odporov in napačnih razumevanj. Tudi zaradi tega razloga sem smernice omehčal in jih poskušal napisati bolj realno.

X.2.9 Zaključek

Delo se je soočalo s potrebo po etičnem razmisleku o učinkih področja UXD. Kot osnova za to je bila uporabljena etika vrlin, ki je bila izbrana zaradi njene usmerjenosti v karakter človeka in njegovo napredovanje. Raziskani so bili učinki UXD in določeni deležniki procesa. Na podlagi rezultatov raziskave vpliva UXD na ljudi, etike vrlin in deležnikov je bila razvita diskusija, kjer se je poudarila pomembnost vrlin vseh deležnikov in povezanost teh vrlin s škodljivimi učinki, ki jih lahko imajo artefakti iz UXD-ja. Nazadnje so bile določene smernice, ki bi vsakemu od deležnikov predstavile, kako bi dobronamernost in sledenje vrlinam lahko vplivala na naloge, ki jih opravljajo. Delo bi lahko bilo nadalje izpopolnjeno z določitvijo dodatnih možnih agentov in njihovih odgovornosti, kar bi lahko razširilo smernice. V ta namen bo oblikovana in objavljena spletna stran, ki bo povabila strokovnjake s področja k nadgrajevanju diskusije o etiki. Nadalje, samo področje etike vrlin dodaja možne pomisleke, in sicer, da ne daje dovolj dobrih, jasnih smernic, da ne opisuje, kaj vrline zares pomenijo in da se predstavlja nerealistično in perfekcionistično. V ta namen bi bilo treba področje nadalje raziskati in predlagati izboljšave ter (po možnosti) oblikovati etiko na način, da bi bila razumljiva in dostopna širši javnosti.

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CHAPTER XI

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