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A performative perspective on UX

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Abstract

As increasingly more interactions occur in public or social settings, the concept of interaction as a “performance” provides a compelling perspective when evaluating user experience (UX). Building on dramaturgical/performative metaphors and phenomenological theory, this paper presents a performative perspective on UX that focuses on mobile or public interactions. Based on concepts from phenomenology, this approach emphasises the importance of subjective individual experiences as the natural focus of analysis. Self-reported subjective experiences can be organized and analysed using dramaturgical metaphors, where interaction can be understood in terms of characters, props and stages. This paper distils these foundations into key concepts and discusses the implications of adopting this perspective in practice. Thus, this performative perspective on UX combines theory and metaphors to guide the evaluation and analysis of UX in mobile or public settings.

Introduction

The evaluation of user experience has become an increasingly important aspect of usability and human computer interaction research. However, as a relatively new area of research it has lacked a clear and unified theory, methodology and understanding [1]. Given the multidisciplinary nature of user experience research, which incorporates designers, psychologists, sociologists, computing scientists, and researchers from the mixed background of human computer interaction and beyond, it is not surprising that the community is having trouble finding common ground. This diversity of definitions and approaches has led to a rather fragmented community lacking both common understandings and comparability of results. There have been a variety of activities and special interest groups in the community tackling these disparities by discussing appropriate methods for user experience [2], developing shared understandings or definitions of user experience [3], and discussing the theory, if any, behind user experience [4]. While some important overarching aspects of user experience have been identified [1] there is still a lack of clear direction in the community as a whole.

This paper presents a performative perspective on UX, combining phenomenology and dramaturgical metaphors in order to understand experience as performance. This is a compelling approach to understanding interactions that occur while mobile or in public places because these interactions are often performed in front of spectators, where the very presence of these spectators significantly changes the experience of interacting. The influence of spectators is particularly interesting for highly visible actions, such as whole body interactions, where alternative input and output techniques such as gesture, speech or proximity make use of the whole body as an interactive part of the interface. These

kinds of interfaces, which often require users to perform new and possibly strange actions in public places, may be unacceptable or undesirable to use in certain public spaces. This performative approach to user experience stems from the embodied interaction tradition [5]. However, where Dourish's embodied interaction builds on the combination of social computing and tangible computing, this performative perspective on UX builds on *social computing* and *whole body interaction*. This slightly different foundation leads to less of a focus on embodiment, and more on *performance*.

A performative approach to user experience

This perspective on UX is built on a theoretical foundation in phenomenology, where individual subjective experience is the primary and natural focus of inquiry. This approach focuses on experience itself as a subjective phenomenon that is constantly being interpreted and reinterpreted by the individual. When interaction is viewed as a performance [6], experience can be described with respect to performers' perceptions of their own appearance, their consideration of the spectators around them, and the ways in which they fluidly move between performing and spectating. This paper refers to "performance" as in the performance of everyday life, where nearly every action is considered a kind of performance. Goffman describes a wide range of performances, from implicit performances of everyday actions and impression management to explicit performances such as giving a formal presentation to an audience or theatrical performance [7]. The entire spectrum of performance is important to consider when evaluating experience because both implicit and explicit performances can form a significant aspect of the user experience. When designing and evaluating these performative experiences, dramaturgical metaphors, as discussed by Goffman [7], provide a way of describing and analysing interactions. These concepts, which come from traditional theatre, describe an individual's surroundings and how decisions are made based on those surroundings with respect to appearance, norms and standards, locations, and audience.

Valuing the subjective experience of individuals is an important aspect of this performative approach. From the perspective of phenomenology, social life exists within the subjective experience of individuals where an "objective" world or experience is of little importance or interest and arguably may not exist as an object that can or should be studied. There are two key aspects of phenomenology that separate it from the traditional positivist sociological perspectives [8]. Firstly, humans as social beings are not simply controlled by external forces and factors but are constantly interacting and actively creating their own social reality. Secondly, specialised methods are required to access those experiences, perceptions, and intentions that are central to humanistic sociological inquiries [8]. Within the field of sociology, this meant a shift from the traditional methods working with records, reports, and statistics to the development of participant observation, refined use of the interview technique, and the adoption of ethnographic methods. With respect to user experience, adopting this theoretical stance suggests a move away from traditional lab studies of interface accuracy and speed to studies that examine experience, usability, and perceptions as they are developed in real world settings.

Key concepts

In order to effectively apply phenomenological theories and dramaturgical metaphors in practice, this paper distils these perspectives into four key concepts that can be used to

guide the design, execution, and analysis of user experience studies. These key concepts provide guidance and purpose when completing both qualitative and quantitative user experience research from this performative perspective.

Understanding location

Identifying how users understand and perceive the location of interaction is an importance aspect of performative experiences. Where did the interaction occur? How does the user describe the location? What norms and standards does the user describe when talking about different locations? How familiar is the user with the different locations discussed? These aspects of location, as described by the individuals that take part in the experience, must be clearly identified by the researcher.

Perceptions about performance

Individual subjective opinions about how the performance looks and feels are important aspects of experience. What aspects of the performance do users like or dislike? What visual aspects of the performance are identified when discussing preferences? How do users describe comfort or discomfort when talking about performance? How do users describe their own personality when discussing performance? These kinds of internal perceptions about the enjoyability, acceptability, and overall experience of performing are important for the researcher to identify in order to understand how performers perceive themselves.

Reactions from spectators

How users make sense of the reactions of spectators and how these influence future behaviours are an important aspect of experience. Who are the spectators that are present during a given interaction? What do users think about spectators in the different locations where interaction occurs? What did the spectators do during a given interaction? How do users attach meaning to spectator reactions? Because spectators have a clear influence on individual behaviour, understanding how the individual makes sense of spectator reactions helps to make sense of motivation and decision-making.

Recalling past experiences

The ways in which users tell stories about past experiences, the opinions and values that are associated with past experiences, and the self-reported reasons for overall judgements about past experiences are important. What experiences do users most often discuss? How do users discuss these experiences as evidence for their opinions? Which aspects of a past experience are the most important for users? Gathering self-reported data about past experiences allows researchers to understand what information users are building on when making decisions in public places and how this affects behaviours.

Implications for methodology

When the focus of analysis is on subjective user experiences, there are significant implications to the way in which such research should be carried out. An important aspect of this kind of performative user experience research that must not be taken for granted is that this research is completed in the context of a social encounter that comes with predefined roles, expectations, and norms and standards. The social encounters that have been created for the purpose of user studies, whether that is an interview, an

observation session, or even the use of quantitative sensing to record behaviours remotely, must take into account the issues associated with the social encounter.

Another important issue is that the experience or phenomenon that is the focus of study often is not practical or accessible to be studied directly in the context in which it appears. For example, during a longitudinal deployment of a multimodal mobile system it is not practical or ethical to constantly shadow a participant in order to observe interaction as it naturally and sporadically occurs throughout the day. Additionally, it is often the case that the experience itself is not easily observable or that the observations themselves are not enough to understand the experience thoroughly. For example, observations alone may not be sufficient to understand why a user chose *not* to use a gesture-based interaction while commuting. In many cases, the study of user experience must be completed outside the actual context where that experience occurs through interviews and discussions after the fact. Only through the triangulation of a variety of data can the researcher gain a more complete understanding of observed behaviours.

This performative approach to user experience is essentially mixed, drawing from both quantitative and qualitative techniques. For the following popular techniques for user experience research, this paper discusses the particular implications for completing these techniques from a performative perspective.

Surveys

Surveys are powerful tool for gathering initial reactions to and perceptions of performative interaction techniques at a relatively low cost and can be completed early in the design process. The content of the questions used in such surveys should be based on the key factors described above in order to address issues such as location, audience, and appearance. Successful examples of surveys used to evaluate performative user experience, in particular social acceptance, can be seen in [9] and [10].

Focus groups

The focus groups used to evaluate user experience from this perspective must create an experience and use this experience to generate both quantitative and qualitative data. This typically involves the use of experience prototypes [11] and the collection of a variety of data such as multiple choice responses, card sorting activities, and open-ended discussions. By creating experiences that give performers the opportunity to experience and imagine the places where they might use a given interaction and the audiences they might perform that interaction in front of, focus groups can address several of the key concepts described above. A good example of this style of focus group can be seen in [12].

Interviews

One of the great advantages of interviews is that they can easily be completed at most stages of development, and can address both past experiences and imagined future experiences. Interview questions that probe any one of the key concepts described above will address the important aspects of performance from which a researcher can develop of rigorous analysis.

'in the wild' user studies

This approach encourages the evaluation of user experience in the wild given its heavy reliance on subjects' real world subjective experiences. Completing user studies is a good

way to look at experience over longer time scales, but can also be completed in the early stages of design using prototypes to investigate simpler experiences. The user studies come in a variety of forms, from using basic experience prototypes [11], to completing controlled 'on-the-street' studies [9], to relatively uncontrolled longitudinal prototype deployments [13]. In all of these, however, the goal is to create an experience for users and gather as much data as possible through remote sensing technology, interviews, questionnaires, and observations. User experience can then be studied through the variety of qualitative and quantitative data collected throughout the experiment.

Conclusions

This performative perspective on user experience builds on phenomenology and dramaturgical metaphors to highlight the importance of a mixed methods approach that combines traditional ethnographic methods from the humanist tradition of sociology with quantitative usability methods from computing science. This provides a compelling approach to the evaluation of mobile technology, especially for interfaces that exploit the whole body for interaction while on-the-move. Many of the techniques that make interaction on-to-go possible are highly visible or noticeable, such as gesture or speech input and multimedia feedback. By viewing these actions as performances, the design, evaluation, and analysis of these applications can be led by the key concepts described above. For example, interview questions and sensor systems can be designed to capture key information based on this approach for an analysis that builds on many sources. By guiding both qualitative and quantitative analysis in this way, this approach provides designers with a novel perspective on mobile UX.

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