Individual User Experience Portfolio: A Thorough Reflection on User Experience Theory and Practice from a Personal Point Of View

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INTRODUCTION

I started this course with experience regards User Centered Design, having practiced methods and tools for User Experience (UX) from a participatory design perspective. However, I had the goal to acquaint more theoretical knowledge about the various aspects of UX in design and especially to discover my personal point of view in this.

In the first three weeks of this course I therefore gained many new insights into the various aspects of User Experience, various definitions, aspects of UX design, and evaluating UX. That is why, within this individual UX portfolio, my personal point of view on User Experience will be proposed including my own UX relevant UX definition and descriptions based on literature; weekly logbook reflections; key UX aspects; integration of UX in my past work concluding into my personal proposition in the UX design field.

Defining User Experience

User Experience has always been in conflict between vague and attractive to me as designer. Therefore, I wanted to get more grip on this concept. I always felt attracted to the notion of UX design, because of my passion for creating and researching user's experiences through participatory design approaches and empathy in design processes. User Experience, for me as designer, is

from great importance since my vision is to create a daily life experience for special need groups that enhances their feeling of empowerment and fulfills their needs of social belonging which allows them to add value to others in society on a daily basis. Therefore, I have always had this personal tension to add value to the user's lives and in this way let them add value to society. In this way, building a deeper grounded foundation in UX theory is from major importance to bring this to practice and strengthen my position in UX. Next to this, it allows me to better validate and understand the intended User Experience, created through design encounters, leading to empowerment or increased social relatedness, relevant to my vision. In this way, my learning goals related to this course and vision within Research, Design and Development (RDD) are as follows,

1. I want to gain the knowledge and skills related to value creation, to get acquainted with multiple ways to deliver value, on multiple levels, and so create supporting User Experience through meaningful design encounters.
2. I want to increase my understanding and skills in how to design for meaningful interaction in order to create empowering and socially engaging User Experiences.
3. I want to enhance my understanding and increase my toolkit for evaluating User

Experiences, making use of empathy [15] and other theoretically grounded evaluation methods.

UX DEFINITIONS AND DESCRIPTIONS

As the UX White Paper by Roto et al. suggests, User Experience is a phenomenon part of a broader general experience [14]. This 'general' experience can be explained as a dynamic concept of a person's individual stream of perceptions and interpretations resulting in emotions when encountering a system, product or service [14]. This experience includes a time aspect in which a memory is created through senses, feelings and thoughts, motivations and actions, which can be relived. Basically, this 'general' experience is a story emerging from a person encountering his/her world around [8]. But what is then the definition or description of User Experience?

User Experience is a complex and broad concept which can be defined in many ways, by many different parties, all highlighting different important aspects of UX. UX can be described from a designer's, researcher's, business's and user's / societal point of view. Even within the designer's point of view, there are many application fields for User Experience as digital design, tangible design, service design or a hybrid in between these fields. Various UX definitions showing the different perspectives include,

"All aspects of the end-user's interaction with the company, its services, and its products." From a business perspective by the Nielsen-Norman Group [14].

"Encompasses all aspects of a digital product that users experience including its form, behavior, and content." From a digital designer's perspective by UX Matters [14].

Relating back to my vision and professional identity, creating a personal definition of User Experience from a designer's perspective, taking societal changes and 'meaningful' interactions into account, in a tangible-digital design field is most relevant to me. Therefore, UX is defined for me as a combination of the definition by Roto et al. and Hassenzahl. Namely, User Experience refers to experiences derived from personally encountering systems, products or services which is unique to every individual (especially within special need groups) we are designing for [14]. Next to this, UX is focused on a particular mediator, in my case tangible-digital interactive products, system or service which create, influence and shape the user's experiences [8]. In the end, crucial for a supportive UX is that the design can be implemented in daily life and that the users have their personal freedom to make it meaningful in their own way. Therefore, Hassenzahl proposes the Why, What, How Model [8] to design for this type of User Experience in which the Why of a design, clarifying the link with the user's needs, emotions and values, is emphasized. Next to this, the How, the way of interacting with the design and how the value is delivered, is from great importance to transfer the why to the user. In this way, value creation (Why), the creation of meaningful interaction (How) and their interrelation play a crucial role for me in the definition of User Experience. It is a way of closing the gap between the user and/or society and its needs, emotions, and values through interacting with the world around.

Next to this, I was surprised by the fact that User Experience is highly affected by the aspects of time and context [8]. For me, UX has always been a perception of the experience during interaction (momentary UX) or after (episodic UX), however the moments before interaction (anticipated UX) and over time (cumulative UX) are just as important [14] for the user. For me this means that when designing for UX, it is important to take past behavior, habits [13] and experiences in the design context into account, just as the effect cumulative interaction can have on the UX over time which still has to match with the designer's intention.

WEEKLY LOGBOOK
The selections have been based on my personal goals stated above related to value creation, meaningful interaction and UX evaluation. Furthermore, the weekly final theory selections consist of a pre-lecture part, including the 'must-read' papers, and a more in-depth personal selection after lecture time.

First week: user experience and value creation
The approach for my pre-lecture activities in this week was based on getting a first grasp of a grounded understanding of User Experience because I lacked a theoretical base next to my previous experience with practical methods and tools. Therefore, through reading and summarizing the suggested "lecture" papers and secondary sources, I wanted to get acquainted with various UX definitions and the concept of value creation. Parallel to this, I have spent my time reflecting upon my previous UX experience, UX in relation to my vision, application of UX and the difference of UX across different design fields. All to create an overall 'umbrella' understanding of User Experience under which I could 'hang' more detailed aspects and theories of creating this User Experience in future career.

As said in 'UX definitions and descriptions', delivering value to the users and/or society plays a big role in the creation of User Experience. Therefore, my after-lecture approach was the first step towards a more detailed understanding of UX aspects and very much related to my first goal about value creation. That is why I selected, next to the suggested papers, the following ones: Changing your hammer: The implications of paradigmatic innovation for design practice by Gardien et al [7]; Creating Meaningful Interactions: the value framework by Den Ouden [3] and Value Sensitive Design and Information Systems by Friedman et al [5].

Through reading, summarizing and reflecting upon those theories and frameworks I tried to answer personal questions about how to create a User Experience in different fields, through value creation; do approaches differ over different fields and change over time?; can we create User Experience on different levels in design?; and what is the role of different players in User Experience as the user, society and business? In this way could learn about the importance of value creation in UX, need satisfaction, different approaches of how to do this, different levels in which you can do this and how to take into account different stakeholders in the design of UX as designer.

Second week: empathy, personal experience and design thinking
Pre-lecture activities were based on gaining a first understanding of the role of empathy in design for UX. This through reading and summarizing the suggested papers by Smeenk and Zaki. Since I had used design approaches for creating empathy in previous projects I focused on the aspects that were new for me and more theoretically grounded as the Empathic Formation compass, Mixed Perspectives methodology (using personal experience), Empathic Handover by Smeenk [15] and the Empathy Model by Zaki [16]. All in order to understand what is empathy, how it is constructed; its role in UX; and to get acquainted with theories, frameworks and tools for creating optimal circumstances for value delivery in the context of User Experience.

After lecture I wanted to reflect on the role of empathy in UX for me as designer of future innovations. I had questions as to what extend empathy is needed to design for User Experiences and especially in what situations empathy is required. Therefore, I reflected upon A Framework for Empathy in Design by Kouprie & Sleeswijk Visser [9] and Incremental and Radical Innovation by Norman & Verganti [12].

Third week: the way of interacting with the world around

My first thought was, how is this variety of papers related to User Experience? Therefore, my pre-lecture approach was to understand the different ways of how people interact with the world around and how I can use aspects of these to design meaningful interaction to create supporting User Experiences. In this way my approach was focused on my second goal as described in 'UX definitions and descriptions'. I wanted to increase my understanding and skills in design approaches for meaningful interaction in order to create empowering and socially engaging User Experiences. Therefore, I selected the suggested lecture papers to read, summarize and reflect upon.

After lecture, the role of behavior change in User Experience in creating UX still was not clear for me. Therefore, my after-lecture approach consisted of (re-) reading, summarizing and reflecting upon behavioral models [11], the impact of habits on behavioral intention [13], and the self-determination theory [6]. Through these theories and frameworks, I could also achieve my third goal of enhancing my understanding and increasing my toolkit for evaluating User Experiences.

RELEVANT KEY ASPECTS OF UX

Key aspects include User Experience itself, value based design, every-day-life behavior, interaction, social awareness and finally the use of empathy. As explained in 'UX definitions and descriptions', User Experience refers to experiences derived from personally encountering systems, products or services which is unique to every individual we are designing for. In which value creation (Why), the creation of meaningful interaction (How) and their interrelation play a crucial role in designing for it [8].

According to Hassenzahl, the fulfillment of needs and the support of values play an important role in designing for User Experience. In his Why, What and How model he explains, designing for UX starts from the Why, clarifying the user's needs and emotions in a certain

activity, forming the base for value support [8]. In this way value creation results into implementable designs which are meaningful and enable users to create memories through encounters, in other words supportive User Experiences. For this value creation, multiple frameworks and design approaches exist for value based design in UX such as Value Sensitive Design [5] and the value framework [3]. These approaches change over time through shifting paradigms and changing societies, which has consequences for the way we as designers can create value to user and/or society and thus substantiate User Experience [7].

Another important aspect of UX is meaningful interaction, as a way to deliver value to user/society and so create supporting UX. Humans daily interact with the world around, encountering many products/services/systems and are so involved in many User Experiences each day. It is important that these encounters can be integrated seamlessly in every-day-life, allowing the user's to make meaningful in their own way. Therefore, design interfaces should facilitate interaction at various levels of attention being focused interaction, peripheral interaction, and implicit interaction [2]. Next to this when interacting with the world around, humans are aware of their social environment, called social awareness. In order to create meaningful interaction in social contexts, visibility of social information is from great importance, called social translucence [4]. Moreover, User Experience consists over time, which means that the moments before interaction (anticipated UX) are just as important in the experience of a design encounter [14] as after interaction. Therefore, behavioral intention, to go interact in a certain way with the design, plays a big part in User Experience too. Constructs mentioned in the Integrated Behavioral Model can be used as design factors to possibly influence the user's intention to interact and create a User Experience [11].

A final key aspect in UX is empathy, the ability of a designer to identify with the user's lived experiences [15], which can be constructed in context [16]. Using empathy

in the design process helps creating optimal circumstances for value delivery in the context of User Experience and for UX evaluation. One of the ways as designer to gain empathy with the user is to make use of personal experience, for which the Mixed Perspectives Methodology offers a grounded way to do so. This methodology helps creating empathy by approaching the 'design problem' from shifting between multiple perspectives throughout the process [15]. Furthermore, a framework for empathy by Kouprie and Sleeswijk Visser suggests 4 phases in the process of empathy (discovery, immersion, connection and detachment) to step in and out of the user's life to gain a deeper understanding [9].

Since value creation and meaningful interaction are the two most important key aspects in designing for UX from my personal perspective, I dove deeper into approaches for both applying empathy. This, to answer personal questions about value creation, meaningful interaction and evaluating UX to build an attitude towards the role of these aspects within User Experience.

Value creation

Because of value creation, designs are sensitive to the high personal aspect of UX through consideration of 'personal' values, important to specific users. This is important to me as designer for a 'vulnerable' target group, having very different specified needs and values to consider. Therefore, I wanted to dive deeper into the different approaches for value based design and the role of various players as user, society and business.

Since I envision myself working in design consultancy (RDD), I believe it is important in value creation approaches to keep moving along the economic paradigms as designer in a business [7]. This to keep up to date with design innovation and especially with the values of the users in these changing societies over time, in order to keep creating meaningful design encounters. Different industries, fields of design, can work in different paradigms making them co-exist, which makes it hard for these which lack behind to adapt to enter new paradigms. Currently, most industries work in the 3rd

paradigm, knowledge economy, in which value is created through an open innovation process making use of user knowledge, expert knowledge and knowledge about use [7]. However, companies need to make themselves ready to move to the 4th paradigm, transformation economy, which creates value through large scale societal behavior change with the using local communities. This requires a parametric approach, in other words focus is on creating platforms for local designers to shape to fit their needs (with local insights), in which customization plays a big role. This paradigm shift asks for the adoption of some new methods for value creation as the Reflective Transformative Design Process, which is able to dynamically inform multi-stakeholder teams; Cradle to Cradle, a design approach for sustainability; and Development Kits, the providence of computer-based tools as guideline for local communities with designers to employ as design tool which makes the designs meet the companies' standards but adapts to local values [7].

When talking about User Experience, the user plays a central role in value creation. Next to this, value creation is a dialogue between the designer's, user's and companies' values. However, as mentioned above, society changes over time which has impact on the way designers have to create value but also on what level this value is created. For me, a good example is the value framework by den Ouden, addressing a way to create society-centric value, so more on a societal level. Moving towards a transformation economy, designers need to acknowledge that the role of multiple stakeholders in the process of value creation becomes more important [3]. Since, addressing societal challenges requires understanding from different perspectives as from the user, organization and societal context [3]. Therefore, another approach of value creation is through the value framework, which supports the creation of a 'shared value' amongst stakeholders resulting into new value propositions for meaningful interaction. Through various steps, different perspectives on value from economy, psychology, sociology and ecology are combined and visualized as value creation opportunities [3].

Another approach for value creation is called Value Sensitive Design [5]. It is a grounded approach to design technologies facilitating the human values, in which the design space is determined through value conflicts amongst direct and indirect stakeholders in the design context [5]. This approach builds on an iterative methodology consisting of three phases including conceptual, empirical and technological investigations. Interesting about this approach is the fact it is timeless, very concrete but flexible, and applicable in many design contexts. Also because it allows designers freedom to start the process with one or a combination of the core constructs of Value Sensitive Design, namely value, technology or context of use.

These approaches gave me insight in value creation in a multi-stakeholder context, putting user and society in the center of attention, resulting into meaningful design encounters, and so supportive UX.

Meaningful interaction
Daily life activities exist amongst others out of tasks and routines for which we use technologies. There are many aspects that make these 'tasks' meaningful such as efficiency, but emphasis is on the relevance of experiential qualities through enriched interaction [10].

In my perspective, meaningful interaction is so important in UX, because it is the way to deliver the value I want to create for supporting UX. People in special need groups are often restricted in daily life functioning, for all kinds of reasons (physical, mental, emotional or behavioral). Therefore, to contribute to the creation of 'empowering' and 'socially engaging' experiences for them, seamless integration of design encounters is from great importance. This allows them to make it meaningful in their own way.

For seamless integration, the interaction-attention continuum suggests to shift between being focused interaction, peripheral interaction, and implicit interaction [2]. These interaction types depend on the required awareness, control and intention in the specific design context. In daily contexts, the user is often occupied in routines in which they perform actions subconsciously though intentional with direct imprecise control. Therefore, peripheral interaction suits best to seamlessly provide meaning [2]. However, this may require a learning period to make the user accustomed to the design [2].

Next to peripheral interaction, constructs for behavioral intention [11] and the effect of habits play an important role in the way User Experiences come to existence. Namely, these can be used as design factors to possibly influence the user's intention to interact and so influence the anticipated UX, and opportunities for meaningful design encounters [14]. Therefore, in order to design for meaningful interaction it is important this interaction will be carried out for which the constructs of attitude, perceived norm and personal agency can be used to influence [11]. Furthermore, since daily activities are often part of routines people adopt habits. Frequency of past behavior has directly an effect on future behavior, causing highly conscious decision-making, strengthened attitudes and affected beliefs about the self which restricts seamless integration of design encounters, and so possibilities for meaningful interaction [13]. Therefore, in order to design for meaningful interactions the user's habits and behavioral impairments need to be investigated to eliminate risks for low behavioral intention.

Empathy and Evaluating UX
From my opinion, evaluating User Experiences using empathy, is an important aspect in UX because as designer it allows me to learn and iteratively adapt intended User Experiences. This enables me to better and better close the gap between the user and/or society's interaction and its needs, emotions, and values. Since, UX consists of various time-dependent versions [14], I wanted to dive deeper into how to evaluate for these different types and for different characteristics of UX which can be read in Appendix C.

INTEGRATION IN WORK DONE
Previous design (research) work was mainly focused on the aspect of empathy in User Experience, from a

practical perspective. In these projects I mainly used empathy in contextual inquiry and a variety of participatory design approaches to gain user insights. Next to this, I have integrated notions of value based design however on a more exploratory level, not in a theoretically grounded manner. Furthermore, ways to design for meaningful interaction has always been a struggle for me in the past and therefore new insights related to its role in UX gives me opportunities for application in future work.

My Final Bachelor Project (Appendix A) is a good example applying both empathy and value creation. It was a research-through-design project exploring personalization. In other words, exploring the process of turning older adult's daily life pleasures into personal design and transferring these to other elderly with the same values to create empowerment and/or social engagement. Reflecting on this project, I have applied empathy in a highly personal way, stepping in and out of the elderly's lives through five personal co-design sessions. In this way I used empathy to gain insights into their most important daily values, activities, personal design opportunities and their opinions of the personal design process. However, my main insights related to empathy were that it is useful in understanding the context of User Experience and evaluating UX till a certain extend due to possible feelings of intrusiveness or high participant load. Comparing my past integration with my new knowledge on empathy, made me realize I could have empathized in more efficient ways. This by making more use of switches to personal perspective, using my personal experiences around my grandparents and their daily values or even imagine what I would value being old. Furthermore, in future projects I would definitely reconsider the use of empathy throughout the entire process using theoretically grounded frameworks by Smeenk and Kouprie & Sleeswijk Visser, mentioned earlier.

Combining past and previous experience with empathy, it made me wonder about its relevance for me in UX for future innovations. Since I envision myself willing to create change on user and societal level, creating daily empowering and socially engaging User Experiences which are not per se technology driven I focus on incremental design [12]. In this type of innovation, empathy has a big role. However, when working with the 'vulnerable' special needs target group I believe it is important to consider in which phases to reach out to user and/or society and in what intensity. Furthermore, the paradigm of transformation economy does ask for big social change through local solutions which requires empathy in creating User Experiences.

Next to empathy, I integrated value based design however in a more exploratory way and highly from the user's perspective, not considering theoretically grounded approaches or values from other stakeholders, on other levels. Value portraits (Appendix B), allowed me to create meaningful personal designs for them however was too user-focused, intrusive and less efficient since I extracted their values from huge life stories. In this way, the fact value creation is a dialogue between user, multiple stakeholders, designer and organization/company was ignored. Therefore, in future projects I will change to grounded approaches as mentioned in the 'value creation' section before to create value in a more iterative way, to shape and refine UX, create value on multiple levels and stay aware of paradigms impacting ways of creating value.

PERSONAL UX PROPOSITION
When hired as a UX designer in a design consultancy working on societal change I will offer theoretically grounded approaches towards User Experience Design with a main focus and expertise in designing the Why of the tangible-digital product, service or system. This through methods of Value Sensitive Design [5] and the value framework [3]. Moreover, through continuous awareness of the impact of changing societies and shifting paradigms on the way I can create value as a designer, working in the company.

Furthermore, I can offer experience in the field of designing User Experiences for special needs target groups which becomes more and more relevant in a society that becomes more inclusive [1]. Therefore, for me as designer who wants to contribute to the creation of 'empowering' and 'socially engaging' experiences for them, I can offer approaches to make design encounters integrated seamlessly in every-day-life. In this way I can create design encounters (interaction), allowing users freedom to make them meaningful in personal ways. This as a way to deliver value to potential users in the societal context and so create supportive User Experience.

Next to this I can offer great knowledge and application of empathy in design processes to create the optimal circumstances as designer to find out the user's needs and values to learn from and iterate upon and finally fulfill through a refined User Experience. Moreover, my ability to use empathy leads itself for improved evaluation processes of User Experience, for which I can offer a variety of methods to use (Appendix C).

All in all, this positions me as a UX designer specialized in the context of special need groups, with great abilities to close the gap between the user and/or society and its needs, emotions, and values through a combination of meaningful interaction and value creation, offering supportive User Experiences.

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APPENDICES

Appendix A – Final Bachelor Project

Figure 1: Final personal design in the context of a meet and greet center for elderly. It enhances empowerment through a User Experience supporting the value of self-esteem by using personal wisdoms (from Alice) as a base for wisdom exchange amongst the elderly in context.
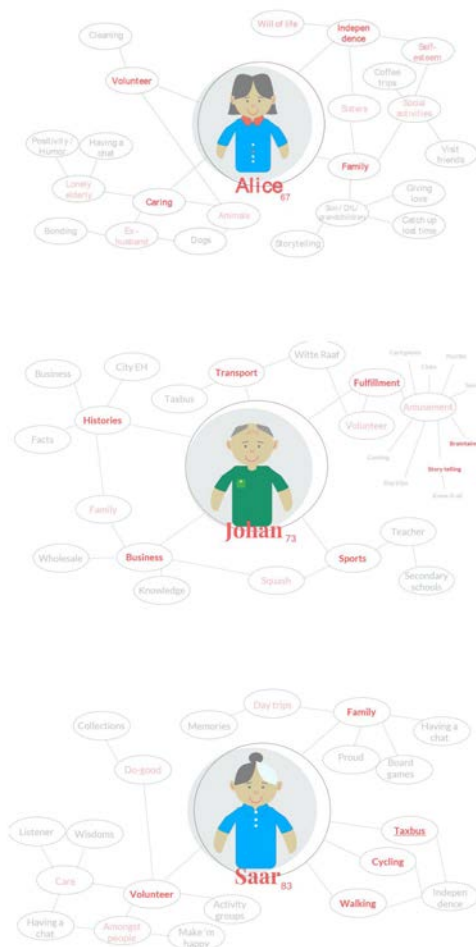
Appendix B – Value Portraits

Figure 2: The value portraits for the 3 elderly highly involved into individual co-design sessions to create a personal design based on their daily values.

Appendix C – Approaches for evaluating UX using empathy

A useful UX evaluation tool might be EDLs, as proposed for the transformational economy paradigm, being Experiential Design Landscapes, an approach to study people in their natural environment through use of smart sensors, data mining and behavior recognition algorithms to analyze new behavioral and use patterns during a given interaction (momentary UX) [7].

Another interesting approach for evaluating UX comes from the Lenz & Hassenzahl who try to present ways to perform analysis to find out particular elements in user's activities that created meaning, in other words User Experience [10]. This in order to iterate on the design and retain or highlight elements that provided particular meaning. In this case, UX evaluation starts with the user carrying out the activity through the provided design, which is analyzed by the designer. This analysis is a combination of traditional task analysis (HTA) and interpretations of the user's reflection upon his feelings related to single steps in the activity. Important notion for the designer is to ask direct questions and help in the reflection process [10]. This evaluation method can be applied to momentary UX and cumulative UX, repeating the activity a couple of times.

Finally, the self-determination theory offers opportunities for evaluating UX [6]. This theory helps understanding motivational aspects of the user for effective behavior, which can affect the meaning of design encounters and so User Experience. Furthermore, it tries to evaluate the level of intrinsic motivation for doing a certain activity, because it is interesting, meaningful or satisfying in itself, which is related to evaluating the value that is expected, anticipated UX [6]. People have basic needs for self-motivation including competence, autonomy and relatedness which if satisfied (through e.g. design encounters) lead to the support of human values of well-being and growth [6]. Evaluating this level of intrinsic motivation, through the self-determination continuum, is

key to creation of 'empowering' and 'socially engaging'
User Experiences.