On the Conceptualization of the Experience of Love: The Underlying Principles

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Abstract. In design research, general theories on experiential concepts have been accessed, conceptual models of experiences have been developed, and design strategies for experience have been presented. However, we argue that due to the complex nature of experiences and the multidisciplinary nature of design, sometimes the complete message to design *for* experience is not delivered. In our previous study, we accessed the general theories of interpersonal love to conceptualize the 'experience of love' in person-product interaction. In this paper, we complete this conceptualization and present the underlying principles of love. These principles of love are fixed and predetermined 'modes of action' that trigger what is experienced as being *love* towards consumer products. We believe that, equipped with a complete and clear set of information, designers and developers have the autonomy to decide for the more 'convenient' sort of information and, consequently, have more control over designing for experience.

1   Introduction

In the past years, several models of experience were developed, such as 'the scenes of experiences' [15], 'meaningful relationships' [3], and 'dimensions of experience' [11]. Whether we talk about user-centered or product-centered approaches, these experiential models share physical, cognitive, and emotional aspects. Therefore, we perceive product experience as the "entire set of effects that is elicited by the interaction between a user and a product, including the degree to which all our senses are gratified (aesthetic experience), the meanings we attach to the product (experience of meaning), and the feelings and emotions that are elicited (emotional experience)" [13, p. 160].

Besides their conceptual differences, it is very difficult to distinguish and dissect these 3 levels of experience (emotional, aesthetic, and meaning) since we experience "the unity of sensuous delight, meaningful interpretation, and emotional involvement" [13, p. 159]. Experiences happen in 'a scene of various dynamic aspects' [15]: they are all tangled and may occur simultaneously. In addition, experiences are 'containers' of "an infinite amount of smaller experiences" [11 p. 420] and the anticipation or remembrance of experiences generate other experiences.

Design researchers have also proposed experience approaches on certain qualities of interaction and introduced affective 'experiential concepts' such as 'beauty of interaction' [21], attachment [19], engagement [8], enjoyment [6], playfulness [22], or resonance [18]. In general, most approaches and strategies are strict in relation to the kind of information they present. Some stick to a more general level of experiences, referring to grounding theories and, to some extent, its application to design [e.g. 10], others are very well conceptualized but no (clear) design strategies are drawn [e.g. 12; 15], and others even propose and apply very clear design strategies and methods but with poor or not precise experiential conceptual information [e.g. 7]. In addition, some experiential concepts are not easily imagined or witnessed in everyday-life and can be quite abstract and less "ecologically valid than others" [10, p. 10] and once experience is not 'named', it is more difficult to have any clues of what it *is* and what it *covers*.

This sum of factors results in "a research agenda dominated by a multitude of experiential concepts that, to some extent, differ in terms of described affective phenomena, theoretical backgrounds, research purposes, and design possibilities" [10 p. 10]. Although general theories have been accessed, conceptual models of experiences have been developed, and design strategies for experience have been made, these 3 levels of information on experiential concepts are not (in general) all accessible (and clear) for designers and developers. The complex nature of experiences combined with the multidisciplinary nature of design reflected in a number of dissimilar approaches and design strategies that – combined – do not deliver the complete message.

Equipped with a clear load of information over experiential concepts, designers and developers are free to develop their own creativity and can choose the kind of information that is most 'convenient' for them and, consequently, have more control over their work.

1.1 Experiencing Love

In everyday-life, people often express their affection for certain products they own by using the word *love*. Love is inherent in all human cultures and its meaning varies from something that gives a little pleasure to a strong positive emotion of regard and affection. In ordinary use love refers to interpersonal relations, whether between mother and child, husband and wife, brothers or sisters, or friends.

In our previous study [reference omitted due to blind peer review], through the comparative analysis of various grounding theories on interpersonal love – where we could identify aspects such as the components, types, stages, expressions, and rewards of love – and the analysis of personal-life narratives about loved products, we collected information about *how* love in person-product interaction is experienced (the experience of love), *why* it is experienced (the reasons), and *what* permeates this experience (the principles).

The exploration also demonstrated that the love nurtured for products is, at many levels, similar to what is called 'partnering love', or the love experienced in partnerships such as marriage. Love, in this context, is a strong affection for products that arises out of relationships and personal ties. People love to use products because they

get things from them: once engaged in a loving relationship, lovers are *rewarded* with positive (and pleasurable) experiences that arise from product interaction and that sustain the relationship.

1.2 The Design Principles

Now the phenomenon of love in person-product relationships is identified, the general theories of interpersonal love accessed, and the design-conceptualization of the experience of love defined, in this paper we focus on the principles that trigger the experience of love. Instead of looking into *how* people interact with products and the experiences that arise from this interaction, these principles were identified through the analysis of reasons *why* people experience love when interacting with products.

A principle is a basic, essential element that determines the intrinsic nature or characteristic behavior of something [1]. The principles of love are fixed and predetermined 'modes of action' that underlie what is experienced and perceived as love. They are the essence, the core elements that represent the experience of love and that distinguish love from other experiences.

2   The underlying principles of Love

Here, we present the 5 principles that rule the experience of love. At this point, some general strategies to design for each principle are offered, although they have not been yet applied. This is intended to be covered by further studies. The principles are illustrated based on the cases from our previous exploration [23] and they refer to the love experienced through interaction with products in a broader sense, not the love experienced strictly *during* physical interaction and use. These principles are not presented in any specific order or hierarchy, although some were observed to be more frequent than others.

Fluent Interaction

"I love to use my mobile phone because it responds so quickly. It flows. I press the buttons and it does exactly what I want it to do. I feel like I am in control: I know what I am doing with it and, at the same time, it responds to me. I feel like it understands me".

People love to use products that interact fluently. Fluent interaction is a concept very much related to what Csikszentmihalyi [9] call the *experience of flow* – an optimal experience, a mental (cognitive) state of operation in which the person is fully immersed in an activity that involves processes such as interpretation, memory retrieval and associations.

Flow of interaction is largely applied in the field of game design since any game that can provide flow to the user will, by definition, be successful as the user will feel

a strong sense of involvement (immersion) and enjoyment when playing [16]. The main difficulty to design games based on flow is the fact that games are often experienced by more than one person [4].

Flow is characterized by a feeling of extreme focus/attention, full involvement, and success in the process of the activity. Csikszentmihalyi presented eight components for the experience of flow but not all of them are needed for flow to be experienced.

– Activity must have *clear goals*;
– One must be *concentrated and focused*;
– A *loss of the feeling of self-consciousness*;
– The *action awareness merges* to the activity itself;
– Direct and immediate *feedback*;
– *Balance between ability level and challenge*;
– A sense of personal *control* over the situation or activity;
– The activity is *intrinsically rewarding*.

In the experience of love, fluent interaction is directly related to the last four components presented. Once the product provides *immediate feedback*, the course of interaction is apparent and the user has the chance to adjust their behavior (and prevent mistakes); a balance between their personal abilities and the challenge the product presents provides the pleasurable impression of intimacy that only experienced users can have; a sense of *control* over product usage or the whole situation that involves use gives a sense of security and self-conscious; all these factors contributes to a rewarding experience. In the case of love what is also interesting is that even when the activity seems slightly more challenging than their experience, users experience a feeling of *transcendence*, since they overcame former (imagined) limitations.

Affective Memory Recall

"I love to use this agenda. It was made by my girlfriend and she gave it to me right before she went to South America, to study for 6 months. It reminds me of her. Since she made it herself, this agenda has everything I need and she even put some pictures of use in it. It is quite functional also".

People love to use products that hold affective memories and act like reminders of these memories. A perfect example of that are the so-called *souvenirs*. Stewart [23] explains that souvenirs "*authenticate* our experiences and become a *survival sign* of events that exist only through the invention of narrative". This concept is related to Belk's [5] idea of extended self, as products gain a symbolic meaning to the owner when associated with memories from the past. Objects that 'provide' affective memory recall have the power to hold and release memories people invest on them: memories of a specific period of time, a cherished person, or a special event. In addition, products that remind people of their past contribute to define and maintain a person's sense of identity [20].

In the theory of 'meaningful relationships' proposed by Battarbee & Mattelmäki [3], bonding with products promote the occurrence of *meaningful associations* which comprise the memories, stories and values attached to the object. The 'world of product meaning', one of the scenes of experience proposed by Jääskö et al. [15], refers to

the historic perspective of product interaction, the roles that products take in people's lives. This world is accessed through stories that reveal these memories and is about being attached to products. Our previous study also contributes to this account: participants who shared their experiences involving affective memory recall with the beloved products were specially attached to them [reference omitted due to blind peer review]. Products that contain affective memories are irreplaceable and people would handle them more carefully, clean them more often and even avoid its use (in order to preserve them) [reference omitted due to blind peer review, 19].

Mugge et al. [20] propose that designers can influence the attachment between consumers and product by encouraging the memories associated with a product. They propose two strategies to encourage product-related memories: to implement odors that bring back memories; and making sure that a product 'ages with dignity'. A fact that eases the design of products that contain memory, although not with the same weight of attachment, is the case of products that 'reminds' of other products: one may love to use an antique pasta machine because it reminds him/her of the afternoons spent making pasta at grandmother's house, with a similar machine.

Comprised Symbolic (social) Meaning

"I love to use my IPod nano. I must say I don't even know exactly how it works, but I love it. It is such a cool gadget. When I am in the train, I feel so hip when I take it from my pocket, unroll the wires, put the headphones in my ears, take the cover off and turn it on. I notice that people around me, specially the ones who are using regular mp3 players, always look when I perform this ritual (…) and what I find funny is that when I bump into someone who also has the white earphones, I feel that we both look each other and display some kind of approval look (…) as if we could understand each other".

People love to use products that comprise symbolic meanings. This principle is not very different from the previous one, since objects that bring back memories do comprise symbolic meanings. However, the focus here is on meanings that can be exposed to and/or perceived by others, in a social environment.

Products that can encourage and facilitate the construction and familiarization of people's self identity and the communication of this identity are expected to fulfill users with social pleasures. Because we are natural social beings, 'who experience things together' [15], socio-pleasure is gained from interaction with others [17]. In the 'scenes of experience' [15], the "world of humans" is where people's personalities, attitudes, values, motivations, life-style and past experiences have an important role. Beyond their utilitarian function, the products we own and use form a complex language of symbols.

Here, this principle is related to 2 specific scenarios: (1) the idea that people look for products that already have an identity and that by owning this product these qualities are expected to be seen as theirs; and (2) the fact that people want to communicate their identity (and intrinsic values, beliefs) through products. To design for these scenarios may not be an easy task, but we must realize that there are some tendencies in people's behaviors that can be used to create strategies. For example, one who

wants to be perceived as someone who is 'trusting' and 'reliable' would most likely give preference to products that are perceived as having 'quality'. When choosing for 'quality' products people tend to decide for robust machines, which already give indications of a product's style.

Shared Moral Values

"I love to use this hair comb from The Body Shop. I like products from The Body Shop because they make responsible products. I know that, for example, no forest was destroyed in the making of this comb, or any other product they make; no animal was injured with animal testing (…) and I like to think that I am part of it, that I am contributing to a better world".

People love to use products through which they can share moral and ethical values. It is about a match between the product's and users' ethical and moral beliefs. In an era where we face the mass destruction of our planet's natural resources and an imminent global warming; an increasing number of deadly diseases and poverty, these values have gained an enormous importance in people's life.

Conscious (or ethical) consumerism is a social movement based on the impact of purchasing decisions on the environment and the consumer's health and life in general. The main motivation to consume ethically is certainly the pleasure people get from it. Conscious consuming leads to ideological pleasures – an abstract form of pleasure that is experienced when a product embodies such values and conveys a sense of environmental responsibility to the user [17]. One who consumes ethical products is surrounded by a rewarding feeling of being "the one who contributes to a better world"; it is a sense of being good to other people and to their selves. It enhances people's personal values.

Conscious consumers are aware of the things they buy: products should be made ethically, without harm or exploitation of humans, animals or the natural environment. They favor ethical products, be they fair trade, cruelty free, organic, recycled or produced locally. Products may be developed with the input of such values. The preference for designs and materials that do not pollute or exploit the environment, that can be recycled or re-used; or products that are produced in a more 'transparent' way (do not explore people, children or animals) may lead to gratifying experiences.

Pleasant Physical Interaction

"I love to play tennis with this racket. I love it because I don't feel it when it is with me. It is light and I can feel the grip. Some rackets are really heavy and when you hit the ball you can feel it resonating in your bones. This one has the right size for my hands (…) my hands really fit to it. I also like the sounds it makes when I hit the ball".

People love to interact with products that are physically pleasant. Hekkert [13] refers to the term 'sensuous delight' to how a product can gratify our senses. Our sense of

touch not only provides us with information about the world but also makes us aware of our own body, which forms a basis for the experience of self [13].

Although for the experience of love some other senses may also be combined (like in the example – sound). To design for pleasant physical interaction, designers must be aware of people's perception of texture, shape, weight, comfort, temperature, vibration, sharpness and, of course, ease of use [13].

3 Discussion and Conclusion

In order to experience love, these principles are not expected to act altogether. Products can be loved by comprising only one of these principles, although the love seemed stronger and more frequent when at least two or three of these principles worked jointly. To this account, specific types of products may require a specific set of principles; and certain principles may appeal more than others to different types of people, according to their personality.

Although the principles of love were observed through the analysis of stories, other researchers have also been alert to these elements of experiences and have come across principles in a more spontaneous manner. In the case of surprise [18], the observance of products in the market revealed the apparent information incongruence between vision and touch and that these products were likely to be a source of surprise (e.g., a lamp that looks like it is made out of glass – and feel rigid and fragile – is actually made of rubber, and is flexible and soft).

The structure presented in this paper provides a clear and convenient guide for designers and developers to design consumer products, facilitating the experience of love. Since it is a hierarchical structure, each step taken helps the development of the other, which makes the 'story' of the experience more logical.

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