"The most passionate cover I've seen":

Emotional information in fan-created U2 music videos

Abstract

Purpose: This article explores how both producers and consumers of user-created music videos on YouTube communicate emotional information.

Design/methodology/approach: 150 filmic documents containing fan-generated versions of U2's "Song for Someone" were purposively collected. The author used discourse analysis to understand the types of videos created, the communication of emotional information from both the producers and the consumers, the social construction of emotion in the filmic documents, and elements of intertextuality that represented emotion.

Findings: Fans created videos containing cover versions, original versions of the song with new visual content, and tutorials about how to play the song. Producers of cover versions communicated emotional information, especially tenderness, through facial expression, their surroundings, and corresponding musical elements. Producers' visual content expressed emotion through meaningful photographs and sad stories. Producers' descriptions revealed emotion as well. Emotions were individually experienced and socially constructed. Consumers conveyed emotion through likes, dislikes, and expressive positive comments. Intertextuality communicated passion for U2 through tour references, paraphernalia displays, band photographs, imitating the band, and musical mashups.

Practical implications: Information science can work toward a new generation of multimedia information retrieval systems that incorporate emotion in order to help users discover documents in meaningful ways that move beyond keyword and bibliographic searches.

Originality/value: This is one of the earliest research papers in the area of Emotional Information Retrieval (EmIR).

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Introduction

Current information retrieval systems allow people to search for information by full text, keywords, tags, and standard bibliographic metadata, but what if they want something that makes them feel happy or that abounds with passion? Although music itself holds no emotion, it generates emotion in people, and they actively seek it out for its emotional qualities (Davies, 2010). If they could, people would look for music videos or other filmic documents that meet an emotional craving, such as, "I want to watch a movie that will cheer me up" or "I'm in the mood for a video of a happy song."

Unfortunately, information retrieval systems, including those available on commercial sites such as YouTube, do not support this sort of need well. In order to truly advance information retrieval systems, it is essential to envision systems that go beyond the traditional keyword- or subject-based query and conceptualize information "needs" in new ways. In addition, people are not always necessarily looking to form a "query" that meets an information "need." They might not know exactly what they are looking for, or they might be simply browsing what is available and interacting with whatever seems interesting (O'Connor, 1993). On YouTube, music videos of potential interest appear on the right hand side of the screen when a chosen video is playing. For example, upon playing the music video for U2's song "Beautiful Day", YouTube suggests videos of other U2 songs, as well as songs by similar bands such as Depeche Mode, R.E.M., and Oasis.

It is not the role of socially networked platform providers such as YouTube to provide the metadata that is used to represent, search, or retrieve documents; instead, people who contribute videos ("producers") and those who view, like, dislike, and comment on videos ("consumers") happily do it. In an effort to move toward a new generation of multimedia information retrieval systems that incorporate intangible facets such as emotion, this article

explores how both producers and consumers of user-created music videos on YouTube

communicate emotional information.

Fandom and participatory culture

People who contribute to YouTube videos that pertain to their interests, whether they

are uploading videos or they are providing comments, likes, and dislikes about others' videos,

belong to a participatory culture. In this study, participatory culture is defined as "a range of

different groups deploying media production and distribution to serve their collective

interests" (Jenkins *et al.*, 2013, p. 2). Perhaps contrary to popular belief, participatory culture

did not come about with the rise of Web 2.0 applications. In earlier days, fans created videos

that remixed or commented on their favourite television shows; the videos were typically set

to music. While they did not have the ability to post their videos online, they shared them in

face-to-face gatherings of people with the same interest, such as at Comic-Con and Star Trek

conventions (Jenkins, 2013). With the dramatic increase in the availability of free and easy-

to-use media sharing platforms such as YouTube, a shift has taken place. The official media

distributors are still important and existent, but all people who have a webcam or a

smartphone are now able to produce and widely disseminate their own creative works that

remix or appropriate their favourite songs, videos, television shows, and other media to fan

communities that share their interest (Jenkins, 2006; Burgess and Green, 2009).

Jenkins (2013) defined a "fan" as "claiming membership in a particular subculture"

(p. xiv). His book, originally published in 1992, helped found the research area of "fan

studies", which became a subdiscipline of media/cultural/literary studies. Fan studies

incorporates a range of enquiries within fan culture, including fans' social interaction within

their groups of common interest, fans' creations such as fan fiction, how fans interact with

and discuss their authoritative creators of interest (Wilson, 1983; McKenzie, 2003), how fans

share knowledge, and how fans organize themselves for activism. The rise of social media

has empowered fans to share their cultural products and communications more easily

(Bennett, 2014). It has led to a focus on "collective creativity", or content creation that could

not have been developed without a group (Boulaire *et al.*, 2014, p. 113). Fans' creations and

conversations have been called media "paratexts", or texts surrounding and relating to the

main text (Gray, 2010).

The notion of authority as it is discussed in information science applies to fan culture.

Fan communities centre their activities and passions on the work of an authoritative creator,

such as U2, as they develop their own works and discussions. Given fans' propensity toward

reworking their favourite authoritative pieces, it is worthwhile considering why and how they

view the original versions as the authoritative ones. People determine the cognitive authority

of a work based on whether they think it is helpful and trustworthy (Wilson, 1963; Rieh,

2002; McKenzie, 2003). Affective authority is "the extent to which users think the

information is subjectively appropriate, empathetic, emotionally supportive, and/or

aesthetically pleasing" (Neal and McKenzie, 2011, p. 131). Both forms of authority can be

observed in fan culture.

Examples of fan studies involving videos demonstrate the rich variety of work in this

area. In fan culture, fan music videos consist of assembled clips from the television show or

movie of interest that highlight certain aspects of the show, such as intimate relationships

between characters or plot lines. These clips are set to music. Fans who make these videos are

called "vidders", and their creations are called "vids" (Jenkins, 1992; Sexton, 2007; Ng,

2008). Vidding is an individual, collective, and social activity all at once (Turk and Johnson,

2012). Several studies have been conducted on vids; for example, Ng (2008) analysed vids

featuring the romantic relationship between Bianca and Lena, two female characters on the

soap opera *All My Children*, and related them to other representations of LGBT relationships.

Other fan studies papers focus on music videos that instead of featuring the TV show

or film more prominently than the music, focus on music videos that feature the music itself.

Baym (2007) described how geographically dispersed fans of Swedish indie music use a

variety of online platforms to share videos, discuss the music, and create community; Ito

(2010) outlines fans' creations of anime music videos. Boulaire *et al.* (2014) explored the

different types of fans' YouTube videos that were based on one song. The types included

"semantic and non-semantic montages … imitation, diversification and ornamentation" (p.

131). The authors suggested how these collectively created works could inform digital

marketing practices.

The intertextuality of music video creation

Given the nature of fan-created videos and other products, in which fans assemble

pieces of media from different sources into new works, create their own versions of

authoritative cultural products, and so on, the subject of intertextuality inevitably arises in

academic discussions of participatory culture. When people interact with a text, they create

its meaning by way of their past interactions with other texts (Barthes, 1967; Barthes, 1977;

Murphy and Rafferty, 2015). The idea of authorship in popular music is especially fluid. Fans

rewrite lyrics, create cover versions, make remixes, and mashup their favourite songs

(Vernallis, 2013). Most fan studies scholars see fan creations as communally created: "[a]s

part of their mediated authorship, fans emphasize and foreground the intertextuality of their

creative work", and the fan groups within which the works are created form "discursive

contexts" (Stein and Busse, 2009, p. 193). Additionally, there are many people involved in

the authoritative versions of popular music. Not only do the performers "author" the songs,

but the producers, the record label, and the songwriters do as well (Karpovich, 2007).

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When fans set their favourite show clips to music, intertextuality can be observed, but it also happens in authoritative works as well. For example, many music videos created by famous artists use common visual imagery intertextually such as television news, classic films, surveillance, dreaming, clips of their own older music videos, and videos from other pop music stars (Karpovich, 2007; Vernallis, 2013). Vernallis emphasizes the importance of the interplay between image and music in music videos. Discussing the video for U2's "With or Without You", she wrote, "there is something fragile and earned about the intimacy … one of the best music videos of the eighties … with delicate projections of shadows of tree branches and water" (p. 5). Werner (2014) studied vids on YouTube of youth dancing like Beyoncé in their homes; she noted how Beyoncé's dance style makes intertextual references to female personas that exist in other times and contexts, including belly dancers and strippers.

According to Ott and Walter (2000), types of intertextuality in media include parodic allusion, self-reflective reference, and creative appropriation or inclusion. The last type can cause legal concerns for the appropriator due to intellectual property law. The authors provide the following example in relation to U2:

"In 1991, Negativland and SST Records were sued over the band's single, 'The Letter 'U' and the Numeral '2',' which sampled U2's music, interviews with band members, and a particularly foul-mouthed off-air moment from DJ Casey Casem [sic]. Though Negativland was ultimately forced to pay legal fees and damages totaling more than $90,000, their single illustrates how the stylistic device of inclusion can function rhetorically as a mode of critique. By combining textual fragments in a manner that invited a rereading of the band U2, Negativland denunciated what they saw as the 'self-righteous and complacent image-world of the polite pop of the [U2] stars' (quoted in Herman & Sloop, 1998, p. 7)" (Ott and Walter, 2000, p. 437).

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Ott and Walter also noted the importance of internet surfing in the information seeking and retrieval process. Surfing, and its inherently intertextual nature, needs to be kept in mind as the next generation of information retrieval systems is conceptualized, because surfing as a form of browsing (O'Connor, 1993) is perhaps counter to the traditional information seeking and retrieval process recognized in most information science research and practice settings.

Emotion in music

The ability of people to describe and convey their moods and emotions, or at least to describe and convey them uniformly in a manner that would be beneficial to information retrieval, presents a challenge (Lee and Neal, 2007; Neal *et al.*, 2008; Rossi and Lee 2015). Psychology tends to focus on addressing negative feelings, although more research is needed on positive emotions "to guide applications and interventions that might improve individual and collective functioning, psychological well-being, and physical health" (Frederickson, 1988, p. 300). Frederickson suggests advancing work in the emotions of joy, interest, contentment and love. Allowing information retrieval system users to search, browse, and retrieve by positive or desired emotion is one way that information science can contribute to practices such as music therapy, which operates on the belief that music improves mental and physical health (Hanser, 2010; Juslin *et al.*, 2010). Identifying how these and other positive emotions are conveyed and expressed in multimedia documents such as photographs, videos, and music is a step toward advancing this area. With respect to this idea, Knautz and Stock (2011, p. 977) noted:

> "Content-based video retrieval in general and the retrieval via emotions in particular carry with them a good few challenges yet. It would be important to determine what specific content … arouses certain emotions (in most cases: happiness) in the viewer.

Research on such 'emotional points of reference' (relating to the "cognitive reference points" of Eleanor Rosch (1975)) remains to be performed."

Since music videos were analysed in this study, it makes sense to explore music and emotion. Music is the "language of the emotions" (Mithen, 2006, p. 24). In fact, the primary reason people listen to music is because of the emotion it invokes in them (Woody and McPherson, 2010).

A wide range of research has been performed on the relationship between music and emotion, particularly in the disciplines of psychology and music. Juslin and Laukka (2003) reviewed prior studies of the communication of emotions in both vocal and musical expression. Statistically speaking, anger and sadness were better decoded and encoded than were fear, happiness, and tenderness. The authors recommended studying more than one encoder (performer), as well as studying encoders and decoders (listeners) together, since both are involved in the communication process. The ability of performers to communicate specific emotions to listeners is relatively well-documented (Juslin and Timmers, 2010). In one encoding and decoding study, a flutist and a violinist were asked to ornament melodies of a Handel sonata in order to convey happiness, sadness, love, and anger. According to the listeners' responses, all emotions except happiness were communicated relatively well (Timmers and Ashley, 2007). Various musical cues have been found to express certain emotions; for example, a slow tempo, a low sound level, legato articulation, and a retardando (slowing down) at the end of the song all express tenderness (Gabrielsson and Juslin, 1996; Juslin and Laukka, 2003).

Woody and McPherson (2010) discussed emotion in musical performers. They linked emotion to motivation: people are motivated to practice or perform music because *playing* makes them experience the same positive feelings they feel when they *listen* to music. While musicians might be motivated to play because of these emotions, they also benefit from

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emotional connections that are created socially with their fellow performers. People who

perform publicly may induce the emotions that they need to convey in a performance by

thinking about a real memory from their past or imagining a sad event. A goal for musicians

is to "feel" the emotion in the music, rather than only relying on the manipulation of

technicalities in their performances, although doing so does not ensure they will have the

intended effect on the audience (Juslin and Timmers, 2010).

Research has shown that people who are in a bad mood seek out music more often

than people who are already in a good mood (Koneĉi, 2010). However, understanding *how*

music elicits emotion is still somewhat of a mystery (Juslin *et al.*, 2010). Listeners might

experience emotion from the music through a few different channels. "Emotional contagion"

means that the listener might feel the emotion that the performer expressed through the

music; in other words, this could be how a performance expressing happiness makes a

listener feel happy. Performers could also evoke emotion in the audience by violating

listeners' expectations of the music, such as in the creation of musical tension. In cognitive

appraisal, people feel emotion based on how they judge something, such as experiencing

amazement elicited by the beauty of a particular musical performance (Juslin and Timmers,

2010). Human brains might be hard-wired to respond to basic features of music, such as loud

sounds. People also might experience emotion through music because it links to another

stimulus, such as the memory of a past event (Juslin *et al.*, 2010).

Emotional Information Retrieval (EmIR)

Emotional Information Retrieval (EmIR), a term coined by Schmidt and Stock (2009),

is a burgeoning research area that seeks to make it possible to find items by emotion. EmIR

researchers thus far have focused on documents that are not in textual format, such as images,

videos, and music (Lee and Neal, 2007; Schmidt and Stock, 2009; Neal, 2010; Knautz *et al.*,

2010; Knautz and Stock, 2011; Knautz, 2012; Siebenlist, 2012). Interfaces may need to be

reconceptualised to enable retrieval by emotion. For example, Knobloch and Mundorf (2003)

foresee "a next generation of interfaces that will probably decode the user's mood and the

corresponding music need from information such as heart rate, body heat, and pupil width"

(p. 504).

To date, EmIR researchers have focused on approaches familiar to information

science. Lee and Neal (2007) investigated how music could be explored by collectively

assigning emotion through the use of directly manipulated sliding bars and five basic

emotions: happy, sad, fear, anger, and disgust (Power, 2006). Work by Neal *et al.* (2008)

suggested that "happy" was perhaps the easiest emotion for people to agree on when

determining emotion in music. Neal (2010a) used discourse analysis to determine how basic

emotions are conveyed within "photographic documents" on Flickr, which she defined as the

photograph itself, its title, its "likes", and its "favourites". She found seven visually

communicated themes: facial expression, colour, light contrast, symbolic, inanimate

observation, action, and social norms, as well as six textually communicated themes:

storytelling, jokes, inside story, text-as-image, antithesis, and personal opinion. Noting Flickr

users' overwhelming preference for "happy" pictures over any of the other five basic

emotions, she followed up this study with an investigation into what makes people think

pictures are "happy". She found visual trends among Flickr photographs tagged with the

word "happy," such as smiling faces, sunny weather, cute animals, and expressions of love

(Neal, 2010b).

Schmidt and Stock (2009) asked participants to tag emotions they found in images

using scroll bars. This led to the development and testing of a prototyped system, called

Media Emotion Search (MEMOSE), that allows users to describe and search for multimedia

documents using scroll bars and ten basic emotions (love, happiness, fun, surprise, desire,

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sadness, anger, disgust, fear and shame) (Knautz *et al.*, 2010; Siebenlist, 2012). Knautz and

Stock (2011) again used scroll bars to evaluate whether users' emotional responses to videos

were consistent, and they found a high level of consistency among participants' emotion-

based "votes."

Although their works were not labelled as EmiR, other researchers have attempted to

find methods of capturing emotional or connotative information for purposes of retrieval. In

an attempt to improve access to images through browsing, Yoon and O'Connor (2010)

showed promising results with an "association thesaurus" linking denotative terms to possible

connotative descriptors. Music Information Retrieval (MIR) researchers have investigated

ways to automatically extract and represent emotion in music, but this approach "does not

account for the whole diversity of emotions expressible through music (Alanki *et al.*, 2014, p.

373). A growing body of research exists in the area of sentiment analysis, which attempts to

analyse users' moods qualitatively as expressed on social media, in the news, and in other

domains (Thelwall and Buckley, 2013; Wöllmer et al., 2013).

U2 and U2 studies

U2, which has had the same four members since its inception in 1976, holds a special

place in the world of rock and roll. They have been billed as "the biggest band in the world"

(Flanagan, 1995, p. 5). In its list of the 100 Greatest Artists, *Rolling Stone* ranked U2 at

number 22 (http://www.rollingstone.com/music/lists/100-greatest-artists-of-all-time-

19691231/u2-20110420). The author of that article, Chris Martin of Coldplay, discussed U2

lead singer Bono's positive contributions to the world such as his social justice work in

Africa and his support of Greenpeace. Martin complimented Bono for being one of the few

famous people who uses his "fame in a good way." Although Bono's work on economic,

political, and social justice issues is polarizing in certain circles, he is generally applauded for

his efforts by world leaders, and these political and social justice influences show up in his

lyrics as well (Flanagan, 1995). The band's music has been described as "Irish soul music"

that transcends "nationality and musical boundaries" (Sawyers, 2000, p. 240).

Fans know U2's songs and live concerts to be quite emotional. One reason for this

might be the band's connection to spirituality. Bono and other members of the band are

Christian, and although they do not overtly proselytize, elements of Christianity can be

observed in their actions and song lyrics (Flanagan, 1995; Stockman, 2001; Helme, 2004;

Galbraith, 2014; Feinauer, 2014). The lyrics of "40", a song on 1983's album *War*, are a

revised version of Psalm 40 in the Bible. One of U2's most famous songs, "I Still Haven't

Found What I'm Looking For" from 1987's *The Joshua Tree*, is a gospel song, according to

Bono (Stockman, 2001). In it, he sings, "You broke the bonds. And you loosed the chains.

Carried the cross of my shame. Oh, my shame. You know I believe it".

Galbraith (2014) discussed interlinked religious and emotional elements in U2's 2009

album *No Line on the Horizon*. One of its songs, "Magnificent", borrows chords and vocal

refrains from Bach's version of the biblical Mary's *Magnificat*, which Bono said creates a

"happy-sad feeling" of "agony and ecstasy" (Galbraith, 2014, p. 120). Also from that album,

"Unknown Caller" subtly borrows from hymns with a pronounced effect on the listeners, as it

calls for them to "Go, shout it out, rise up":

"The sound itself and the listener's reception of and reaction to the music become all

important, stimulating social associations and emotional responses, and relegating the

listener's cerebral response to a matter of secondary significance … When – as often

in U2 songs – the song's seductive form takes priority over the production of content,

and evocation takes precedence over precise meaning, U2 manage to open up a space

for what, to many listeners, will count as a spiritual experience" (p. 121).

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The area of U2 studies is a growing and multidisciplinary trend in academia. U2CON, an academic conference exclusively focusing on U2 studies, was held in 2013 and 2015, and another one is planned for 2017 (http://u2conference.com/). A review of this site, as well as the site's bibliography, will reveal a wide range of intellectual topics about the band. Scholars from music, philosophy, theology, psychology, and more have participated in the conference.

"Song for Someone"

"Song for Someone" is a U2 song from the band's 2014 album *Songs of Innocence*. The song is about the time when Bono (Paul Hewson) met his future wife Ali (then Alison Stewart). Bono was 13 and Ali was 12 (Rolling Stone, 2014). Bono uses this song to express the solace Ali brought to him after going through his difficult childhood: "I don't know how these cuts heal, but in you, I found a rhyme" (http://www.u2start.com/content/article/4/The-origins-of-the-Songs-Of-Innocence/). It was released as a single in May 2015. In July 2015, a short film was released that featured the song. The film, which stars Woody Harrelson, tells the story of a man getting released from prison. "The piece thematically links to RECTIFY, SundanceTV's Peabody award-winning series that follows the story of Daniel Holden and his family as they struggle to move forward after Daniel's release from 19 years on death row" (SundanceTV, 2015).

The song is acoustic and focuses mostly on the guitar and vocals. It is slow in tempo and very gentle-sounding, although it builds up to a strong, emotional finish, when Bono ends it with: "If there is a kiss I stole from your mouth, and there is a light, don't let it go out". Doyle (2014) described the song as "soaring." Powers (2014) states that in the song, Bono is "tracing the evolution of a stubborn optimism that would later make U2 the biggest band in the world, and the one most likely to be accused of overreaching" (http://www.npr.org/sections/therecord/2014/10/08/354096944/the-dream-of-ridiculous-

men). Even in this simple love song, Bono builds Christianity into the lyrics: "I'm a long,

long way from your Hill of Calvary". In the Bible, the Hill of Calvary is the location where

Christ was crucified (http://www.bible-

history.com/jerusalem/firstcenturyjerusalem_hill_of_calvary.html). As with many of U2's

lyrics, this line has many potential meanings, and it is left up to the listeners to decide what it

means to them (Barthes, 1967).

When the author hears the song, she feels a bittersweet sadness, and it makes her

reflect on a range of experiences in her life: the ongoing development of her spirituality, the

loss of past relationships, and when she first met her current partner. Throughout the course

of this research, she has had chills, cried, and felt joy at different times as she listened to and

watched the fan-created videos of the song. As a member of the U2 fandom, she posted a

personal version of the song on YouTube, in which she sang it acapella from her office, but

she did not include it in the dataset for this research.

Research questions

This research analysed emotional information in user-generated videos of "Song for

Someone". Following Neal's (2010) "photographic documents", the term "filmic document"

will refer to the entirety of each YouTube video analysed, including the video itself, the

producer's description of the video, the consumers' likes, dislikes, views, and comments on

the video. Research questions were as follows:

RQ1. What types of user-generated videos of U2's "Song for Someone" have been shared

with the U2 fandom on YouTube?

RQ2. How do the video producers in this fandom communicate emotional information in the

filmic documents?

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RQ3. How do the consumers in this fandom communicate emotional responses to these filmic documents?

RQ4. How does intertextuality contribute to the communication of emotion in these filmic documents?

Methodology

This study applied discourse analysis, defined as "a cluster of related methods for studying language use and its role in social life" (Potter, 2008, p. 218), to filmic documents containing user-created videos of U2's "Song for Someone". Discourse analysis is used with increasing frequency in information science research (McKenzie, 2003; Neal, 2010; Neal and McKenzie, 2011). It is an appropriate method for library and information science because it analyses communication, and communication is central to the field (Budd and Raber, 1996). Also within library and information science, discourse analysis "permits analysis of the ways in which information, its uses, and its users are discursively constructed … such that power over them can be exercised in specific ways" (Frohmann, 1994, p. 119).

As Potter noted, discourse has historically been used to study language, such as interview transcripts, but it is being used more frequently for other data sources, which brings advantages to the researcher. For example, collecting data from a publically available website permits researchers to observe social construction taking place, including "discursive forms of presentation and interaction that can be witnessed immediately or archived in various iterations and moments" (Markham, 2008, p. 457). Discourse analysis can and has been applied to other forms of media, such as films and photographs (Iedema, 2003; Clark, 2008; Weintraub, 2009; Neal, 2010; Vernallis, 2013; Werner, 2014). Analysing video qualitatively, as opposed to observing live action, also helps the researcher with analysis because video captures substantial amounts of data including "conduct, talk, interaction, and comportment

as well as the features of place, bodily adornment, and material objects" (Gibson, 2008, p. 917). Werner (2014) used discourse analysis in her research involving user-created YouTube videos containing youth dancing to Beyoncé songs, as well as the videos' comments. She sought to understand the intertextual social and cultural constructions created by that fan community.

Although many varieties and theoretical approaches to discourse analysis exist, this study utilized Weintraub's (2009) approach, which he developed for studying the discursive interaction between a visual source and its accompanying textual information. He emphasised the importance of ideology in discourse, and states the following as the two theoretical principles behind discourse analysis:

"1. An authoritative discourse will be the most ideological, because it involves the strongest claims of power and knowledge; thus it is most worth analyzing. 2. Discourse must always be analyzed in context, in order to reveal its social and therefore ideological functions" (Weintraub, 2009, p. 203).

According to Weintraub's method, the process of discourse analysis involves first describing the visual content and their "accompanying texts", analysing the context of the content and the "accompanying texts", and finally discussing the social construction of reality arising from the content and their texts (p. 206). Weintraub specifically applies his method to photographs, although it proved to work equally well for videos. In this study, U2's version of "Song for Someone" is considered to be the authoritative discourse.

Guidance on how to analyse the visual content of the videos partially stemmed from Vernallis' (2013) analysis of the relationship between music and image in pop music videos. She considered visual elements such as rhythm, editing, performance, settings, distance of objects, and intertextuality, among others. In this study, the author considered the music played in the videos to be "accompanying texts". Although the music was often as important

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as or more important than the visual component of the videos, music is not visual content and therefore must be analysed differently.

The author chose a U2 song to be the subject of this study for many reasons. The author has been a U2 fan since the early 1990s, when the band's pivotal album *Achtung Baby* was new and its corresponding ZOO TV tour sold out indoor and outdoor stadiums worldwide. In cultural studies language, the author is an "aca-fan", which means she is a fan of U2 as well as an academic undertaking research about U2 fan culture. It is common practice for academics who study their own fan communities to identify themselves as an aca-fan in their research because it has implications for their insight (Stein and Busse, 2009). Although the possibility of bias exists in an aca-fan's study, it would have been impossible to analyse these videos in adequate depth without extensive knowledge of U2 and participation in U2 fan culture.

Additionally, in March 2015, U2.com – upon noticing that "fans have been posting online some beautiful, personal versions of 'Song For Someone'" – invited people to create and share their own personal performances of the song:

"- Shoot the video in a room that's all about you - could be a bedroom, a basement, a garage. Could be any room but it needs to feel personal to you.

- Set your camera to record, sing the song and give it your all.

- Sing it solo or jam with an instrument.

- Let your personality and passion shine through, your country and culture. Make #SongForSomeone your song" (http://www.u2.com/news/title/sing-song-for-someone-then-upload-it).

The page also instructed fans to upload their version of the song to a social media platform such as YouTube, Instagram, or Twitter, tag the video with #SongForSomeone and their country (such as #UK), and email its link to a specified address. This invitation

appeared to be directed toward increasing engagement within the digital participatory culture

of U2 fandom. It ultimately inspired the author to use fan-created videos of "Song for

Someone", specifically the emotional information contained in the videos and in the videos'

interactions from viewers, as the data for this study. The interactions were an important and

rich data source because personal feelings are a common type of YouTube comment

(Madden *et al.*, 2013).

In late March and early April 2015, the author purposively collected 168 user-created

video versions of "Song for Someone". She started data collection by searching for "Song for

Someone" in YouTube's search engine and then clicked on other versions that appeared on

the list of suggested videos on the right hand side of the screen. While collecting them, she

created a list containing the link to the filmic document as well as the country of the

producer(s) (when available) and preliminary notes about the content of the video. She

watched each video before adding it to the list.

After allowing time for consumers to interact with the filmic documents, she returned

to them in June 2015. She removed links that no longer worked as well as links to a few

others that appeared twice in the original list. This left her with 150 filmic documents. In a

spreadsheet, she assigned a unique identifier to each document. She recorded the link to each

document, the basics about the musical performance (such as the primary instruments used in

a cover version), a description of the visuals in the video, the producer's description, the

producer's country, the number of comments, direct quotes of any comments expressing

emotion, the number of likes, the number of dislikes, and the number of views.

Results

Although this is a qualitative study, some numerical facts provide an overview of the

filmic documents included in the analysis. Table 1 provides a quantitative look at the

documents.

Table 1. Quantitative overview of the filmic documents.

As can be seen in the table, more viewers expressed a positive response rather than a

negative response to the videos. 82 of the videos received 0 dislikes, and 38 of them received

only one dislike. Comparatively, only 25 of the videos received 0 likes. 130 of the 150 videos

received fewer than 10 comments. A country could not be identified for 66 of the filmic

documents, but the identified countries included Argentina, Australia, Austria, Belgium,

Botswana, Brazil, Canada, Chile, Denmark, France, Germany, Hungary, India, Ireland, Italy,

Mexico, Netherlands, Peru, Poland, Scotland, Singapore, Spain, the United Kingdom, and the

United States of America. This range of countries reflects the international popularity of the

band.

RQ1. What types of user-generated videos of U2's "Song for Someone" have been shared

with the U2 fan community on YouTube?

Cover versions of the original song comprised the majority of the videos. In many

covers, an individual simply sat in front of a camera and performed the song. Many of them

did not have a high production value; rather, the focus was on the simplicity of the song. The

individually-performed versions included a range of instrumentations: several of them

included vocals and guitar, but other versions were sang acapella or sang along with U2's

version. Others featured vocals and piano, vocals and piano karaoke, guitar only, and flute

only. A few covers included two performers, in which one sang, and the other played the

accompaniment on a guitar, a piano, or – in one case – an mbira, which is an African

instrument (http://www.mbira.org/instrument.html). Some covers featured four individuals

that performed vocals, bass, guitar, and drums, just like U2. These groups tended to identify

themselves as U2 "tribute bands", and recorded themselves either performing live in front of

an audience or playing in a studio setting. A minority of covers included interesting

performances that align with YouTube memes, such as a "Chipmunk" version and

"Nightcored" versions. The "piano karaoke" versions included an electronic keyboard

instrumentation, a display of the lyrics, and an overhead display of a piano that illustrated

what notes were being played.

Other filmic documents in the sample featured the *original version of the song with
new visual content* as performed in the authoritative version. The fan-created portions

focused exclusively on visual content. Visual content types included one single image for the

duration of the entire song, such as a photo of the band or the album's cover art, the text of

the song's lyrics displayed in various languages as Bono sings them, fans dancing to the

song, and personal photographs. Other videos containing the original version of the song

featured somewhat elaborate productions that told their own stories; an example will be

discussed later.

Tutorials were the third type of video. In the tutorials, an experienced guitarist

demonstrated and explained how to play the song on a guitar. Fingering diagrams of the

chords were included in some tutorials.

*RQ2. How do the video producers in this fandom communicate emotional information in the
filmic documents?*

Watching the videos provided insight into producers' emotional experience of the

song. For example, many of them closed their eyes or smiled as they sang, seemingly

indicating their deep involvement with the music and the joy they felt from the song. Visual

cues from the cover version producers' surroundings also provided emotional information. These included beautiful outdoor locations, highly personal places such as bedrooms and living rooms, and items appearing in these personal places such as albums, books, religious symbols, and U2 paraphernalia such as tour posters.

The musical performances of the cover versions also communicated emotion. Musical qualities such as a slow tempo, a final ritardando, and legato articulation indicated tenderness, as described earlier in this article. Although the performers communicated tenderness excellently, perhaps the performers were simply emulating U2's performance rather than adding their own emotive interpretations. Following are some examples of other emotive interpretations that could be observed in the videos.

Personal experience. Many videos that contained original versions of the song and the fans' own visual content expressed emotion as they related to personal experience. For example, one version contained a montage of family photographs, and the last frame included text that indicated a family member featured in the photos had died. It also included a quote: "A special place in our hearts is always kept for you"; these elements together could certainly make a consumer feel sad. Other videos featured montages of personal photographs including wedding photos, pictures taken before a high school dance, and pictures of friends spending time together. These montages created a nostalgic feeling. Another photo montage featured nature images, and the title was "U2 – Song for someone… (peace of mind)…" which suggests a serene personal interpretation of the song.

Sadness. One particularly well-produced music video set to the original version of the song is very sad. It tells a story of a man and woman falling in love by showing them spending time together and growing closer to each other. Toward the end, the man buys two ice cream cones and puts an engagement ring in one cone. While he is buying the ice cream, the woman is doing the "he loves me/he loves me not" flower ritual. At the end, the flower

petals are on the ground, she is gone, the ice cream cones fall to the ground, and a tear falls

from the man's eye. The viewer can only conclude that the flower told her he did not love her,

so she ran away, which left both of them unknowingly heartbroken.

Individual emotional connection. The producer-provided descriptions also provided

emotional information; most of it indicated the producers' emotional connections to the song

or their own performance, even if the emotions felt were not explicitly stated: "My entry for

the Song for Someone contest … this song means so much to me I couldn't help but enter"

and "Just me and my guitar in my own room singing a song I love." Some producers talked

about why the contents of the video was significant, such as this producer, who held his son

in his arms while he sang: "My son love [sic] it when I sing U2 songs before his bedtime".

These producers explained exactly why the place they recorded their cover version was

emotionally significant:

> "Here is our cover of U2's 'Song for Someone' from last years [sic] 'Songs of
>
> Innocence'. We filmed this in my bedroom. A place where for nearly 10 years we
>
> have been recording music together. It is also a room which I will soon be vacating
>
> after 21 years. We thought that with these reasons it was a suitably personal room for
>
> us to record this in".

Another producer was particularly reflective in his discussion of the song's emotional

meaning: "So this song is a memory that lasts, an idea that comes from another place that

cannot be explained simply as things that happen can be, because there is no reason to forget

what had still not enough [sic]". Still another producer of a cover talks about when she heard

the original version: "was awaken [sic] by the last three lines … and I fell in love … It is

amazing how one part of a song can call out to you and make you want to listen to it over and

over again".

Intended response. Some descriptions conveyed the effect they hoped their video had on the consumers, such as "Hope you like my cover version" or "if you like this, PLEASE watch the video untill [sic] the end, subscribe and comment".

RQ3. How do the consumers in this fandom communicate emotional responses to these filmic documents?

As mentioned previously, consumers "liked" the videos with much more frequency than they "disliked" them, which speaks to the generally positive response to the documents. Predictably, most of the consumers' emotional responses could be found in their comments. Almost all comments were positive in nature. The following quotes illustrate the range of the positive responses. Many of them highlight the quality of the cover, the specific emotions the consumer experienced while watching the cover, or the emotional quality of the song:

Quality of the cover

"I love it. To me, the best cover of this song so far!! And the guitar sounds so healing"

"Wow! you guys rock! I love it so much"

"Wow man, your voice is amazing, Bono has this super distinctive voice which really fits U2 songs well, and your voice just wore this song like a glove..... really nice."

"This is the most heartfelt, amazingly beautiful version I have heard of this song, girls!"

"that's so raw and intimate!!!! that's the magic!! keep it up!!"

"that was really inspiring man!!"

"Your cover is amazing... Is so quiet... So deep and relaxing..."

"Excellent performance... even makes me appreciates U2's version considerably greater, as your acoustic guitar and incredibly sincere raw, emotionally gifted vocal capabilities emphasize the song with pure soul & heart"

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"Starts slow, but you get really good (passionate.)"

"Nice piano and vocal rendition. There's a lot of sincerity in your music."

"Amazing cover, very emotional"

"Beautifully done and clever. Made me laugh -- all the wonderful kid chaos was golden."

"Great voice and the most passionate cover I've seen. This is what I think is the point: if you're not going to go all the way, don't go at all. You went all the way!"

"So emocional [sic]. I liked it."

"Soft and sweet!"

"Nice guitar playing! This song was made for your kind of voice. Bravo! A sweet moment!"

"Really, really amazing. You give me chills, everytime."

Emotional impact of the song

"Sometimes things happen in your life and you have no control, and a song just brings you to tears and makes things ok"

"No Comments.. Just feel!...."

"Beautiful song. Intense meaning."

"Omg this song makes me melt every time I hear it."

"Una canzone piena di emozioni" (Italian for "a song full of emotions")

A small number of negative comments were present, but they were not overly negative. Most negative comments were constructive suggestions about how the video could have been improved. For example, one video that played the original song and displayed the lyrics had errors in the lyrics. Comments on the video included "I watched 7 videos for this song and not one of them have the correct lyrics. On the U2 web page it says 'You can always see'". (The correct lyric is "You can always see", but the video says "You can't

always see"). Several people responded to this comment, with replies such as "Yeah, "can"

makes no sense. Can't believe ppl keep getting it wrong!" and "But I'm glad it's posted. A

lot of people post w/errors. I still appreciate them being posted." The most negative

comment occurred on a cover version; a consumer stated, "Don't quit your day job".

RQ4. How does intertextuality contribute to the communication of emotion in these filmic

documents?

        In a few cases, allusions to works by other creators expressed emotion indirectly. For

example, one video containing the original version of the song showed clips from the film *It's*

a Wonderful Life (1945). The clips tell the story of George's courtship and marriage with

Mary. The video editing makes consumers happy about the love that is shown between the

couple, but sad if they know the overarching story about George's suicide. One consumer's

comment on a cover version refers to another band: "I feel this is the way Gavin Rossdale

would cover Song For Someone in the middle of a Bush show!" No explanation was given,

but it seems that the commenter has an emotional connection with both U2 and Bush.

        More prolifically, the intertextuality present in the sample emphasises the deep and

long-standing connections that many fans have with U2. While these elements may not

express emotion present in "Song for Someone", they do demonstrate the depth and intensity

of U2 fandom. Mentions of and allusions to other works by the band could be found in many

filmic documents throughout the sample. Following are the types of U2 intertextuality found

the sample and illustrated by examples from the data.

        Tour references. "I will see U2 tour the 11 and 14 th November At Paris Bercy , I

hope see my [sic] version on stage." "I'm the singer-songwriter who was pulled on stage

during U2's Elevation tour in Las Vegas to sing and jam with my heros [sic]!"

Visual displays of U2 paraphernalia. One man lip syncs to the original version while he is surrounded by U2 paraphernalia: the book *U2 by U2*, the book *North Side Story: U2 in Dublin, 1978-1983*, the *Elevation 2001: Live from Boston* concert DVD, and the albums *All That You Can't Leave Behind*, *U2 - The Best of 1980-1990, Songs of Innocence*, and *Under a Blood Red Sky*. Other videos displayed a poster from the U2 360° tour hanging behind the performer, a poster with the cover of U2's *Achtung Baby* album hanging behind the performer, and the performer wearing a U2 t-shirt.

Band photographs. These are shown while the original version of the song is played. In one example, a black and white photograph of Bono and Ali when they were very young is displayed; their heads are touching, and they are looking down at a flower that Ali is holding. Others display photos of Bono by himself or the entire band.

Imitating the band. In some cover versions, the performers attempted to look like members of U2. For example, the guitarist is dressed like The Edge, with a beanie and a beard, and the singer is dressed like Bono, wearing an earring, sunglasses, and black leather clothing. Some cover versions were inspired by other U2 performances, as indicated in their descriptions: "Was always inspired to do this instrumental version after watching U2 perform it acoustically on Jimmy Fallon's show. Love The Edge's arpeggios! Trying to capture the nuances of Bono's voice for the melody..."

Musical mashups. Some performers introduced elements of other U2 songs in their cover versions. One performer sang and played the music of "Song for Someone" on guitar, but he blended in lyrics and music from "One" at the end. He also listed lyrics from both songs in his description. One fan performed a mashup of "Stay (Faraway, So Close!)", "Song for Someone", and "With or Without You" by singing and playing guitar to a small part of all three, but he does not stop playing between songs. Another producer sang the lyrics to "Song for Someone" while simultaneously playing the music of "Stuck in a Moment" on guitar.

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Discussion and future directions

This article continued research into EmIR by investigating emotions expressed by fans of a band that is known for creating significant affect in its listeners. Producers of cover versions communicated emotional information, especially tenderness, through facial expression, their surroundings, and corresponding musical elements. Producers' visual content expressed emotion through meaningful photographs and sad stories. Producers' textual descriptions revealed emotion as well. Consumers of the videos conveyed emotion through likes, dislikes, and expressive positive comments. Intertextuality in the filmic documents represented U2 fandom by means of U2 tour references, visual displays of U2 paraphernalia, band photographs, imitating the band, and musical mashups.

Many communications and representations of emotion can be found in these fan-created versions of "Song for Someone". Most cover versions communicated a feeling of simple tenderness, as can be seen in the producers' performances as well as in the consumers' comments. This approach to the performance respects U2 as the authority of the song. According to consumers' comments, a good cover version of the song is emotional, passionate, and captures the simplicity and tenderness of the authoritative version. The consumers' positive reinforcements, the sharing of emotional reactions between the producers and consumers in the descriptions and comments, and other conversations that took place between the producers' videos and the consumers' interactions support social construction of the emotion expressed and felt in the song and within the fandom. Knowledge inherent in U2 fandom, such as their other songs, books about the band, and their concert tours, is apparent in the conversations and the intertextual references. This knowledge, and

the shared passion for the authoritative works, enable U2's fandom to construct knowledge about and love for the band together.

Social construction is integral to the backbones of fandom and the passion fans share with each other for their authoritative creators. That said, the emotional responses to "Song for Someone" were also very personal. For example, many cover versions included personal physical surroundings, and strong affect could be viewed in the producers while they performed. The photographs of family and friends that accompanied the original version of the song hold the most affective meaning to the producers, although consumers may connect with the photos on their own terms by simply enjoying the photos or being reminded of their own friends and family. In this situation, emotional responses are individual as well as social.

The notion of U2's version as the authoritative version of "Song for Someone" presents an opportunity for more discussion on cognitive and affective authority (Wilson, 1963; Rieh, 2002; McKenzie, 2003; Neal and McKenzie, 2011). U2 wrote and performed the first version of the song, but if another band had previously wrote and performed it, would U2 fans still consider U2's version to be the authoritative one? Additionally, many consumers commented on how much they liked a certain cover version and why; in most cases, it was because of the emotion the cover created for them. Was this because it reminded them of U2's version, or did the cover create an entirely new emotional experience for the consumer? Perhaps the cover version became a separately authoritative version for these fans; as Derrida (1977) suggested, a "supplement" is a work in its own right, rather than an addition to the original work.

In the future, it could prove useful to perform a similar study on another U2 song that uses different musical and textual elements to evoke different emotions, such as one of their fast-paced electronic songs, in order to compare results. Other methodological approaches could also be used to look for communications of emotions. Other related areas for future

research include understanding why some videos earn many emotion-based interactions from consumers while others have few or none, and how the interactions fit into the norms of fan culture.

This research could inform currently available online commercial music service providers on how they might include emotional facets into their recommendations and automatically created playlists. On a broad scale, after gaining a better understanding of how emotions in various forms of documents are communicated individually and socially, new interfaces should be developed and tested in order to help users locate documents that elicit different feelings. It seems evident from this study, as well as from prior research discussed in this paper, that emotional responses to multimedia documents are both socially constructed and individually felt, so eventual systems should account for collective experiences as well as personal preferences.

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Table 1. Quantitative overview of the filmic documents.

	Lowest Number	**Highest Number**	**Average**	**Median**
Views	7	228,741	4,697	217
Comments	0	186	6.89	1
Likes	0	1.034	29.47	4
Dislikes	0	5	2.02	0

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"The most passionate cover I've seen":

Emotional information in fan-created U2 music videos

Abstract

Purpose: This article explores how both producers and consumers of user-created music videos on YouTube communicate emotional information.

Design/methodology/approach: 150 filmic documents containing fan-generated versions of U2's "Song for Someone" were purposively collected. The author used discourse analysis to understand the types of videos created, the communication of emotional information from both the producers and the consumers, the social construction of emotion in the filmic documents, and elements of intertextuality that represented emotion.

Findings: Fans created videos containing cover versions, original versions of the song with new visual content, and tutorials about how to play the song. Producers of cover versions communicated emotional information, especially tenderness, through facial expression, their surroundings, and corresponding musical elements. Producers' visual content expressed emotion through meaningful photographs and sad stories. Producers' descriptions revealed emotion as well. Emotions were individually experienced and socially constructed. Consumers conveyed emotion through likes, dislikes, and expressive positive comments. Intertextuality communicated passion for U2 through tour references, paraphernalia displays, band photographs, imitating the band, and musical mashups.

Practical implications: Information science can work toward a new generation of multimedia information retrieval systems that incorporate emotion in order to help users discover documents in meaningful ways that move beyond keyword and bibliographic searches.

Originality/value: This is one of the earliest research papers in the area of Emotional Information Retrieval (EmIR).

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Introduction

Current information retrieval systems allow people to search for information by full

text, keywords, tags, and standard bibliographic metadata, but what if they want something

that makes them feel happy or that abounds with passion? Although music itself holds no

emotion, it generates emotion in people, and they actively seek it out for its emotional

qualities (Davies, 2010). If they could, people would look for music videos or other filmic

documents that meet an emotional craving, such as, "I want to watch a movie that will cheer

me up" or "I'm in the mood for a video of a happy song."

Unfortunately, information retrieval systems, including those available on commercial

sites such as YouTube, do not support this sort of need well. In order to truly advance

information retrieval systems, it is essential to envision systems that go beyond the traditional

keyword- or subject-based query and conceptualize information "needs" in new ways. In

addition, people are not always necessarily looking to form a "query" that meets an

information "need." They might not know exactly what they are looking for, or they might be

simply browsing what is available and interacting with whatever seems interesting

(O'Connor, 1993). On YouTube, music videos of potential interest appear on the right hand

side of the screen when a chosen video is playing. For example, upon playing the music video

for U2's song "Beautiful Day", YouTube suggests videos of other U2 songs, as well as songs

by similar bands such as Depeche Mode, R.E.M., and Oasis.

It is not the role of socially networked platform providers such as YouTube to provide

the metadata that is used to represent, search, or retrieve documents; instead, people who

contribute videos ("producers") and those who view, like, dislike, and comment on videos

("consumers") happily do it. In an effort to move toward a new generation of multimedia

information retrieval systems that incorporate intangible facets such as emotion, this article

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explores how both producers and consumers of user-created music videos on YouTube

communicate emotional information.

Fandom and participatory culture

       People who contribute to YouTube videos that pertain to their interests, whether they

are uploading videos or they are providing comments, likes, and dislikes about others' videos,

belong to a participatory culture. In this study, participatory culture is defined as "a range of

different groups deploying media production and distribution to serve their collective

interests" (Jenkins *et al.*, 2013, p. 2). Perhaps contrary to popular belief, participatory culture

did not come about with the rise of Web 2.0 applications. In earlier days, fans created videos

that remixed or commented on their favourite television shows; the videos were typically set

to music. While they did not have the ability to post their videos online, they shared them in

face-to-face gatherings of people with the same interest, such as at Comic-Con and Star Trek

conventions (Jenkins, 2013). With the dramatic increase in the availability of free and easy-

to-use media sharing platforms such as YouTube, a shift has taken place. The official media

distributors are still important and existent, but all people who have a webcam or a

smartphone are now able to produce and widely disseminate their own creative works that

remix or appropriate their favourite songs, videos, television shows, and other media to fan

communities that share their interest (Jenkins, 2006; Burgess and Green, 2009).

       Jenkins (2013) defined a "fan" as "claiming membership in a particular subculture"

(p. xiv). His book, originally published in 1992, helped found the research area of "fan

studies", which became a subdiscipline of media/cultural/literary studies. Fan studies

incorporates a range of enquiries within fan culture, including fans' social interaction within

their groups of common interest, fans' creations such as fan fiction, how fans interact with

and discuss their authoritative creators of interest (Wilson, 1983; McKenzie, 2003), how fans

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share knowledge, and how fans organize themselves for activism. The rise of social media

has empowered fans to share their cultural products and communications more easily

(Bennett, 2014). It has led to a focus on "collective creativity", or content creation that could

not have been developed without a group (Boulaire *et al.*, 2014, p. 113). Fans' creations and

conversations have been called media "paratexts", or texts surrounding and relating to the

main text (Gray, 2010).

The notion of authority as it is discussed in information science applies to fan culture.

Fan communities centre their activities and passions on the work of an authoritative creator,

such as U2, as they develop their own works and discussions. Given fans' propensity toward

reworking their favourite authoritative pieces, it is worthwhile considering why and how they

view the original versions as the authoritative ones. People determine the cognitive authority

of a work based on whether they think it is helpful and trustworthy (Wilson, 1983; Rieh,

2002; McKenzie, 2003). Affective authority is "the extent to which users think the

information is subjectively appropriate, empathetic, emotionally supportive, and/or

aesthetically pleasing" (Neal and McKenzie, 2011, p. 131). Both forms of authority can be

observed in fan culture.

Examples of fan studies involving videos demonstrate the rich variety of work in this

area. In fan culture, fan music videos consist of assembled clips from the television show or

movie of interest that highlight certain aspects of the show, such as intimate relationships

between characters or plot lines. These clips are set to music. Fans who make these videos are

called "vidders", and their creations are called "vids" (Jenkins, 2013; Karpovich, 2007; Ng,

2008). Vidding is an individual, collective, and social activity all at once (Turk and Johnson,

2012). Several studies have been conducted on vids; for example, Ng (2008) analysed vids

featuring the romantic relationship between Bianca and Lena, two female characters on the

soap opera *All My Children*, and related them to other representations of LGBT relationships.

Other fan studies papers focus on music videos that instead of featuring the TV show or film more prominently than the music, focus on music videos that feature the music itself. Baym (2007) described how geographically dispersed fans of Swedish indie music use a variety of online platforms to share videos, discuss the music, and create community; Ito (2010) outlines fans' creations of anime music videos. Boulaire *et al.* (2014) explored the different types of fans' YouTube videos that were based on one song. The types included "semantic and non-semantic montages … imitation, diversification and ornamentation" (p. 131). The authors suggested how these collectively created works could inform digital marketing practices.

The intertextuality of music video creation

Given the nature of fan-created videos and other products, in which fans assemble pieces of media from different sources into new works, create their own versions of authoritative cultural products, and so on, the subject of intertextuality inevitably arises in academic discussions of participatory culture. When people interact with a text, they create its meaning by way of their past interactions with other texts (Barthes, 1967; Barthes, 1977; Murphy and Rafferty, 2015). The idea of authorship in popular music is especially fluid. Fans rewrite lyrics, create cover versions, make remixes, and mashup their favourite songs (Vernallis, 2013). Most fan studies scholars see fan creations as communally created: "[a]s part of their mediated authorship, fans emphasize and foreground the intertextuality of their creative work", and the fan groups within which the works are created form "discursive contexts" (Stein and Busse, 2009, p. 193). Additionally, there are many people involved in the authoritative versions of popular music. Not only do the performers "author" the songs, but the producers, the record label, and the songwriters do as well (Karpovich, 2007).

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When fans set their favourite show clips to music, intertextuality can be observed, but it also happens in authoritative works as well. For example, many music videos created by famous artists use common visual imagery intertextually such as television news, classic films, surveillance, dreaming, clips of their own older music videos, and videos from other pop music stars (Karpovich, 2007; Vernallis, 2013). Vernallis emphasizes the importance of the interplay between image and music in music videos. Discussing the video for U2's "With or Without You", she wrote, "there is something fragile and earned about the intimacy … one of the best music videos of the eighties … with delicate projections of shadows of tree branches and water" (p. 5). Werner (2014) studied vids on YouTube of youth dancing like Beyoncé in their homes; she noted how Beyoncé's dance style makes intertextual references to female personas that exist in other times and contexts, including belly dancers and strippers.

According to Ott and Walter (2000), types of intertextuality in media include parodic allusion, self-reflective reference, and creative appropriation or inclusion. The last type can cause legal concerns for the appropriator due to intellectual property law. The authors provide the following example in relation to U2:

> "In 1991, Negativland and SST Records were sued over the band's single, 'The Letter 'U' and the Numeral '2',' which sampled U2's music, interviews with band members, and a particularly foul-mouthed off-air moment from DJ Casey Casem [sic]. Though Negativland was ultimately forced to pay legal fees and damages totaling more than $90,000, their single illustrates how the stylistic device of inclusion can function rhetorically as a mode of critique. By combining textual fragments in a manner that invited a rereading of the band U2, Negativland denunciated what they saw as the 'self-righteous and complacent image-world of the polite pop of the [U2] stars' (quoted in Herman & Sloop, 1998, p. 7)" (Ott and Walter, 2000, p. 437).

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Ott and Walter also noted the importance of internet surfing in the information

seeking and retrieval process. Surfing, and its inherently intertextual nature, needs to be kept

in mind as the next generation of information retrieval systems is conceptualized, because

surfing as a form of browsing (O'Connor, 1993) is perhaps counter to the traditional

information seeking and retrieval process recognized in most information science research

and practice settings.

Emotion in information retrieval

All humans experience emotions, but they are difficult to define tangibly. As Fehr and

Russell (1984) observed, "Everyone knows what an emotion is, until one is asked to give a

definition. Then, it seems, no one knows" (p. 464). Most theories and models of the range of

human emotions are found in literature from psychology. Generally, two types of models can

be found in the literature. Some models list discrete "basic" emotions that can be combined to

describe emotions (Ekman, 1992; Yazdani *et al.*, 2013). For example, Shaver *et al.* (1987)

listed categories or prototypes of basic emotions: love, joy, anger, sadness, fear, and surprise.

Likewise, Power (2006) identified five basic emotions based on a study of existing emotion

models: anger, sadness, disgust, fear and happiness. The second type of emotion models

consists of two- or three-dimensional approaches containing a continuum of emotions

(Yazdani *et al.*, 2013). For example, Rubin *et al.* (2004) applied Watson and Tellegen's

Circumplex Theory of Affect, which represents emotion as a range of positive affect and

negative affect, to determine whether people can agree about the emotions present in texts.

Their participants tended to agree most on categories containing high positive affect.

The ability of people to describe and convey their moods and emotions, or at least to

describe and convey them uniformly in a manner that would be beneficial to information

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retrieval, presents a challenge (Lee and Neal, 2007; Neal *et al.*, 2009; Rossi and Lee, 2015).

Knautz's (2012) review of emotion as it is discussed in the psychological literature

differentiates between the emotion that is *depicted* in a multimedia document, such as a

video, an image, or a musical work, and the emotion that the user *feels* when interacting with

a document. She posits that the distinction between them is important to understand for

improving multimedia retrieval. Some researchers have attempted to apply validated

psychological models of emotion to analysing emotions and texts. Psychology tends to focus

on addressing negative feelings, although more research is needed on positive emotions "to

guide applications and interventions that might improve individual and collective

functioning, psychological well-being, and physical health" (Frederickson, 1988, p. 300).

Frederickson suggests advancing work in the emotions of joy, interest, contentment and love.

Allowing information retrieval system users to search, browse, and retrieve by positive or

desired emotion is one way that information science can contribute to practices such as music

therapy, which operates on the belief that music improves mental and physical health

(Hanser, 2010; Juslin *et al.*, 2010). Identifying how these and other positive emotions are

conveyed and expressed in multimedia documents such as photographs, videos, and music is

a step toward advancing this area. With respect to this idea, Knautz and Stock (2011, p. 977)

noted:

> "Content-based video retrieval in general and the retrieval via emotions in particular
>
> carry with them a good few challenges yet. It would be important to determine what
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> specific content … arouses certain emotions (in most cases: happiness) in the viewer.
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> Research on such 'emotional points of reference' (relating to the "cognitive reference
>
> points" of Eleanor Rosch (1975)) remains to be performed."

Music and emotion

Since music videos were analysed in this study, it makes sense to explore music and emotion. Music is the "language of the emotions" (Mithen, 2006, p. 24). In fact, the primary reason people listen to music is because of the emotion it invokes in them (Woody and McPherson, 2010).

A wide range of research has been performed on the relationship between music and emotion, particularly in the disciplines of psychology and music. Juslin and Laukka (2003) reviewed prior studies of the communication of emotions in both vocal and musical expression. Statistically speaking, anger and sadness were better decoded and encoded than were fear, happiness, and tenderness. The authors recommended studying more than one encoder (performer), as well as studying encoders and decoders (listeners) together, since both are involved in the communication process. The ability of performers to communicate specific emotions to listeners is relatively well-documented (Juslin and Timmers, 2010). In one encoding and decoding study, a flutist and a violinist were asked to ornament melodies of a Handel sonata in order to convey happiness, sadness, love, and anger. According to the listeners' responses, all emotions except happiness were communicated relatively well (Timmers and Ashley, 2007). Various musical cues have been found to express certain emotions; for example, a slow tempo, a low sound level, legato articulation, and a retardando (slowing down) at the end of the song all express tenderness (Gabrielsson and Juslin, 1996; Juslin and Laukka, 2003).

Woody and McPherson (2010) discussed emotion in musical performers. They linked emotion to motivation: people are motivated to practice or perform music because *playing* makes them experience the same positive feelings they feel when they *listen* to music. While musicians might be motivated to play because of these emotions, they also benefit from emotional connections that are created socially with their fellow performers. People who perform publicly may induce the emotions that they need to convey in a performance by

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thinking about a real memory from their past or imagining a sad event. A goal for musicians

is to "feel" the emotion in the music, rather than only relying on the manipulation of

technicalities in their performances, although doing so does not ensure they will have the

intended effect on the audience (Juslin and Timmers, 2010).

Research has shown that people who are in a bad mood seek out music more often

than people who are already in a good mood (Koneĉni, 2010). However, understanding *how*

music elicits emotion is still somewhat of a mystery (Juslin *et al.*, 2010). Listeners might

experience emotion from the music through a few different channels. "Emotional contagion"

means that the listener might feel the emotion that the performer expressed through the

music; in other words, this could be how a performance expressing happiness makes a

listener feel happy. Performers could also evoke emotion in the audience by violating

listeners' expectations of the music, such as in the creation of musical tension. In cognitive

appraisal, people feel emotion based on how they judge something, such as experiencing

amazement elicited by the beauty of a particular musical performance (Juslin and Timmers,

2010). Human brains might be hard-wired to respond to basic features of music, such as loud

sounds. People also might experience emotion through music because it links to another

stimulus, such as the memory of a past event (Juslin *et al.*, 2010).

Emotional Information Retrieval (EmIR)

Emotional Information Retrieval (EmIR), a term coined by Schmidt and Stock (2009),

is a burgeoning research area that seeks to make it possible to find items by emotion. EmIR

researchers thus far have focused on documents that are not in textual format, such as images,

videos, and music (Lee and Neal, 2007; Schmidt and Stock, 2009; Neal, 2010a; Neal, 2010b;

Knautz *et al.*, 2010; Knautz and Stock, 2011; Knautz *et al.*, 2011; Knautz, 2012; Siebenlist

and Knautz 2012). Interfaces may need to be reconceptualised to enable retrieval by emotion.

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For example, Knobloch and Mundorf (2003) foresee "a next generation of interfaces that will

probably decode the user's mood and the corresponding music need from information such as

heart rate, body heat, and pupil width" (p. 504).

To date, EmIR researchers have focused on approaches familiar to information

science. Lee and Neal (2007) investigated how music could be explored by collectively

assigning emotion through the use of directly manipulated sliding bars and five basic

emotions: happy, sad, fear, anger, and disgust (Power, 2006). Work by Neal *et al.* (2009)

suggested that "happy" was perhaps the easiest emotion for people to agree on when

determining emotion in music. Neal (2010a) used discourse analysis to determine how basic

emotions are conveyed within "photographic documents" on Flickr, which she defined as the

photograph itself, its title, its "likes", and its "favourites". She found seven visually

communicated themes: facial expression, colour, light contrast, symbolic, inanimate

observation, action, and social norms, as well as six textually communicated themes:

storytelling, jokes, inside story, text-as-image, antithesis, and personal opinion. Noting Flickr

users' overwhelming preference for "happy" pictures over any of the other five basic

emotions, she followed up this study with an investigation into what makes people think

pictures are "happy". She found visual trends among Flickr photographs tagged with the

word "happy," such as smiling faces, sunny weather, cute animals, and expressions of love

(Neal, 2010b).

Schmidt and Stock (2009) asked participants to tag emotions they found in images

using scroll bars. This led to the development and testing of a prototyped system, called

Media Emotion Search (MEMOSE), that allows users to describe and search for multimedia

documents using scroll bars and ten basic emotions (love, happiness, fun, surprise, desire,

sadness, anger, disgust, fear and shame) (Knautz *et al.*, 2010; Siebenlist and Knautz, 2012).

Knautz and Stock (2011) used scroll bars to evaluate whether users' emotional responses to

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videos were consistent, and they found a high level of consistency among participants'

emotion-based "votes."

Although their works were not labelled asEmIR, other researchers have attempted to

find methods of capturing emotional or connotative information for purposes of retrieval. In

an attempt to improve access to images through browsing, Yoon and O'Connor (2010)

showed promising results with an "association thesaurus" linking denotative terms to possible

connotative descriptors. Music Information Retrieval (MIR) researchers have investigated

ways to automatically extract and represent emotion in music, but this approach "does not

account for the whole diversity of emotions expressible through music (Aljanaki *et al.*, 2014,

p. 373). A growing body of research exists in the area of sentiment analysis, which attempts

to analyse users' moods qualitatively as expressed on social media, in the news, and in other

domains (Thelwall and Buckley, 2013; Wöllmer et al., 2013).

Many music information retrieval researchers have developed automatic processes for

classifying features of music. For example, Tzanetakis and Cook (2002) classified music

based on genre using primitive features such as rhythm and harmony, and identified the

classification of emotion as future research. Yang *et al.*, (2006), noting that classifying

emotion in music is difficult because not everyone responds the same to a piece of music,

used Thayer's (1990) model of mood, which is based on arousal and valance, to apply fuzzy

classifiers to emotion in music. Their approach worked well for mapping the changes in

emotion throughout a song. Schuller *et al.* (2010) also applied Thayer's model, and used

primitive features of the music as well as metadata present in online music databases to

classify the emotion in music. The team achieved "prediction accuracies of 77.4% for arousal

and 72.9% for valence" (p. 13). A more recent study by Yazdani *et al.* (2013) utilized Russell

and Mebrabian's (1977) theory of emotion, which combines arousal and valence with

identified basic emotions, to test and measure an approach to collecting users' emotional

responses to music through processing physiological signals.

U2 and U2 studies

U2, which has had the same four members since its inception in 1976, holds a special

place in the world of rock and roll. They have been billed as "the biggest band in the world"

(Flanagan, 1995, p. 5). In its list of the 100 Greatest Artists, *Rolling Stone* ranked U2 at

number 22 (http://www.rollingstone.com/music/lists/100-greatest-artists-of-all-time-

19691231/u2-20110420). The author of that article, Chris Martin of Coldplay, discussed U2

lead singer Bono's positive contributions to the world such as his social justice work in

Africa and his support of Greenpeace. Martin complimented Bono for being one of the few

famous people who uses his "fame in a good way." Although Bono's work on economic,

political, and social justice issues is polarizing in certain circles, he is generally applauded for

his efforts by world leaders, and these political and social justice influences show up in his

lyrics as well (Flanagan, 1995). The band's music has been described as "Irish soul music"

that transcends "nationality and musical boundaries" (Sawyers, 2000, p. 240).

Fans know U2's songs and live concerts to be quite emotional. One reason for this

might be the band's connection to spirituality. Bono and other members of the band are

Christian, and although they do not overtly proselytize, elements of Christianity can be

observed in their actions and song lyrics (Flanagan, 1995; Stockman, 2001; Helme, 2004;

Galbraith, 2014; Feinauer, 2014). The lyrics of "40", a song on 1983's album *War*, are a

revised version of Psalm 40 in the Bible. One of U2's most famous songs, "I Still Haven't

Found What I'm Looking For" from 1987's *The Joshua Tree*, is a gospel song, according to

Bono (Stockman, 2001). In it, he sings, "You broke the bonds. And you loosed the chains.

Carried the cross of my shame. Oh, my shame. You know I believe it".

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Galbraith (2014) discussed interlinked religious and emotional elements in U2's 2009 album *No Line on the Horizon*. One of its songs, "Magnificent", borrows chords and vocal refrains from Bach's version of the biblical Mary's *Magnificat*, which Bono said creates a "happy-sad feeling" of "agony and ecstasy" (Galbraith, 2014, p. 120). Also from that album, "Unknown Caller" subtly borrows from hymns, as it calls for them to "Go, shout it out, rise up":

> "The sound itself and the listener's reception of and reaction to the music become all important, stimulating social associations and emotional responses, and relegating the listener's cerebral response to a matter of secondary significance … When – as often in U2 songs – the song's seductive form takes priority over the production of content, and evocation takes precedence over precise meaning, U2 manage to open up a space for what, to many listeners, will count as a spiritual experience" (p. 121).

The area of U2 studies is a growing and multidisciplinary trend in academia. U2CON, an academic conference exclusively focusing on U2 studies, was held in 2013 and 2015, and another one is planned for 2017 (http://u2conference.com/). A review of this site, as well as the site's bibliography, will reveal a wide range of intellectual topics about the band. Scholars from music, philosophy, theology, psychology, and more have participated in the conference.

"Song for Someone"

"Song for Someone" is a U2 song from the band's 2014 album *Songs of Innocence*. The song is about the time when Bono (Paul Hewson) met his future wife Ali (then Alison Stewart). Bono was 13 and Ali was 12 (Rolling Stone, 2014). Bono uses this song to express the solace Ali brought to him after going through his difficult childhood: "I don't know how these cuts heal, but in you, I found a rhyme" (http://www.u2start.com/content/article/4/The-origins-of-the-Songs-Of-Innocence/). It was released as a single in May 2015. In July 2015, a

short film was released that featured the song. The film, which stars Woody Harrelson, tells

the story of a man getting released from prison. "The piece thematically links to RECTIFY,

SundanceTV's Peabody award-winning series that follows the story of Daniel Holden and his

family as they struggle to move forward after Daniel's release from 19 years on death row"

(SundanceTV, 2015). In August 2015, a second video for the song was released, which

features Bono singing from the clouds. According to Grow's (2015) explanation of the video,

"As a man trips and falls on the earth below, the frontman croons words of support, reaching

into the night sky to grab a star as he sings, 'There is a light / Don't let it go out'"

(http://www.rollingstone.com/music/news/see-bono-grab-a-star-in-u2s-new-song-for-

someone-video-20150827).

The song is acoustic and focuses mostly on the guitar and vocals. It is slow in tempo

and very gentle-sounding, although it builds up to a strong, emotional finish, when Bono ends

it with: "If there is a kiss I stole from your mouth, and there is a light, don't let it go out".

Doyle (2014) described the song as "soaring." Powers (2014) states that in the song, Bono is

"tracing the evolution of a stubborn optimism that would later make U2 the biggest band in

the world, and the one most likely to be accused of overreaching"

(http://www.npr.org/sections/therecord/2014/10/08/354096944/the-dream-of-ridiculous-

men). Even in this simple love song, Bono builds Christianity into the lyrics: "I'm a long,

long way from your Hill of Calvary". In the Bible, the Hill of Calvary is the location where

Christ was crucified (http://www.bible-

history.com/jerusalem/firstcenturyjerusalem_hill_of_calvary.html). As with many of U2's

lyrics, this line has many potential meanings, and it is left up to the listeners to decide what it

means to them (Barthes, 1967).

Research questions

This research analysed emotional information in user-generated videos of "Song for Someone". Following Neal's (2010a) "photographic documents", the term "filmic document" will refer to the entirety of each YouTube video analysed, including the video itself, the producer's description of the video, the consumers' likes, dislikes, views, and comments on the video. Research questions were as follows:

RQ1. What types of user-generated videos of U2's "Song for Someone" have been shared with the U2 fandom on YouTube?

RQ2. How do the video producers in this fandom communicate emotional information in the filmic documents?

RQ3. How do the consumers in this fandom communicate emotional responses to these filmic documents?

RQ4. How does intertextuality contribute to the communication of emotion in these filmic documents?

Methodology

This study applied discourse analysis, defined as "a cluster of related methods for studying language use and its role in social life" (Potter, 2008, p. 218), to filmic documents containing user-created videos of U2's "Song for Someone". Discourse analysis is used with increasing frequency in information science research (McKenzie, 2003; Neal, 2010a; Neal and McKenzie, 2011). It is an appropriate method for library and information science because it analyses communication, and communication is central to the field (Budd and Raber, 1996). Also within library and information science, discourse analysis "permits analysis of the ways in which information, its uses, and its users are discursively constructed … such that power over them can be exercised in specific ways" (Frohmann, 1994, p. 119).

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As Potter noted, discourse has historically been used to study language, such as interview transcripts, but it is being used more frequently for other data sources, which brings advantages to the researcher. For example, collecting data from a publically available website permits researchers to observe social construction taking place, including "discursive forms of presentation and interaction that can be witnessed immediately or archived in various iterations and moments" (Markham, 2008, p. 457). Discourse analysis can and has been applied to other forms of media, such as films and photographs (Iedema, 2003; Clark, 2008; Weintraub, 2009; Neal, 2010a; Vernallis, 2013; Werner, 2014). Analysing video qualitatively, as opposed to observing live action, also helps the researcher with analysis because video captures substantial amounts of data including "conduct, talk, interaction, and comportment as well as the features of place, bodily adornment, and material objects" (Gibson, 2008, p. 917). Werner (2014) used discourse analysis in her research involving user-created YouTube videos containing youth dancing to Beyoncé songs, as well as the videos' comments. She sought to understand the intertextual social and cultural constructions created by that fan community.

Although many varieties and theoretical approaches to discourse analysis exist, this study utilized Weintraub's (2009) approach, which he developed for studying the discursive interaction between a visual source and its accompanying textual information. He emphasised the importance of ideology in discourse, and states the following as the two theoretical principles behind discourse analysis:

"1. An authoritative discourse will be the most ideological, because it involves the strongest claims of power and knowledge; thus it is most worth analyzing. 2. Discourse must always be analyzed in context, in order to reveal its social and therefore ideological functions" (Weintraub, 2009, p. 203).

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According to Weintraub's method, the process of discourse analysis involves first describing the visual content and their "accompanying texts", analysing the context of the content and the "accompanying texts", and finally discussing the social construction of reality arising from the content and their texts (p. 206). Weintraub specifically applies his method to photographs, although it proved to work equally well for videos. In this study, U2's version of "Song for Someone" is considered to be the authoritative discourse.

Guidance on how to analyse the visual content of the videos partially stemmed from Vernallis' (2013) analysis of the relationship between music and image in pop music videos. She considered visual elements such as rhythm, editing, performance, settings, distance of objects, and intertextuality, among others. In this study, the author considered the music played in the videos to be "accompanying texts". Although the music was often as important as or more important than the visual component of the videos, music is not visual content and therefore must be analysed differently.

The author chose a U2 song to be the subject of this study for many reasons. The author has been a U2 fan since the early 1990s, when the band's pivotal album *Achtung Baby* was new and its corresponding ZOO TV tour sold out indoor and outdoor stadiums worldwide. In cultural studies language, the author is an "aca-fan", which means she is a fan of U2 as well as an academic undertaking research about U2 fan culture. It is common practice for academics who study their own fan communities to identify themselves as an aca-fan in their research because it has implications for their insight (Stein and Busse, 2009). Although the possibility of bias exists in an aca-fan's study, it would have been impossible to analyse these videos in adequate depth without extensive knowledge of U2 and participation in U2 fan culture. Studies involving fan culture "invite self-reflexivity with all of its inherent (and valuable) complications" (Stein and Busse, 2009, p. 194). Reflexivity allows researchers to go beyond fact reporting; it permits them to construct their own interpretations and

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evaluate the origins of those interpretations (Hertz, 1997, p. viii). In many forms of

qualitative research, the researcher is an embedded instrument: "analysis, interpretation, and

meaning-making come from the researcher, using all of her or his personal and professional

skills, training, knowledge, and experience as an instrument to produce a coherent picture of

the research as the researcher saw and experienced it" (Brodsky, 2008, p. 768). The

knowledge that the researcher brought into this study could also be called "experiential

knowledge." According to Berg (2008), "Experiential knowledge of the researcher is always

present in research, and some propose that research benefits when this is made explicit.

Beyond mere acknowledgement, the researcher embraces the importance of experiential

knowledge constantly exploring the interaction among experience, data, and understanding

through an iterative process of inquiry and reflection" (p. 322).

Additionally, in March 2015, U2.com – upon noticing that "fans have been posting

online some beautiful, personal versions of 'Song For Someone'" – invited people to create

and share their own personal performances of the song:

"- Shoot the video in a room that's all about you - could be a bedroom, a basement, a

garage. Could be any room but it needs to feel personal to you.

- Set your camera to record, sing the song and give it your all.

- Sing it solo or jam with an instrument.

- Let your personality and passion shine through, your country and culture. Make

#SongForSomeone your song" (http://www.u2.com/news/title/sing-song-for-

someone-then-upload-it).

The page also instructed fans to upload their version of the song to a social media

platform such as YouTube, Instagram, or Twitter, tag the video with #SongForSomeone and

their country (such as #UK), and email its link to a specified address. This invitation

appeared to be directed toward increasing engagement within the digital participatory culture

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of U2 fandom. It ultimately inspired the author to use fan-created videos of "Song for

Someone", specifically the emotional information contained in the videos and in the videos'

interactions from viewers, as the data for this study. The interactions were an important and

rich data source because personal feelings are a common type of YouTube comment

(Madden *et al.*, 2013).

In late March and early April 2015, the author purposively collected 168 user-created

video versions of "Song for Someone". She started data collection by searching for "Song for

Someone" in YouTube's search engine and then clicked on other versions that appeared on

the list of suggested videos on the right hand side of the screen. While collecting them, she

created a list containing the link to the filmic document as well as the country of the

producer(s) (when available) and preliminary notes about the content of the video. She

watched each video before adding it to the list.

After allowing time for consumers to interact with the filmic documents, she returned to them

in June 2015. She removed links that no longer worked as well as links to a few others that

appeared twice in the original list. This left her with 150 filmic documents. In a spreadsheet,

she assigned a unique identifier to each document. She recorded the link to each document,

the basics about the musical performance (such as the primary instruments used in a cover

version), a description of the visuals in the video, the producer's description, the producer's

country, the number of comments, direct quotes of any comments expressing emotion, the

number of likes, the number of dislikes, and the number of views. **Results**

Although this is a qualitative study, some numerical facts provide an overview of the

filmic documents included in the analysis. Table 1 provides a quantitative look at the

documents.

Table 1. Quantitative overview of the filmic documents.

As can be seen in the table, more viewers expressed a positive response rather than a negative response to the videos. 82 of the videos received 0 dislikes, and 38 of them received only one dislike. Comparatively, only 25 of the videos received 0 likes. 130 of the 150 videos received fewer than 10 comments. Because the quantitative data is quite skewed and represents the shape of an inverse power law, an arithmetic mean is not useful, although the median is still a valid statistic. A country could not be identified for 66 of the filmic documents, but the identified countries included Argentina, Australia, Austria, Belgium, Botswana, Brazil, Canada, Chile, Denmark, France, Germany, Hungary, India, Ireland, Italy, Mexico, Netherlands, Peru, Poland, Scotland, Singapore, Spain, the United Kingdom, and the United States of America. This range of countries reflects the international popularity of the band.

RQ1. What types of user-generated videos of U2's "Song for Someone" have been shared with the U2 fan community on YouTube?

Cover versions of the original song comprised the majority of the videos. In many covers, an individual simply sat in front of a camera and performed the song. Many of them did not have a high production value; rather, the focus was on the simplicity of the song. The individually-performed versions included a range of instrumentations: several of them included vocals and guitar, but other versions were sang acapella or sang along with U2's version. Others featured vocals and piano, vocals and piano karaoke, guitar only, and flute only. A few covers included two performers, in which one sang, and the other played the accompaniment on a guitar, a piano, or – in one case – an mbira, which is an African instrument (http://www.mbira.org/instrument.html). Some covers featured four individuals that performed vocals, bass, guitar, and drums, just like U2. These groups tended to identify themselves as U2 "tribute bands", and recorded themselves either performing live in front of

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an audience or playing in a studio setting. A minority of covers included interesting

performances that align with YouTube memes, such as a "Chipmunk" version and

"Nightcored" versions. The "piano karaoke" versions included an electronic keyboard

instrumentation, a display of the lyrics, and an overhead display of a piano that illustrated

what notes were being played.

Other filmic documents in the sample featured the *original version of the song with*

new visual content as performed in the authoritative version. The fan-created portions

focused exclusively on visual content. Visual content types included one single image for the

duration of the entire song, such as a photo of the band or the album's cover art, the text of

the song's lyrics displayed in various languages as Bono sings them, fans dancing to the

song, and personal photographs. Other videos containing the original version of the song

featured somewhat elaborate productions that told their own stories; an example will be

discussed later.

Tutorials were the third type of video. In the tutorials, an experienced guitarist

demonstrated and explained how to play the song on a guitar. Fingering diagrams of the

chords were included in some tutorials.

RQ2. How do the video producers in this fandom communicate emotional information in the

filmic documents?

Watching the videos provided insight into producers' emotional experience of the

song. For example, many of them closed their eyes or smiled as they sang, seemingly

indicating their deep involvement with the music and the joy they felt from the song. Visual

cues from the cover version producers' surroundings also provided emotional information.

These included sunny outdoor locations, highly personal places such as bedrooms and living

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rooms, and items appearing in these personal places such as albums, books, religious

symbols, and U2 paraphernalia such as tour posters.

The musical performances of the cover versions also communicated emotion. Musical

qualities such as a slow tempo, a final ritardando, and legato articulation indicated tenderness,

as described earlier in this article. Although the performers communicated tenderness

excellently, perhaps the performers were simply emulating U2's performance rather than

adding their own emotive interpretations. Following are some examples of other emotive

interpretations that could be observed in the videos.

Personal experience. Many videos that contained original versions of the song and the

fans' own visual content expressed emotion as they related to personal experience. For

example, one version contained a montage of family photographs, and the last frame included

text that indicated a family member featured in the photos had died. It also included a quote:

"A special place in our hearts is always kept for you"; these elements together could certainly

make a consumer feel sad. Other videos featured montages of personal photographs including

wedding photos, pictures taken before a high school dance, and pictures of friends spending

time together. Another photo montage featured nature images, and the title was "U2 – Song

for someone… (peace of mind)…" which suggests a serene personal interpretation of the

song.

Sadness. One music video set to the original version of the song tells a conventionally

sad story. It tells a story of a man and woman falling in love by showing them spending time

together and growing closer to each other. Toward the end, the man buys two ice cream cones

and puts an engagement ring in one cone. While he is buying the ice cream, the woman is

doing the "he loves me/he loves me not" flower ritual. At the end, the flower petals are on the

ground, she is gone, the ice cream cones fall to the ground, and a tear falls from the man's

eye.

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Individual emotional connection. The producer-provided descriptions also provided emotional information; most of it indicated the producers' emotional connections to the song or their own performance, even if the emotions felt were not explicitly stated: "My entry for the Song for Someone contest … this song means so much to me I couldn't help but enter" and "Just me and my guitar in my own room singing a song I love." Some producers talked about why the contents of the video was significant, such as this producer, who held his son in his arms while he sang: "My son love [sic] it when I sing U2 songs before his bedtime". These producers explained exactly why the place they recorded their cover version was emotionally significant:

> "Here is our cover of U2's 'Song for Someone' from last years [sic] 'Songs of Innocence'. We filmed this in my bedroom. A place where for nearly 10 years we have been recording music together. It is also a room which I will soon be vacating after 21 years. We thought that with these reasons it was a suitably personal room for us to record this in".

Another producer was particularly reflective in his discussion of the song's emotional meaning: "So this song is a memory that lasts, an idea that comes from another place that cannot be explained simply as things that happen can be, because there is no reason to forget what had still not enough [sic]". Still another producer of a cover talks about when she heard the original version: "was awaken [sic] by the last three lines … and I fell in love … It is amazing how one part of a song can call out to you and make you want to listen to it over and over again".

Intended response. Some descriptions conveyed the effect they hoped their video had on the consumers, such as "Hope you like my cover version" or "if you like this, PLEASE watch the video untill [sic] the end, subscribe and comment".

RQ3. How do the consumers in this fandom communicate emotional responses to these filmic

documents?

As mentioned previously, consumers "liked" the videos with much more frequency

than they "disliked" them, which speaks to the generally positive response to the documents.

Predictably, most of the consumers' emotional responses could be found in their comments.

Almost all comments were positive in nature. The following quotes illustrate the range of the

positive responses. Many of them highlight the quality of the cover, the specific emotions the

consumer experienced while watching the cover, or the emotional quality of the song:

Quality of the cover

"I love it. To me, the best cover of this song so far!! And the guitar sounds so healing"

"Wow! you guys rock! I love it so much"

"Wow man, your voice is amazing, Bono has this super distinctive voice which really

fits U2 songs well, and your voice just wore this song like a glove..... really nice."

"This is the most heartfelt, amazingly beautiful version I have heard of this song,

girls!"

"that's so raw and intimate!!!! that's the magic!! keep it up!!"

"that was really inspiring man!!"

"Your cover is amazing... Is so quiet... So deep and relaxing..."

"Excellent performance... even makes me appreciates U2's version considerably

greater, as your acoustic guitar and incredibly sincere raw, emotionally gifted vocal

capabilities emphasize the song with pure soul & heart"

"Starts slow, but you get really good (passionate.)"

"Nice piano and vocal rendition. There's a lot of sincerity in your music."

"Amazing cover, very emotional"

"Beautifully done and clever. Made me laugh -- all the wonderful kid chaos was golden."

"Great voice and the most passionate cover I've seen. This is what I think is the point: if you're not going to go all the way, don't go at all. You went all the way!"

"So emocional [sic]. I liked it."

"Soft and sweet!"

"Nice guitar playing! This song was made for your kind of voice. Bravo! A sweet moment!"

"Really, really amazing. You give me chills, everytime."

Emotional impact of the song

"Sometimes things happen in your life and you have no control, and a song just brings you to tears and makes things ok"

"No Comments.. Just feel!...."

"Beautiful song. Intense meaning."

"Omg this song makes me melt every time I hear it."

"Una canzone piena di emozioni" (Italian for "a song full of emotions")

A small number of negative comments were present, but they were not overly negative. Most negative comments were constructive suggestions about how the video could have been improved. For example, one video that played the original song and displayed the lyrics had errors in the lyrics. Comments on the video included "I watched 7 videos for this song and not one of them have the correct lyrics. On the U2 web page it says 'You can always see'". (The correct lyric is "You can always see", but the video says "You can't always see"). Several people responded to this comment, with replies such as "Yeah, "can" makes no sense. Can't believe ppl keep getting it wrong!" and "But I'm glad it's posted. A

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lot of people post w/errors. I still appreciate them being posted." The most negative

comment occurred on a cover version; a consumer stated, "Don't quit your day job".

RQ4. How does intertextuality contribute to the communication of emotion in these filmic

documents?

        In a few cases, allusions to works by other creators expressed emotion indirectly. For

example, one video containing the original version of the song showed clips from the film *It's*

a Wonderful Life (1945). The clips tell the story of George's courtship and marriage with

Mary. The video editing might make consumers happy about the love that is shown between

the couple, but potentially sad if they know the overarching story about George's suicide.

One consumer's comment on a cover version refers to another band: "I feel this is the way

Gavin Rossdale would cover Song For Someone in the middle of a Bush show!" No

explanation was given, but it seems that the commenter has an emotional connection with

both U2 and Bush.

        More prolifically, the intertextuality present in the sample emphasises the deep and

long-standing connections that many fans have with U2. While these elements may not

express emotion present in "Song for Someone", they do demonstrate the depth and intensity

of U2 fandom. Mentions of and allusions to other works by the band could be found in many

filmic documents throughout the sample. Following are the types of U2 intertextuality found

the sample and illustrated by examples from the data.

        Tour references. "I will see U2 tour the 11 and 14 th November At Paris Bercy , I

hope see my [sic] version on stage." "I'm the singer-songwriter who was pulled on stage

during U2's Elevation tour in Las Vegas to sing and jam with my heros [sic]!"

        Visual displays of U2 paraphernalia. One man lip syncs to the original version while

he is surrounded by U2 paraphernalia: the book *U2 by U2*, the book *North Side Story: U2 in*

Dublin, 1978-1983, the *Elevation 2001: Live from Boston* concert DVD, and the albums *All That You Can't Leave Behind*, *U2 - The Best of 1980-1990, Songs of Innocence*, and *Under a Blood Red Sky.* Other videos displayed a poster from the U2 360° tour hanging behind the performer, a poster with the cover of U2's *Achtung Baby* album hanging behind the performer, and the performer wearing a U2 t-shirt.

Band photographs. These are shown while the original version of the song is played. In one example, a black and white photograph of Bono and Ali when they were very young is displayed; their heads are touching, and they are looking down at a flower that Ali is holding. Others display photos of Bono by himself or the entire band.

Imitating the band. In some cover versions, the performers attempted to look like members of U2. For example, the guitarist is dressed like The Edge, with a beanie and a beard, and the singer is dressed like Bono, wearing an earring, sunglasses, and black leather clothing. Some cover versions were inspired by other U2 performances, as indicated in their descriptions: "Was always inspired to do this instrumental version after watching U2 perform it acoustically on Jimmy Fallon's show. Love The Edge's arpeggios! Trying to capture the nuances of Bono's voice for the melody..."

Musical mashups. Some performers introduced elements of other U2 songs in their cover versions. One performer sang and played the music of "Song for Someone" on guitar, but he blended in lyrics and music from "One" at the end. He also listed lyrics from both songs in his description. One fan performed a mashup of "Stay (Faraway, So Close!)", "Song for Someone", and "With or Without You" by singing and playing guitar to a small part of all three, but he does not stop playing between songs. Another producer sang the lyrics to "Song for Someone" while simultaneously playing the music of "Stuck in a Moment" on guitar.

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Discussion and future directions

This article continued research into EmIR by investigating emotions expressed by fans of a band that is known for creating significant affect in its listeners. Producers of cover versions communicated emotional information, especially tenderness, through facial expression, their surroundings, and corresponding musical elements. Producers' visual content expressed emotion through meaningful photographs and sad stories. Producers' textual descriptions revealed emotion as well. Consumers of the videos conveyed emotion through likes, dislikes, and expressive positive comments. Intertextuality in the filmic documents represented U2 fandom by means of U2 tour references, visual displays of U2 paraphernalia, band photographs, imitating the band, and musical mashups.

Many communications and representations of emotion can be found in these fan-created versions of "Song for Someone". Most cover versions communicated a feeling of simple tenderness, as can be seen in the producers' performances as well as in the consumers' comments. This approach to the performance respects U2 as the authority of the song. According to consumers' comments, a good cover version of the song is emotional, passionate, and captures the simplicity and tenderness of the authoritative version. The consumers' positive reinforcements, the sharing of emotional reactions between the producers and consumers in the descriptions and comments, and other conversations that took place between the producers' videos and the consumers' interactions support social construction of the emotion expressed and felt in the song and within the fandom. Knowledge inherent in U2 fandom, such as their other songs, books about the band, and their concert tours, is apparent in the conversations and the intertextual references. This knowledge, and the shared passion for the authoritative works, enable U2's fandom to construct knowledge about and love for the band together.

Social construction is integral to the backbones of fandom and the passion fans share

with each other for their authoritative creators. That said, the emotional responses to "Song

for Someone" were also very personal. For example, many cover versions included personal

physical surroundings, and strong affect could be viewed in the producers while they

performed. The photographs of family and friends that accompanied the original version of

the song hold the most affective meaning to the producers, although consumers may connect

with the photos on their own terms by simply enjoying the photos or being reminded of their

own friends and family. In this situation, emotional responses are individual as well as social.

The notion of U2's version as the authoritative version of "Song for Someone"

presents an opportunity for more discussion on cognitive and affective authority (Wilson,

1983; Rieh, 2002; McKenzie, 2003; Neal and McKenzie, 2011). U2 wrote and performed the

first version of the song, but if another band had previously wrote and performed it, would

U2 fans still consider U2's version to be the authoritative one? Additionally, many consumers

commented on how much they liked a certain cover version and why; in most cases, it was

because of the emotion the cover created for them. Was this because it reminded them of

U2's version, or did the cover create an entirely new emotional experience for the consumer?

Perhaps the cover version became a separately authoritative version for these fans; as Derrida

(1977) suggested, a "supplement" is a work in its own right, rather than an addition to the

original work. It might prove useful to YouTube users if these different versions could be

linked using FRBR's ability to assign relationships between various formats of the same

work, as Greenberg *et al.* (2012) observed.

In the future, it could prove useful to perform a similar study on another U2 song that

uses different musical and textual elements to evoke different emotions, such as one of their

fast-paced electronic songs, in order to compare results. Other methodological approaches

could also be used to look for communications of emotions. Other related areas for future

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research include understanding why some videos earn many emotion-based interactions from consumers while others have few or none, and how the interactions fit into the norms of fan culture.

This research could inform currently available online commercial music service providers on how they might include emotional facets into their recommendations and automatically created playlists. On a broad scale, after gaining a better understanding of how emotions in various forms of documents are communicated individually and socially, new interfaces should be developed and tested in order to help users locate documents that elicit different feelings. It seems evident from this study, as well as from prior research discussed in this paper, that emotional responses to multimedia documents are both socially constructed and individually felt, so eventual systems should account for collective experiences as well as personal preferences.

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