THE SERENDIPITY SHUFFLE

Tuck W Leong 1, Frank Vetere 1, Steve Howard 1, 2
1 Department of Information Systems, University of Melbourne, Victoria, Australia
2 Department of Computer Science, Aalborg University, Denmark
1 {twleong; fv; showard}@unimelb.edu.au; 2 showard@cs.aau.dk

ABSTRACT

Recently, listening to music in shuffle mode has gained a strong following. Analysis of online data about the ‘shuffle experience’ reveals a range of rich and unusual user-experiences - one in particular is Serendipity. Although serendipity is often imbued with ‘magic’ or regarded as a product of chance and luck, its effects can be inspirational and transformative. To date, little has been done to understand and characterise this experience. We sketch an initial understanding of serendipitous experience, and position it within a broader view of user experience. We also surface some implications for user-centred design processes.

KEYWORDS: serendipity, shuffle, user-experience, unfinalisable design

1. INTRODUCTION

In recent years, the HCI community has enthusiastically embraced the study of user experience (Blythe, Overbeeke, Monk, & Wright, 2003; Forlizzi & Ford, 2000; Petersen, Iversen, Krogh, & Ludvigsen, 2004). What it means to live with personal technology is not captured in traditional formulations of usability. Rather this living-with-technology is laden with experiential attributes such as notions of self and how we interact in society (Grinter & Palen, 2002; Katz & Aakhus, 2002; Norman, 2004). Rich conceptualizations of user experience are required to ensure that future technologies go beyond simply supporting our activity effectively and efficiently, and instead are experienced as pleasurable, fulfilling, contributing to our sense of well being and adding to our sense of self.

McCarthy and Wright (M&W) argue that most HCI approaches to date neglect or at least underplay the role of personal experience in interacting with technology (McCarthy & Wright, 2004). Their response is to “suggest an approach to viewing technology as experience that is open to the sensual, emotional, volitional and dialogically imaginative aspects of felt experience” (McCarthy & Wright, 2004, p. 184). Drawing from pragmatist philosophers such as John Dewey and Mikhail Bakhtin, M&W propose a framework to help understand why some interactive experiences are satisfying whilst others are frustrating. Their framework provides a space within which experiences can be juxtaposed, related, separated, coalesced but never isolated.

M&W urge the need to “review lived, felt experience as prosaic, open, unfinalisable, situated in the creativity of action and the diallogicality of meaning making, engaged in the potential of each moment” (McCarthy & Wright, 2004, p. 184). They adopt a dialogical approach that sees users of technology as actively making sense of the situations they encounter, negotiating the ramifications, radically reshaping their experiences with technologies, chasing their own desires, making something of what they are given, and making sense of themselves in the process. Seen in this light, users are authors, characters, protagonists, and co-producers (Dunne, 1999).

The experience of these open and unfinalisable situations often leads to moments of serendipity, where unexpected connections or enlightened discoveries are made. Thus from a user-experience perspective,
serendipity can be seen as the meaningful experience of chance encounters. An illustrative example of encounters with chance is the listening to music in the shuffle or random mode.

This study aims to better understand the user-experience of serendipity. How is it that a piece of technology designed to allow users to abdicate choice whilst generating random content affords such an experience as serendipity? How does this happen? What is the character of this particular experience and how does it affect users? How might we design for serendipitous experience? Here we add to attempts to develop a robust and holistic understanding of experience by examining this interesting phenomenon – serendipitous experience through shuffle listening.

2. STUDYING SERENDIPITY THROUGH THE SHUFFLE

Although playing music in shuffle mode is not a new phenomenon, the iPod shuffle’s (iShuffle) release, accompanied by Apple’s marketing slogans urging us to, “mix things up … add musical spontaneity to your life” (Apple, 2005) has popularised this mode of music listening. On the surface, this can be seen as simply giving a machine the agency to generate random content and variety, but thematic examination of online self-reports from users who listen in shuffle mode reveals rich and diverse felt experiences; one of which is the sense of serendipity.

Taking shuffle-listening as our departure point, we explore how people make sense of a ‘random’ event and turn it into something which is personally meaningful. Understanding how unpredictability and randomness are experienced as serendipity adds to our current conceptualisation of user experiences, and poses challenges in regards to design for serendipity.

2.1. Approach

Data from 104 users reporting on their personal experiences of shuffle listening were gathered from the internet and converted into a text document. The sources included discussion boards (ipodlounge, eyonmac), web magazines (endgadget, wired, eyonmac, macnewsworld), blogs and replies to blog entries (cityofsound, womanathome, mushrush, gunson) and web news (guardian, eyonmac, subtraction). They were then imported into NVivo for open and axial coding (Neuman, 2003) with a schema based on M&W’s framework. Results are themes or higher order coalitions that surface features of experience of serendipity.

3. SERENDIPITY: AN ANALYSIS

In characterising user’s experience of serendipity through shuffle, we will draw upon M&W’s Threads of Experience- focusing in particular on the major components of experience – the Compositional, Sensual, Emotional and Spatio-Temporal. The authors suggest that these are not discrete elements of experience but rather that we think of the threads as multi-facetted, interwoven, different aspects of human experience which should be viewed as a ‘unity’ (McCarthy & Wright, 2004). Although our analysis look at each thread separately as if they occur separately in time and even influence each other through feedback, it is important to stress that M&W’s core message (being loyal to Dewey and Bakhtin) is that any experience is simultaneously sensual, emotional, and intellectual – that is, experience is relational.

One listener claims that moments of serendipity during shuffle-listening “…teaches me connections between disparate kinds of music and the infinite void. I understand the universe better” (ID#2). Another user was able to compose a new memory using familiar content taken out of context and re-presented in a new situation: “…forge(ing) new connections between my heart and my ears” (ID#91). The unexpected juxtaposition of tracks during shuffle listening could lead to something new being discovered or created. It is in the process of making sense of such new memories or connections that the users experience moments of serendipity. To be able to make sense of a particular random song taken out of its original context and to create a satisfying and fulfilling experience in a new situation or context during shuffle listening points to the compositional nature of serendipity and its consonance with M&W’s Compositional thread. This thread refers to the narrative structure and plausibility of the experience; in short it is about making sense of the relationship between the parts and the whole of an experience (McCarthy, Wright, & Meekison, 2005).
“Random shuffle can turn large music libraries into an ‘Aladdin’s cave’ of aural surprises” (ID# 27). This provides opportunities for unexpected rediscoveries during shuffle listening which can lead to serendipitous (re)connection with the past or another memory, as one user reports “…hear(ing) songs that I haven’t heard for years and fall(ing) in love with them again” (ID#81). Another user equates it with “…bumping into an old friend you have not seen for a long time” (ID#69). Because music is a powerful auditory mnemonic device (Bull, 2000), this accidental rediscovery can evoke memories lucidly, with “each randomly-sequenced track like an aural postcard” (ID#92). This listener is able to locate, extract and frame a particular aural memory within her history of memories and relate this to a new situation meaningfully.

It is worth noting that through this sense making a particular song is invested with new meaning. The song is now connected to other memories and situations. To experience serendipity through shuffle is to connect to, reflect on, compare, and relate different memories from the past, the present and make satisfactory sense of it all under new contexts. With new meanings invested, this experience can change the person’s sense of self as one listener realised, serendipitous experience through shuffle “had made me re-examine things I thought I knew about my favourite music” (ID#95). This reflects the Spatio-Temporal thread of M&W’s framework which is about the space and time elements of our experiences; the sense making of the connections between our past and the future.

When a listener reports feeling the “unique tingle” (ID#21), the “white-knuckle ride” (ID#94) or the “laugh-out-loud pleasurable” (ID#21) during moments of serendipity, it points to M&W’s Sensual thread. This thread orients us to the concrete, palpable, and visceral character of experience that is grasped pre-reflectively in the immediate sense of the situation (McCarthy et al., 2005). Gripped by serendipity one listener reported, “So enlightened I was feeling due to the perfect selection of music, that I could barely force myself out of my car once I arrived at my destination.” (ID#91) The ‘serendipity shuffle’ catches some unaware and at times is difficult to express; “…the random effect delivers a sequence of music so perfectly thematically ‘in tune’ that (it) is quite unsettling.” (ID#94)

One user’s encounter with serendipity when shuffle listening led him to find his “shuffle nirvana” and “…so enlightened I was feeling that I could barely force myself out of my car once I arrived at my destination” (ID#91). The emotions that this user felt and the deep effect the experience had on him is an acknowledgement of our human need to achieve emotional unity (McCarthy & Wright, 2004). It is emotionally satisfying to make sense of the unpredictable. Other illustrations include “(the shuffle) teaches me connections between disparate kinds of music and the infinite void. I understand the universe better” (ID#2) and “the unadulterated joy that comes with it” (ID#93). These examples refer to the M&W’s Emotional thread - to judgements that ascribe to other people and things of importance with respect to our needs and desires.

4. DISCUSSION

We highlighted data that are limited to only positive self reports of serendipitous experiences because we want to focus on users’ serendipity and how this experience is manifested during shuffle listening. Whether it is from a random track ‘magically’ underscoring the prevailing mood or the lyrics of a song that just ‘happens to’ speak directly to the listener at that moment, users experience serendipity through shuffle because they are actively (and creatively) interpreting their experiences. This is because a characteristic feature of being a person is our urge to interpret and understand our experiences (Bruner, 1990). Whether serendipity is regarded by listeners as “machine schooling me on connections I have not thought of” (ID#18), or simply as “the universe trying to tell me something” (ID#57), serendipitous moments can be delightfully seductive to ‘meaning-seeking’ users and its effect can be inspirational and transformative. Serendipity has encouraged some listeners to re-examine their beliefs about and understanding of their favourite music, and to establish a new way to experience music. As a columnist in The Guardian notes, “This is a radically different way of encountering music and one I don’t need to tell you is not possible in any other format.” (Bowbrick, 2002)

Using M&W’s experience framework led to a clearer picture of how users make sense of serendipity during shuffle listening. While the use of the four Threads of Experience to deconstruct serendipity has led
to a deeper understanding of this enigmatic experience, further (and future) analysis of serendipity will include the use of the other facet of M&W’s framework, in particular the Six Processes of Sense Making. Apart from adding a further dimension to our approach it may also help triangulate and confirm the analysis. Future studies with a broader approach in data gathering will also lead to a richer and more nuanced characterisation and understanding of serendipity.

5. CONCLUSION

Serendipity from shuffle resonates strongly with M&W’s urge to approach design as dialogical where it involves the designer giving to the user a design which is unfinalised, allowing users to play into their potential (McCarthy & Wright, 2004). Whilst a dialogical approach sets the stage for conditions in which serendipitous experiences are more likely to occur, it does not imply that we can determine these experiences through design. From the data, one of the influences on serendipitous experience may be the size and diversity of the music collection sampled. Since shuffling only draws randomly from the content the user has collected, the randomness studied here is constrained from the outset. In fact, it is entirely possible that too large a music library may reduce serendipity (as with a very small one). A better understanding of how users manage their play-lists and the impact the constrained randomness has in affording serendipity are worth exploring. It may also reveal variations in serendipitous experience, e.g. 'constrained serendipity', and help us understand any floor and ceiling effects as they relate to the size of the media library. Through developing a deeper understanding of this experience, we can begin to learn how to allow for serendipity to occur in other personal leisure devices. In the process it may also broaden our conceptualisation of what it means to design for richer user-experiences.

6. REFERENCES