



Cape Peninsula University of Technology
Faculty of Information and Design

A study of grawlix as an alternative to
conventional linguistic and typographic communication

by

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Master of Technology: Graphic Design

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ABSTRACT

Typography appears every day in our life. The arrival of digital technologies allows people to interact frequently through the typography on various digital screens. Many online digital platforms also allow people to be connected and produce typographic elements through generating their own online contents. This opens up new perspectives of typographic genres and shapes the way we perceive typography differently from the printed medium.

Grawlix is one such case which it has been influenced by new technologies and new users. Grawlix is a series of typographic symbols which often appears in comic strips or cartoons. The purpose of grawlix is to censor profanity used in speech (e.g.,! @#\$) and it is also used as a visual effect to enhance narratives such as text effects and background effects. However, grawlix is being reintroduced by online fan communities who are actively engaged in their interest in particular characters from comics, manga or animated series. As online fans incorporate new uses of grawlix in their daily online interactions. This leads to new typographic genres are starting to emerge. Therefore, this research explores online communities' use of typography in two of their online settings, Twitter and Osu. These two settings are undertaken as a case study to understand the changing roles of typography in the current society. It is important to understand that new typographic genres and practices by non-professionals are crucial to the practice of graphic design, as designers' primary aim is to communicate visually with their audience. Equipping Graphic Design students and designers with new typographic knowledge produced by online users (non-professionals) may assist students and designers in developing new perspectives and approaches to typography in contemporary contexts.

In this thesis, Waller's (1987) typographic genres model is used to examine the relationship between online users, typography and the medium to understand the typographic conventions embodied in a document. Owing to the nature of this research, a hermeneutic approach is adopted. Interpretative Phenomenological Analysis is used to understand the layers of meaning embodied in online text. In such a study, there is a need for the researcher to be fully immersed in the participants' context. Data for the current study were obtained online through participant observation, semi-structured

interviews, and the analysis of documents produced by online fans, as well as of the interface of the medium and the grawlix examples produced by online fans.

Findings show that there has been a shift in the typographic paradigm. As online fans create bricolages of various forms of subjective knowledge and interact on digital platforms, they design many non-conventional typographic variations and the resulting genres differ from grawlix used in comics and provide new ideas of traditional typographic knowledge of our professional discipline.

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DEDICATION

This work is dedicated to my colleagues, friends, family and fellow designers.

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GLOSSARY

Bots: AI system or programme designed to do self-tasks. Mainly used in Social media and other internet platforms to manage their contents and users.

Cap: Capitalised

Fan fic: Fiction written by online fans based on their fandom

Fandom: The subculture composed by fans involved with fan activity based on the entertainment they like or in which they are interested

Font: The physical embodiment of typeface used

GIFs: The Graphics Interchange Format(s)

IMR: Internet Mediated Research

IPA: Interpretative Phenomenological Analysis

Meme: A presented image or a piece of text of a humorous nature which is popularised through repetition through web media and online users

REC: Research Ethics Committee

Role Play: Fan activity established by a group of online fans as they act out or perform the part of a person or character of the interest. One of the popular online fan activities in social media platforms.

RTs: It stands for Retweet(s). It is an act of reposting a Tweet posted by another user.

San-serif: The general category of typefaces that have been designed without a small line added at the end of a letter or symbol (serifs). San-Serif fonts are Ariel and Helvetica.

Serif: The general category of typefaces that have been designed with a short line or stroke attached. Good examples of serif fonts are Times New Roman and Bodoni.

Tweets: An image, video or text posted on Twitter

UI/UX: User Interface and User Experience

Unicode: A character encoding standard that has widespread acceptance in digital text. Unicode often represents non-Latin characters and symbols.

CHAPTER ONE

RESEARCH BACKGROUND

1.1 Introduction

Technology has changed our perspective of the world over the past few decades. The advancement of technology has made our lives easier and more convenient. As our society has become increasingly centred on digital technologies, many professional and educational disciplines have been affected. A medium-sensitive discipline such as Graphic Design is no exception to the influence of technology. This influence can easily be understood through examining the history of graphic design from early printing to digitalisation. Gutenberg's invention of printing press technology introduced mass-productions of the movable type. This printing technological revolution influenced many designers to invent new typefaces such as blackletter (Gothic script) and have led to hand written manuscripts being replaced by mass printed documents. Digital technologies were developed for digital printing and on-screen devices, with printed type digitalised as a font, designer shifts were needed to adapt to these changes in technology. For instance, for e-books or other digital publications, we cannot employ the same design methodology that we used for print publications. Shifts in notions of technology have therefore become inevitable in the practice of graphic design. These changes of technologies from print to digital also had a significant influence on the disciplines of typography. Therefore, the study explores how digital technologies exert influences on current uses of typography and how typography is perceived in the current context.

In contemporary society, our frequent communication is heavily centred on new digital media and devices, resulting in new linguistic and typographic conventions that are entirely different to those that we have conventionally known. I have personally experienced these changes during my daily communication when using Twitter and WhatsApp on my phone.

As a graphic designer, I find that these changes are interesting and relevant to the practice of graphic design, since designers are often involved in the production of meaning-making for effective visual communication through typography. Furthermore, design is an ongoing process. It continuously requires designers to be innovative: they need to be able to reflect on the past and understand both that and the contemporary world to create something new. In this thesis, I will therefore attempt into new typographic conventions in relation to digital technologies that are currently used.

1.2 Background to the research topic

According to Cameron (2017), the internet has changed the way we see (modern) writing. She argues that writing is now a form of social interaction, rather than merely existing to store information in visible forms. Crystal (2011:16) states that the internet is 'a mixed medium'. He emphasizes that internet language is defined by its correlation with speech and writing because visual interaction includes certain qualities of speech. Crystal (2006) elaborates that speech is a dynamic, time-bound and transient medium because it occurs within the presence of participants engaged in the conversation. Contrarily, writing is a space-bound, static and permanent medium because writer and reader are communicating without each other's presence. However, internet language can be presented like speech because digital technologies allow to people to interact through asynchronous exchanges of text (Crystal, 2011). Therefore, Crystal (2011) regards internet language as a mixed medium. It is crucial to note that typography plays a significant role in internet language as it links quality of speech and writing. For instance, typographic elements such as emoticons are used as facial expressions and body gestures that are often used in face-to face conversations and uses of certain fonts could portray tones of a conversation.

A digital communication medium relies heavily on textual and visual objects for communicative interaction as people frequently interact through online text. Typography plays important role in interpretation and online communication. Boss & Cranford Teague (2016), point out that typography on the web is crucial towards building a visual hierarchy and flow in user experience. Arguably, the text produced within online space is relevant to the domain of typographic study. Herring (2013) explains that Internet language is characterised by non-standardised typography and

orthography. Examples such as / <3 u for “I love you” could be regarded as non-traditional spelling. Despite its frequent appearances in online text, few studies have been addressed the typographic aspects of online text.

Although many linguists mention symbols, emoticons and use of punctuation marks as key typographic features in Computer-Mediated Communication (CMC) and internet linguistic studies, this research focuses primarily on the linguistic perspective (lexical and orthographic reduction mainly). Herring (2013: 2334) regards typography in CMC as ‘non-alphabetic keyboard symbols’ that consists of numbers, punctuations and special symbols such as @ and #. However, constant updates to technologies means that introductions of new features such as GIFs occur constantly. Short videos, audio clips and images are often incorporated in online interactions and serve as typographic elements. Hence, the study will examine the typographical layout that consists of multimedia resources. Online text, images, new digital and non-standard typographic variables such as GIFs or memes are included within the scope of this study.

This section briefly looked into the current relations to typography in internet language and its new features to outline new typographic varieties considered in this typographic research. The study will then introduce gawlix as one case of current typographic motions. This will be discussed further in the sections that follow.


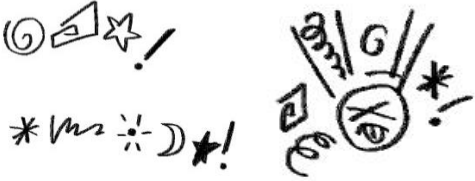

1.3 Background to the study of gawlix

The previous section discusses how the influence of digital technology has resulted in new typographic opportunities and communication used by online users. This section discusses the context of the research. Hård af Segerstad, (2002) asserts that internet language is heterogeneous because its usage varies with its users, genres, and context. Hence, the study of internet language requires identifying the user and their context. This section contextualises gawlix and online fan as gawlix users.

Gawlix was originally used by comic artists as a creative substitute for a profane or obscene word or phrase; and, as a visual tool, it presented a unique visual experience for readers, as a story could be narrated without causing offence (Racicot, 2014). Gawlix was introduced by an American cartoonist, Mark Walker. In his book, *The*

Lexicon of Comicana (1980), he introduced the language of cartoon symbology used in cartoons. Walker (1980) first coined the term ‘maladicta’ as a creative way to substitute a profanity used in a comic strip. According to Curb Nottus (2017), Walker has been credited with using the term grawlix from 1964. Walker initially introduced Grawlix under one of the categories of maladica. Law (2010) suggests that grawlix is more publicly recognised than other comicana symbols due to the influence of the typewriter. The typewriter can mass produce grawlix symbols easily by using the shifted number keys function. This has thus led to grawlix gaining popularity amongst cartoonists and it is frequently featured in comics. A recent study of grawlix by Van Elburg (2013) broadens the term by introducing several new visual symbols and visual graphic effects used in cartoons (See Table 1.1).

Table 1.1 A list of grawlix examples

Types	Examples
Use of glyphs and punctuation marks	?!#\$\$%&
Obscenicons (a series of negative imaginaries presented in pictogram)	
Scribble lines, shapes and spiral lines	
Visual effects with effect texts	

Van Elburg (2013) describes the increasing alternatives in grawlix usage and varieties as he illustrates the use of grawlix symbols in emails and on the web such as in fonts and emoticons. Grawlix began to emerge in social media and other virtual spaces. Barringer (2013) mentions the frequent appearance of grawlix in mass media and communication as he noticed how the current use of language receives more graphic

treatment than before. Lupton (2010) also notices that, in digital mediums, online text is easily accessible to users who may recreate and repurpose it. The authorship of text therefore changes from user to user and typography becomes more open and evolves continuously. The users in this research refer specifically to online fans. An online fan, in this context, refers to a person who is often obsessed with a particular entertainment media (e.g., series, fanfiction, anime, manga or cartoons, or celebrities) (Bell, 2001). According to Thorne et al. (2009), online fans are established through strong affiliations based on their interest in a particular entertainment media. A fan community is established through individual fans gathering and creating an alternative social group to engage with fandoms (fan-made cultural works and activity).

Pullen (2004:81) introduced five key features of a fan-based community to identify a fan:

1. An online fan often looks for an intervention from particular media of their interests and adds their own self-interpretation. For instance, online fans watch the series and create a review or explore the meaning in the series.
2. An online fan often learns from the fan community. The online fans develop additional information on their characters as they interact with another online fans.
3. They are an active consumer. They continuously produce and consume their own fandom.
4. They have a bricolage characteristic, which often involves creating a unique form of cultural production (e.g. fan-fiction, fan-art and role play, Zines publishing about favourite character etc.).
5. An online fan establishes an alternative social community (e.g. online fan clubs or specific online discussion forums).

It is important to note that fandom allows online fans to develop potential in new digital language development. According to Thorne et al. (2009), online fans' creativity in remixing existing media assists them to alter language through code switching amongst second language learners and could possibly contribute to learning new language. Fans' creativity in hybridising various resources may be the considered factor that motivates unique communication. This study departs from the assumption

that online fans have adequate knowledge of grawlix and other visual effects used in comics and manga, as one of the factors that contribute to new grawlix genres.

1.4 Research problem statement

This research addresses a gap in research explorations of new typographic norms produced by online users and their social interactions. The dynamic interaction between digital media and online users has led to new research opportunities to explore contemporary typography. Grawlix, in this particular case, seems to be used as a mode to bypass standard linguistic and typographic rule.

1.5 Research questions and objectives

Table 1.2 A summary of research questions and objectives

Main research question	
How is grawlix used as an additional form of linguistic and typographic communication?	
Sub-questions	Objectives
What is the essence of grawlix-ness to online fans?	To interpret what the distinctive features of grawlix mean to online fans
Why do grawlix users practise with grawlix as communication tools?	To understand the value of grawlix that motivates grawlix users to use it
How do online fans make the decision to choose a particular typographic element as a grawlix?	To examine what structures of grawlix are chosen to achieve communication

1.6 Significance of the study

This research will outline the shifting notions of technologies and typography. According to Shaughnessy (2009), there are new techniques and aesthetics in typography that are used on the internet which need to be explored and differentiated from printing. The findings of this research will contribute to fill research gaps regarding how grawlix has changed our notions of communication across standard language and typographic conventions.

This research could also contribute to the practice of typography and visual communication in contemporary contexts. It is important for designers to understand the nature of existing worlds to create and design something new. The nature of our practice often synthesises considerations of various aspects (historical and socio-cultural factors) to produce meaningful design (Noble & Bestley, 2005). This research

will contribute to the definition of new on-screen paradigms of online communication and will explore current aspects of typography.

1.8 Motivation (rationale)

To highlight the significance of this research, this section addresses the motivations of the researcher (self) and of targeted audiences.

My motivation: My motivation for this research is simply to explore and understand. As an active online user, I often encounter unconventional and eccentric typographic forms and layout throughout digital communicative mediums. This has fascinated me and interests me as a designer as I am often involved in typographic design. Some of the examples that I have encountered are ridiculously illegible and different from the linguistic and typographic knowledge with which I am familiar; and yet these forms function as communication. I found this phenomenon appealing and saw this as an opportunity to gain new insights into new visual knowledge and practices.

Typographic researcher and educator: Typography is an intellectual discipline involved with practice, flexibility and adaptive skills. There is a need for constant critical study of the relationships between practice and new technologies as they emerge. To follow up on this constant change in the medium of our practice, typographic education needs to encourage theoretical and conceptual explorations of typography study in the context of contemporary settings. To adapt these changes, I think there is a need for reflection on the current relationship between designer, typography and audience. Just as Aitchison (2001) studies language changes when a new speaker and communication medium are introduced, I think it is important to be aware of our given context if we are to adapt to changes.

Who else has an interest in the research? This research attempts to explore *how* typography happens and enables communication in digital settings from the perspective of a typographic scholar. As this research includes multi-disciplinary aspects, this may spark interest among those aligned to the study of digital communication processes, or among those interested in exploring the social interaction between the user, text, and digital setting in context-sensitive arenas.

Furthermore, this research might also potentially provide a glimpse into a methodological approach for handling typography as a source of visual data.

1.9 Summary of research methodology

According to Merriam (2009:05), qualitative research uncovers the meaning of a phenomenon through understanding how people interpret their experience and what meaning they attribute to their experiences to construct knowledge. Qualitative research has two research perspectives: (1) interpretive and (2) critical. This qualitative research is situated within an interpretivist framework. According to Lapan et al. (2012), interpretivists assumes that meanings are created by an individual's interaction with the world around them. Therefore, an interpretivist attempts to understand phenomena from a participant's viewpoint and value in a specific social context. The interpretivist framework is relevant to this study because it helps the researcher to understand how and why online fans engage with certain typographic communication features called 'gawlix'.

To understand how online fans experience gawlix in the context of online settings, Interpretative Phenomenology Analysis (IPA) is used as a research type. In order to outline IPA, I will first briefly introduce phenomenology as used in this study. Phenomenology is the study of phenomena by describing the subjective experience of individuals in order to understand how meaning appears in our social reality (Reiners, 2012). Reiners (2012:01) defines Phenomenology as a method to understand knowledge gained through interaction between researchers and participants by focusing on understanding individual's experiences in the first person's point of view. Hence, a phenomenological approach is based on the interpretation of personal knowledge and subjectivity. The research approach is subjective, inductive, and dynamic (Reiners, 2012). Phenomenology is appropriate for this study because the researcher strives to understand how online fans use and establish gawlix communication through their personal knowledge and subjectivity and how typographic meanings emerge through their online interaction.

According to Pietkiewicz and Smith (2012), IPA is an effective research tool to investigate how individuals relate their experiences of certain phenomena in context

and attach meaning to it. This method involves the thick descriptive and interpretative analysis of data obtained from the participant's perspective (mainly embodied in the text) and analysed on a case to case basis (Pietkiewicz & Smith, 2012).

As IPA focuses on understanding the participant's lived experience in a specific context, Dunworth (2011), emphasises that IPA often involves purposively selecting a sample with regards to their experience of a particular phenomenon. A purposive sampling technique was used in this study. By using this sampling technique, I was able to purposively select the online fans based on their fandom and frequency of their involvements in fan activity within digital spaces.

IPA is used as an approach that encourages the researcher to be situated in the participants' world and understand their point of view. Therefore, data collection methods were developed for their participatory nature and included open-ended structures. The following three methods were used: (1) artefact analysis; (2) participant observation; and (3) semi-structured interviews.

I engaged with online fans through participatory observation. Jones and Somekh (2004) suggests that participant observation allows the researcher to engage in the research subject's activity and environment as a participatory observer. By virtue of this method's participatory nature, it allowed me to understand the fans' natural settings and establish relationships with them. During observation, I gathered and analysed relevant gawlix examples. Dunworth (2011) points to participant-generated texts as an important method to access to participant's lived experiences. Henning et al. (2004) also explains that document and artefact analysis helps to provide a background to a particular phenomenon that occurs among a specific group of people. By analysing the online text produced by online fans, I obtained some insights to typographic variations and usages. Finally, semi-structured interviews were conducted with the participants, alongside capturing of visual data, such as screen-captured gawlix examples produced by the participants. According to Smith and Osborn (2007), semi-structured interviews is one of the popular data collection methods in IPA. They highlight that the semi-structured interview produces a rich data through open-ended questions rather than pre-determined questions prepared by the interviewer (Smith & Osborn, 2007).

This allows participants to take charge of the interview flow and questions, which facilitates empathy and flexibility in data collection.

1.10 Summary of ethical considerations

This research followed the ethical and professional guidelines of the Cape Peninsula University of Technology (CPUT). I obtained ethics approval from the Research Ethics Committee (REC) of CPUT. All information sheets and consent forms were provided to participants to inform them of the nature of this study and confidentiality of the data (see Appendices A and B). The participants in this research were individual online users; therefore, no ethical clearance was needed from an overarching body. However, individuals' permission was required and obtained. The research setting was publicly accessible, with interactions conducted in online and virtual settings, thus there was a need to follow ethical guidelines for Internet-Mediated Research (IMR) (British Psychological Society, 2013 & 2017). The ethical considerations were drawn from IMR's four principles for designing, implementing and assessing in an IMR study: (1) Respect for the autonomy and dignity of persona; (2) Scientific value; (3) Social responsibility; and (4) Maximising benefits and minimising harms.

1.12 Chapter outline

This thesis consists of six chapters, outlined below (figure 1.1).

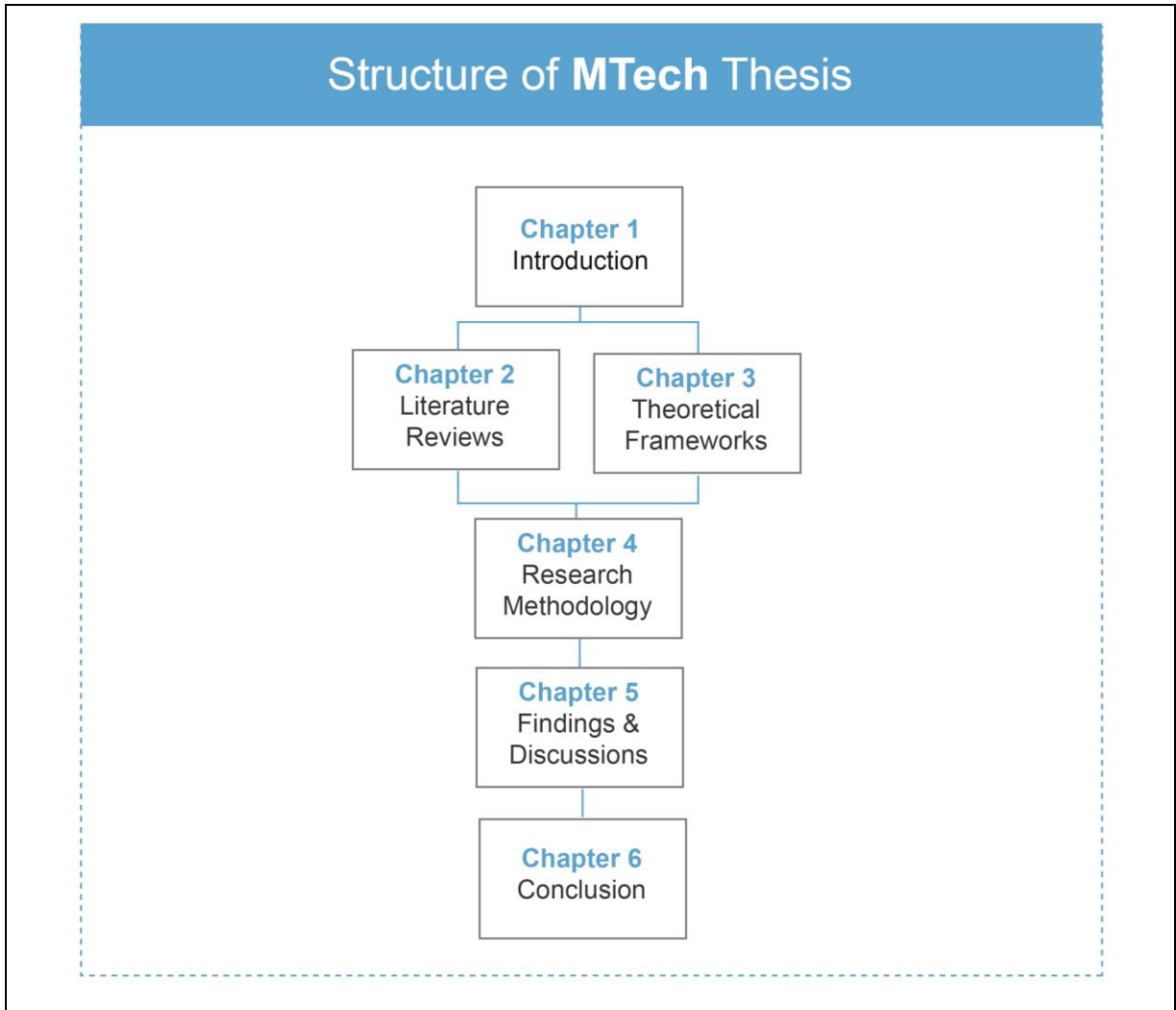


Figure 1.1 Structure of MTech thesis

In Chapter one, the notion of typographic communication in digital technology is covered as the core of this research topic. The study notes that there has been a shift in typographic genres in the form of grawlix. Grawlix is briefly described as a series of symbols, pictograms, and glyphs that are mainly used as a visual framework for comic art to enhance the visual communication between the comic artists and comic reader. However, several features of grawlix have started to surface amongst online fans and their fan interaction online. The chapter explores the current relationship between digital medium, online user, and typography to highlight my academic and professional interests and personal motivations that led to my research goal and methodology.

Chapter two introduces studies related to the subjective nature of typography and its heuristic approaches to understanding typographic communication. The chapter presents relevant literature to define typography and how typographic communication is established. The literature scrutinises a semiotic approach to understanding how the typographic meaning and a typographic form are socially constructed. Followed by this, how a multimodal medium such as typography is described. This section constructs knowledge based on Waller's (1987) approach to typographic layout and its relations to document (medium). By doing so, I am able to construct theoretical approach to identify how typographical genre shifts in gawlix by online fans in the digital medium. Furthermore, the chapter interconnects the data presented in chapter five of this thesis to formulate the research findings and discussions.

Chapter three introduces Waller's (1987) typographic genres as the theoretical frameworks. The chapter breaks down Waller's (1987) systematic structures. The writer and reader syntagms and three other functional constraints are organised and explicated. Followed by this, gawlix, as used in comic strips, is analysed, based on Waller's (1987) model to exemplify how it is applied to this research. Chapter three also underpins the connections between the theoretical and methodological positions.

Chapter four discusses methodological approaches and research tools. Since gawlix is generated by online fans as writers and readers, the study focuses on online fans' experience, knowledge, habits in writing and reading strategies applied in typographic communication. To obtain these qualitative data, Interpretative Phenomenological Analysis (IPA) is incorporated to uncover the layers of meaning embodied in gawlix. Sampling techniques and methods are aligned with IPA. The IPA approach is dynamic and flexible by encouraging the researcher to directly immerse themselves into the world of participants. Hence, the researcher can describe the phenomenon from a participant's perspective. The chapter outlines two research settings, Osu and Twitter, as a social platform and medium for online fans to interact and exchanges online texts. The researcher, as an active online fan, engaged with online users by participating in fan activity and established a good relationship with participants. A purposive sampling technique is used to identify online fans and the potential research participants. A purposive sampling technique is used in this study. By using this technique, I was able

to purposively select online fans based on five key characteristics mentioned in Section 1.3 and their particular uses of typography and language.

Chapter five presents the data findings and analysis. The data captured from the field works is discussed. The data obtained from the analysis of grawlix examples captured, the analysis of interface of Osu and Twitter, the recorded video during the participant observation alongside the researcher's diary are used to describe the lived experience as an online fan in the typographic meaning-making. The data is also captured from the semi-structured interviews with six purposively selected online fans. The Findings are aligned with Waller's three functional constraints. The researcher reports on (1) how the user interface of Twitter and Osu influence typographic choices, (2) what the current typographical variations are. (3) What social habits and writing strategies employed in typographic communication are, and (4) what the lived experiences of an online fan as a writer and reader of typographic communication are. Finally, the summary of findings is discussed alongside with research questions given in Chapter One. The findings of the study are that typographic meaning of grawlix used in a digital setting is used as a typographic tone to portray playfulness in the informal context.

Chapter six provides a summary of the thesis as well as the findings. By doing so, chapter six overview of the main research questions and attempts to uncover grawlix in digital media. Initially, the chapter contextualises the online fan as a reader and writer. Followed by this, comparisons between grawlix used in print medium and digital medium are made in order to formulate typographical genre shifts in grawlix. This chapter concludes that there is a definite genre shift in grawlix. Grawlix in printed comics serves to enhance narratives and to censor profanity in communication between comic artists and comic readers. However, grawlix used by online fans helps to develop social affiliations and social interaction. Grawlix is used as an expressive medium of online users' self and social identity, as users are constantly exchanging online text. Lastly, the study suggests further research on various typographic usages by various online users in certain settings and contexts to draw further comparisons.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter outlines literature related with typographic studies and its relations to grawlix. The review of the relevant literature establishes the theoretical structures and the theoretical framework for understanding typographic meaning and the phenomenon under study. This study makes use of Waller's (1987) model of typographic genres to rationalise how typographic communication is established through the interaction between user, medium and typography, as well as to develop an appropriate methodology for guiding the study.

2.2 Writing and typography

Writing renders language in visible form. According to Mawhood (2014), Writing and typography have closely co-existed in communication events. She explains that their interrelated co-existence is visible throughout the history of literacy. The development of cultural literacy led to the invention of writing systems. Alongside this development, various typographic systems were also accomplished. Meggs and Purvis (2011) illustrated the development of writing in relation to symbols and typography as they reflected back on cuneiforms, hieroglyphs, and alphabets. However, because of the interrelated relationship between writing and typography, these two entities are often misunderstood as a single entity.

Literacy uses writing as a materialised form of meaning for reading and writing, but typography is related to graphic literacy. It assists readers to read and 'interpret' images. According to Walker (2001:2), typography is concerned with the visual organisation of written language. By this means, a writer accesses typographic features to support effective communication.

Similar to writing, typography transmits meaning during the writing and reading process between author, text, and reader. The basic author-text-reader trio manifests how

typographic meaning and form are established and understood. Similarly, the practice of typographic design also involves the relationship between designer (author), typography (text) and audience (reader). According to Muller (2001), form follows function and convention. Function motivates form to be shaped to serve a certain purpose. It is associated with the intended use and the content. However, convention refers to the context of the subject. It is often related to a socio-cultural value that connects the designer and audience(s). These two considerations are key motivations that influence designed forms. Many designers bring these two into consideration during their design process. Typography is also designed to serve a specific function and convention for a specific audience.

In this particular study, it will be seen that new digital technologies have introduced new typographic conventions and functions of grawlix that are used by a group of online fans. According to Waller (2012:21), it is valuable to note how visual processing in graphic literacy may be understood through layout conventions and document literacy. I believe that Waller's (1987) layout genres structure theory is appropriate to explore the textual communication process involving grawlix and how certain typographic genres are expected through typographic layout.

2.3 Definition of typography

There are several definitions of typography with several different meanings. According to Livingstone and Livingstone (2012), typography is defined as the art of arrangement and specification of type in preparation for printing. However, this definition is fixed and limited to the printed format. A broader definition of typography covers various visual communication elements. Typography is then mainly understood as the art of manipulating type, illustration and emotions to achieve effective visual communication. Mawhood (2014:08) clearly defines it as follows:

... typography – from the Greek roots τύπος (typos): 'impression' and -γραφία (-graphia): 'writing' – accords no preference to any specific production process. Its value lies in its impression: the visual manifestation of marks on a substrate. It can be represented as print, hand-writing, LED, Facsimile, Teletex; on the screen of a word processor or the code that awaits compilation as a computer program.

She also addresses a shift in the definition of typography, as she discussed the ambiguity in typography and lettering (Mawhood, 2014:8).

In typographic terms, typography and lettering are regarded as two different disciplines. Baines and Haslam (2005:10) differentiated lettering as an illustrated, unique composition of letters. Contrarily, typography is related to writing using repeatable units and specific graphic conventions. It often concerns type-form in relation to how it is produced. However, Mawhood (2014) argues that typography not only denotes type form and its production, but articulated meaning within a visual framework and how specific graphic forms are visually organised.

2.4 Visual metaphor and typography

The previous section focuses on defining typography as a visual framework in terms of materialised writing. Typographic communication must be established with the presence of author and reader. By this means, the author produces text with a reader's expectations in mind; and the reader has to imagine the writer's intentions through examining the author's text. Therefore, heuristic and rhetorical strategies are employed during the interpretation of typographic communication.

This is related to audience-centric driven practices such as graphic design. Harkins (2010:34) explains that typographic designers (authors) should always align themselves with the audience (readers). Identifying the audience and their expectations provides a methodology to achieve appropriate and persuasive typographic design. A designer often manipulates various visual elements to create a visual pathway for the targeted audience. For instance, the practice of graphic design incorporates gestalt principles¹ to categorise different uses of graphics to manipulate the audience's visual and cognitive perception. However, it is important to note that typographic design does not only refers to manipulations of form and visual perception. Shaughnessy (2009: 285), regards typography as a massive paradox because

¹ Gestalt principle is a theory of perceptions, developed by gestalt psychologists, Max Wertheimer, Wolfgang Khlér and Kurt Koffka. Wertheimer (1938) introduced gestalt principles. These provide a guideline as to how graphic elements are structured to make information legible and readable. There are six principles: (1) Figure-ground segregation (2) Symmetry, (3) Closure, (4) Proximity, (5) Continuation and (6) Similarity.

typography is often personal. It is personal because designer often synthesises the design discipline (rule) that was taught alongside with their *aesthetic judgement*. For instance, Branding use typography as a representation of brand value, attitudes, and advertising use typographic elements to evoke emotions to appeal to targeted audiences. The current uses of typography in our society shows that typography is subjective and metaphoric because it often holds a multiplicity of typographic meanings which are interpreted at the interpersonal level.

However, this subjective nature of typography could confuse readers to interpret designer's intention. Regardless to this disadvantage, many typographic communications successfully convey the message. This could be due to the reader's ability to understand given context and the reading habits as a cue to appropriate interpretation. According to Hofstadter (1995), 'seeing' and 'thinking' are complex processes. He refers to analogy-making as a negotiation process between (1) finding resemblances and (2) comparing difference based on different situations and contexts. Hofstadter (1995) also highlighted that determining key *context* and *reading habits* shorten the process of pattern recognition. According to Lemon (2013), habit is a default interpretation which is connected to strong cognitive-perceptual habits. Lemon (2013) regards habit and prior use as a key source of connotation.

According to Nørgaard (2009), to study a multimodal medium like typography, it is important to understand that connotation and metaphor are embodied in typographic meaning. She distinguishes connotation (as the cultural and social reference that indicates the origin of a sign) from metaphor (as a principle of similarity that creates an association between the visual form and the conceptual meaning). Nørgaard's discussion of typographic metaphor is more explicitly explored in Theo Van Leeuwen's (2006) article, 'Toward a semiotic of typography.' Van Leeuwen (2006) introduces two terms similar to Nørgaard's: (1) connotation and (2) experimental metaphor in typographic meaning. Van Leeuwen elaborates on connotation as an idea that signs are from a contextual background, such as a social or cultural group. On the other hand, Van Leeuwen's experimental metaphor refers to our prior experiences in a particular context that triggers typographic significations and interpretations.

2.5 Semiotics and typography

According to Muller (2001), the form is indefinite. It is the role of design to intertwine with the user and their social and cultural conventions to shape the definite form. Therefore, Muller emphasises that the study of semiotics could lead to a comprehensive understanding of how form is established as a sign. Semiotics is the study of meaning-making and sign processes. Noble and Bestley (2005) emphasise the importance of semiotic theories in guiding study and contextualising a particular visual system and communication. Semiotics identifies key features of socially-embodied value in a sign. This theory was developed by Ferdinand de Saussure and Charles Sanders Peirce.

According to De Saussure (1959), semiotics is a science that studies sign-systems within a society. Copley and Jansz (2004) explain that, in semiotics, a sign *stands for something else* that one wishes to communicate. This means that people often mediate the use of signs to convey their ideas or thoughts. De Saussure introduced a dyadic sign system that consists of the 'signified' and 'signifier' in order to understand a sign (see Figure 2.1). According to Hussein and Abushihab (2014), De Saussure defined the 'signified' as our mental concept, while 'signifier' as a sign acting as the mediator of meaning that is signified.

Unlike De Saussure, Peirce views a sign as an empty entity that always relies on how *the world* around us shapes us. Peirce (1994) contends that *people* make sense of the world around them, rather than through a sign. Hence, he exclusively looked into a relationship between the sign itself and the external reality of users. Peirce introduced a mode of triadic sign systems to formulate his argument (see Figure 2.2). Deledalle (2001) explains that Peirce's triadic sign system consists of a triple relationship between the representation (signifier), the object (a link to what the representation stands for) and an interpretant (signified). Importantly, an interpretant is considered as 'signified', because it does not refer to the reader of a sign but to a mental concept of the sign, such as the user's experiences and perceptions (Crow, 2010).

Queiroz and Merrell (2006) postulate two distinctive features to add to Peirce's theory of semiotics. Firstly, semiosis is a dynamic structure. By this, Peirce believes that

meaning cannot be fixed because people (interpretants) all have different subjective views of the world. Therefore, the sign is a dynamic entity that can produce infinite meanings and interpretations. Secondly, he specifically explores the relationships between representation and object. Peirce categorises signs into icon², index³ and symbol⁴ to understand the structure of a sign based on the way it is presented and its relationship to a reference (object).

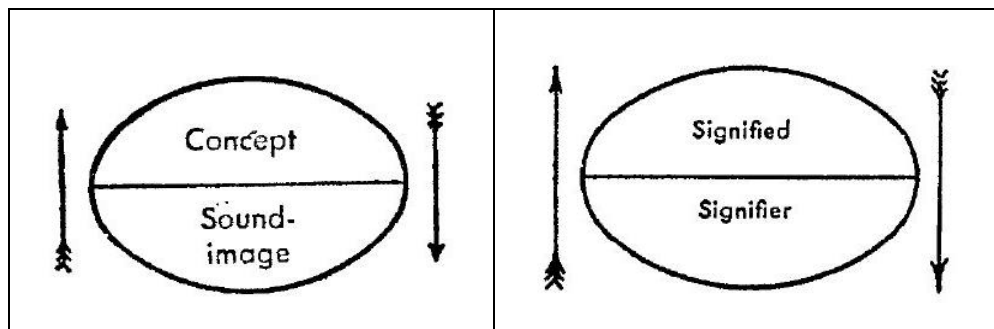


Figure 2.1 De Saussure's model of a dyadic sign system (De Saussure, 1959:66 & 1959:114)

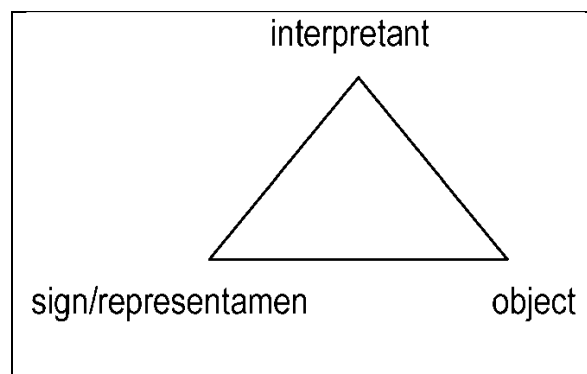


Figure 2.2 Peirce's model of a triadic sign system explained by Nordtug (Nordtug, 2004:91)

Semiotic applies to typography because typography represents a particular emotional and social meanings and abridge the association between writer, content, and reader. Serafini and Clausen (2012), conceptualise typography as a semiotic resource for designers and readers to strategies and interpretive repertoires. Furthermore, Hassett and Curwood (2009), made a point that assigned meaning in a particular typography is possible due to the social genres and conventions. Therefore, I would like to refer

² An icon is a signifier that resembles a physical object; and this physical object connects the signified and signifier (e.g., a photograph) (Abullah & Hubner, 2006).

³ An index is a direct link between object and sign (e.g., a road 'Stop' sign) (Abullah & Hubner, 2006)..

⁴ A symbol is an abstract visual sign that does not have any semantic features of the signified. However, it communicates through a convention that is agreed by a group of people (e.g., alphabet) (Abullah & Hubner, 2006).

back to the relationship between Peirce's representation, object and interpretant because it provides a designer a comprehensive framework to analyse how a particular typographic sign is culturally acknowledged and assign meaning to it.

This section briefly provided a theoretical background to two points of view regarding semiotics and signs. The following section will explain in depth how semiotic theory is used to develop a visual framework to understand typographic layout.

2.6 Kress and Van Leeuwen's visual communication grammar

Kress and Van Leeuwen (2006) introduced a social semiotic framework called 'Grammar of visual design'. Kress and Van Leeuwen's (2006) visual resources, such as image or typography or colours, are regarded as semiotic resources because they are culturally and socially shaped to make meaning in visual communication. Liu's (2013), study on Kress and van Leeuwen suggests that their view of visual modes represent a particular social relation between the producer, the viewer and the object presented. Furthermore, Kress and Van Leeuwen (2006) suggest that understanding an image requires looking into the meaning of the composition between multimodal texts. In this way, the meaning of visual images can be understood through the arrangement of different visual elements. They (2006:177) introduced three key interrelated systems to understand how meaning is composed:

- **Salience:** The manipulation of the viewer's attention through relative size and contrast (e.g., foreground, background, tonal values);
- **Framing:** Dividing, or enclosing, of text elements (e.g., using line in between the paragraph to separate information and section.);
- **Information value:** The placement of elements based on the specific information values in a certain section of the image (e.g., left, top, bottom, centre and margin).

However, Waller (2012) criticises Kress and Van Leeuwen's linear approach. Waller contends that their concept of information value is controversial, because their selected examples do not demonstrate the concept to validate their point; and there are limited considerations regarding the variety of layouts that could be found in non-linear

sequences. In an example such as illustrated in Figure 2.3, an unconventional typographic layout proves that the concept of information value is not necessary to understand the information value within the layout. For instance, Kress and Van Leeuwen (2006) assert that information presented in multi-columns is read from the left to right; therefore, the given information is suggested to be presented on the left and new information is placed on the right-hand side for the reader to navigate the information chronologically. However, Waller (2012) argues that this left-right distinction is a limited view as a document is not always read in a linear manner. The information presented in Figure 2.3 does not read from left to right. It is non-sequential and yet the reader can navigate the flow of the information without relying on the left to right convention.

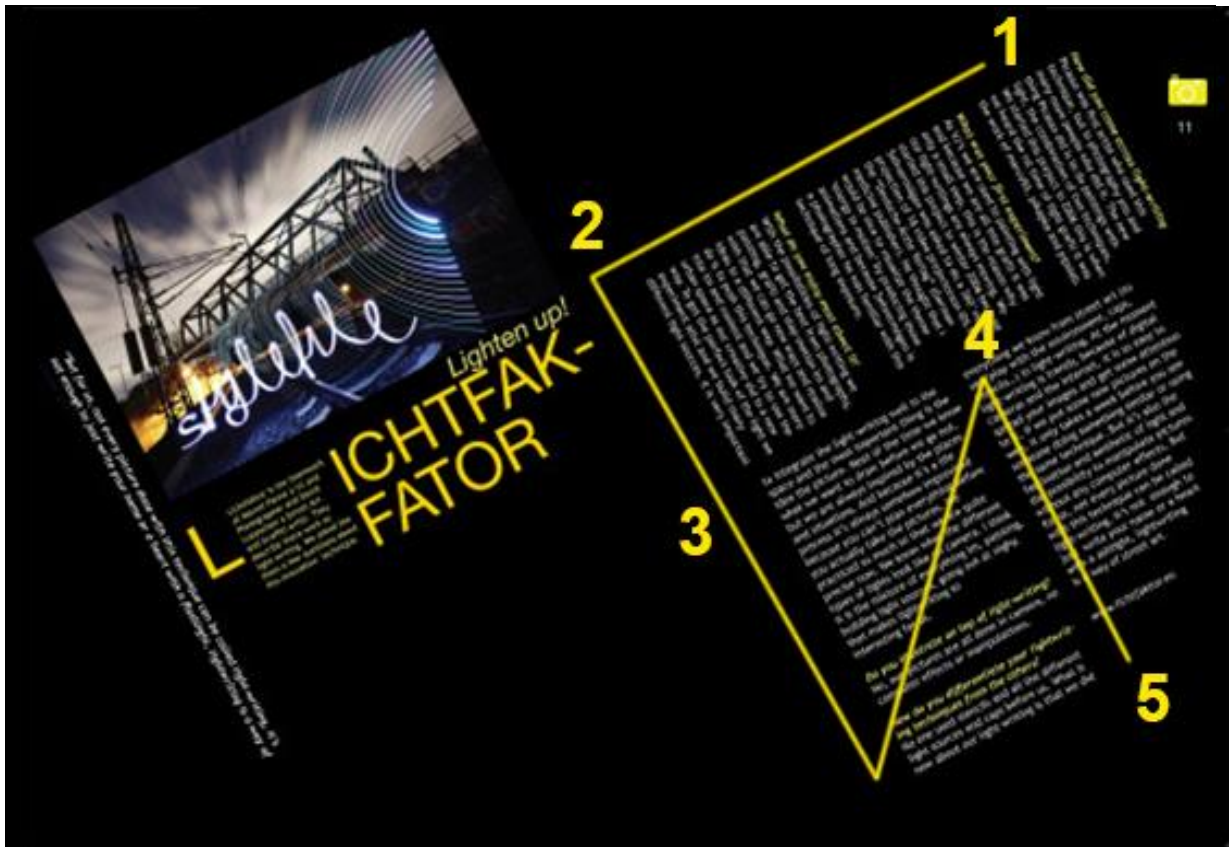


Figure 2.3 Examples of unconventional typographic layout (my own example)

Another example is a guideline to folding an origami paper frog (See Figure 2.4). This layout contains a step-by-step guideline by displaying text (information) and the picture of each step, as an example. This example also does not have any associations with the information value because texts are arranged based on the proportion of pictures rather than information value. Furthermore, it breaks from left to right conventions and

yet the reader can follow the flow of the information through the numbers arranged within in the picture.

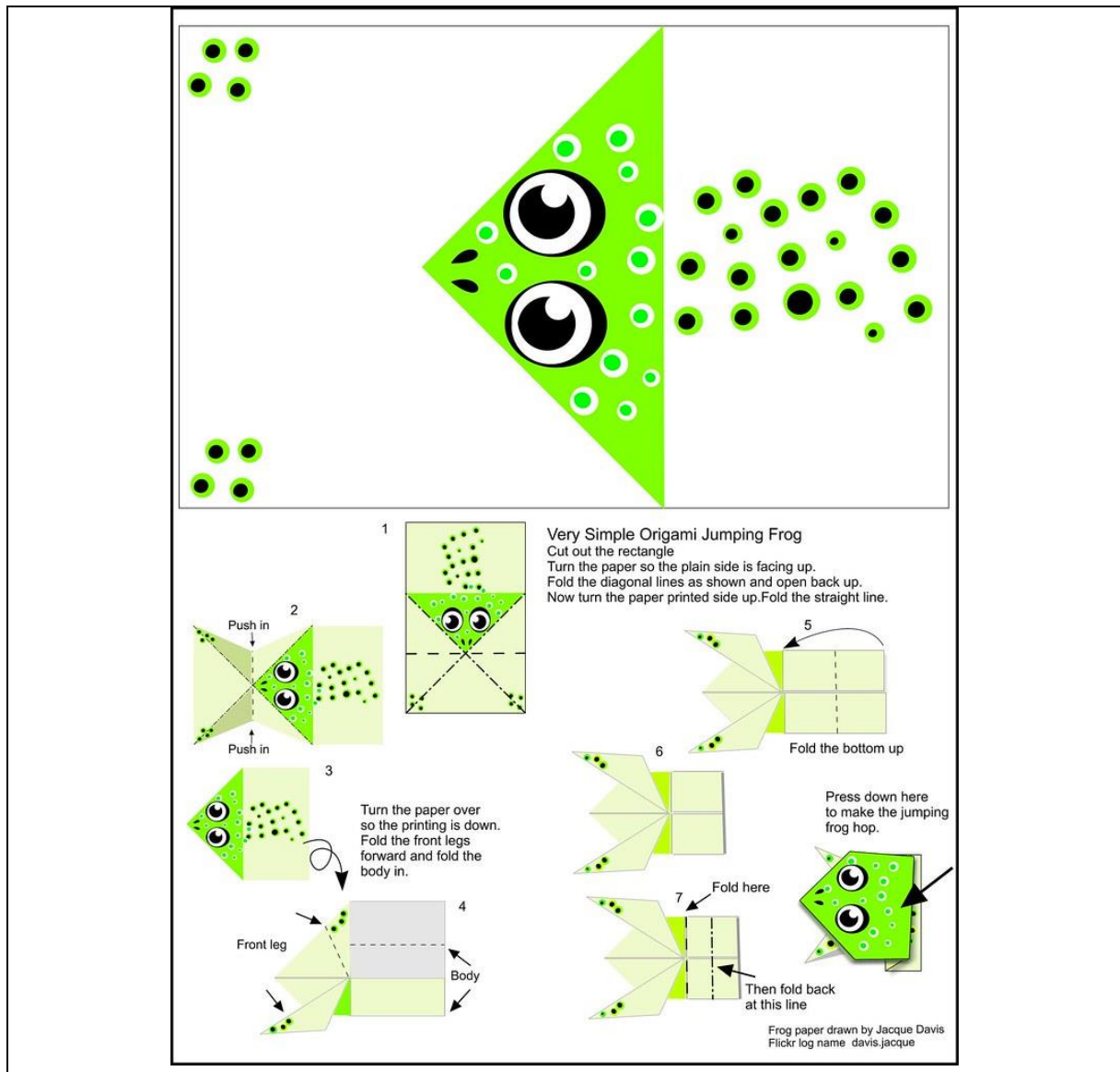


Figure 2.4 Origami jumping frog instructions and paper (Davis, 2008)

These two examples showed that the document layouts are not linear hence handling of typographic layout should not be only considered examining the relationship between visual inferences and its compositions but layout properties and document's style in repeated in a certain document type are required in the discourse of analysis (Waller, 2012: 15).

2.6 Waller's distinction between linguistic genres and typographic genres

According to Waller (1987), the study of typographic layout could assist in understanding visual metaphor embodied in visual inferences. Waller's view of understanding typographic layout involves the reader's strategic style of reading that is conventionalised in the medium and how the graphics of each genre are related visually and metaphorically. He formulates his argument based on linear sequences in linguistic genres. Waller examined De Saussure's two principles of arbitrariness and linearity in language to differentiate 'linguistic-ness' and 'typography-ness.' According to De Saussure et al. (1996), linguistics is a structural system, because it has a linear sequence. De Saussure (1996) introduced arbitrariness and linearity of the signifier as important principles in language. Arbitrariness is the linear string that connects abstract virtual systems (signified) to material forms (signifier). On the other hand, linearity is regarded as a syntagmatic relationship between signifier components (writing and speech). By this means, linearity focuses on understanding how each word is related to others in linear sequences. According to De Saussure, arbitrariness, and linearity are important principles necessary to understand the systematic relationship between writing and speech.

However, Waller (1987) also points out that De Saussure's arbitrariness and linearity are not entirely relevant to visual graphics and typography. As opposed to De Saussure's attempt to study the internal systematic structure in language, Waller (1987) emphasises the study of the context and function presented visually. His view of the typographic layout is that of a dynamic sequence. He argues that the interpretation of text or image is based on the context and purpose of these elements, rather than on the arbitrary relationship between signifier and signified. Moreover, he highlights that the process of reading text is conventionalised, with expected rules embodied in a certain document (medium). By this means, based on the document (medium), the reader is often able to identify that a certain expected strategy is needed to read a certain visual metaphor. For instance, when we read a certain academic research paper, we expect it to be in the format and layout set out in that institution's guidelines. Thus, conventionalised reading strategies that suit the particular purpose(s) of a document help the reader to navigate and understand visual metaphor, without the presence of a writer.

2.7 Layout and technical affordances in a digital document

This section attempts to explore the layout of a document in the digital age, as well as how technical constraints within digital documents influence certain typographical layouts and choices. According to Waller (2012:8), “page layout breaks out when freed from linear production technologies but is suppressed when the next technical development reverts to the linear default”. Technological changes have brought new features, but also imposed some technical constraints. The layout incorporated has to compensate for and adjust to technical affordances. For instance, when we convert a print book into an e-book, we cannot achieve a layout similar to that of the original, printed book. In print and paper medium, 10 to 12-point font size is sufficient for readability and legibility. However, at least 12 to 14-point font size is required for readability when using a screen medium.

The web consists of webpages and other electronic documents access by the internet. There are different webpages and e-documents with its own typographic conventions and genres. Dyson (2004) notes that the reading experience on a screen differs from that of reading a print medium. He explains that digital media have introduced new formats and features, such as scrolling, multiple navigations and hyperlinks that enable dynamic interactivity with the text and that differentiate digital interaction from the interaction involved in the static layout of the printed format.

Askehave and Nielsen (2005) discuss the main media properties characterised by a web-generalised text document: (1) Multimedia-ness and (2) Hyper-textuality.

Multimedia-ness in web text refers to multimedia elements that consists of image, sound, and animation. Askehave and Nielsen (2005:6) highlight that multi-media-ness of the web is a non-sequential reading process. This could be due to too many information features in one web page, leading to reader distraction. Also multimedia distracts readers as they can change from one mode to another. By this means, users are able to switch to read or listen, watch through online text, image, audio, and video featured on web media. Thus, engaging with multimedia in webtext involves a form of non-sequential reading. Furthermore, Askehave and Nielsen (2005) emphasis that the

multimedia-ness of web text encourages users to produce polysemous text. For instance, the web text produced in social media often involves the user uploading their own content and shares. Shedroff's (2001) idea of productivity and creativity, highlight that digital media allows the user to create, build, alter the content of the media. This shows that users can be the writer and the reader.

Yee (2006:193), the designer no longer has absolute control in creating typography. They provide an empty template through which users' input is incorporated and co-created through their shared experience. As Seargeant and Tagg (2014) highlight, online text is social. It is dynamically linked to chains of production. Deumert (2014) also regards internet text as socially constructed, as online users interact. This shows that the interaction with multimedia and in digital documents plays significant roles in the production of online text.

Hyper-textuality is defined by Askehave and Nielsen (2005), as a key feature of web documents that involves linking one web text to another. This is characterised by a non-sequential text system. According to Finnemann (1999), hypertext has a capability of two modes: (1) the reading mode and (2) the navigating mode. This is a unique feature of the digital document because this allows the reader to cross-reference, bouncing back and forwards with new or additional information (Askehave & Nielsen, 2005). Yee (2006:187) explores hypertext to distinguish the difference between narrative in a print document and digital document. She explains that a printed document is sequential because its physical structure is restricted to a page, and top to bottom reading. Whilst hypertext introduces multiple entries and links to different sections, such as the hyper link text presents in web site navigational bars often direct readers to a new section or different page. Thus, she acknowledges that hyperlink is an important tool for typography on screen.

We also need to reflect on technical constraints in relation to typographic layout. According to Buckland (1998), each technology has different capabilities and constraints. This is indeed true: there are different digital types on screen which are influenced by the different capabilities and constraints of a device. For instance, the website design layout is fluid and dynamic, based on how the website is featured in a certain on-screen device. The web designer needs to be aware of features of a digital

screen to design a user-responsive website. For instance, the copy of a website that features on the Desktop may work very well with long sentences and a paragraph description. However, this thick description may not be appropriate on small on-screen devices like a smartphone owing to its screen size constraints. It is a role of the designer to create comprehensible communicable information to pass between the device and a user. The term ‘interface’ is used to refer to visual features that connect the device and a user. The interface is an important aspect of the digital document because, although a digital document is absent in a physical and tangible form, we read information through the interface presented in the digital document.

2.8 Implications of typographic genre shifts in gawlix

This section contextualises typographic shifts in the use of gawlix, as new writers and readers interact through new digital mediums. Based on the literature and Waller’s typographic layout and genres, I introduced online fans as active writers and readers in the production of gawlix communication. Following this, a brief background to digital documents and its genres is given.

In Chapter one, Section 1.3 contextualised gawlix in comic genres as a universal visual framework for comic artists and their readers to provide alternatives to, or substitutes for, words and emotions, thereby providing censorship of obscenities. Based on these studies, I draw a comparison of gawlix in different contexts in Table 2.1:

Table 2.1 A summary of gawlix in printed and digital mediums

Variables	Gawlix in comics	Gawlix in social media
Writer	Comic artist	Online fan
Function	Censorship	Social
Reader	Comic reader	Online fan
Medium	Printed, Paper	Content distribution platforms

Online fans prefer to be socially engaged, so many content distribution platforms are used to share their fan activity. According to Jeewa and Wade (2015), a content distribution platform is a social media platform where users generate content through pictures or media which are shared amongst different users. Popular examples of

content distribution platforms are Facebook or Twitter. According to Trzcinska and Nozewski (2017), social media provides a social space which allows users to construct their own culture such as fandom. This use of social media also shows that the present use of grawlix has more social purposes than the previous use of grawlix as an alternative to censorship.

As the internet provides a social space for online fans to interact and construct their own fandom semiotic signs, they have employed some of the features from Grawlix used in printed medium and created their own typographic systems to communicate. This transitions of Grawlix used in comic in printed medium to internet communication shows that differences in grawlix uses and conditions. To understand how these changes influence new typographic conventions in digital genres, I introduce Waller's (1987) model as a guideline to understand how typographic genres shift. I will discuss this in more detail in the next chapter.

2.9 Summary

In this chapter, I presented the literature on several studies related to the topic of typography and its relationship to language, writing and digital mediums. The main point of this chapter was to explain typography as a distinctive entity from writing. It is important to note that typography is a mode of representation that obtains socially embodied values and functions. Therefore, the interpretation of typographic signs involves the context and purpose of the signs. Waller suggests that the study of typographic layout conventionalised in a document could provide a comprehensive understanding of typographic genres. Based on Waller's statements, I also highlighted the relevant literature that explores the layout and technical affordances of on-screen documents to question the potential conceptual shifts involved in grawlix communication.

CHAPTER THREE

THEORETICAL FRAMEWORK

3.1 Introduction

This section explicitly explores Waller's (1987) genre model of typographic communication as a theoretical framework in relation to this study. Three main topics are introduced in this chapter: (1) The writer's topic strategies; (2) Technology and medium; and (3) The reader's reading strategies. These are explored in relation to understanding grawlix communication.

3.2 Waller's genre model of typographic communication

A document consists of information and rhetoric. This means that the purpose of information in a document is to serve communication needs whilst rhetoric (graphics) serves to enable effective and easy reading of that information. This is accurate, as Pettersson (2002:82) points out that current desktop publishing system requires the writer to consider not only the content of the image and text, but they need to know some of the graphic design and editor skills needed to construct information cohesively. Carliner (2006) also states that information design and document design are merging as a variety of disciplines such as information architect, graphic design and information are closely interrelated with the topic.

The document layout is important because it reflects on a certain genre. In this context genre refers to a generic structure that create a particular convention to structure certain expectations for writing and reading (Allen et al. 1999). In Chapter two, Waller (1987) clarifies typographic genres as dynamic and non-sequential because they rely on visual metaphors that are interpreted differently based on the context and purpose. Therefore, Waller suggests that typographic genres in certain contexts are understood through the typographic elements and conventional typographic layouts presented in a certain document (medium). In this section, the research looks into Waller's (1987) proposed genre model of typographic communication involving three stages (see Figure 3.1): (1) the relationship between writer, text and readers; (2) functional

constraints; and (3) conventional structure. Each stage will be discussed explicitly in Sections 3.4.1, 3.4.2 and 3.4.3.

It is important to note that this model provides an explicit understanding of the textual communication process such as that used in typography and explains how genres are structured through typographic layout.

Waller (1991) suggested that there are three kinds of motives involved with genre structure:

1. Explicating the topic
2. Coping with artefactual constraints
3. Supporting reading strategies

These three motivations are employed to construct a certain typographic genre. This is relevant to this research because typography design involves these three similar important motivations (Harkins, 2010; Spiekermann, 2014):

1. Purpose, Content and Context of the audience
2. Medium/Technology
3. Audience's knowledge and experience in a particular medium/topic

Intertwining these three motivations in typographic design and Waller's (1999) genre model helps us to understand the newly conventionalised typographic genre of grawlix in a digital medium.

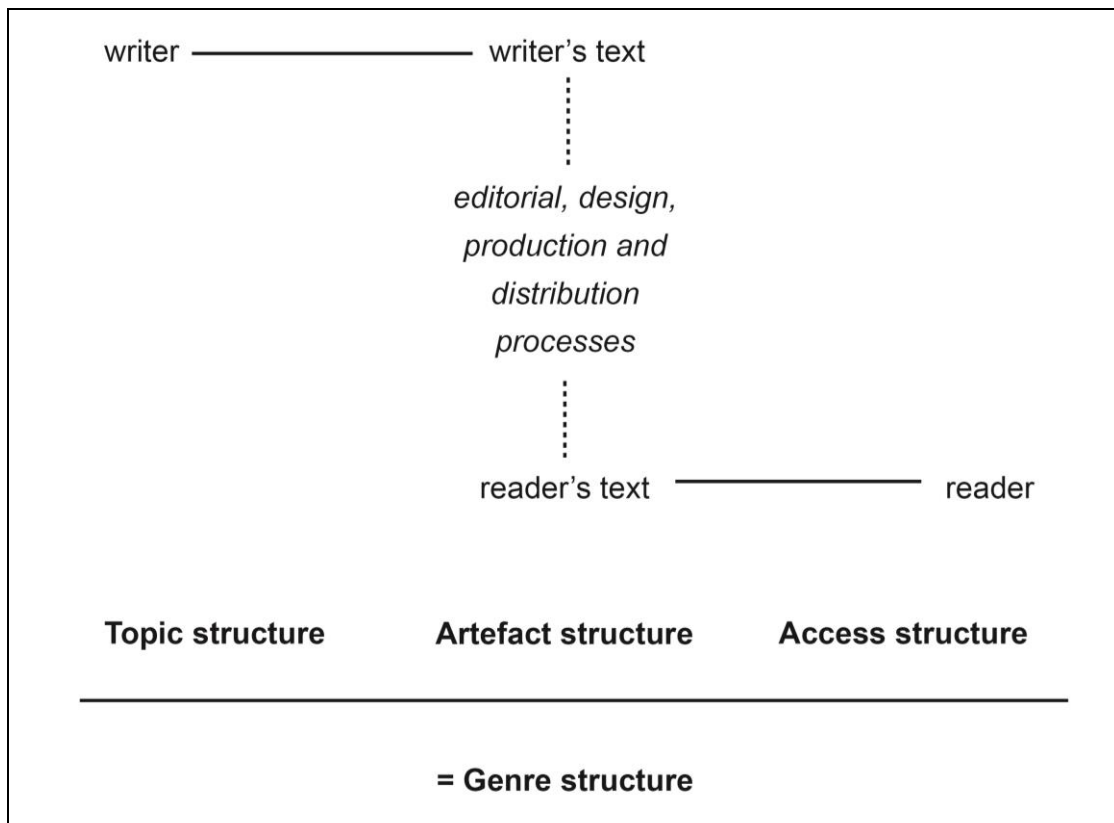


Figure 3.1 A diagram of Waller's genre model (Waller, 1999)

3.3 The writer-text-reader relationships

The act of reading involves *writer*, *text* and *reader*, as mentioned in the previous section. According to Waller (1987), the visual metaphor involves a dynamic and non-linear process, because writing is asynchronous and context-bound, while the reader has dynamic interaction with the text in which the writer's subtle presence is embedded. Hence, Waller stresses the importance of understanding the writer-syntagm and reader-syntagm to understand the dynamic reading process. This section summarises Waller's understanding of the writer-text-reader relationships.

The writer: Primarily concerned with the content. The role of a writer is to take the reader into consideration while they are composing text (i.e., the writer is the designer) (Waller, 1987, 1990).

Writer's text: The text that results from the writer's content and intentions. This is based on the professional and the industrial interventions of the writer involved in the creation

of his or her text (i.e., the text is initially a rough draft and involves layout planning on memo, scamp book and digital note) (Waller, 1987, 1990).

The reader: The subject as audience in the reading process. The role of the audience is involved in interpreting the text and the writer's intentions (i.e., the target audience who has certain personal knowledge of reading strategies and referencing in a certain document) (Waller, 1987, 1990).

Reader's text: The final text presented in the distributed document. This is transformed from the writer's text. (i.e., a magazine, book, with conventional genres) (Waller, 1987, 1990).

3.4 Functional constraints

Waller (1987) introduces three important structures to be overlaid in documents. According to Waller (1990), functional constraints in certain documents allow us to understand how certain visual strategies and multimodal elements are composed in relation to the writer, document, and reader. Waller proposed three structures: (1) Topic structure, (2) Artefact structure and (3) Access structure. Delin et al. (2003) view Waller's three constraints as persuasive and comprehensive. Waller (1987) states that typographic layout design in documents is fluid and dynamic because its appearance is determined by the physical nature of the document and the methodology used in typographic layout.

3.4.1 Topic structure

Topic structure is closely related to the writer and the writer's text. The topic structure considers the display of information and content of the author's argument. This structure focuses on identifying the hierarchical relationship between the units of the topic in a document. By this means, topic structure investigates how information and content were arranged by the writer's argument (in this case, designer). For instance, the content hierarchy in this research paper consists of main headings in Ariel bold, 12pt. The subheading also in bold Ariel but distinguish them by the numbering in front of the sub- heading (e.g. main heading example is 3.4 and sub-heading example is

3.4.1). The body of the content is presented under the main sub-headings in normal Ariel, 12pt to provide an information hierarchy. The topic structure could also be considered as the use of space between introduction, body and conclusion to structure information. The particular arrangement of features in the two examples serves to signal to the reader topic divisions. Waller (1987) exemplified topic structure in design as a writing plan, such as a photo-session and mapping used in the design of editorial print, to structure information logically and rhetorically.

3.4.2 Artefact structure

Artefact structure is a constraint on the physical nature of the document or display and its technological production (Waller, 1987). By this means, Artefact structure focuses on how a certain medium or technological constraint influences the choice of layout. For instance, the typographic layout for a brochure needs to take the medium into account. The designer is required to consider the medium constraint, such as that a particular page size requires information and topic content to be fit within A4 paper size. Furthermore, the medium and technologies are important factors in the design process. They often lead to new graphic conventions and genres (Harkins, 2010). This, as exemplified by Pettersson (2002), suggests different font sizes according to the medium. Pettersson (2002:203) recommends using font size set between 9-12 point, 15-20 points for the reading text on computer screen and 90-120 points on a 24' television set. The reason behinds of bigger font size on screen base medium is because visual display on screen medium is lower than printed document.

According to Waller (1987), artefact structure is motivated by a unit of an artefact that restricted by the physical nature of the document (medium). Therefore, to understand this restriction, he suggested looking into the variables related to a function of graphic within the context of the medium and technology present within the document.

3.4.3 Access structure

Access structure investigates the relationship between the reader's text and the reader. This structure analyses the features that enable the reader to gain access to the meaning of the content and the writer's intention. This access could be understood by identifying the consistency and patterns in the typographic treatment in the text component (Waller, 1987). It is important to note consistency and patterns in typographic treatment, because these serve as visual guidelines and cues that assist readers to interpret the text.

Thomas and Harri-Augstein (1980) view the act of reading as an act of self-organising and self-referencing. In their view, the reading process is holistic because it involves establishing knowledge based on context from the text.

Waller (1987) also explained that the reader often uses referencing systems and certain reading strategies to interpret the writer's intentions and navigate complex content. For example, I have used Harvard in-text referencing right after a statement to indicate that I am referring to a source of information written by someone else. By doing this, I inform the reader what I am doing. The reader then understands that I am drawing on a certain argument based on other research. However, it is important to note that the reader's knowledge of conventions in certain documents determines the access structure. A reader without any knowledge of academic writing style and referencing systems will be unlikely to understand the purpose of an in-text reference used in this research.

3.5 Genre structure

Genre structure is a new genre developed through a combination of three structures mentioned in 3.4.1, 3.4.2 and 3.4.3. According to Waller (1987), topic, artefact and access structures are heuristic concepts to provide a theoretical framework to describe *the genres of typographically organised documents*.

The conventional way of expressing and accessing topic structure is determined by artefactual constraints of technologies. Waller (2012) technology influence on the

visual appearance of document as well as nature of the document thus typographical genre shift and changes alongside with technological shift. He exemplified a bus timetable in print medium and digital medium: a print medium bus timetable is a conventionalised genre; however, presenting a bus timetable in a digital medium, such as a screen-based medium, requires a different approach, because the large, broad timetable used in print cannot be presented legibly on the screen medium. This example shows the important influence of technology in creating a new genre.

Furthermore, he categorises four typical features of typographic genres (Waller, 1987:229):

1. *Typical context of use*: situations (such as industrial, domestic, educational, and bureaucratic); products (such as books, periodicals, objects, packs and containers); in the case of historical examples, date of origination.
2. *Typical format and configuration*: page (or field) size and shape, binding (where appropriate), paper or other surface material, frequency and use of colour, grid, boundary (such as line, box, column, page, book, and container).
3. *Typical treatment of verbal language*: composition system (such as letter image quality), typographic style (such as atmosphere and associations), range of signalling (such as underlining, bold, and italic), additional features (such as rules, tints, and borders).
4. *Typical treatment of visual elements*: pictorial syntax or style, proportion of visual to verbal language, how visual and verbal language are integrated.

This list effectively demonstrates how typographical genres are identified through visual. According to Delin et al. (2006), believes that Waller's categorisations provide an extensive analysis of visual artefacts as well as illustrate how visual characteristics are interrelated to the document and typographic genre.

3.6 Waller's model as a theoretical framework and its relations to this study

I believe that Waller's model is an effective tool to understand the grawlix in a digital document, because Waller's model suggests a non-linear process to understand typographic layout. In this model, Waller's key concepts are:

1. Functions: The purpose of this text. This concept often involves how a writer attempts to present his/her intentions

2. Constraints: The constraints and conventions that influence the process of producing and accessing the text
3. Medium and Technology: The document that presents the final forms of the writer's intentions and connects the reader to access the writer's intentions.

Although Waller (1987) emphasised that the purpose of developing this model was to critique and analyse typographic layout in the practice of graphic design, this is the most effective model to outline the typographic genre structure in grawlix communication. However, many researchers in document genres acknowledge the usefulness of Waller's typographic genre as an analytical tool and methodology (Delin et al. 2003; Delin et al. 2006; Luna, 2004).

Furthermore, studying typographical layout is far more effective to answer reader's certain judgement on different typographic voices. For example, Moys (2011) conducted an interview with several magazines to explore what determines the reader's typographic judgement. One of her findings shows that people's typographic judgements are drawn more from the visual structure and layout rather than the typeface used (Moys, 2011:13). This shows that layout can influence a reader's interpretation of text and it also portrays a reader's subjective judgement.

Based on this model, I attempted to generate a methodological approach and design questions to investigate and use the model as an analytical tool. My application of the theoretical framework is summarised in the following diagram (Figure 3.2).

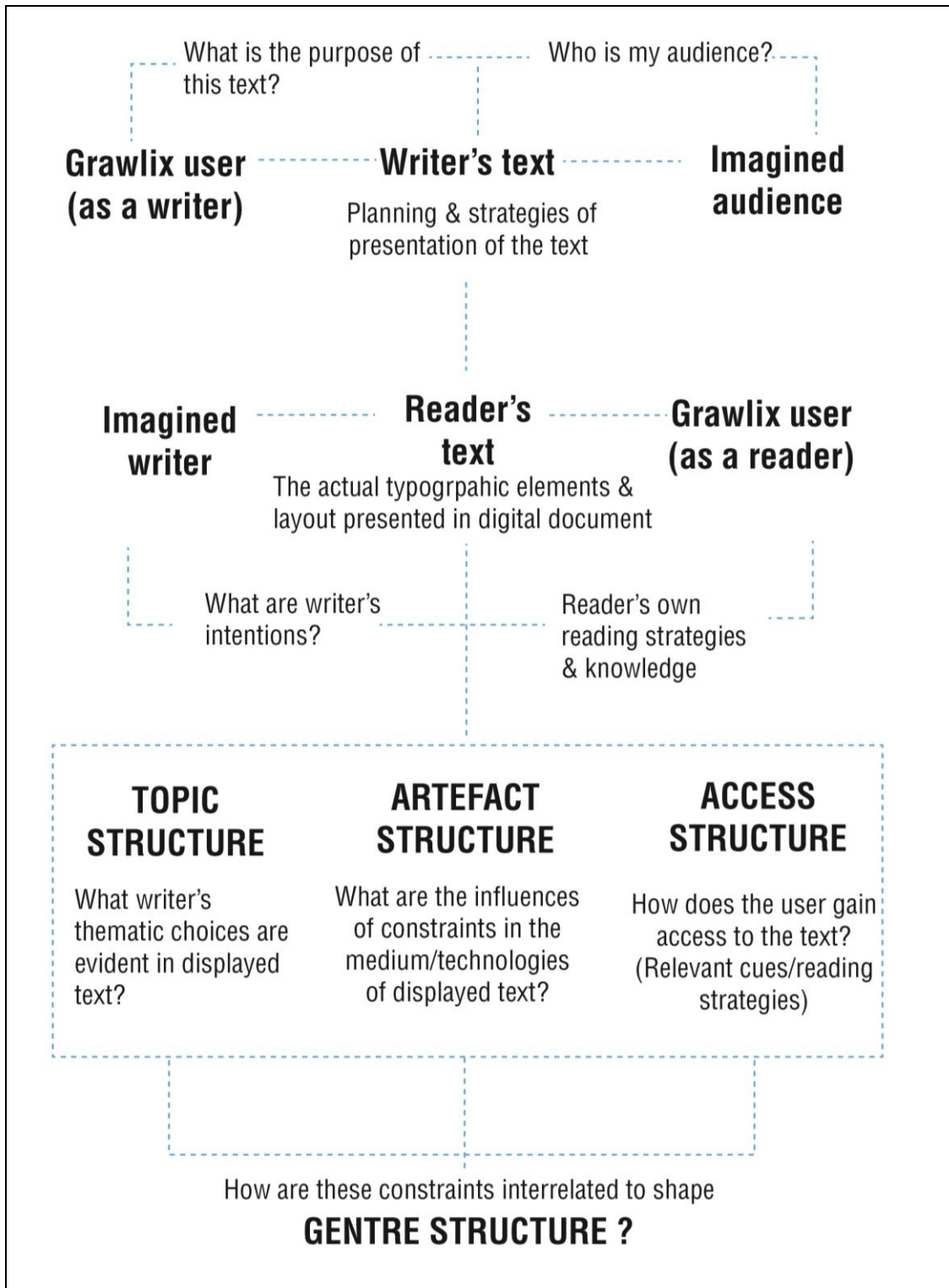


Figure 3.2 A summary of Waller's model in relation to this study

3.7 An application of Waller's model to contextualise grawlix in comics

This section attempts to interact with Waller's typographic genre theory and contextualise the grawlix used in comics with Waller's writer-reader syntagm, three

functional constraints mentioned above and genre structures as an analytical guideline and tool.

This section presents one of the comic strips illustrated by Stephan Pastis (see illustrated figure 3.3). The analysis will identify the writer and the audience in the context of comics first:

- Comic artist as the writer: The role of a comic artist is to communicate sensitive topics in a comical, interesting and humorous tone;
- Comic reader/fan as the reader: A person who has prior knowledge of reading comic genres;
- Grawlix as the text: A combination of symbols as a creative substitution for profanity;



Figure 3.3 'Swearing like a parrot' from Stephan Pastis's *Pearls before swine* (Zwicky, 2009)

After contextualising the writer and the reader in the comic genre, this section contextualises three structures, based on Figure 3.3.

- *Topic structure*: The narrative in the comic strip is displayed in three blocks. These blocks are arranged in a linear sequence: vertical divisions show a chronological sequence. This shows the content of the topic structure flows from left to right; and symbols !@#% in this context are interpreted by the reader as swear word(s), because the first block of the comic strip provides a context to the topic.

- *Artefact structure*: The limited space in the medium is a key influence on artefactual constraint in this example. This comic strip is displayed in newspapers. A conventional newspaper is a medium that constrains the arrangement of text, because its layout has to set priorities to incorporate texts and information within a restricted space (normally A3 pages), thus space allocated for comic strips is limited.
- *Accessing structure*: A comic reader with prior experience of reading comic strips in newspapers could easily apply their reading strategies to understand the message. For instance, they could incorporate Western reading conventions to their strategies by reading from left to right. The comic reader's frequent reading of other comic strips also provides prior knowledge that could be used as a self-referencing tool to interpret the combinations of !@#% symbols as a representation of swearing or frustration.

Multimodal modes like the speech bubble are another constraint because all the text is required to fit into this limited space. This may explain the rationale behind the comic artist deciding to choose a collection of symbols as an alternative to expressing frustration and profanity; these symbols may also convey emphasis and anticipation of censorship.

Finally, the relationship between these three structures is contextualised holistically to describe the conventional genres in gawlix used in comic strips. The topic structure of the comic strip concerns narratives and its purpose is to entertain the viewer humorously.

In demonstrating Waller's genre model through gawlix in a comic strip in Figure 3.3, one can see that the textual interpretation was analysed through a hermeneutic approach (Snodgrass & Coyne, 1997). The hermeneutic approach is closely associated with the practice of graphic design, because design involves creating meaning in a form that is accessed by people. Jahnke (2011) encourages a hermeneutic approach to the design practice, because hermeneutic approach could lead to better understanding of design interpretation and manifest new meaning. As discussed in Chapter two, graphics convey a multiplicity of meanings and

interpretations are also formed at the interpersonal level. Hermeneutics helps one to understand human sense-making processes by looking into the relationship between people and artefacts and how they interact in sense-making (Yanow, 2010). This is equivalent to the analytical process I demonstrated in this section: I analysed and interpreted the comic strip in Figure 3.3 to make sense to how typographic meaning, embodied in grawlix, is used in a comic strip.

Interpretative Phenomenological Analysis (IPA) was introduced in this study because IPA is an effective method to uncover the layers of meanings underlying a particular phenomenon (Yanow, 2010). The further relevance of this approach is discussed in the next chapter.

3.8 Summary

Utilising Waller's model of typographic genres, Chapter three focused on two important factors underlying the typographic genres in grawlix communication: (1) understanding the relationship between writer, text and reader; and (2) functional constraints inherent in certain documents. These two important factors were considered in the context of the interests of this research and were summarised in Figure 3.2.

Furthermore, throughout Waller's model, the need to adopt a hermeneutic approach was realised. This directly links to the selected research and the choice of Interpretative Phenomenological Analysis (IPA). These aspects will be discussed in more depth in Chapter four.

CHAPTER FOUR

METHODOLOGY

4.1 Introduction

This research study investigates the lived experiences of online fans in their meaning-making and grawlix communication in digital documents. Through adopting a phenomenological study, this qualitative research attempts to understand 'what' these online fans experience and 'how' they experience the phenomenon under study (Reiners, 2012). This chapter outlines the research design and methodology that were developed in relation to this research topic.

4.2 Aims

The aim of this study was to examine closely several online fans' lived experience and journeys involving grawlix communication in digital documents. It is important to note that IPA examines and uncovers the individual and personal experience of participants from their viewpoint. This is relevant to this study, because grawlix communication occurs during interpersonal experiences among people using digital mediums.

The phenomenological enquiry for this research setting took place in virtual and digital space. The internet and digital media provide a social space for online fans to interact through digital text and digital interfaces to create new typographic genres and experiences. This research intended to explore how digital technology had an impact on online fans' newly conventionalised typographic communication and selected genres. To achieve this, I selected two popular digital online fans' social spaces often used by online fans. These were Twitter and Osu⁵. These two online platforms provide online fans with a social space to generate contents and sharing with their fandom. These selected digital platforms are the common and natural settings of online fans,

⁵ A free online rhythm game developed by Peppy. This game consists of Beatmaps that involve music and various objects (circles and long bars) appearing according to the beat of the music. The game requires clicking the object (circles and long bar. etc.) that appears with the music. It is important to note that Beatmaps are generated by online fans and users (Osu, n.d.).

where they can interact and produce new linguistic and typographic conventions. It is important to observe how these two digital platforms influence on online fan's typographic and linguistic choices, as well as how they are establishing new typographic conventions within each platforms' interface.

Through IPA, I attempted to describe the online fans '(individual participants) lived experience through closely interacting with them and their natural settings. The nature setting is defined by Norum (2012) to refer to the physical, social, and cultural sites of participant in certain phenomenon. which it means data is collected in the field not in a lab. The researcher obtain data through participant's ordinary events and behaviours in everyday context. Due to my intention to attempt to interpret their lived experience, it was important to approach the research in an open-ended manner. For this reason, this research approach was less constrained and informal in nature. According to Henning et al. (2004), it is very important for qualitative researchers to be equipped with the qualities of openness and flexibility. I chose to focus on the open-ended nature of qualitative research, because grawlix seem to have a multiplicity of meanings that enable different interpretations, depending on the given context and medium. Therefore, I developed a methodology, while maintaining an open-ended attitude (see Table 4.1).

Table 4.1 Depiction of data collection process

Main research question:		
How are grawlix being used as an alternative linguistic and typographic form of communication?		
Sub-questions	Objectives	Methods
1. What is the essence of grawlix-ness to online fans?	To interpret what are grawlix's distinctive features to online fans.	Document and artefact analysis: For the purpose of identifying functional constraints in relation to typical treatments of verbal and visual language.
Why do grawlix users practise with grawlix as a communication tool?	To understand the value of grawlix that motivates grawlix users to use them.	Semi-structured interview: To understand the motivational factors that encourage online fans to use grawlix. To describe the participants' perceptions and attitudes towards the use of grawlix communication.
How do online fans make the decision to select a particular typographic element as a grawlix?	To understand what structures of grawlix are used to achieve communication	Semi-structured interviews with online fans. To analyse how typographic topic structures were formed by online fans as writers To analyse online fans' established knowledge in employing a certain reading strategy for interpretation. Participant observation: How does a digital medium become conventionalised through social interaction in a digital fan community? Document and artefact analysis of interface: How do typographic variants and layout placed on the interface demonstrate the typographic genres in a digital document?

4.3 Interpretivist paradigm

This research intended to establish how grawlix users create grawlix communication and why they use grawlix to communicate. This research investigates the subjective norms employed by grawlix users and the interpersonal nature of grawlix, so there is

a need for a qualitative enquiry into how Grawlix happen and why they happen the way they do (Hesse-Biber, 2017).

For this reason, I adopted an Interpretivist philosophical framework. According to Hurworth (2011), an Interpretivist approach is necessary to question assumptions that are socially constructed where there are multiple possible meanings and perspectives. These assumptions, meanings and perspectives need to be evaluated through a qualitative approach and in the natural settings of the social actor(s). According to Chowdhury (2014), interpretivism was established by Max Weber as he aimed to introduce the subjective nature of science into debates, because he believed that understanding something in a specific context requires more than an empirical approach. Therefore, interpretivist researchers are interested in understanding how people make sense of the world and how, as researchers, they can understand people's social behaviour and interaction (Henning et al., 2004). This is important for this study, because the purpose of this research was to understand how grawlix users experienced the typographic reading or interpretations of grawlix on screen-based mediums within the realm of their personal experiences, emotions, and subjective points of view, within given social contexts. Thus, this study required an interpretative approach to understanding grawlix users' construction of meaning (meaning-making) and how grawlix communication is constituted. This constitution involves a regulation of meaning where grawlix users assign meaning in their online community.

4.4 Interpretative Phenomenological Analysis (IPA)

Based on Moran and Mooney's (2002) book, *'The phenomenology reader'*, the philosophy and concept of phenomenology has two schools of thought: Edmund Husserl's 'Descriptive phenomenology'; and that of (his student) Martin Heidegger's 'Interpretative (Hermeneutic) phenomenology'. These two phenomenological approaches are differentiated by their different philosophical points of view and methodological approaches to subjectivity.

This study adopts Martin Heidegger's interpretative phenomenology as its main research methodology. Heidegger (1978) introduced interpretative phenomenology which focuses on human existence, rather than human consciousness and human

knowledge. Hence the researcher seeks the meaning of a phenomenon by understanding the everyday world and how interpretation is created from self-interpretation.

Heidegger rejected Husserl's idea of bracketing of preconceptions or the bias of the researcher, because it is impossible to negate our experience in relation to the phenomena under study. Moran and Mooney (2002) further explained this by stating that phenomenology adopts a hermeneutic approach to phenomenological study. This means Heidegger's approach focuses on the relationship between the event/object and the person and how these two interact to create meaning in relation to a particular phenomenon. This requires a prior understanding of the phenomenon and its background and then is subject to change after the researcher's and participants' subjective experiences are understood. Interpretative phenomenology encourages the researcher to be interactive within the participants' world and setting and use appropriate methods such as participatory observation and semi-structured interviews.

4.5 Rationale for adopting IPA

Interpretative phenomenology was selected as a research philosophy because grawlix communication occurs within a close interaction between users and a digital setting. To understand how online users, make sense of grawlix communication, the online users' lived experience of using this non-conventional linguistic and typographic communication needed to be shared with me by participants. Furthermore, any fan-based community is strictly exclusive to fans, so, to access fans' data, I was required to be the part of their community. According to Gauntlett (2004), flexibility with new digital media allows people to express themselves more easily in those contexts; and, within this fluctuating virtual environment, people start to share views, exchange information and build relationships that, together, contribute to build community. This explanation highlights the centrality of interactivity as a key methodological focus for this research.

I had previously been an active online fan of anime and cartoons since secondary school. I therefore had prior experience of online fan-based communities. This was an advantage for me, as I could more easily establish rapport and converse with the fan-

community. My intention was to understand how grawlix communication came to be known by the participants; and to achieve this, my presence as a 'being' in the participants' world facilitated communication.

4.6 Research setting(s)

The research conducted in two popular digital platforms where online fan interacts. A brief background to these two selected settings is presented below:

(1) Twitter is a text-driven online communication platform. This medium involves textual interaction between the following: user (writer), tweet (writer's online text) and follower (reader). The Twitter interface was designed for microblogging purposes. According to Ann Williams et al. (2013), microblogging is an online broadcast medium in a specific form of blogging. Blogging involves sharing the user's content. The content is constantly updated by the blogger (writer). Blogging allows reader engagement, as readers can leave comments and have a discussion with the blogger. Microblogging too involves these content sharing and reader engagement features. However, microblogging differentiates itself from blogging by the content that is generated in a restricted format. As opposed to blogging, the content of microblogging typically presents as less content. A character limit is a common feature of microblogging. Twitter is an example of a microblogging site: its conventionalised character restriction feature is that a tweet is restricted to 140 characters.

Twitter was selected because it is considered as one of the popular platforms amongst online fan. This could be due to its multiple functions such as image and video uploading where online fans could constantly fan interact. Furthermore, character limitations motivate users to produce various interesting typographic forms.

(2) Osu is a free open source, rhythm, multiplayer online game. This game involves clicking circles that appear according to the rhythms/beats of the music that is playing. Beatmap is content generated by online fans. This consists of music, timing, and mapping on beat maps. The online fan communicates through game chat. In-game chat and public chat in Osu is synchronous. According to Romiszowski and Mason (2003), online communication often taken in real-time interactions involves online

speaker's presences to establish communication. Hence many online settings such as an online chat (e.g. WhatsApp), video-audio driven communication settings like video-call and live streams (e.g. Skype, Google Hangout, Twitch) virtual setting where communicate through avatar or characters (e.g. Online game) all involves two or more people's presence in virtual setting. It is important to note that the multiple presences of online user lead to online communication is ephemeral and fragmented. Garley (2008) explains that this is due to online text and topic are often overlap and interrupt as different users continuously exchange message.

Osu was selected because it is also popular digital platforms where online fan interacts and produce fan artefact (Beatmaps). The synchronous quality in Osu game chat could also provide insights that may differ from the online fan in Twitter.

4.7 Sampling

Online fans were purposively selected through purposive sampling techniques. According to Morse (2004), purposive sampling involves a purposely-planned selection from the populations of possible research subjects based on the key characteristics of their phenomena. Tucker (2011) informs us that purposive sampling begins with the researcher's interest in a group and the sampling proceeds based on the purpose of evaluations sets by the researcher. This is the most appropriate method to use if there are only a small number of primary data source to explore.

Recruitment for the study required me to engage in fan activity with the participants to establish a good relationship with them. I used my prior, established relationship with other online fans as a starting point to help me to identify potential participants. I used the research engines on Twitter and Hashtag systems to identify the potential participants. I also exposed my identity to the participants through using a hashtag and a self-introductory template that displayed my fandom interests and main fan activities.

As illustrated in Figure 4.1, I created a tweet and asked any user who was interested in being friends with me to Re-tweet or leave a 'Like'. These two features of Twitter were used to identify potential users who might be interested in participating in this research. Within a week, I had about 150 followers. However, I was only able to

establish a closer relationship with 25 of these followers through fan discussion or by exchanging fan art and fan fiction.



Figure 4.1 A friend request in Korean

The participants were narrowed down by users' tweet contents. I purposely selected participants based on the unconventional linguistic and typographic variants in their tweets and how they integrated new digital materials and different modes of representation.

The selection of participants from Osu was approached differently from the approach described for Twitter. For a week, I conducted a pilot study on Osu as a new player to get familiar with the game plays. I established a relationship with the potential audiences through engaging in game and conversation in the 'lobby'. I also used 'add friend' features as a tool to maintain relationships with the participants. The Osu

players were purposively selected, based on their interesting use of typographic and language features during a conversation.

4.8 Data collection

This section summarises data collection. The following research methods were used:

- Semi-structured interview
- Participatory observation
- Document

The next sub-section summarises general steps for each method of data collection.

4.8.1 Document

According to Prior (2013:02), a document does not refer to a stable, static, and pre-defined artefact. In fact, a document provides a broader aspect of the social interaction between creator, users, and settings. Flick (2007) agrees with Prior and explains that using a document involves more than analysing texts. According to Corbette (2001), there are different uses of documents. She explains that there are (1) personal documents such as a personal journal or diary that express the feelings and autobiographies and (2) Institutional documents which are produced by institution. These can be public documents, such as television scripts, or private documents.

It is important to note that web site and other digital mediums could be considered as a document as long as the medium itself provides the context of its production and its usage (Flick, 2007:262).

The interface of Twitter and Osu and the typographic variations produced in online conversation in Twitter and Osu were used as a document. By doing this, I attempted to identify types of grawlix currently being used on social media and how they are used by online fans as the typographic layout. By selecting a document, it helped to provide a background to a particular phenomenon that occurred among a specific group of people and the context. To understand how grawlix were arranged and visually

represented, I collected grawlix examples by using the following instruments and procedures:

- Screen capture tool: used to capture visual data
- Renamed and organised the captured images according to date
- Organised the features of captured images through Excel sheets

4.8.2 Participant observation on Osu and Twitter

It is crucial for a researcher to remain open to the unexpected, be self-conscious, and remain disciplined during periods of observation. According to Jorgensen (1989), the researcher's role of observation while participating requires involvement in the process: this means that the researcher has to be familiar with the setting and blend into the participants' setting as naturally as possible through performing alongside the participants in their roles.

In this case, I began with unfocused observation to become familiar with the setting by playing multiplayer games, through casual conversations about a game or other entertainment, and by producing fan art exclusive to the community. Thereafter, I immersed myself into a specific fan group/user group related to the study to conduct focused observation. My aim was to understand and how the relationships between the digital settings and the online users were negotiated to produce grawlix communication.

The following methods were used to collect data:

- Research notes: I produced textual notes during the periods of observation.
- Screenshot tool: This was used to capture interesting grawlix examples produced by online users.
- OBS video recorder: This was used to record online fans' social interaction.

The first observation took place on Osu where I engaged in game activity and lobby chat for three weeks to understand how fans interact with one another within a synchronised setting (real-time interaction).

Another three weeks of participatory observation were conducted on Twitter. I began observation using my existing Twitter account on which I had previously established relationships with a small group of English anime fans.

The process of observation on Twitter began with experiencing the interaction with online fans synchronously and asynchronously through the interface. The first week of observation involved observing how other online fans interacted with one another to understand how I could participate in the participants' world. After this week, I imitated the participants' social interaction as I began immersing myself in the world of participants. In Twitter, I exchanged fan art and copied certain typographic usage to generate text; and I actively engaged with participants during my observation on Osu.

4.8.3 Semi-structured interviews with grawlix users

This research used semi-structured interviews with selected samples. According to Ayres (2012), a semi-structured interview is often placed between a structured and an unstructured interview. Its distinctive feature is characterised by flexibility; and the researcher has control over the topic of the interview. This means that a semi-structured interview is developed through a written interview guide (i.e., one prepares some preliminary questions). However, it also has the feature of open-ended questions to encourage participants to answer without being restrained by the questions. This explains why semi-structured interviews often provide qualitative data that allows the researcher to interpret a participant's verbal and non-verbal information with much more flexibility (Henning et al. 2004). This method was appropriate to employ because it allowed me, as the researcher, to elicit grawlix users' subjective experiences and perspectives on their usage of grawlix to form a message (communication).

However, the interview was conducted online, because most of the participants are situated internationally and the virtual space is a more convenient and natural setting for the participants. According to Mann and Steward (2011), internet interviews eliminate the constraints of face-to-face interviews, resulting in more in-depth data. Conversely, it is important to note that CMC (Computer Mediated-Communication) is text-driven, which often raises a question as to the validity of a data sample. Mann and Steward (2000) also raise the issue of validity in CMC due to the anonymity of the

technology blinding a participant's true identity. I attempted to address this challenge through establishing closer relationship with participant to validate the participant's identity.

There is also bias in interview that needs to be considered. Bias is unavoidable whether we are capturing data from real life or cyber life. In interview when it comes to eliciting participants' accounts of experiences. According to Holbrook (2008), there are always biases from participants during the interview, as participants often answer according to how they think the researcher expects them to answer, or they project themselves in line with how they want to be perceived. As this research deals with understanding participants' subjective knowledge, avoiding bias is, in any case, almost impossible, as subjectivity is a constituent of bias. Hence this research adopted Heidegger's (1978), Interpretative approach to embrace bias as part of subjective knowledge.

Furthermore, Kuzmanic (2009) emphasises that validity in qualitative interviews and narratives is content specific, as meaning in qualitative interviews, such as in semi-structured or narrative interviews, is often constructed through the interaction between interviewer and interviewee. Based on this explanation, I would argue that, whether an online participant's identity is true or not in real life, this research focuses on their virtual identity, because this could be linked to their particular use of typographic forms in the online space and their production of gawlix communication within an online community – these are their natural settings.

The following materials were used in the interviews:

- Interview schedule
- Visual data: screenshots generated by participants were captured
- Twitter direct messages and Kakao talk⁶ as a place to conduct an interview
- OBS recorder ⁷to record the interview
- Prior general descriptions of the research participants.
- Semi-structured interviews were planned through these two steps:

⁶ Kakao Talk is a free Instant Message Application for smartphones. This message application has a free text and call features. This application is popular amongst South Korean smartphone users (Kakao Talk, n.d.).

⁷ A free open source software that allows to record desktop screen and other screen devices (OBS Project, n.d.).

Initial meeting: I began by providing a participant with an information sheet and consent form to inform the participants of the nature of the research.

The format: At the start of the semi-structured interview, I asked participants to fill in their demographic information sheet and to complete a questionnaire. The questionnaire asked the participant to describe three quality of participant's online writing (See Appendix C).

Then, the interviews were conducted. I worked with the questionnaire that participants filled in beforehand and participant's tweets captured prior to discuss the topic of grawlix during the interview. The interviews were between 45 minutes and one-hour long.

4.9 Data organisation

The data collected during the field work were organised and stored in my computer folders. There was a folder with three main sub-folders representing categories based on data collected from three selected methods: (1) Artefact and document analysis; (2) Participatory observation; and (3) Semi-structured interviews. Within each folder, sub-folders were generated to categorise data. For instance, (1) Artefact and document analysis and (2) Participatory observation folders which were organised based on the date of the observation time; and (3) Semi-structured interviews were organised in number (e.g. participant 1, participant 2, participant 3 and so on).

Any written notes and physical documents were scanned and organised in an assigned folder. The data folder in my computer was uploaded to Atlas TI Q, qualitative research analysis software for storing and organising data.

4.10 Background to data organisation and IPA data analysis

Interpretative phenomenological analysis (IPA) provides step-by-step guidelines for data collection and analysis. This qualitative approach focuses on the participant's life world and how they make sense of their experience from their perspective. Cassidy et al. (2011) note that IPA is a time-consuming process, as it requires the researcher to analyse case by case. However, this approach helps to achieve, in-depth, full

descriptions of the lived experience of the participants. Smith and Osborn (2012) note that the researcher is required to be dynamic and flexible during data analysis.

This study aimed to use IPA to identify grawlix users' attitudes, values and motives underlying their meaning-making in grawlix communication.

IPA analysis developed through the following process, as illustrated in Figure 4.2.

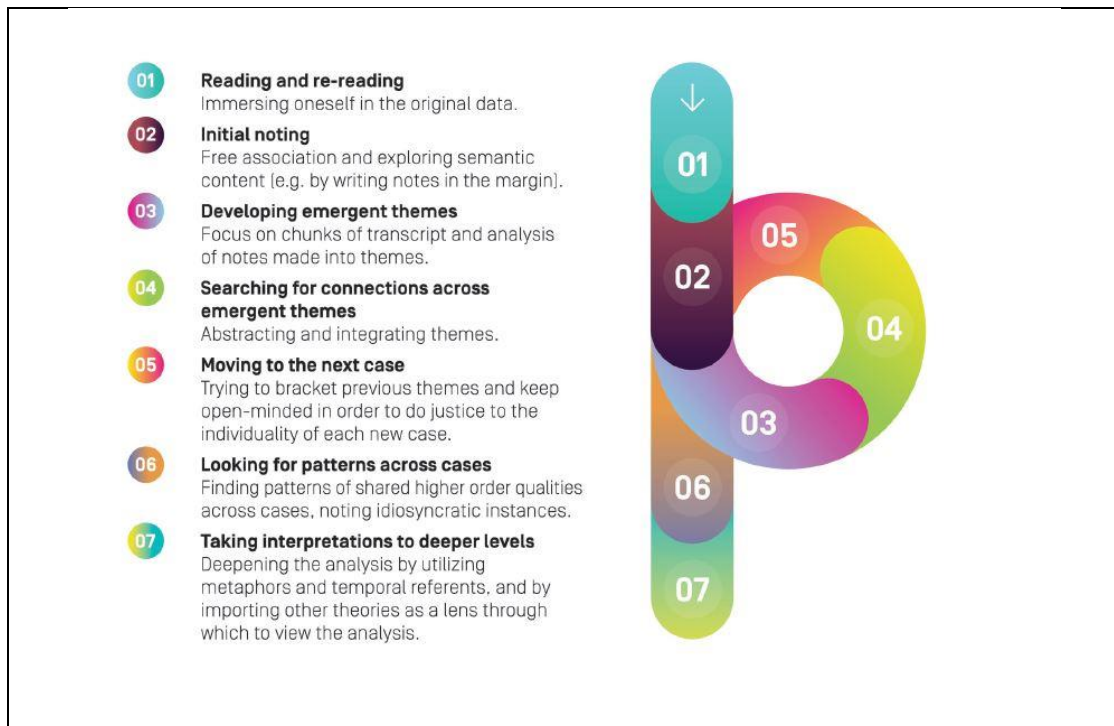


Figure 4.2 A diagram of IPA data procedures and analysis (Charlick et al., 2016:210)

IPA is characterised by (1) Interpretation (hermeneutic approach) and Idiographic (case to case approach to the data).

According to Eatough and Smith (2007), there are two important considerations. (1) Hermeneutics is a theory of interpretation based on Heidegger's (1978), Interpretative phenomenology: if we want to gain access to someone's lived experience, we need to experience what that person is experiencing and so need to describe that fully. Thus, a hermeneutic approach often results in a double interpretation, including both the participant's and the observer's lived experiences. The researcher interacts personally within the world, and with others in that world. (2) An Idiographic approach is concerned with an individual case in a specific context and often explores phenomena using a

systematic in-depth analysis. According to Eatough and Smith (2008), an idiographic approach helps the researcher to understand how a specific phenomenon occurs from a specific person’s perspective. Owing to the IPA approach, I purposively selected a sample of participants and analysed each participants’ data case by case.

4.11 IPA data procedures and analysis

This section of Chapter four summarises how each selected data collection method was used to produce data for the analysis and how analysis procedures were done (See Table 4.2)

Table 4.2 A summary of IPA data procedures and analysis

Methods	Participatory observation	Document	Semi-structured interviews
Data	Field notes Screen recorded videos Screenshot images	Screenshot artefacts Screenshot of interface on web-mediated medium	Video recordings Interview Transcription Visual materials used during the interview
Analysis procedures	Organised gathered data into folders (Scanning of notes, etc.) Reflected on data gathered Coded notes Looked for connections, themes and patterns Developed emerging themes	Organised gathered artefacts in the folders Renamed artefacts into E01 Categorised data into Excel spreadsheets Selected relevant examples based on typographic variations IPA analysis Uploaded examples to Atlas TI Q Looked for the connections and patterns Developed emerging themes	Assigned pseudonym to each participant. Printed out each participant’s description forms, visual materials and interview scripts Read and made a personal memo on paper and mind-mapped with the visual materials. Created a margin on the right side of the digital transcript Wrote up codes Uploaded to Atlas TI Q Looked for the connections and patterns. Developed emerging themes

4.12 Ethics

This research was conducted according to the ethical and professional guidelines of CPUT. Information sheets and consent forms (with consent letters) were provided to participants to ensure confidentiality and legality of the data obtained, as well as their willing consent to participate in the research. The participants' posts were in the public domain, they had already made a choice to share their writing and art publicly, so the same kind of permission was not needed. However, it is important to protect their identity. This was achieved by altering each participant's name into Participant 1, 2 and 3. Also, individual research permission was requested before the research commenced. All rights and the welfare of all the subjects involved in this research were guaranteed.

This research followed an ethical guideline procedure for Internet-mediated research (IMR), as the research was conducted online and in virtual settings. According to the National Committee for Research Ethics in the Social Sciences and the Humanities, *NESH* (2014), there is a need for the researcher to understand ethical considerations for internet-based research, as it is the nature of the internet to be publicly accessible and rapidly changing. Markham and Buchanan (2012:03) explain that the internet should be considered as "a social phenomenon, a tool and also a site" for research. As the Internet was the site of my research, I needed to consider ethics related to the role the Internet plays in the research project and consider issues specific to the case content.

The British Psychological Society (2017) summarises the main issues to consider when making an ethical decision for IMR (see Table 4.3).

Table 4.3 Summary of the main ethical considerations for designing and implementing an IMR study (British Psychological Society, 2017:05)

Principle	Considerations
Respect for the autonomy, privacy and dignity of individuals and communities	<p><i>Public/private distinction</i> – The extent to which potential data derived from online sources should be considered in the public or private domain;</p> <p><i>Confidentiality</i> – Levels of risk to the confidentiality of participants' data, and how to minimise and/or inform participants of these risks, particularly where they may potentially lead to harm;</p> <p><i>Copyright</i> – Copyright issues and data ownership, and when permission should be sought to use potential data sources;</p> <p><i>Valid consent</i> – How to implement robust, traceable valid consent procedures;</p> <p><i>Withdrawal</i> – How to implement robust procedures which allow participants to act on their rights to withdraw data;</p> <p><i>Debriefing</i> – How to implement robust procedures which maximise the likelihood of participants receiving appropriate debrief information.</p>
Scientific integrity	<p><i>Levels of control</i> – How reduced levels of control may impact on the scientific value of a study, and how best to maximise levels of control where appropriate.</p>
Social responsibility	<p><i>Disruption of social structures</i> – The extent to which proposed research study procedures and dissemination practices might disrupt/harm social groups.</p>
Maximising benefits and minimising harm	<p><i>Maximising benefits</i> – How each of the issues mentioned above might act to reduce the benefits of a piece of research, and the best procedures for maximising benefits;</p> <p><i>Minimising harm</i> – How each of the issues mentioned above might lead to potential harm, and the best procedures for minimising harm.</p>

Based on IMR ethical guidelines, the ethical considerations for my research study are summarised in Table 4.4.

Table 4.4 Summary of the main ethical considerations for designing and implementing an IMR study based on this research

Principle	Considerations
Respect for the autonomy and dignity of persons	<p><i>Public/private distinction:</i> The research is conducted in the public domain: Participatory observation of Osu games: in-game chats in synchronous settings. Participatory observation on Twitter is based on the researcher's Twitter timeline, as autobiographical research. However, tweets shown on the researcher's timeline are produced within a public space.</p> <p><i>Confidentiality:</i> Confidentiality is dealt with case by case and focuses on data collection methods in online settings. In any conversations captured during an in-game chat, the player's game name will be censored to prevent identification of the player. Any tweets (artefacts) gathered from Twitter will be censored to prevent identification of the user. The name of participant and their demographic information obtained from the interview will not be revealed during the write-up of the research. During writing the thesis, the name of the participant is substituted with a pseudonym to protect their identity.</p> <p><i>Copyright:</i> Any unauthorised online fan-made artworks (e.g., fan art or fan fiction) will not be used in this research.</p> <p><i>Valid consent:</i> The researcher will obtain permission from the Osu game administration so that, as a representative of the community. The researcher will only conduct participant observation on the public chat in Osu game because public chat is considered as a public space rather than personal space. Any online participant interviewed is provided with a valid consent letter and form before the actual interview.</p> <p><i>Withdrawal:</i> The consent letter and form explicitly informed participants that they could withdraw from the research at any time by contacting the researcher by email or via Twitter.</p>
Scientific integrity	<p><i>Levels of control:</i> The researcher engages with the participant's daily activities to increase group levels of trust and cohesion. The demographic information form is filled by interviewed participant to increase the data validity. Protection of any personal data gathered will be store in a password lock folder.</p>
Social responsibility	<p><i>Disruption of social structures:</i> The researcher conducted undisclosed observation in public chat in Osu and tweets appears on user's timelines. However, to avoid any disturbance in social structure, the researcher considered consequences and outcome of a piece of research by sorely focuses on the user's typographical structures and graphic variables.</p>
Maximising benefits and minimising harm	<p><i>Maximising benefits:</i> The researcher will follow the ethical guidelines of CPUT; consent letters and forms will be prepared beforehand.</p> <p><i>Minimising harm:</i></p>

	Any online fan's user name will be censored by blurring their user name to protect their identity. Participants will be able to withdraw from the research at any time they wish to do so.
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4.13 Limitations

My thesis is only directly relevant to the use of typography in English and Korean among online fans. Furthermore, my study did not include other gawlix examples featured in my other additional languages, such as Russian characters or Chinese logograms used during the Osu in game chat and Twitter.

Language limitations raised several challenges in this study. The translation of data collected from Korean online fans into English was difficult. This is due to my limited proficiency in English, as it is my additional language; and I lack translation skills.

In addition to my limitations, the challenge I faced during my field work was participants' engagement in this study. I had difficulty in establishing relationships with some online game players. This could be due to my lack of knowledge of the game play; and trying to familiarise myself with the game was time-consuming. During my field work, I realised that, to build a good relationship with an online game player, there is a need to engage more actively in game-play rather than participating in in-game chat only. The disappearance of a participant on Twitter was also challenging. One of the participants who arranged an interview suddenly disappeared and the participant who was most appropriate for the study suddenly become inactive. Such events prevented me from adding their data to the data collection.

4.14 Delimitations

The study will not cover linguistic aspects such as orthography or grammar in an explicit manner. The primary focus of this study is to examine typographical aspects and their relation to documents and online fans. Also, the study did not include online fans who are primarily interested in idols and celebrities, as many gawlix elements are related to comics, cartoons and anime. Hence, the study centred on online fans (1) who are actively engaged in fandom (by producing fan artefacts such as fiction and fan art) and (2) whose main fandom interests are related to comics, cartoons and anime.

4.15 Summary

By adopting Interpretative Phenomenology in this research study, I focused on online fans who were considered grawlix users and who produced grawlix communication on Twitter and Osu (online game). I employed participant observation to immerse myself in several small online groups on Twitter and Osu game chat to become familiar with the users' virtual worlds and online activity. During the observations, I encountered grawlix artefacts and became familiar with the interfaces of each medium. Notes on these observations were gathered and later analysed to understand the constraints of the medium and typographic variations used. The main research data collection method was semi-structured interviews with six participants. The data from each was analysed, based on IPA's case by case approach, to understand how participants internally constructed grawlix knowledge. The data collected was translated, analysed and the findings will be discussed in Chapters five and six.

CHAPTER FIVE

DATA PRESENTATION, ANALYSIS AND FINDINGS

5.1 Introduction

Chapter five introduces findings that are divided into three sections. The first section presents the artefactual and access structures featured in the interfaces of Twitter and Osu, as well as their distinctive typographic aspects. Followed by this, the second section presents the interpretation of lived experiences during participatory observation events. As I immersed myself in the field and integrated into the online settings, an attempt is made to describe my own experiences and that of the online fans in relation to the socio-cultural behaviours and communication habits of users during online textual exchanges. Further the scrutiny of the lived experience of the online users as active writers and readers, including their awareness of their typographic choices and the reasoning behind their communication constructions and interpretations receive treatment. Finally, a summary of the findings is presented in relation to pertinent research questions as outlined in chapter one. Table 5.1 (below) reminds the reader of the research questions and objectives outlined in chapter one.

Table 5.1 Table of research questions and objectives

Main research questions	
How is grawlix used as an alternative form of linguistic and typographic communication?	
Sub-questions	Objectives
What is the essence of grawlix-ness to online fans?	To interpret what the distinctive features of grawlix mean to online fans
Why do grawlix users practise with grawlix as communication tools?	To understand the value of grawlix that motivates grawlix users to use it
How do online fans make the decision to choose a particular typographic element as a grawlix?	To examine what structures of grawlix are chosen to achieve communication

5.2 An analysis of the digital interfaces

This section begins with data findings from the document and artefact analysis. Several screenshots of the interface and features of each of the mediums were captured for analytical purposes. This section provides a brief background to show how online users

generate and gain access to online text by medium. Moreover, the artefactual constraints within each digital medium are explored and discussed in relation to how these constraints influence typography.

5.2.1 An analysis of the Twitter interface

Twitter uses the term ‘tweet’ to generate and interact with online text. A ‘tweet’ refers to a short message, as well as the act of writing a post (Kelsey, 2010:181). The tweet is a short post that may contain photos, GIFs, videos and text. A list of tweets is generated by users and displayed on the user’s home timeline (see Figure 5.1). The home timeline is where the user sees the different tweets generated by other users (see captured example in Figure 5.1). It is important to note that the Home timeline is an important social space. This is where the user can access others’ text and interact with it. Twitter also refers to as a verb, an act of writing a post (O’Reilly & Milstein, 2009:43). To type a tweet, the user needs to open the ‘Compose’ box at the top of the user’s home-line or click the ‘Tweet’ button in the navigation bar (see Block A, Figure 5.2).



Figure 5.1 Twitter home timeline

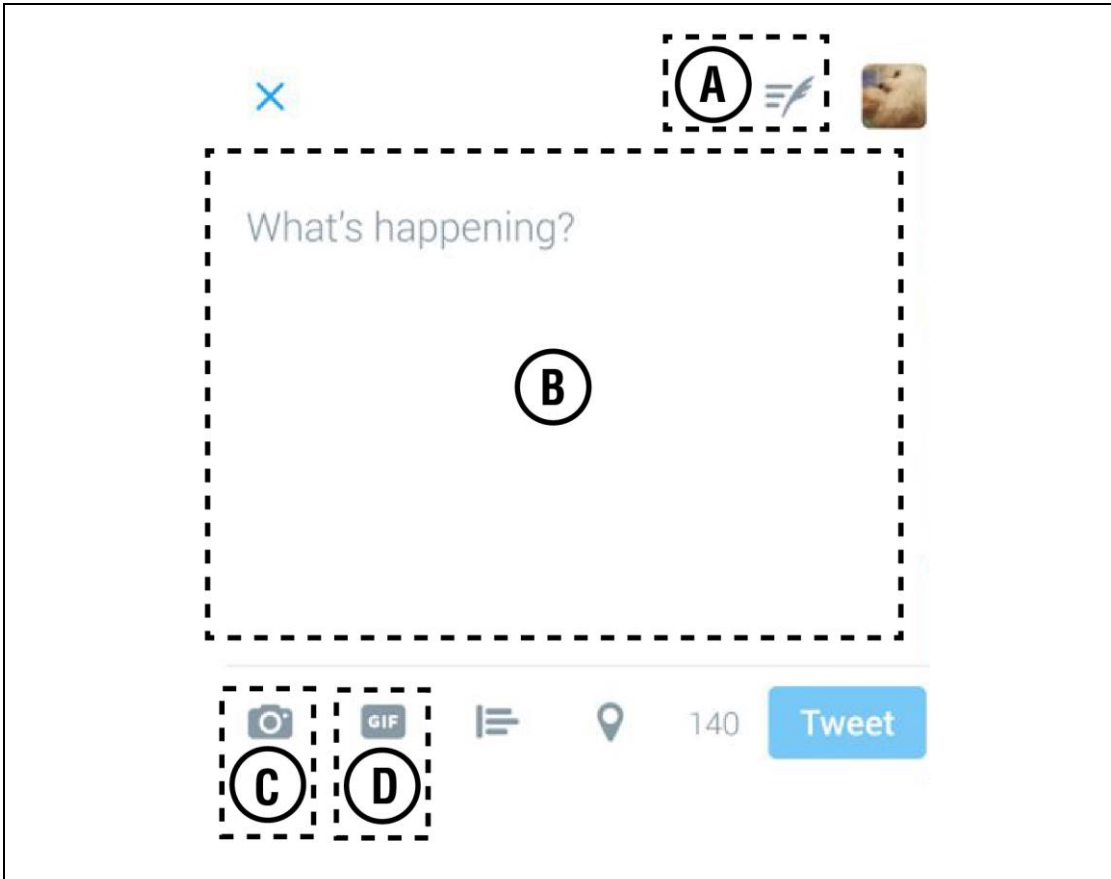


Figure 5.2 A screenshot of the Tweet composer box

Despite Twitter's character limitation being an artefactual constraint, this platform provides alternatives to compensate for it. For instance, there are various features displayed in Figure 5.2, such as an icon, which allows the user to upload pictures (Block C) and icons (Block D) linked to a GIF search engine.

The Compose box (see indicated section in Block B) is closely related to Waller's functional structure. This is a space where the online user as writer generates text as a draft. This could be considered rough planning. The Compose box is a functional structure in Twitter, because this is only visible to the user who intends to generate a tweet. Only after the clicking the Tweet button will the user's text be published and visible to the followers on the user's home timeline (see Figure 5.3).

The home timeline is one of the access structures where the follower (as a reader) can access the following user's text (see Figure 5.3, where several tweets are listed and divided by a light grey line (see indication in Block F).

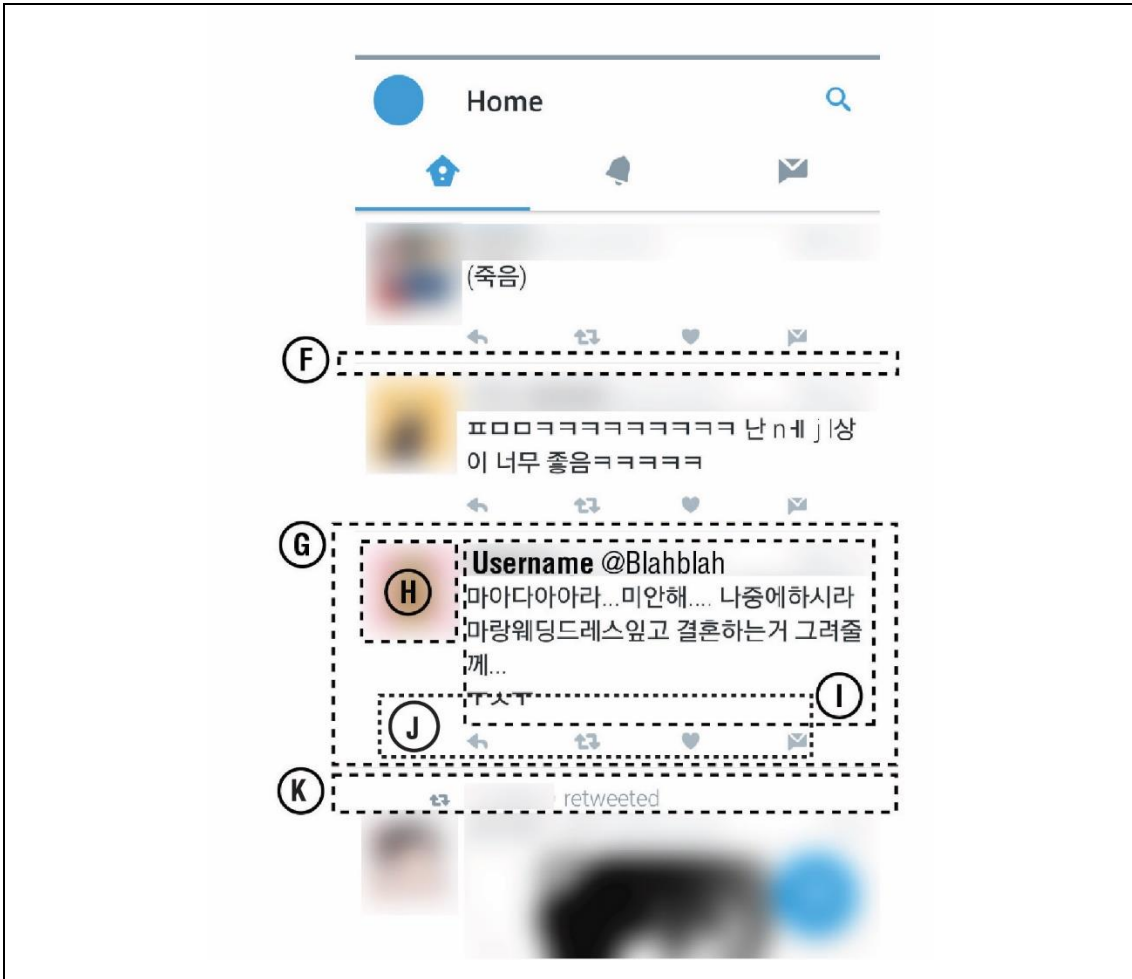


Figure 5.3 Published tweets on a home timeline

Block G in Figure 5.3 shows a typographic layout genre in a tweet. Twitter’s typographic layout consists of the user’s profile picture (Block H); and, right next to the profile picture are placed the user’s Username in bold and @username (the writer). Following this, underneath the Username, the user’s online text (message content) is presented in Block I. There are also four functions that allow other users to interact in the space underneath Block J. These four functions are: *Reply*, *Retweet*, *Likes*, and *DM (Direct Message)*. These four functions are important features of Twitter, because they allow users to interact directly with each other.

Moreover, these functions could be used to recompense for some of the technical challenges in Twitter. For instance, the Reply function is often used as a tool to continue the conversation in response to the previous tweet (see illustrated in Figure 5.4).

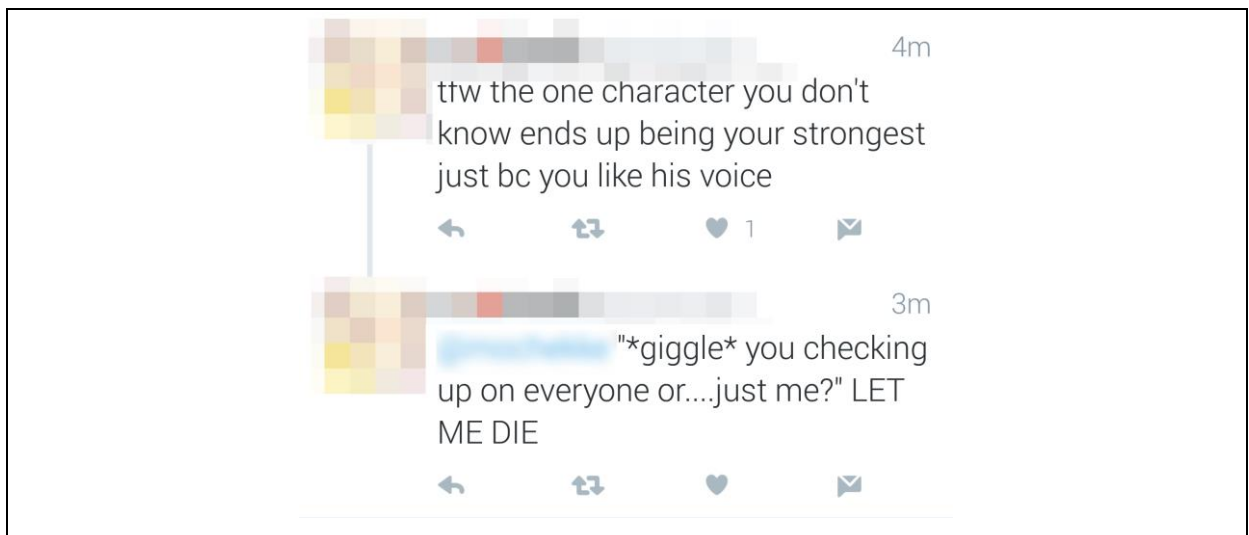


Figure 5.4 Reply function

These various multimodal and additional features in Twitter allow the users to produce a multimodal typographic layout.

5.2.2 An analysis of the Osu interface

Osu is an online rhythm multi-player game. Osu is characterised by categorisations of different in-game chat rooms with players from different in-gaming situations and linguistic backgrounds. Categories appear on the navigation bar on the topic of the chat box (see a list of blue boxes on the navigation bar, Box A in Figure 5.5).

There are two main types of online in-game chat rooms. The first one is a public lobby chat where the player can have a conversation with other players while they are in the waiting lobby. The other form of chat room is an in-game lobby chat where users enter into a multiplayer game room. In-game lobby chat is sub-divided by different players according to their native language. Alternatively, there is a #lobby chat room available where users of different linguistic backgrounds can interact.

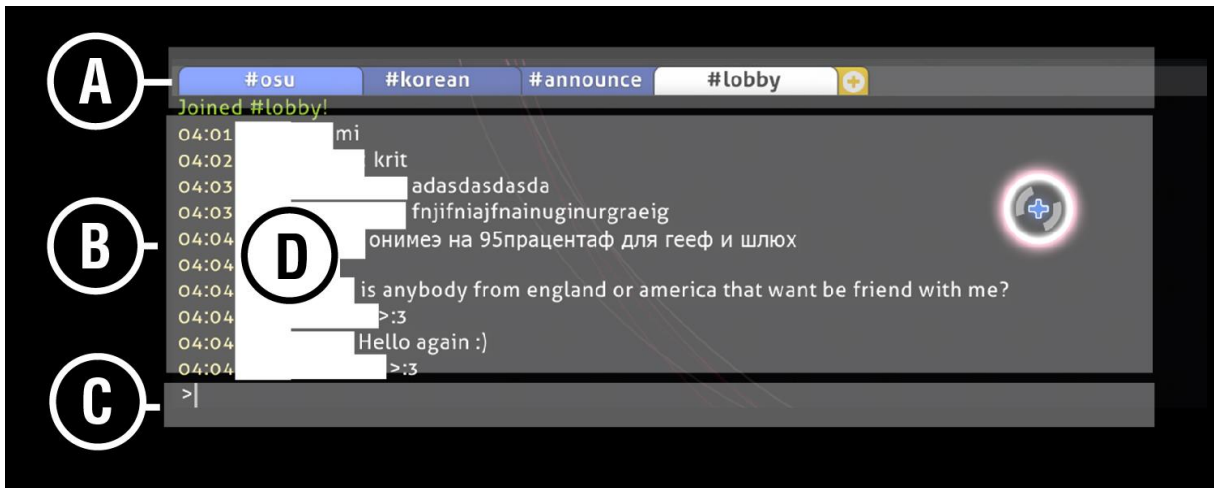


Figure 5.5 Osu game chat room interface

The in-game chat is typically structured into three important sections: the navigation bar (Block A), followed by the chat room section where gamers exchange and access to each other's text occurs (Block B). Lastly, Block C is where the player (as writer) generates the text. It is important to note that this section is only visible to the player (as writer) who will type.

The in-game chat room structure is similar to that of other conventional online in-game chat layouts: a space where texts are socially interchanged and there is space for the player's personal text production (as writer).

Compared to Twitter, in-game chat does not have a character limitation because it has a communication purpose rather than the purpose of updating a statement. However, this in-game chat has a textual constraint, so the typographic variant is limited and restricted. For instance, textual elements are linearly laid out and mainly alphabet-based characters are used.

In-game chat in Osu is highly synchronous and text is used to engage with multiple audiences. To communicate with a target audience, this interface features the name of the player ahead of the text that they write (see Block D in Figure 5.5). Colour codification is an important visual cue in Osu in-game chat used to indicate different things in the game. Eight different colours are used in game chat under the user's name.

These colours are listed on the official Osu website, as shown here:

- **White:** the player him- or herself.
- **Pale yellow:** Non-supporters
- **Yellow:** Osu supporters
- **Red:** Global Moderation Team/ Quality Assurance Team member
- **Green:** Line contains your name, certain keywords
- **Blue:** Private message
- **Cyan:** Peppy, the creator of Osu
- **Pink:** BanchoBot (Bot manages player's chat etiquette)

The colour codification allows users to differentiate players, game moderators and Bots in the chatroom. It also assists in targeting the specific player with which to communicate.

As opposed to Twitter's diverse typographic options and additional functional features, this interface is strictly limited to characters (text) and symbols. One of the most used featured in Osu is a hyperlink text. Osu often involves hypertext links as an alternative to display additional information and as a navigation tool. For instance, in the example illustrated in Figure 5.6, blue highlighted blocks in this screenshot indicate hyperlinks to help the reader navigate to a web page where, in this case, beatmaps (game levels) or other items can be downloaded.

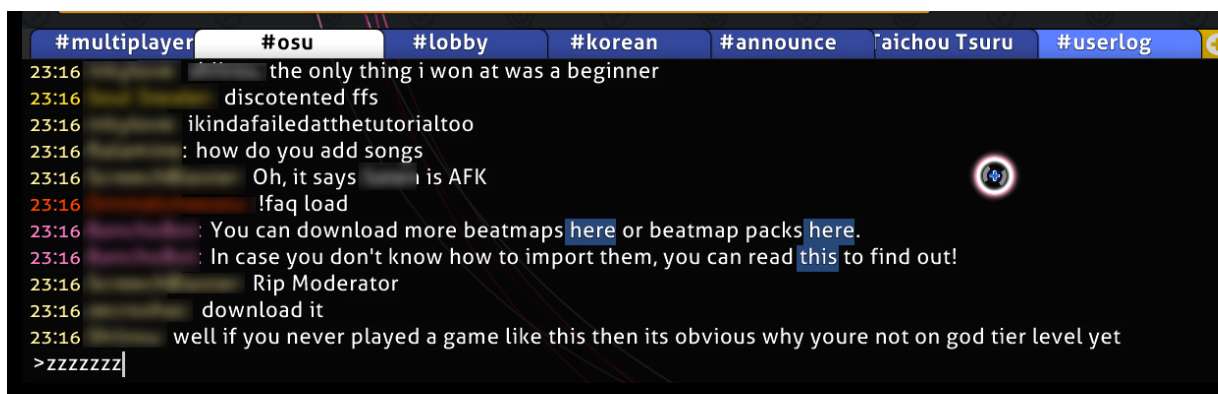


Figure 5.6 Osu hyperlink text example

Furthermore, in chat rooms, a hyperlink is used as an alternative tool to display multimedia elements which are limited to text. Online fans incorporate hyperlinks to display images or to show YouTube videos.

The purpose of the online game chat is to encourage conversational interactions; and, consequently, speech-like textual exchanges constantly appear and disappear in the chatroom. This may explain why Osu's in-game chat room contains fewer features than Twitter for producing multimodal typographic variants, such as emojis (pictograms), pictures, GIFs or short videos.

5.3 An analysis of artefact examples

This section analyses the typographic variants and layout employed in each online setting. By looking into the artefacts produced within Twitter and Osu, I attempted to identify typographic characteristics and layout genres embedded in each medium. This section is based on data captured from several tweets and conversations captured from Osu game chats. Analysis is presented with several screenshots of Tweets and a video recorded during the field work.

5.3.1 Visual and verbal features of typography in Twitter

Several screenshots were selected as examples to discuss visual and verbal features in Twitter. The characteristic visual and verbal features of Twitter are non-conventionalised in their layout or structure. For instance, in Examples B and C in Figure 5.7, the typographic layout is not conventionally organised. These two examples are not written using typical left-to right writing systems but are organised dynamically, based on the given content. For instance, text is organised according to simulate sounds. Example B, writer place arrow emoticons and arrow symbols in between the character.

Example A	Example B
 <p>#알티한_트친에게_연인처럼_문자</p> <p>알티 없을 시 밤hㅏ를 감ㅓ6,,,☆</p> <p>Translate from Korean</p> <p>GIF</p>	 <p>딩↗동↘ 문을 열어다→오</p> <p>내가 왔→단↗다↘</p> <p>숨 으려 해↗ 도↗소</p> <p>용 없 어</p> <p>딩↗동↘ 어서 열어다→오</p> <p>내가 왔→단↗다↘</p> <p>도망치기엔 이미 늦↗엇↑어↘</p>
Example C	Example D
 <p>정진운오빠,,, 오 빠,,</p> <p>오</p> <p>빠</p> <p>아</p> <p>아</p> <p>아</p> <p>아</p> <p>아</p> <p>ㅏ</p> <p>。</p> <p>.</p> <p>.</p> <p>.</p>	 <p>Every f**king time</p> <p>TELL ME WHERE IS YOUR PARTNER!?</p> 

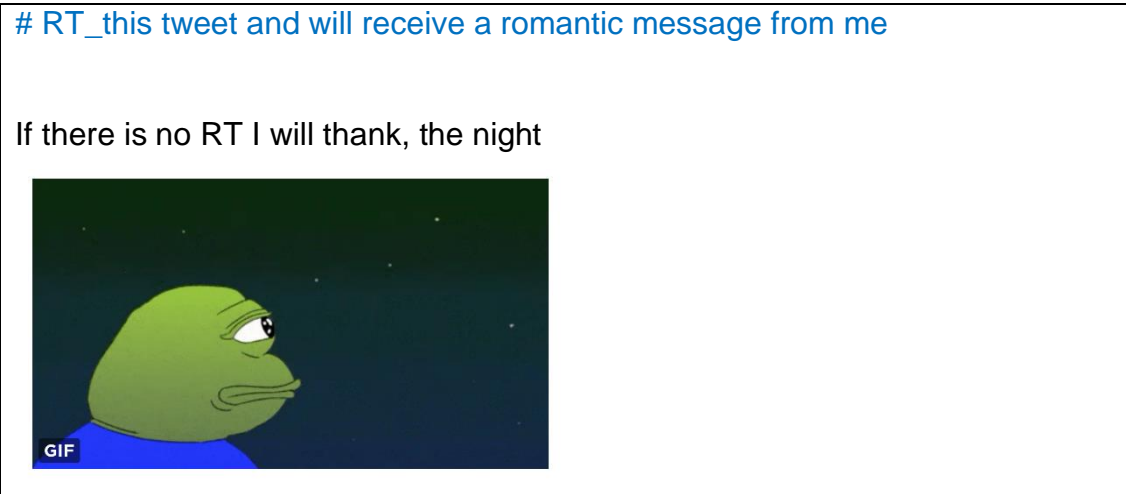
Figure 5.7 Examples of visual and verbal features

The second key characteristics of typographic genres is multimodality in digital mediums like Twitter. More than one typographic and semiotic mode was incorporated. The following frequently used digital typographic variants are organised here:

GIFs: Stands for Graphical Interchange Formats. A GIF is a file format that presents as continuously looping images without any sounds or play button. Gifs are unique

communication mode only possible on digital medium as it is not possible to see Gifs in printed medium. Newman (2016:01), regards Gifs as a vernacular creativity amongst online fans who make and circulates their shared interests and reference to interpretation. It often incorporates it along with texts, emojis and emoticons. A GIF is often used as an expressive extensive medium incorporated to express emotions or additional reactions to given text in a context (Eppink, 2014).

Example A: Translated



Example A in Figure 5.7 exemplifies the use of a GIF in a tweet to express emotions and humour. The tweet consists of a hashtag (the blue text with a hashtag symbol #), the user's online text and a GIF of Pepe, the frog, looking at a shooting star fall. The user who composed this tweet used the GIF as an additional expression related to the user's complex feeling. Pepe's melancholy facial expression and a shooting star in the background may refer to the fact that the user does not want her followers to retweet her tweet so that she does not have to send any romantic messages to anyone. At the same time, she might feel lonely if nobody retweets her tweet because it means nobody noticed her tweet or that nobody wanted to receive a romantic tweet from her.

Furthermore, it is evident how GIFs are often associated with portraying emotions and gestures. According to Hickey's (2015:31) analysis of the reaction GIF reveals that GIF has 'self-view point' gestural functions One can go to the GIFs search engine feature in Twitter to find an appropriate GIF: in Figure 5.8, each block of GIFs is listed underneath the search bar. These are named as categories based on emotions or reactions represented by GIFs from the popular media.

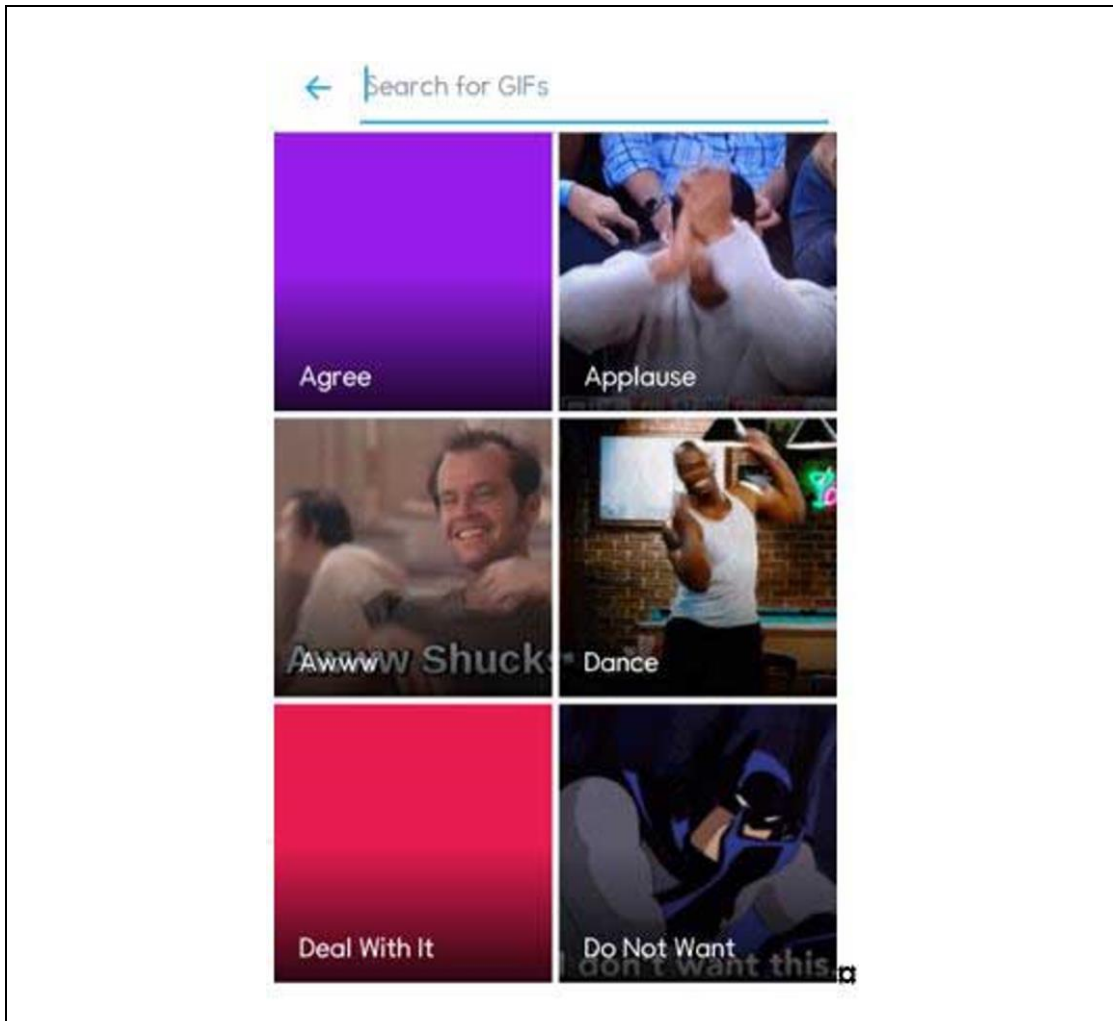


Figure 5.8 GIFs search engine

Emoticons/Emojis: An emoticon is a combination of glyphs, punctuation marks and characters producing a sign to display an expression(s) or word. The example of a smiley ‘ :-)’ is an example of an emoticon. On the other hand, an emoji is often depicted as a pictogram to convey an expression or word: 😊. Many previous researchers considered that emoticons and emojis were used as visual cues to convey the mood and facial expressions of the communicator, because online text lacks non-verbal cues used in face-to-face communication (Thompson & Foulger, 1996; Danet et al., 1997; Rajhi, 2007). However, more recent studies have rejected the idea that emoticons only denote emotion (Baron, 2009; Dresner & Herring, 2010). Instead, they describe an emoticon/emoji as an attribute that is used to modify and influence the meaning of the linguistic text. Tian et al. (2017:12) propose six ways in which emojis interact with the linguistic text:

Replace a word/phrase

Repeat a word/phrase (accenting, adding focus)

Express the speaker's emotion or attitude independently

Enhance/emphasise an emotion expressed in the text


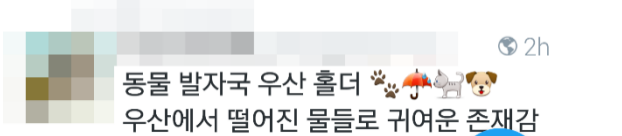

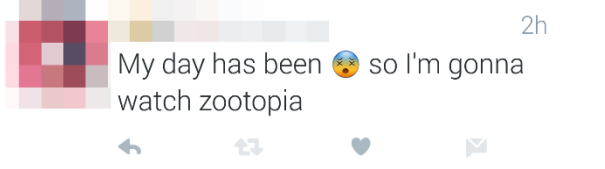
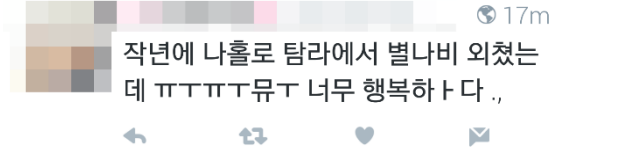
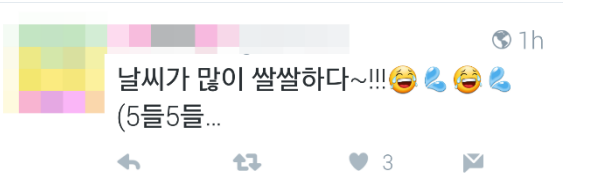
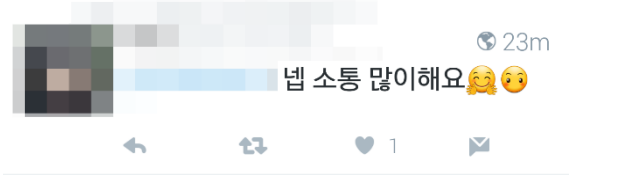

Modify the meaning of linguistic text (e.g., marking non-literal or non-serious use)

Used for politeness.

These six ways were often evident to me during data collection (see Table 5.2 examples).

As additions to these examples, I would like to introduce several new typographic aspects and approaches to the use of emoticons and emojis that I encountered during data collection. A combination of emojis and emoticons was incorporated to create an image (see Figure 5.9). Also, emoticons could indicate additional gestures and signs, such as the communicator's tone of voice. An emoticon therefore may not only refer to a facial expression (see Figure 5.10). An emoticon, such as a flower, is often used in a typographic layout as a decorative ornament to enhance visual salience and appeal (see Figure 5.11).

Table 5.2 A list of emoticons/emoji examples

Replace a word/phrase	Repeat a word/ phrase
<p>shit i'm scared of: 🧠 ← END 💔 🍞 🕒 🙅</p> 	 <p>‘Animal footprint umbrella holder’</p>  <p>The existence of waterdrop fall from the umbrella is cute.</p>
Express the speaker’s emotion or attitude independently	Enhance/emphasise an emotion expressed in the text
	 <p>‘Last year, I used to shout Intro for Star vs the Forces of Evil ⁸by myself. 🥲 I am so happy.,’</p> <p>🥲 is used as a happy tear.</p>
Modify the meaning of linguistic text	Be used for politeness.
 <p>‘It is cold~!!! 🥶🥶🥶🥶 (ShiverShiver...’</p>	 <p>‘Yes. Please communicate with me often.’</p> 

⁸ Star vs the Forces of Evil is an American animation series produced by Disney television animation.



Figure 5.9 A combination of emoticons and emoji

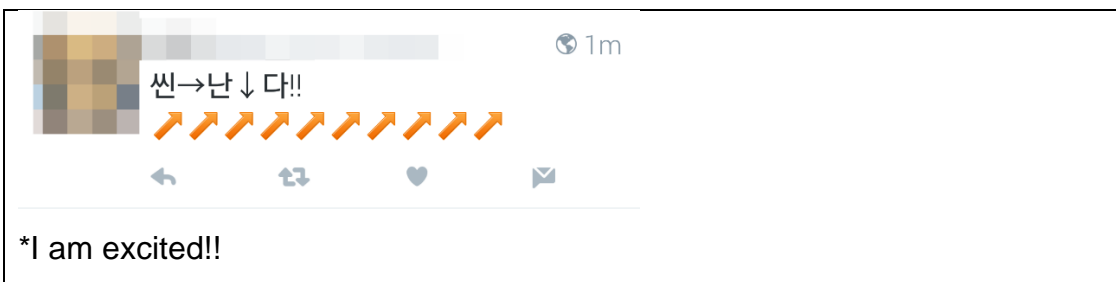


Figure 5.10 Expressing tone of voice

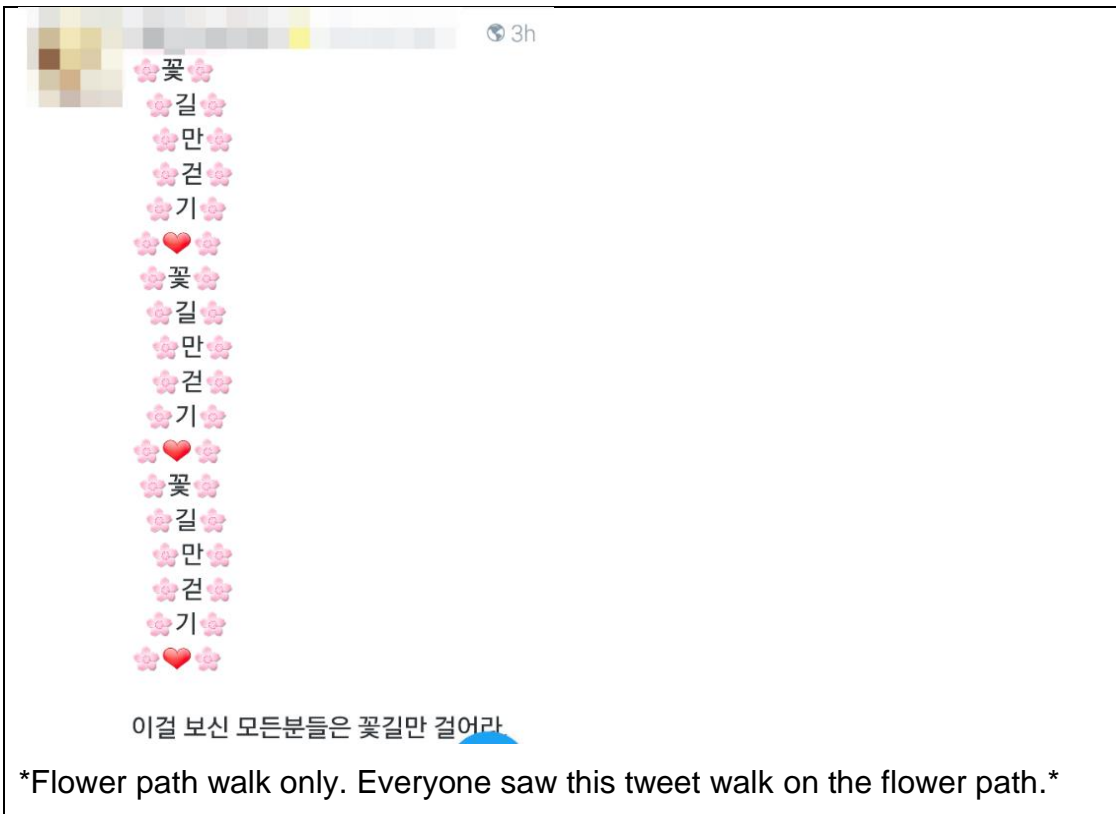


Figure 5.11 Decorative ornament

These findings show that the excessive use of emoticons and emojis is intended for the purpose of typographic layout rather than linguistic purposes. It is interesting to note that substitutions of words, phrases or facial expression are often used in singular form, whilst excessive use of emoticons and a combination of emojis and emoticons may be used for visual salience and typographic emphasis.

Pseudo-alphabets: These are characterised by an eclectic mixture of Unicode and symbols that are selected based on their superficial similarities (Eli the Bearded, 2016). The superficial similarity refers to typographic form: the alphabet is then arranged on the basis of the exterior similarity between the original texts (objects) and what they refer to. For example, character combinations with the Korean character, ‘ㅅ’ and number six, ‘6’, are interpreted as ‘삼’, because 6 could share similar features with the latter. The similarity is illustrated in Figure 5.12.



Figure 5.12 Example of pseudo-alphabet characters (my own example)

However, it is important to note that Pseudo-alphabet does not only denote character replacement. Other graphic variations could be substituted, provided they have a similar exterior appearance to the original text.

Importantly, too, pseudo-alphabets create an opportunity for multicultural transition. In the example captured in Figure 5.13, the user incorporated various non-linguistic symbols and linguistic characters (Korean, Hangul, English alphabets, Chinese characters), although the message is only communicable in a bilingual setting. The way multilingual resources are configured into new repertoires reinforces new typographic genres of personalisation, as well as encourages linguistic shifts.

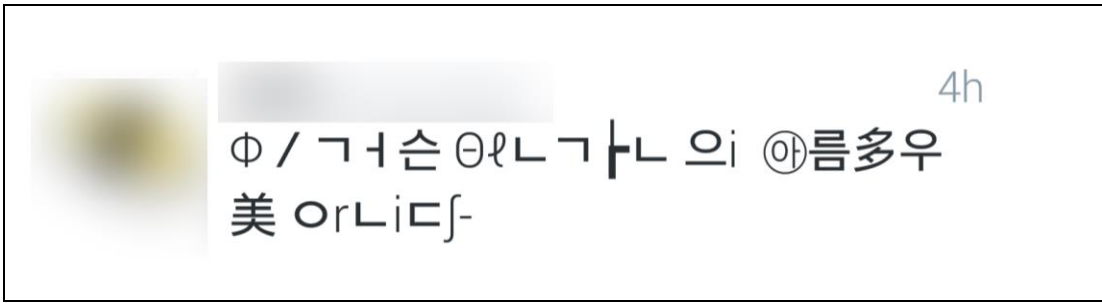


Figure 5.13 An example of pseudo-alphabet characters (Twitter)

Meme: A presented image or a piece of text of a humorous nature. A meme is iconic image popularised by online users by repeating it through a web medium. Bauckhage (2011:45) defines it as “the phenomenon of contexts or concepts that spread rapidly among online users”. In Figure 5.7, Example A, the frog, Pepe, is an iconic symbol of an internet meme. Another example is the ‘Distracted boyfriend meme’ (Figure 5.14). This is a stock photo popularised in the internet community. This stock image has been re-contextualised by online users. It became popular amongst online fans as they parodied it to the fandom in which they were interested.

Figure 5.14 illustrates how online fans replicate the meme and adapt it in their own context. The meme is a relevant to typographic elements because it not only has a social affiliation, it provides important visual cues for content interpretation.

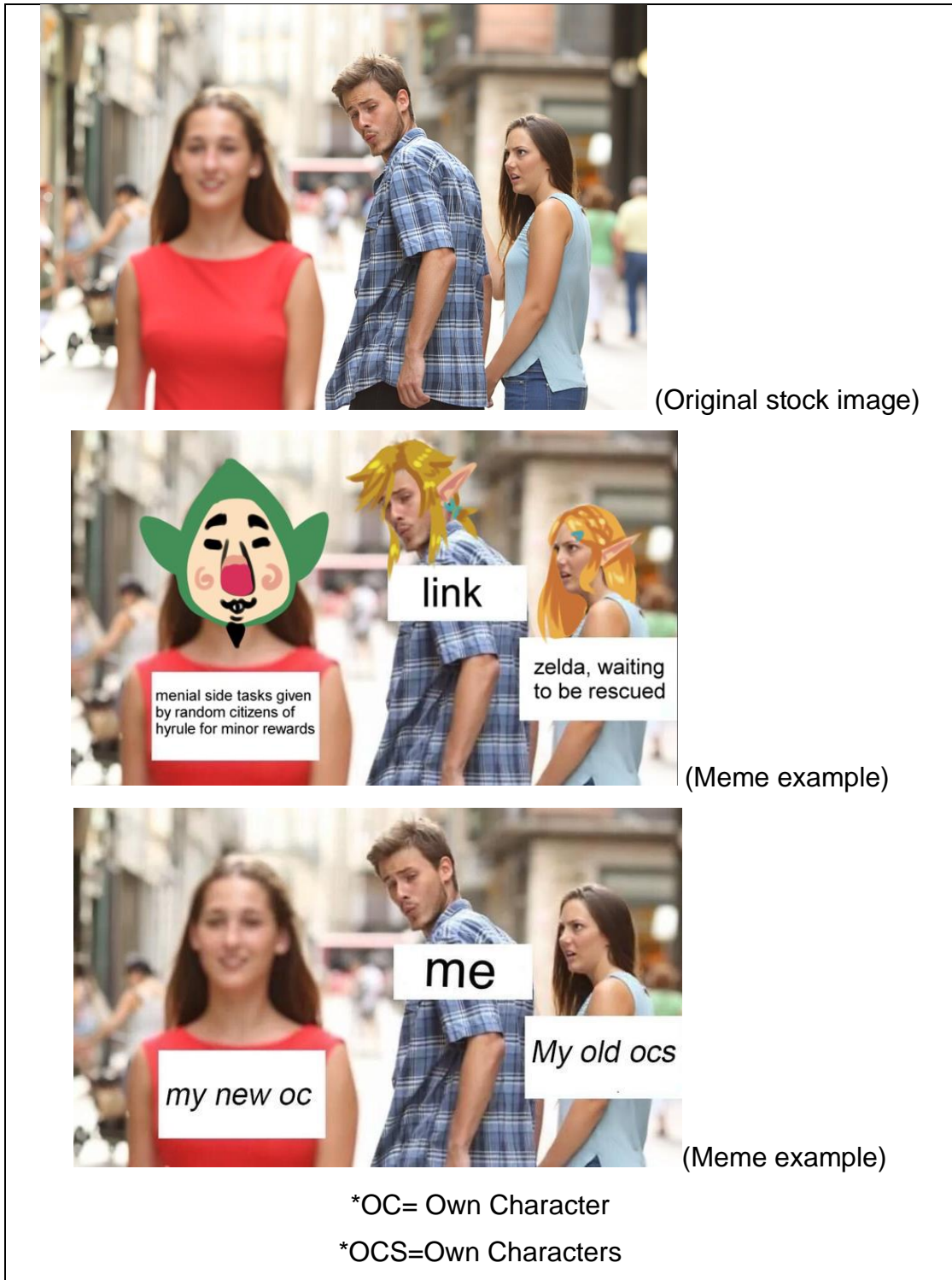


Figure 5.14 Distracted boyfriend meme (Downer, 2018)

Unicode characters: Characters developed for coding language and script to display non-alphabet characters (Unicode, 2017). These characters are considered a Unicode, such as Korean (한국) characters and graphic symbols like White star ‘☆’ used in Example A in Figure 5.7.

This section has provided findings which introduce various typographic elements and typographic layouts used in Twitter. The examples show that multimodality is a key feature of Twitter.

5.3.2 Visual and verbal features of Osu

Previously in my discussion in Section 5.2.2, I made the point that the Osu interface and chat room features are restricted to characters, Unicode, symbols and glyphs. Thus, there is less multimodality. However, the online game player cleverly compensates for this constraint through morphing more than one symbol or character and providing a codification to characters and net-signs to help users communicate efficiently (see summarised examples in Table 5.3).

Table 5.3 A list of Osu typographic variations

Unicode	Emoticon
23:12 [redacted] rwby: ♥	00:15 [redacted] lol :^)
04:35 [redacted] オマンコワレチャウ◆♪◆.*...。	00:15 [redacted] xd
04:38 [redacted] うゆゆゆ y	02:22 [redacted] ~_~
	01:13 [redacted] : sorry <3
Numbers	Lengthening
01:30 [redacted] taiko is 4 bitchoz	01:56 [redacted] plzzzzzzzzzzzzzzzz
	01:29 [redacted] senpai daisukiiii !!!!
Use of punctuation marks	Net neologism
01:57 [redacted] : Poking intensifies*	04:03 [redacted] adasdasdasda
23:14 [redacted] Americans are f*cked whoever	04:03 [redacted] fnjifniajfnainuginurgraeig

Unicode used in Osu involves symbols and non-Latin characters (see examples in Table 5.2). To use Unicode in-game setting, the user needs a basic knowledge of Alt code. To make the heart symbol like this, ♥, you must turn on Number lock on the

keyboard and press Alt+3 on the numeric keypad. Alternatively, the player could copy and paste the symbol.

Emoticons used in Osu game chat are often presented by more than one glyph, symbol and character. For instance, in the example portrayed in Table 5.3, the user combined glyphs and punctuations marks to create a facial expression, ‘: ^)’ or by combining lower case x and d. There are no features to use pictograms like emoji, so the user cleverly combines what is available to create an image. In Figure 5.15, Player A combines the glyph ‘<’ and the number ‘3’ to portray the emoticon of a heart (see the similarity between symbol, ‘♥’ and <3). Although <3 does not exactly look like the heart symbol, as it is presented sideways, it is easily interpreted as a heart due to similar graphical features. The use of ‘<3’ suggests that the online player often combines more than one character or symbol to create an image.

Number is used as a substitution for a word or preposition. In Table 5.3, number 4 is used as a substitution for the word ‘for’. Substitutions of number is efficient because it helps to type text faster.

Lengthening is frequently used in game chat. An excessive use of characters at the end of the word is used to portray the user’s tone of the voice or exaggeration of the message (see examples in Table 5.3).

Use of punctuation and capitalisation are used as typographic tools to emphasise, express and omit; they are frequently used in text-driven synchronous chat rooms like Osu In Figure 5.15, Player B substitutes character ‘i’ and ‘t’ with asterisk glyphs (*). Players emphasise ‘VERY’ by using block capital letters to differentiate the type from other characters. Lengthening is also often used in game chat to exaggerate the tone of the voice (see the example in Figure 5.15).

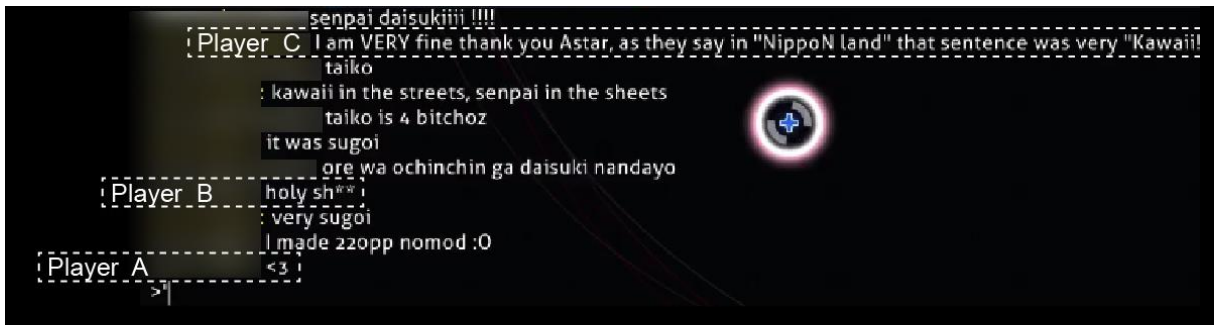


Figure 5.15 A screenshot of Osu in-game chat

Net neologism is often used during game chat. A Net neologism such as *asdfasf* does not denote a specific meaning but rather has a typographic meaning. *Asdasd* or *asdfasdf* have several different meanings when used in different contexts. *Urban Dictionary* (n.d) introduces several definitions of it. It (1) may signify a number of emotions, such as frustration, joy, etc.; (2) may be an online alternative for expressing 'what the fuck'; and (3) may be something people randomly type when they have nothing to say.

By looking through Osu players' textual examples, it seems that players are often involved in character mutations and use punctuation and capitalisation to express gestures and emotions.

5.4 The IPA: The researcher's experiences as a grawlix user

This section presents my lived experience as a grawlix user. The data were captured through my observational diary, notes, and video recordings during periods of observation. I conducted three weeks of participant observation on Osu; and then three weeks of participatory observation on Twitter. This section attempts to describe how I experienced this particular phenomenon under study.

5.4.1 Immersing myself in tweeting with online fans

The findings reported and discussed in this chapter relate to my own experiences during participant observation. My interactions with artefacts presented on my home timeline and fan activity were shared between online fans and me. Three weeks were spent observing the interaction between my followers and me on my home timeline.

The observations were recorded using a screen recording device, as well as by using the screen capture tool, to capture specific moments. I experienced the phenomenon under study as I interacted through the interface displayed on the digital screen. This experience was also captured by my research diary and memos.

During the time on my home timeline and with my followers, I learned that circulations of tweets often involve a small group of people. Texts are mainly exchanged through dyadic interaction (between a follower and me). I also realised that direct interaction with followers and tweets featured on my home timeline allowed me to obtain new typographic knowledge and record usage. For instance, I had a first encounter with some features of a Twitter net neologism called ‘Commu’ (커뮤) which I learned about through one of my follower’s tweets (see Figure 5.16).

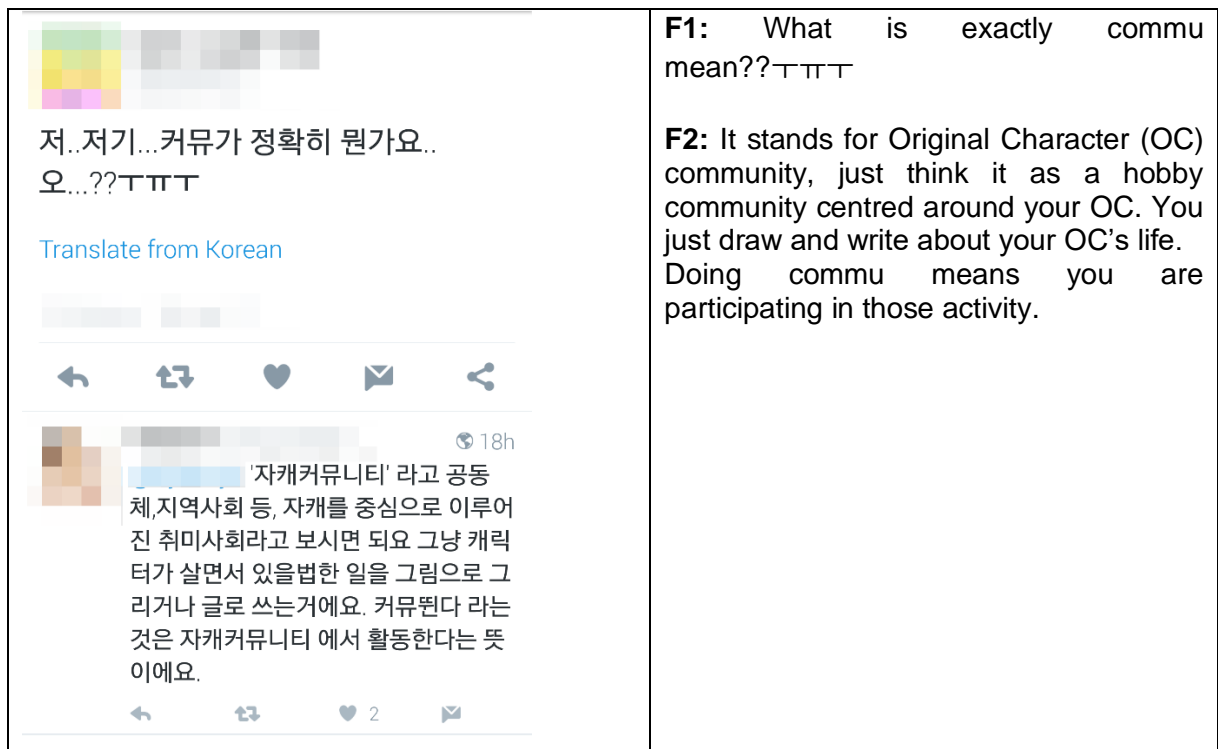


Figure 5.16 My introduction to Commu

In a way similar to this, new typographic sign knowledge could be obtained simply by my seeing how others used a sign in their tweets. In Figure 5.17, one of my followers too seemed to have obtained a new emoticon by copying it from someone online.



Figure 5.17 my first encounter with emoticon, (._. and conversation with F1

During my periods of observation, I also learned that online fans often use a certain typographical layout like a template and then customise according to their needs. Online fans often copy and paste from other websites or tweets generated by bots, such as in the example illustrated in Figure 5.18. Especially in Twitter, many tweets are generated by Twitter Bot. A Twitter Bot is a software program that generates tweets automatically by programmed Bots. Bots are coded to produce posts on Twitter constantly (Veale & Cook, 2018).

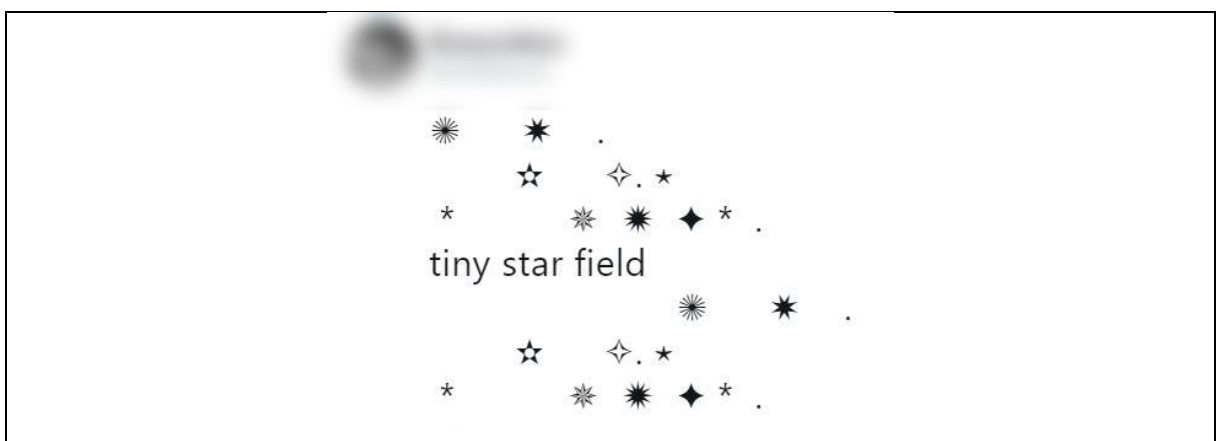


Figure 5.18 A tweet generated by Bot (Tiny Star Field, n.d.)

In a recent study based on Twitter Bot, Wojcik et al. (2018) report that sixty-six percent of tweets linked to popular websites are shared by accounts automated by Bots rather

than human users. This study shows that the content shared in tweets is often provided by Bots. I often found the repetition of a similar typographic layout on my timelines (see Figure 5.19 as an example).



Figure 5.19 Twitter - In this house we tweet (Schimkowitz, 2017)

“In this house we ...” was posted by a Twitter user, @intosyou. According to Schimkowitz (2017), this tweet gained popularity as people replicated the post and adapted it to their own context. In the fandom community, this meme is often reconfigured to represent an online fan’s love and appreciation of fictional characters. This post therefore becomes a popular internet meme amongst online fans to express their fandom. As clear in Figure 5.19, the image is a default template that allows other users to duplicate the text. Such examples have often emerged on my timelines. During my observation, I noticed that fandom often used copying and pasting from various resources to establish a social affiliation, as well as to bricolage a new typographic convention.

5.4.2 Immersing myself in game with Osu game players

Findings in this section relate to data obtained from my participant observation in Osu game chat. In Osu, an online fan’s main fan activity involves creating a beatmap and playing the beatmap with other players. My periods of observation occurred daily. I used a screen recorder on my desktop to record what I was observing. Recording my observations enabled me to reflect on these later. Three weeks were spent observing the main Osu in-game chats, lobby chat and in-game chat. During my time with #Osu in lobby chat and Osu game players, I learnt a lot about the community structures and

community rules. The Osu community has strict regulations and communication etiquette that need to be followed (see Figure 5.20):

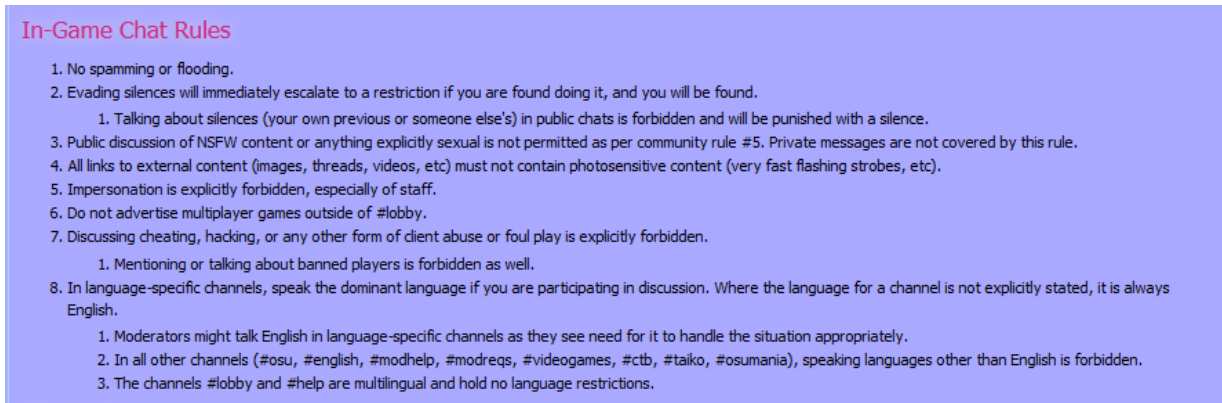


Figure 5.20 Osu in-game chat rules (Osu, n.d.)

In-game chat rules were monitored by two administrators. There are two administrators that manage chat rooms to make sure players follow the rules. All game chats are monitored by Bancho Bot and Global Moderation Team. Bancho Bot is an automatic management system that assists players in chat, announces game-related messages and hosts the In-game chat room (Osu, n.d.). Bancho Bot can be utilised by typing a command. However, the manual administration of players is managed by Global Moderation teams and their names are written in Red (see Figure 5.21). The administrators monitor conversations in a public chat room to evaluate whether people disregard Osu rules. Furthermore, only Global Moderation Team administrators have the authority to command Bancho Bot to mute a player.

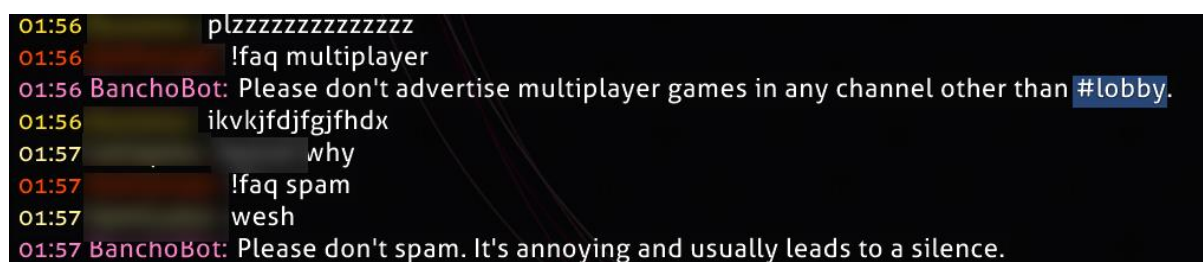


Figure 5.21 Examples of operation of BanchoBot and Global Moderation team

During the observations, I noticed that Osu community has a strict communication and chat regulations that drew a boundary to user's choice of language and typographic

form. This is clearly visible as Bancho Bot and Global moderators' constant moderations of players' uses of language and communication (See figure 5.21).

Although communication in Osu is controlled and restricted in typographic choices, many online fans made an alternative to compensate within game chat. For instance, the online fans could interpret certain textual displays and the tone of their textual voice. For instance, I observed that Player A typed a full sentence all in upper caps. After this text, Player B responded as if he/she was annoyed by Player A's use of upper caps and says, 'STOP USING FULLCAP AND SHOUTING AT EARS!'

It was interesting to note how the concept of capital letters ('caps') was employed as a code for yelling. According to Crystal (2011:64), use of full or upper caps is regarded as shouting, in Netiquette. The conventionalisation of caps has become a sign of a user's tone of voice.

During the observation, the researcher also experienced that a series of duplication of the same text continued through Osu chat (see Figure 5.22):



Figure 5.22 A screenshot captures duplication of use of ':3'

The examples here clearly show that one player typed an emoticon, ':3' (cat face expression) and it continued throughout the whole Osu public chat. It was interesting to note that, during the duplication of this emoticon, some users started to add or swap the characters. This may show how online fan establish their own semiotic systems that enables communication as well as social affiliations.

Furthermore, in Osu, the chat was heavily driven to use Japanese media, such as anime or manga. It seems as if a net neologism occurred based on Japanese media consumption. Many people seemed to mix Japanese and English to communicate. One of the players commented using Japanglish (see Figure 5.23). Japanglish is an English written word based on how the Japanese word is pronounced. (e.g. Kawaii = Cute in Japanese; Senpai = Senior; Daisuki = love you lots).

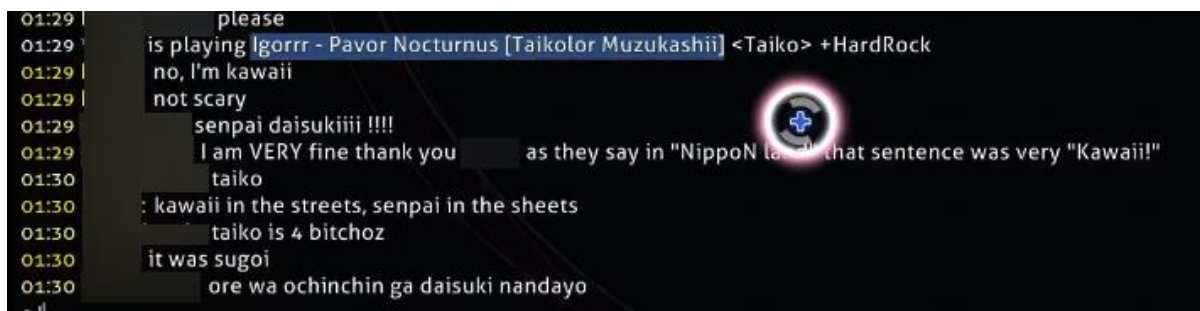


Figure 5.23 Examples of Japanglish

There seem to be more linguistic and typographic co-occurrences, changes in morphology, and substitutions from graphic to graphic.

5.5 The IPA: The experience of gawlix users as writers

This section presents interview data related to the role plays by online fans as writers. The purpose of analysing these findings is to attempt to visualise how online fans imagine their audience and what motivational factors may influence their rationale for choosing certain typographic forms and constructions.

Six participants were involved in my study. Their demographic information is summarised in Table 5.4.

Table 5.4 Interviewees' demographic information

Participant no.	Nationality	Home language	Add. language	Gender	Types of fan
P1	South Korean	Korean	N/A	Female	Fan fiction writer
P2	South Korean	Korean	N/A	Female	Fan fiction writer
P3	American	English	Spanish (Basic level)	Female	Passive fan; Gamer
P4	Singapore	English	Bahasa Melayu	Female	Passive fan; Gamer
P5	Spanish	Spanish (Castilian)	English (Advanced level); French (Basic Level)	Female	Fan artist; Passive fan; Gamer
P6	Korean	Korean	English (Basic level); Japanese (Basic Level)	Female	Fan artist; Gamer

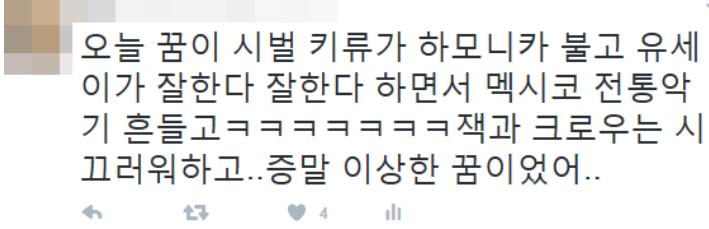
Before the interviews took a place, each participant was asked to prepare for the topic of discussion during the interview by describing three characteristics of the way they write online. Prior to the interview, I also captured tweets to discuss the typographic and linguistic choices generated by interviewees.

5.5.1 Interview with P1

P1 is an active fanfiction writer. Her main fandom interest is one of the popular Japanese anime called 'Yu-Gi-Ho D5'. Due to her main interest in this particular anime, in her tweets she often discussed the topic related to this anime and the character she liked. I met her through one of my followers. As we (including me) frequently build up a relationship by talking about our fandom, we were able to establish a good online relationship.

P1 described her style of tweet as involving the following characteristics: (1) use of abbreviated words/acronyms; (2) GIFs; and (3) frequent use of emoticons. Her frequent use of abbreviated words/acronyms was visible during her daily tweets and during the interview. See Figure 5.24 for an example of one of P1's tweets. She often used 'ㅋㅋㅋ' ('kkk') to indicate laughter in Korean which is similar to lol or LOL (Laugh

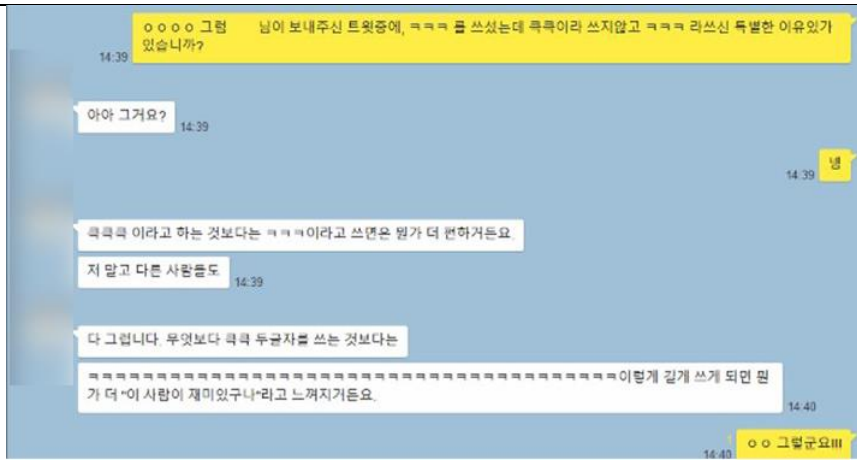
Out Loud) in English (see Figure 5.25). ‘ㅋ’ is a Korean constant that is an abbreviation of the noise of laughter: ‘ㅋㅋㅋ’.



Translation:
 Today, I had a dream about Kiryu who was playing the harmonica and Yusei was shaking Mexican traditional instruments and saying ‘Excellent!’ to Kiryu. ㅋㅋㅋㅋ (LOLI). Jack and Crow were annoyed... It was really a weird dream..

Kiryu, Yusei, Jack and Crows are anime characters from Japanese anime, Yu-Gi-Go D5

Figure 5.24 P1's tweet



14:39 **Interviewer:** ○○○ then, how about one of the screenshots you sent me, you wrote ㅋㅋㅋ [KKK* abbreviated words of KuKuKu. It is one of the onomatopoeia in Korean regarded as laughing sound.] Instead of writing, kukuku. Is there any particular reason why you used ㅋㅋㅋ (kkk) instead?

14:39 **P1:** Oh that one?

14:39 **Interviewer:** Yes.

14:39 **P1:** It is somehow more easier to write ㅋㅋㅋ instead of ㅋㅋㅋ (kukuku). People beside me also do that.

14:40 **P1:** Above all, instead of writing ㅋㅋㅋ, using
 ㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋ is somehow looks like ‘this person seems like a fun person.’

Figure 5.25 A screenshot from online interview with P1

During the interview, I asked P1 for the motivation(s) behind her frequent use of ⇨ and lengthen of it (see captured interview in Figure 5.25). The interviewee disclosed two key motivations for her choice. These were (1) convenience (“easier to write”) and (2) to portray character or personality.

Most studies on language usage in computer mediated communication note that using abbreviations and acronyms is popular, as their purpose is to ease communication (Turner, 2010). P1 rationalised one of her motivations why she chose to abbreviate word ⇨ to ⇩ driven by convenient in communication. Crystal (2006) regards the use of abbreviations and acronym in internet slang is motivated by digital mediums such as IM (Instant Message) restricted character limitations motivates users to use abbreviations and acronyms. I think the major influences on use of abbreviations and acronyms is determined by social representation. The use of abbreviations and acronyms are genres in internet communication because the user need to have a knowledge in the mechanism of shortening and relations to pronunciations and the original full text to interpret meaning instantly. P1 is aware of how other online people have been used and noted and that’s how she conventionally using ⇨.

P1 also raised interesting aspects regarding her motivation to use ‘⇨.’ In the interview captured in Figure 5.25, it was interesting to note that P1 associated a certain use of typographic elements (here, an excessive use of ‘⇨’) with portrayal of a language user’s personality or character. By employing typographic strategies of excessive use of ‘⇨’ she add typographical voice (value). She perceives a person who uses ‘⇨’ as “a fun person”. Her use of Internet text often involved para-lingual properties, rather than linguistic ones. Even her use of GIFs and emoticons involved expressions of her emotions or to represent her tone of voice.

P1’s thematic choice of writing in Twitter was generated within a casual and informal setting. Her audience was clearly used to communicating with close friends and informal settings. During the interview, I asked her whether there was a rule employed for using GIFs or any Internet symbols. She believed that there were no specific rules

to using those, but the use of these elements was based on their appropriateness in the situation. During the interview, she explained when it would be appropriate to use GIFs and emoticons (see captured interview in Figure 5.26).

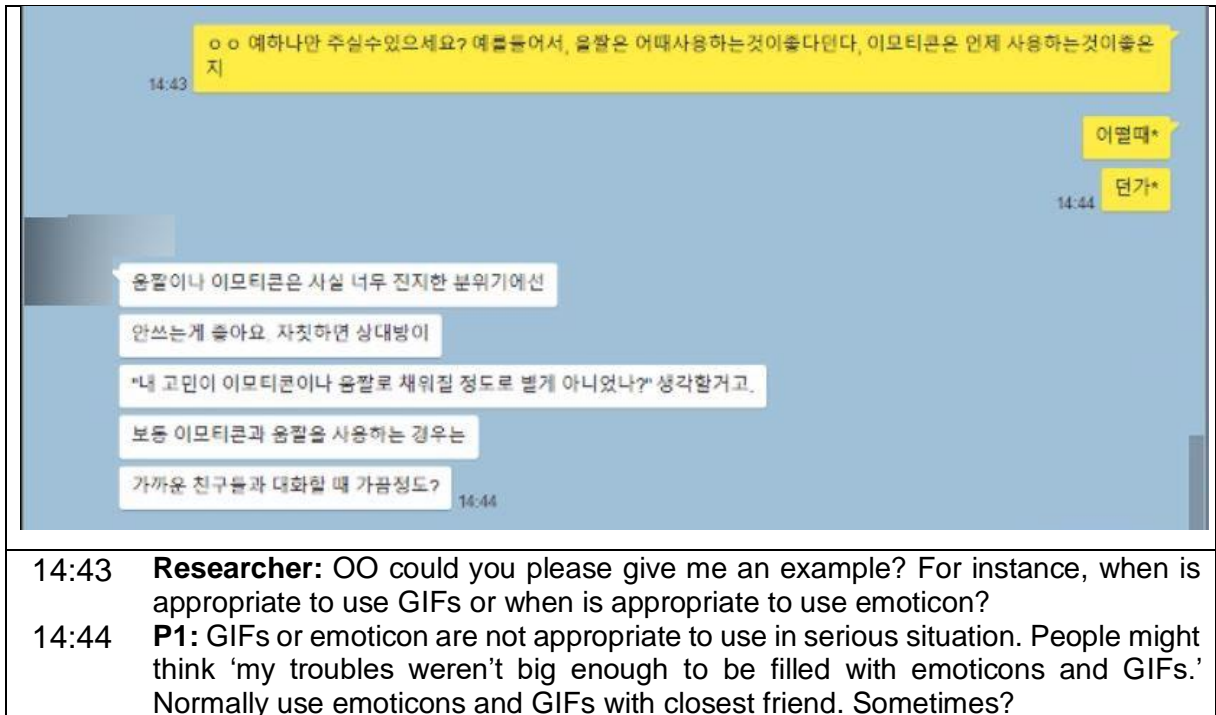
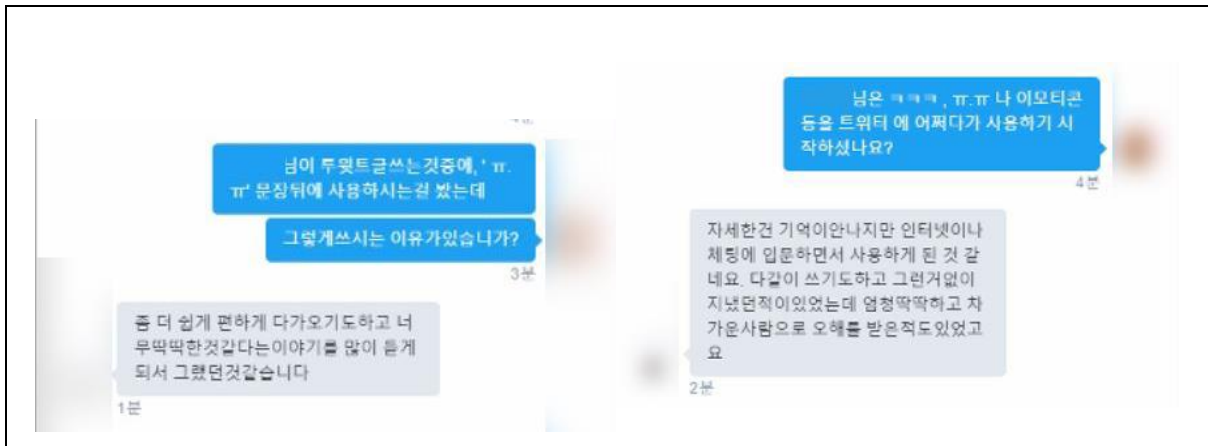


Figure 5.26 Interview with P1

5.5.2 Interview with P2

P2 is also an active fan fiction writer. I was able to engage with her through one of my followers. Due to our similar taste in fandom and interests, we were easily able to communicate on Twitter's Direct Message. P2 also described her styles of writing on Twitter: (1) no spacing between words; (2) often talking to herself; and (3) abbreviated words/acronyms.

During the interview, I noticed that she frequently liked to use 'ㅍㅍㅍ' at the end of a sentence, so I asked the reason for this. She explained that, in her previous experience with her followers (online friends), she was often perceived as a cold and unfriendly person. To avoid such misunderstandings, she began to incorporate many emoticons within her text as a writing strategy.



Interviewer: I've seen you using π.π at the end of the sentence. Is there any particular reason why you write like that?

P2: It makes people talk to me more comfortably and people used to tell me the way I talk is too stiff so I ended up using it.

Interviewer: How did you end up starting to use ㅋㅋㅋ, π.π, or emoticons on Twitter?

P2: I cannot remember it in detail, but I think I ended up using it as I started online chat. I used to talk to people without it but I was often mistaken as a cold and stiff person.

Figure 5.27 A screenshot from interview with P2

Similar to P1, P2's motivation for using emoticons was as a means to tone down the seriousness in her language. P2 used these emoticons in informal settings. In our interview (see Figure 5.28), she explained that she often used emoticons during informal conversations with an audience of her closest relationships. She also emphasised that she would never use those emoticons with an adult audience. This shows that the topic structure of her tweets was often produced within informal or interpersonal contexts and with an audience of closest relationships.

P2 was also influenced by the medium and its constraints. She raised the character limitation on Twitter as her reason for not using a space between words and why she made more use of abbreviations and acronyms (see interview in Figure 5.29).

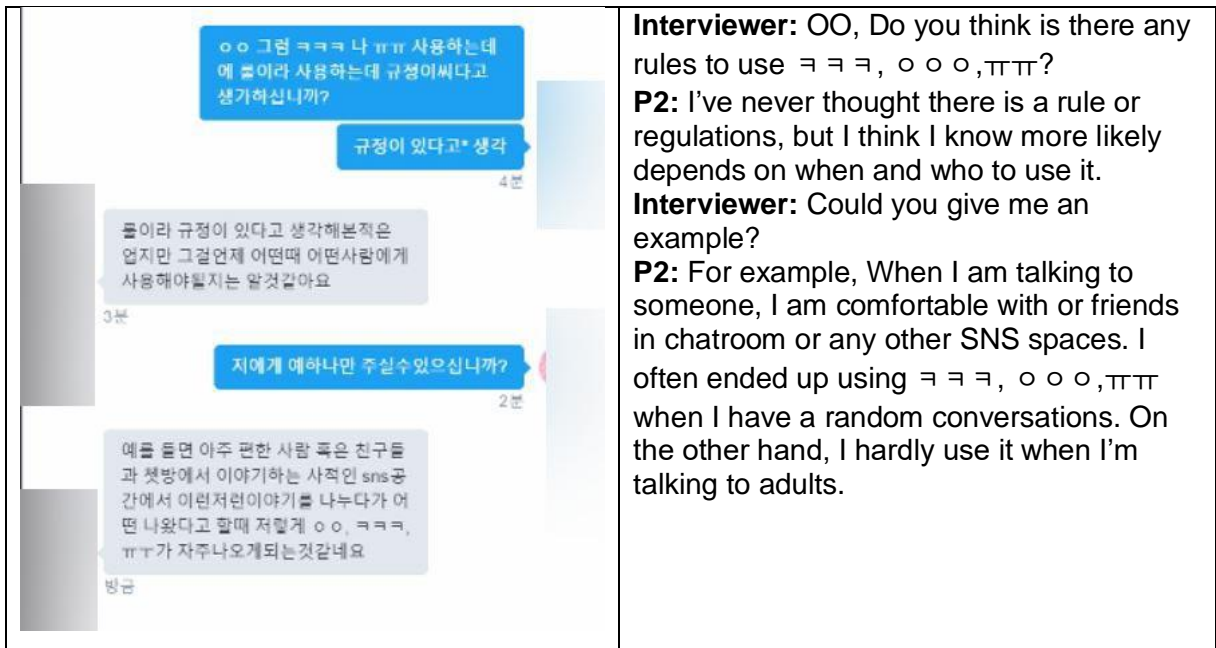


Figure 5.28 A screenshot from interview with P2

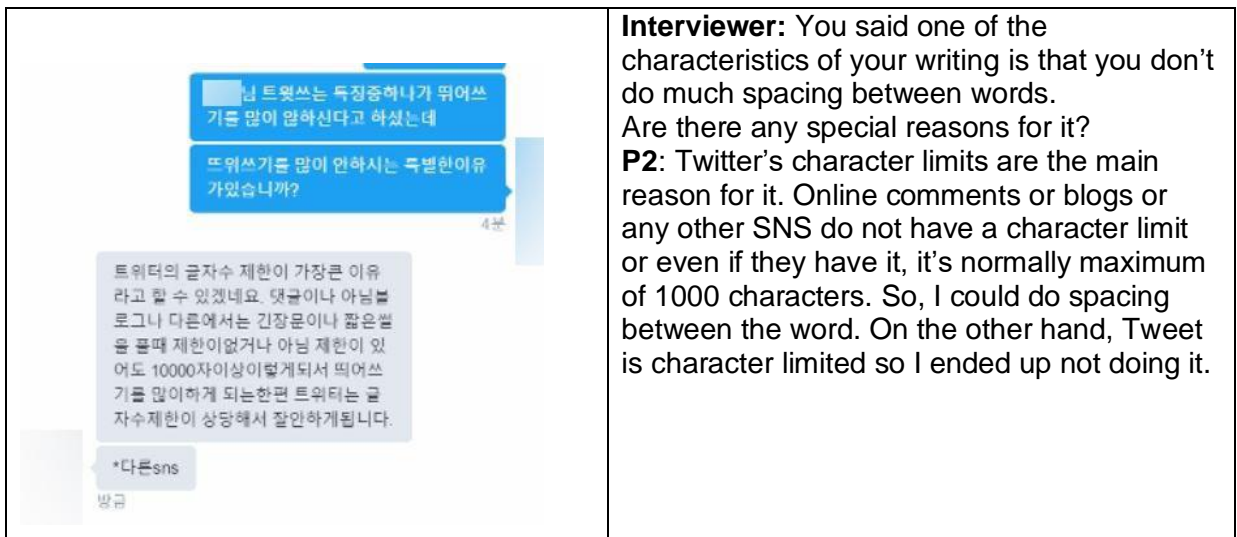


Figure 5.29 P2's discussion of Twitter character limits

5.5.3 Interview with P3

P3 is a passive online fan and gamer. I met her from using a Twitter search tag. We were able to establish a good relationship through exchanging fan art and conversations on fandom and games. During the interaction with P3 via Twitter, I noticed that she often used emoticons in her tweets. P3 herself was very aware of her frequent use of emoticons, as was clear when she described her styles of tweets in

response to the information sheet prior to the interview. Her characteristic use of tweets involved (1) emoticons, emoji, (2) GIFs, and (3) acronyms (lol, tbh).

P3's favoured the use of a pictogram-based typographic medium over a combination of characters and glyphs, as can be seen in Figure 5.30 in a capture of her Twitter header: her heavy use of emoji is visible in her user name; and even in her twitter bio, she incorporates emoji within her text.



Figure 5.30 P3's Twitter header

During the interview, she explained her rationale for using emoticons: they (1) are substitutes for words; (2) are visually appealing; and (3) express emotions or reactions to something.

P3 explained that Twitter's character limits were a key motivation why she started using emoji, because she regarded them as an effective alternative to represent a certain word. Figure 5.30 shows how she used emoji that portray someone throwing trash in the trash can as a substitute for the word, 'trash'. She also seemed to be influenced by the way other online users' manner of using emoji as an alternative, as she mentioned that she saw people on Twitter use lots of emoji.

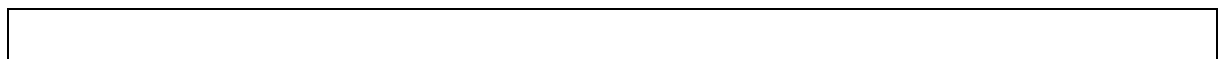




Figure 5.31 A screenshot from interview with P3

It was interesting to see the way she wrote V I E W S in emoji instead of just typing 'views'. As opposed to her main motivation for using emoji to substitute a word, she deliberately chose character emojis with extra letter-spacing. In this case, her use of emoji was for their visual salience. Concerning the interview (see Figure 5.31), P3 thought the way she used emojis on her Twitter bio was funny; and her typographic layout was influenced by the Drake album called 'Views'. In Figure 5.31, below the initial words, 'view' is presented in a bold, grungy looking font (often used by Rock music genres) with extra letter spacing between each character. P3's uses emoji as a typographic tool to simulate the typography used in a music album (see Figure 5.32). The use of an alternative font as emoji could be due to the limited range of Twitter's default font. Furthermore, it makes text more visually attractive. Pop culture and media image have inevitably influenced the participant's typographic layout and construction. She was aware of typographic use in the album, and she referenced it to create her own meaning in Twitter.

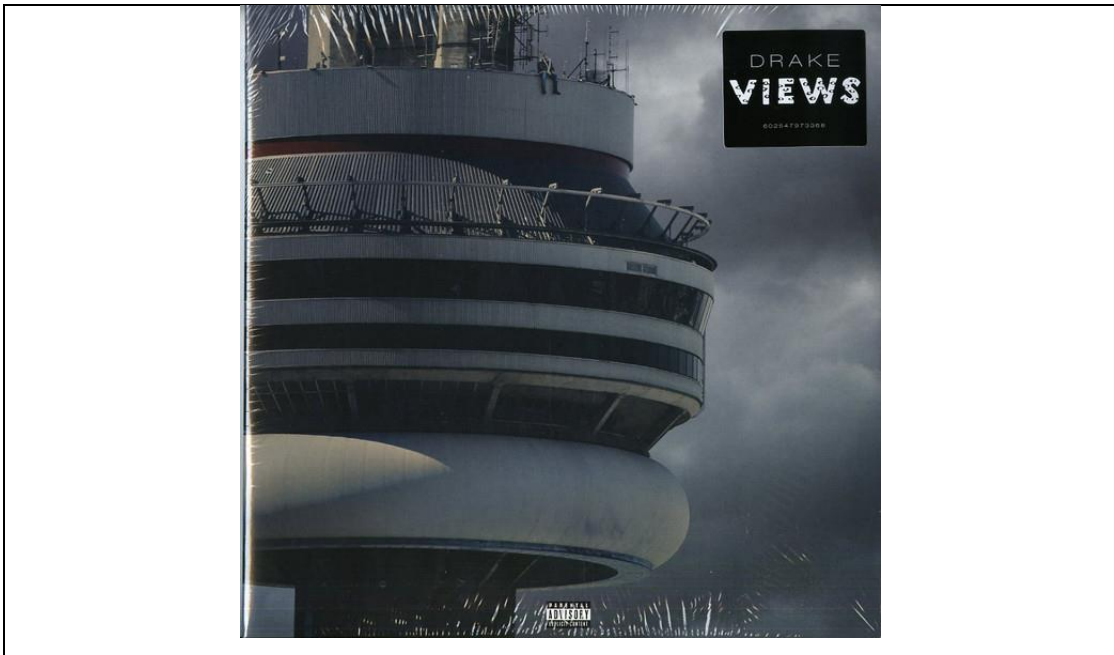


Figure 5.32 Drake album cover (Discogs, n.d.)

P3 also used emoji as an alternative to express her emotions or reactions to something. She rationalised during the interview that she preferred to use emoji and GIFs right after a sentence to express emotions or reactions to something. This showed that grawlix were often incorporated in expressive contexts. P3's views of writing on Twitter was more interpersonal and exclusive, as she believed that this particular form of writing would be understood by a particular group of people who share the same interest(s). For instance, her intentional use of 'V I E W S' with emoji could be understood only by other online users who share similar interests and knowledge of Drake's album.

5.5.4 Interview with P4

P4 described herself as a passive gamer. We met each other on Tumblr (blogging website). P4 and I were already close and had previously established a relationship long before the interview through our fandom. Twitter is her second social network for fan interaction and social status blogging. She characterised her style of writing on Twitter as involving these: (1) emoticons; (2) acronyms/abbreviations; and (3) GIFs.

During my interaction with P4, I noticed that she incorporated various typographic modes to portray her emotions and feelings. In Table 5.5, one sees that P4 often used

emoji at the end of a sentence to express her emotions. On the other hand, GIFs are used mostly by themselves, unaccompanied by any words or sentences. She often uses GIFs to express her reactions or emotions when she is replying to something. She also frequently used capital letters to express her excitement.

Table 5.5 A list of P4's various ways of expressing emotions

<p>Emoticons</p>	
<p>GIFs</p>	
<p>Capital</p>	

During the interview, she clarified that her intention in using emoji and GIFs was to express herself and her feelings. However, her use of acronyms or abbreviations was motivated by convenience.

During the interview, P4 sent a winking GIF. I asked her why she decided to send that particular GIF to me (see Figure 5.33).

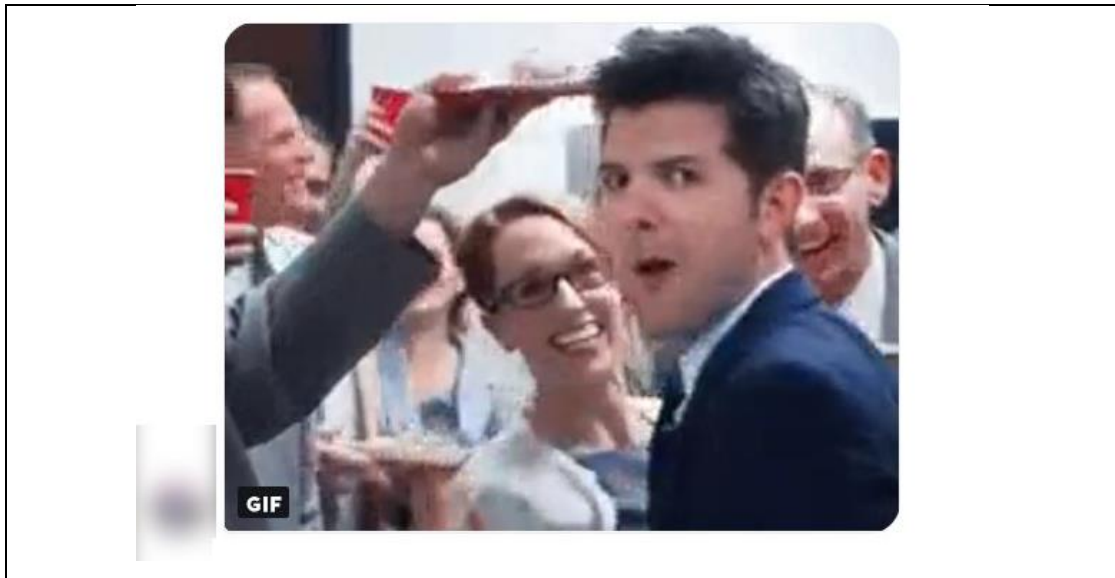


Figure 5.33 A screenshot from interview with P3: GIF

She responded that she felt like it was appropriate to use in this conversation because of the subject matter that we were discussing, i.e., it was related to emoji and GIFs (see quotation from Figure 5.34):



Figure 5.34 A screenshot from interview with P4 regarding GIFs

This shows that appropriateness of the topic was a factor that influenced P4 to generate her online text in a particular way.

It was also interesting to note P4's preference for using caps as a typographic mode to express anger or excitement, rather than using an emoticon. She subjectively rationalised this by saying that *caps seemed "larger" than emoticons* and so were better at expressing an emotion like anger (see dialogue in Figure 5.35).



Figure 5.35 A screenshot from interview with P4

Although P4's reasoning was subjective, P4's perceptions of caps as a better expressive medium than emoticons to represent anger or excitement shows that her decision-making on typographic elements was based on what stood out more visually from her (i.e., the writer's) personal perspective.

5.5.5 Interview with P5

P5 is a fan artist, a passive fan, and gamer. I also had previously established a good relationship with P5. We had also met online and developed a good relationship

through our fan activity and fandom. She was a very active Twitter user and she frequently used Twitter as a medium to socialise with her online fan friends. P5 described her use of language on Twitter as follows: (1) it eliminates letters or symbols in a sentence; (2) excessive use of emoticons; and (3) excessive use of repetition.

During the interview, she revealed two main motivations that determined her writing style: (1) efficiency and (2) emphasis. P5 explained that the use of abbreviations and acronyms was motivated by her desire to type text quickly. She exemplified her previous experience during her online gameplay, when she often used emoticons during video games to save typing time. She used emoticons and an excessive number of characters to “exaggerate” humorous content and express emotions, such as excitement (see the interview in Figure 5.36).



Figure 5.36 A screenshot from interview with P5

This interview script also shows that P5 employed different linguistic and typographic choices according to the digital platform and the audience (reader). For instance, her

reason for using acronyms in a net forum differed from her reason for using them in a videogame chat (see Figure 5.36).

Efficiency as a motivation was clearly shown in P5's demonstration of how she substituted 'u' for 'you', based on their phonetic similarity and on the fact that she thought that omissions of symbols highlighted only necessary information and the primary message (see Figure 5.37).

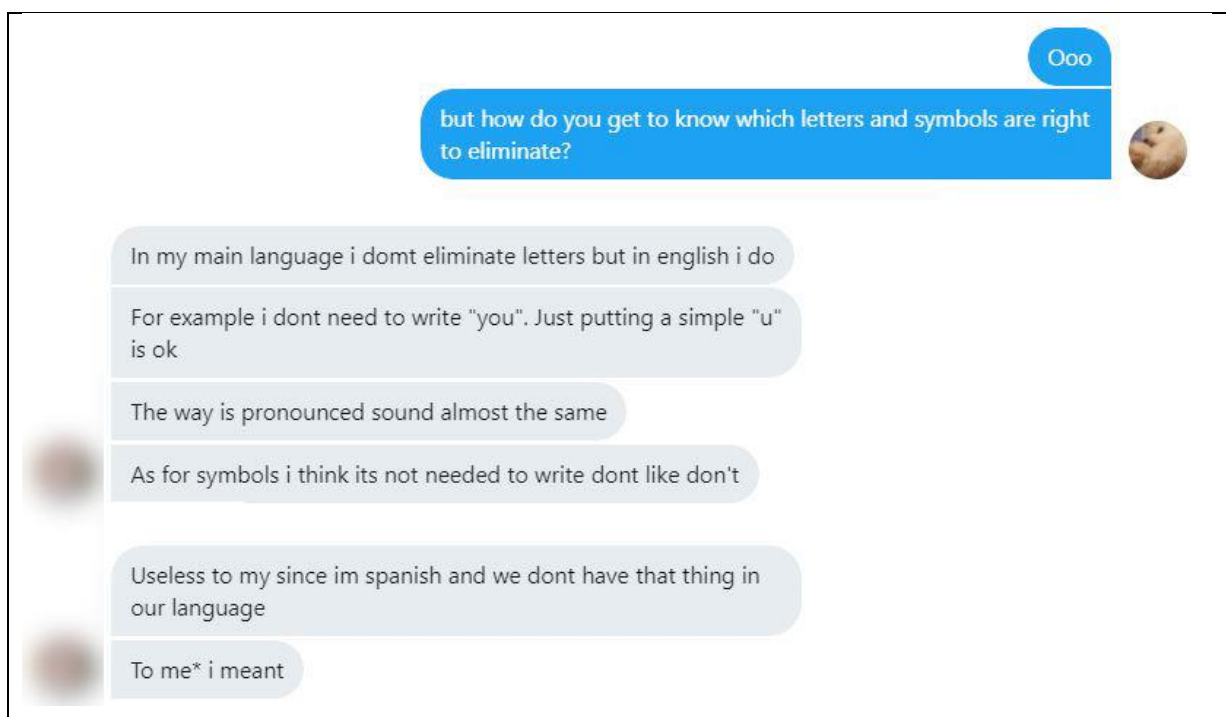


Figure 5.37 P5's substitution of 'u' for 'you'

However, she preferred to use these strategies in English (omit and eliminate letters or symbols), but not in her home language. In the section of the interview (see Figure 5.38), P5 explained that she regarded using abbreviations and omitting a character in her home language as not "cool at all". P5 believed that fewer variations are employed in Spanish. Through this interview, I realised that there are different attitudes towards using omissions and abbreviations in English and Spanish. P5 categorised her home language as suitable for communicating formal conversations, whilst English was used in more casual conversation. This was perhaps because conventions of omission and abbreviations in online are predominantly popularised amongst English users, rather than non-English speakers.



Figure 5.38 P5's perceptions of use of glyphs and numbers

P5 also believes that there were some influences from her fandom evident in her style of writing online. For instance, P5 associated her use of emoticons with Japanese media, such as anime and manga. The example such as emoticons (ToT) and (;A;) are similar to facial expressions of crying. By combining characters and punctuations creates a facial feature such as eyes, mouth, and tears. These imitations are often featured from Japanese anime and manga to portray character's emotions (see example in Figure 5.39).

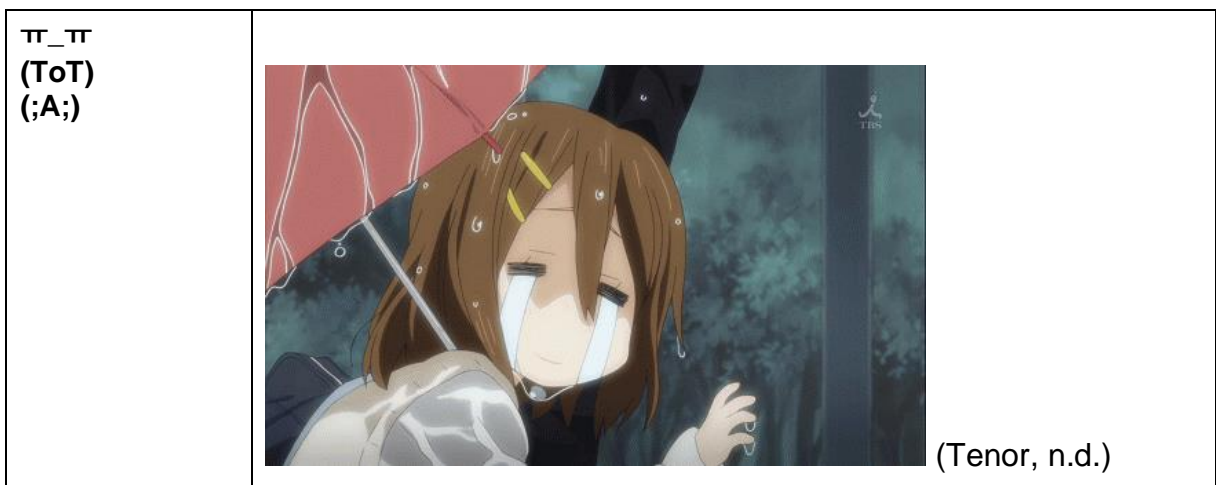
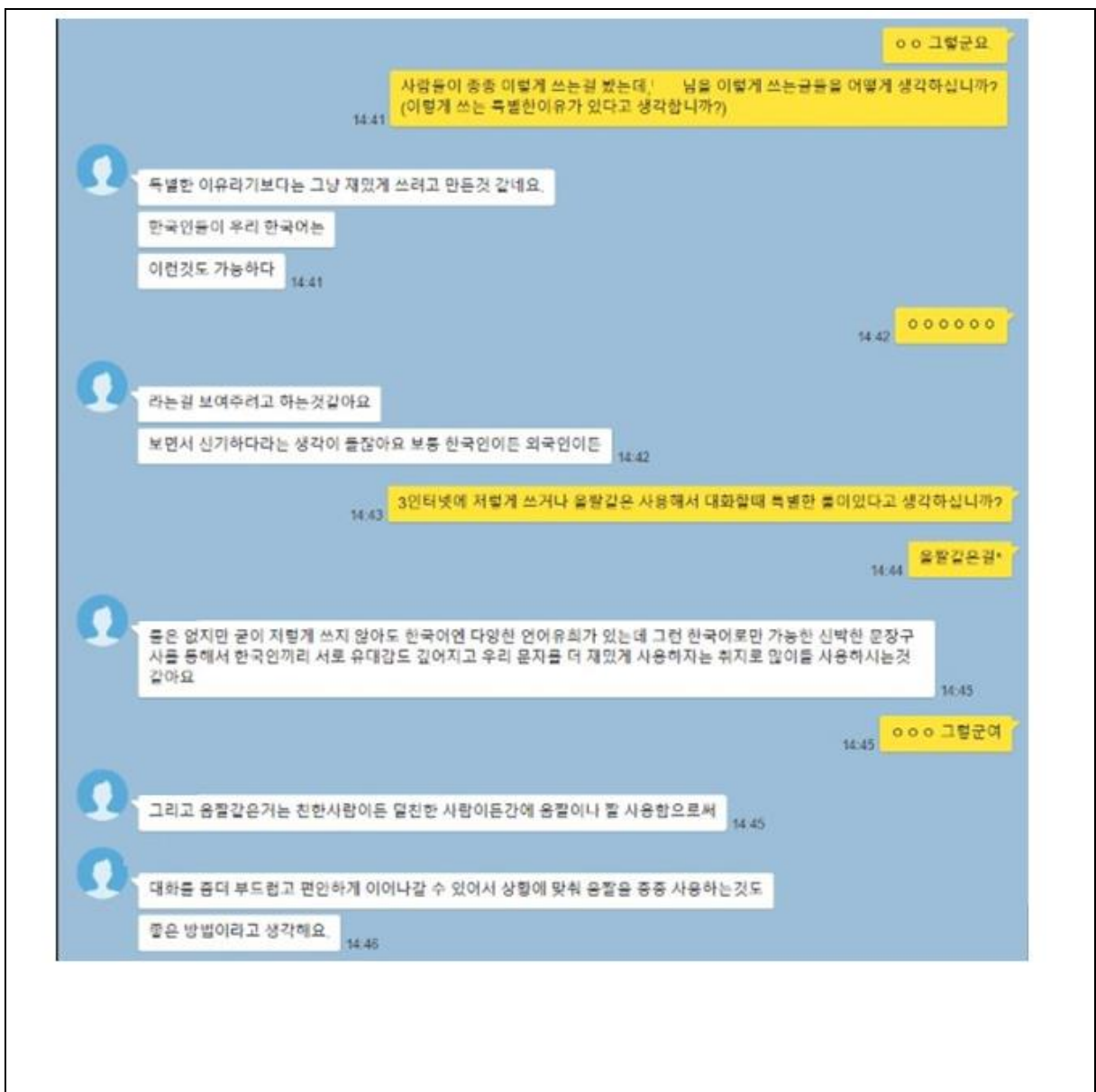


Figure 5.39 Example of influence of Japanese media on P5's writing style

5.5.6 Interview with P6

P6 is a fan artist and gamer. We met through the hashtag system mentioned previously in Chapter Four. Our similar interest in anime fandom and our frequent fan art exchanges assisted us to establish a closer relationship. P6 described her style of online writing as being distinguished by three key features: (1) abbreviations of words, ㅋㅋㅋ, ㅋㅋㅋㅋ, ㅎㅎㅎ; (2) no spacing between words; and (3) modification of words.

P6 viewed her particular writing style on Twitter as “fun” and “a playful” activity (see Figure 5.40). During the interview, I noticed that her choice of language focused on displaying a friendly tone of conversation (see Figure 5.40).



14:41 Interviewer: People seems like to write that. What is your opinion about it? (Do you think is there any particular reason why people write like that?)

14:41 P6: I don't think there are particular reasons why people use it. It just seems like made for fun.

P6: To shows a Korean can do lots of stuff with Hangul (Korean language).

14:42 Interviewer: ○ ○ ○ ○ ○

14:42 P6: If you look at this writing, it looks interesting, even if you are Korean or a foreigner.

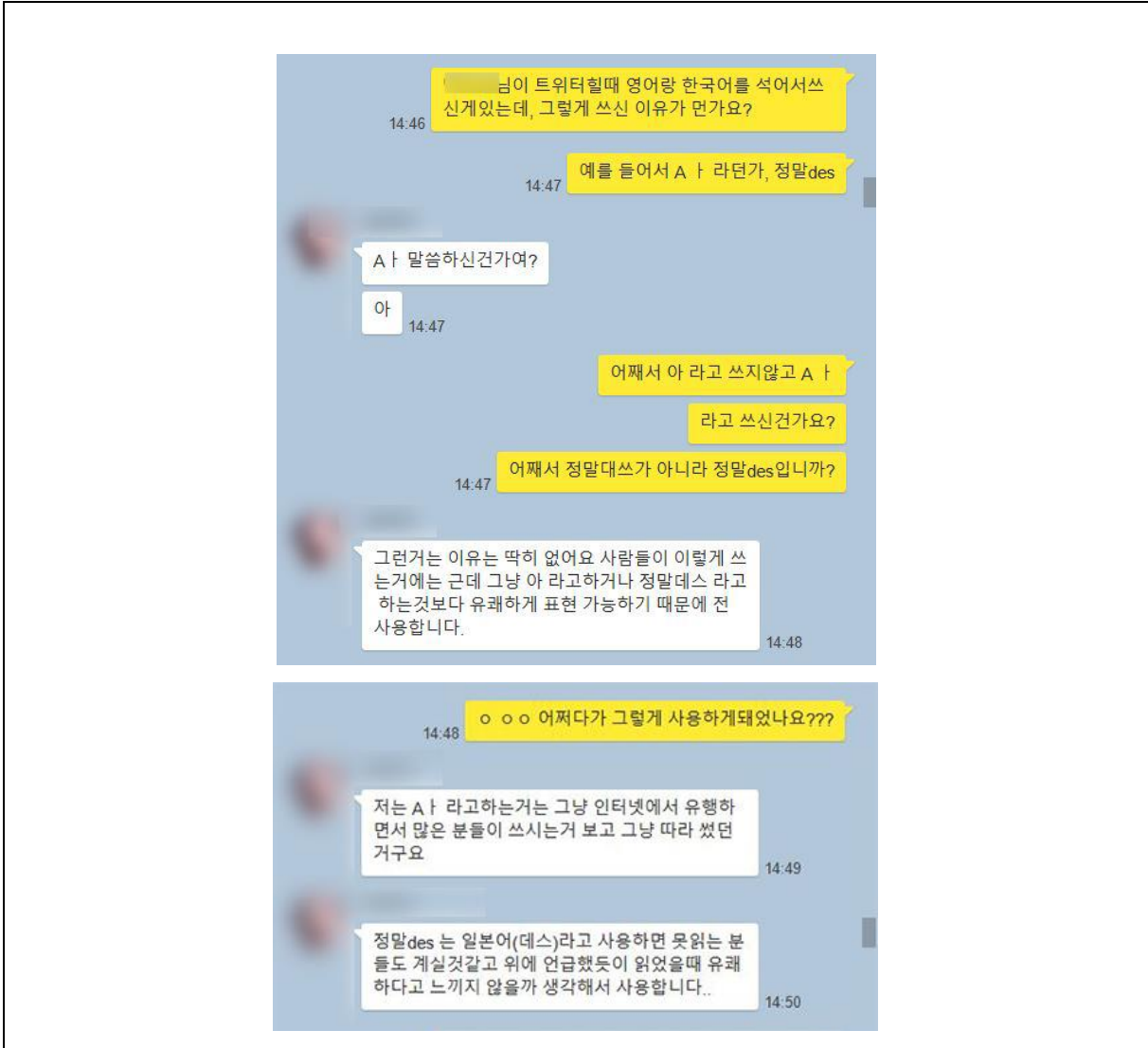
14:43 Interviewer: Do you think there are any particular rules to write like that or use gif to communicate?

14:45 P6: I don't think there are any particular rules to write like that. In Korea, there are various puns and internet slangs are used amongst Korean. Through this unusual way of writing Korean, it helps to increase the friendliness and I think the intention was to be more playful with Korean.

14:45 Interviewer: ○ ○ ○ I see.

14:45 P6: Also, something like GIF can be conveniently used to close or less close person, it makes conversation gentler and more comfortable. It seems like good idea to use gif often based on the situation.

Figure 5.40 A screenshot from interview with P6



14:46	Interviewer: I've seen you mixing Korean and English. Why did you write like that?
14:47	Interviewer: For example A ㅏ or 정말 des
14:47	P6: Are you talking about A ㅏ
	Interviewer: Why did you write like A ㅏ instead of 아 (ah)? Why did you write 정말 des instead of 정말데스 (reallydes?)
14:48	P6 I don't think there is any particular reason why. I've seen people write like that. It just seems more fun to write like that instead of just writing normally. I write like that because it seems more fun.
14:48	Interviewer: Ooo How did you ended up writing like that?
14:49	P6: I saw other people write like that (A ㅏ) on online. It seems like a trend so I copied it.
14:50	P6: '정말 des' is people might get confused if I write 정말데스. As I mentioned before, I think it looks more fun and playful to write that way.

Figure 5.41 A second screenshot from interview with P6

P6 stated that she often constructed her language based on the 'boundaries' that her Korean followers could understand. An example based on one of her textual artefacts is: '정말 des' (original text representation 정말데스). This word is translated as 'really?' in English. What makes this example interesting is that this word consists of multilingual semiotic elements. First is the Korean orthography and Korean alphabet. Second is the Japanese copula, です (Desu or). This is a word that grammatically links subjects and predicates. In English, examples are 'to be' or 'it is' (Koichi, 2007). However, it is written according to phonetic similarities in English and Japanese. English is incorporated as a third linguistic element. During the interview, I asked how she ended up constructing a word like that. She rationalised that she thought combining texts, 정말 (really) and 데스 (Desu) and might seem 'unreadable' to other followers who were not very familiar with Japanese. Although it was a very subjective reason, this example shows that the word 정말 (really) was her primary message, which was strictly linguistically bound to one conventional rule. However, this also provides insight into her use of 'Desu' (Noted that P6 wrote Des instead of Desu because Desu is a phoneme, the translation of this phoneme into a text may translate different to the person), which is more of a typographic use. By this means, she incorporated non-linguistic elements, not for communicative purposes, but to lend personality to her character (she mentioned it made the word seem "more fun").

It is also important to note that 정말 des (Really-des) may seem like a multilingual sign produced by a bricolage of English, Korean and Japanese, but it does not communicate across the cultures. 정말 des (Really-des) developed an extensive semiotic system of its own as it is separate from the conventional linguistic forms (even though '정말 des' is only comprehended by Korean users). The use of 'des' could also be adopted by English users by constructing words like 'reallydes?' as 'des' or 'desu' is commonly used amongst anime fans due to their general knowledge of fandom.

It was evident that this multilingual sign was not used to communicate across different languages, but to emphasise visual interests and personal appeal. Furthermore, the interview provides interesting insight into the process of code-switching languages and bricolages, such that P6 drew on various knowledge sources, resulting in new typographic signs for communication purposes.

5.6 The IPA: The lived experience of online fans as readers

This section is a sequel to Section 5.5, as it extends the analytical interest in online fans as writers and then attempts to describe the lived experience of online fans from the perspective of their being readers. I will reflect on findings from the interview data. I will discuss how readers gain access to writers' texts and what kind of reading strategies they employ to obtain new typographic knowledge which enables them to construct their own interpretation of messages. Please note that this section of the findings does not include an interview with P1 because our interview did not continue beyond the topic of the writer's perspective.

5.6.1 Interview with P2

During my interview with P2, I asked her how she coped with new symbols and signs used by her followers. Based on her response, I identified two main strategies she employed when her online friends communicated with her using unknown typographic communication. These are: (1) asking; and (2) assuming (see Figure 5.42).

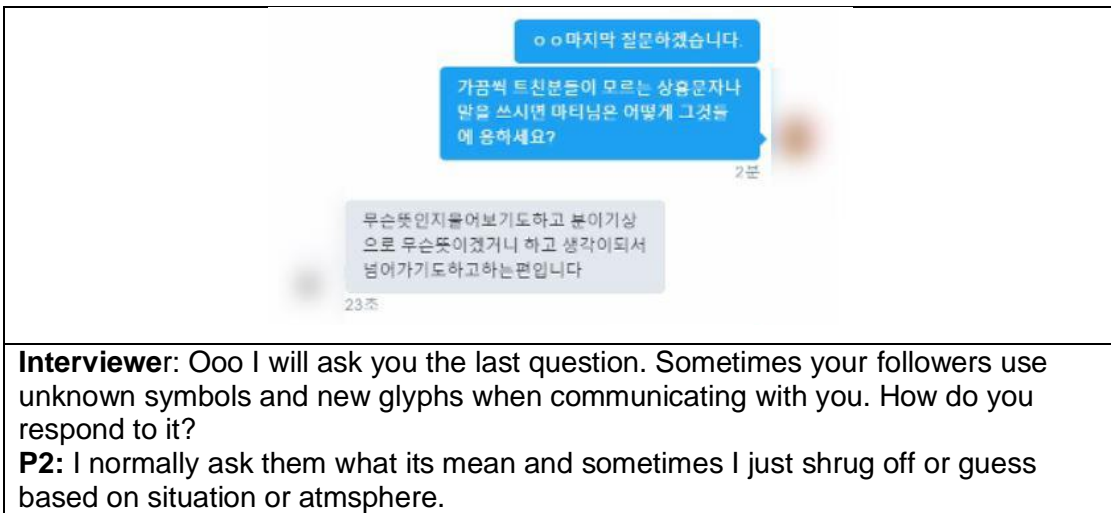


Figure 5.42 A screenshot from interview with P2

During my participant observation sessions, I also experienced and perceived the usefulness of asking as a tool to facilitate learning, to access new typographic forms and understand new internet sign. I found this method to be the most effective way of interpreting texts. P2 also adopted the practice of ‘assuming’ the meaning of text based on the atmosphere and context of the conversation. This shows that the atmosphere and the context of online conversations play an important role in providing cues to help the reader interpret meaning in online texts.

5.6.2 Interview with P3

As I had asked P2, I also asked P3 how she coped with new typographic communication (see Figure 5.43). The findings comprise responses similar to those from P2: P3 explained that that she preferred to guess meaning through the content.



Figure 5.43 A screenshot from interview with P3

5.6.4 Interview with P4

P4's approach to unknown typographic communication was one of these: (1) ask; (2) ignore; or (3) search, as a method to cope (see Figure 5.44).

One of her methods was to search, or to "google it", something the researcher herself experienced and often relied upon as a method to cope with understanding a new sign. The participant seemed to rely on self-interpretation, rather than directly asking others. She would ask only if she had a close relationship with the text producer.

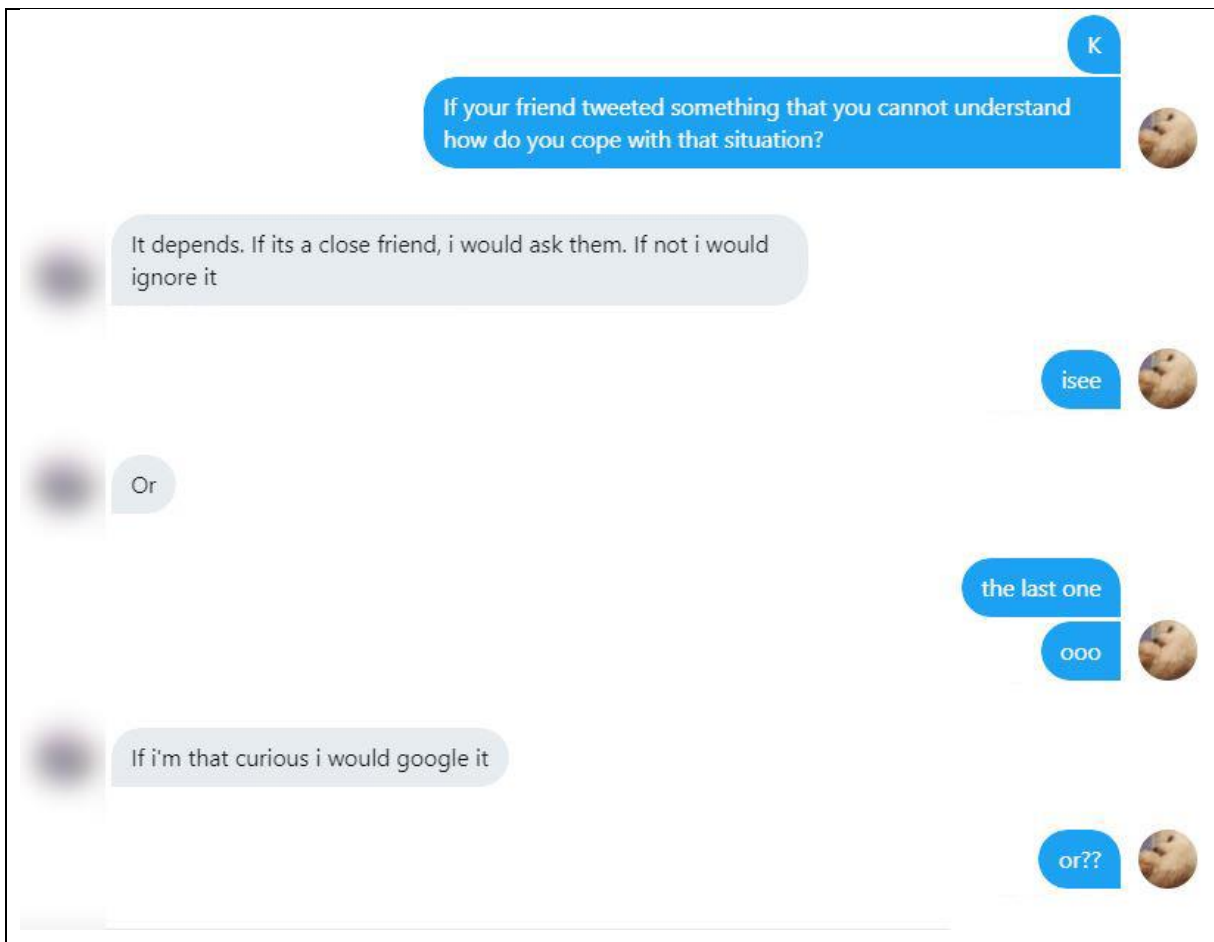


Figure 5.44 A screenshot from interview with P4

Furthermore, she translated random signs portrayed in a tweet from her Twitter timelines (see Figure 5.44). When I showed her the example of the tweet composed in Arabic characters in Figure 5.45, she described how she at first perceived an Arabic character as a leaf. After that, she incorporated her linguistic knowledge to interpret

the symbols as representing a laugh, “Ha”. It was interesting for me to note how she translated an arbitrary sign into written language, based on characters.

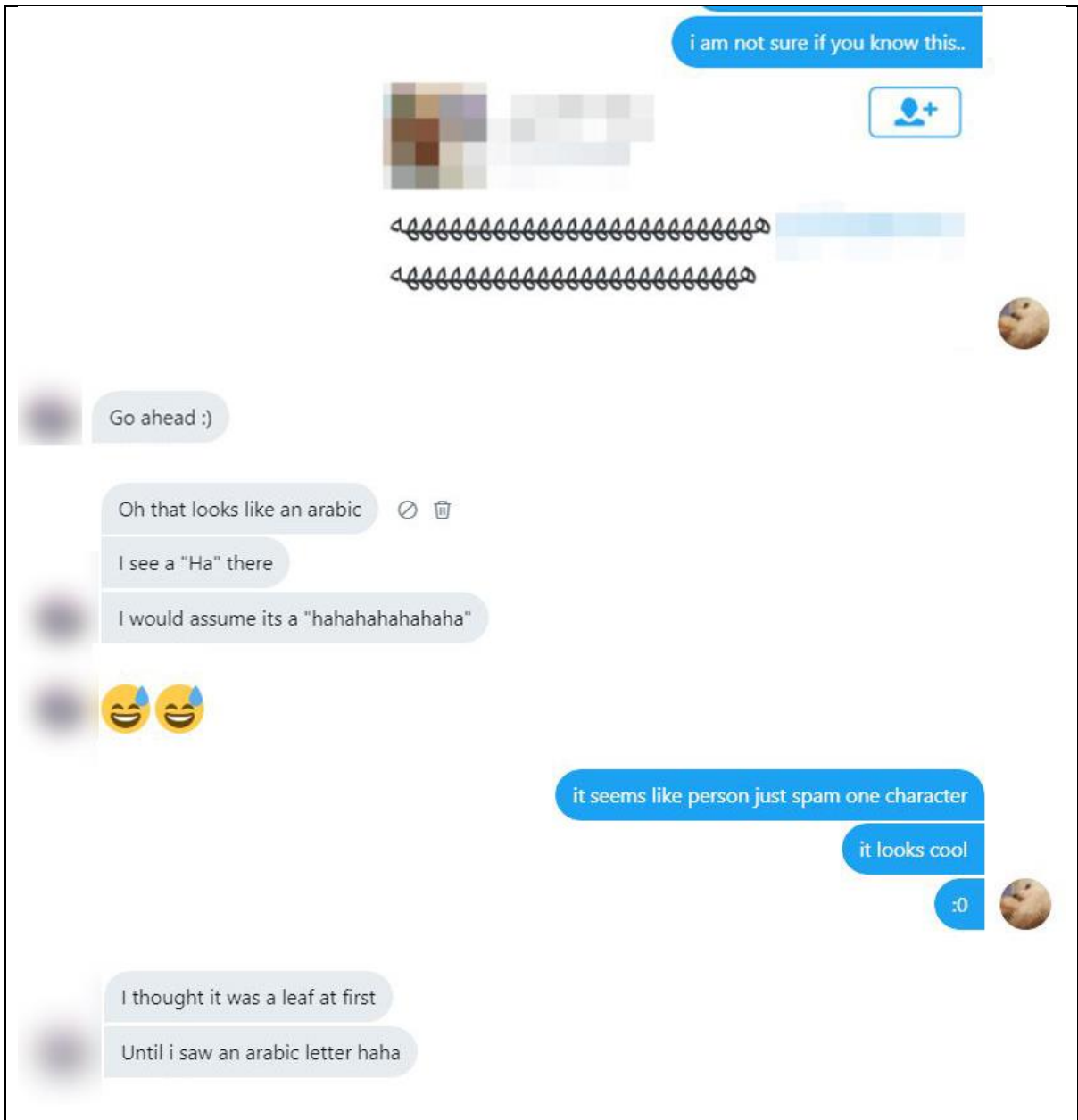


Figure 5.45 A screenshot from interview with P4



Figure 5.46 A screenshot from interview with P4

She was also the only person who noticed that the Korean hashtag in Figure 5.46 was written in Korean. This was interesting and fascinating for me to note, because pseudo-alphabets were used in the hashtag. From the combination of alphabet letters, numbers, and Hangul⁹, it was difficult for a non-Korean speaker to distinguish the written language. Even though P4 could not accurately interpret the meaning from the typographic symbols (she commented that she did not “speak nor learn Korean”), she was able to distinguish meaning, despite its unconventional representation.

5.6.5 Interview with P5

This section displays the data obtained from the interview with P5. The most popular method used by P5 was solely Google Translate. She explained that, if a tweet contained any interesting images or a video, she often used Google Translate to help her understand what she was viewing. However, If Google translate does not able to translate the text, then she often chose to ignore the online text she does not have any knowledge on.

P5 also raised her previous experiences with a particular use of number 8 as a substitution for the pronunciation of ‘ate’ (see transcription, Figure 5.47). It was interesting to note P5’s journey to understand how number 8 became signified as a word. At first, she explained that she was not able to interpret “l8u” as “I hate you”, because she only signified ‘8’ as the number eight. However, as she found out how other persons used it in a different context, Sk8ter boy, she was suddenly able to re-interpret the number as a word that signified the sounds for ‘ate’. Her experience clearly shows that a user looks for a relevance cue through how a glyph is used in a different context to supplement personal interpretation. This was how P5 coped: through referencing others and their use of text as a cue for her own interpretation.

This finding may explain how users were able to obtain new typographic and linguistic knowledge independently, instead of by directing asking.

⁹ Hangul is a Korean phonetic written system.



Figure 5.47 A screenshot from interview with P5

5.6.6 Interview with P6

The interview data obtained from P6 revealed that P6 often used Google Search to provide a cue for interpretation. P6 shared her story of how she had learned from other people when she communicated with her online friends. For instance, she explained how she ended up using sign A ㅏ (ㅏ) online (see Figure 5.48).

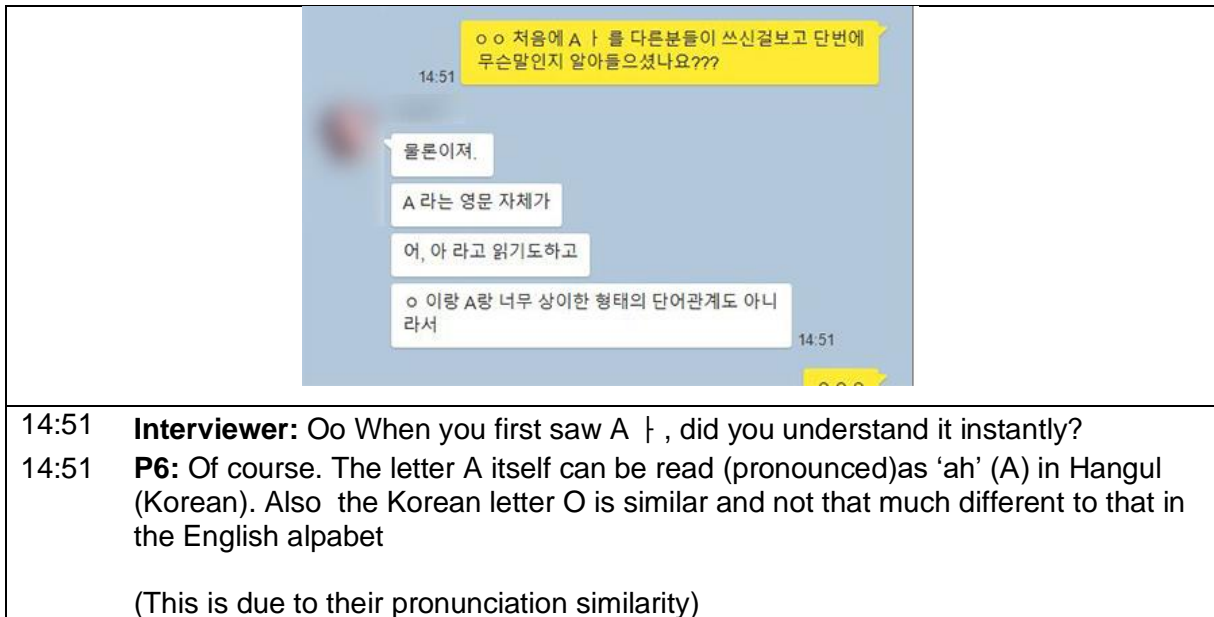
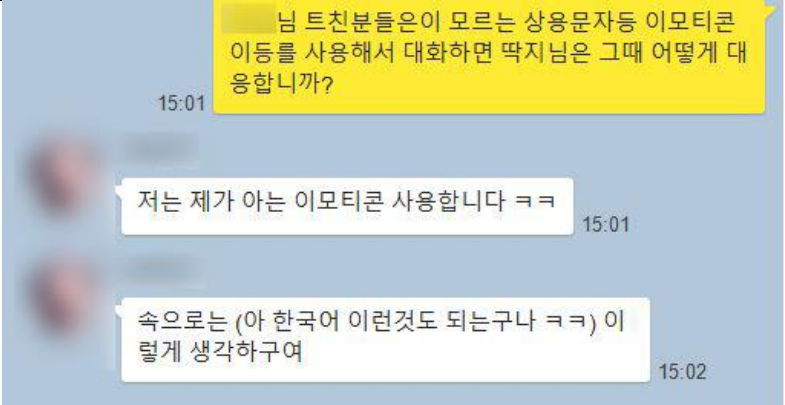


Figure 5.48 A screenshot from interview with P6

This exemplified that P6 used imitation as a method to learn new typographic forms. Unlike P5, P6 showed a different approach to understanding unknown signs. During the interview, I asked how she would respond if typographic features were unknown to her (see Figure 5.49). Her approach to new typographic signs was to respond with something that she knows. This response of P6 showed that she often self-organised to seek for meaning.



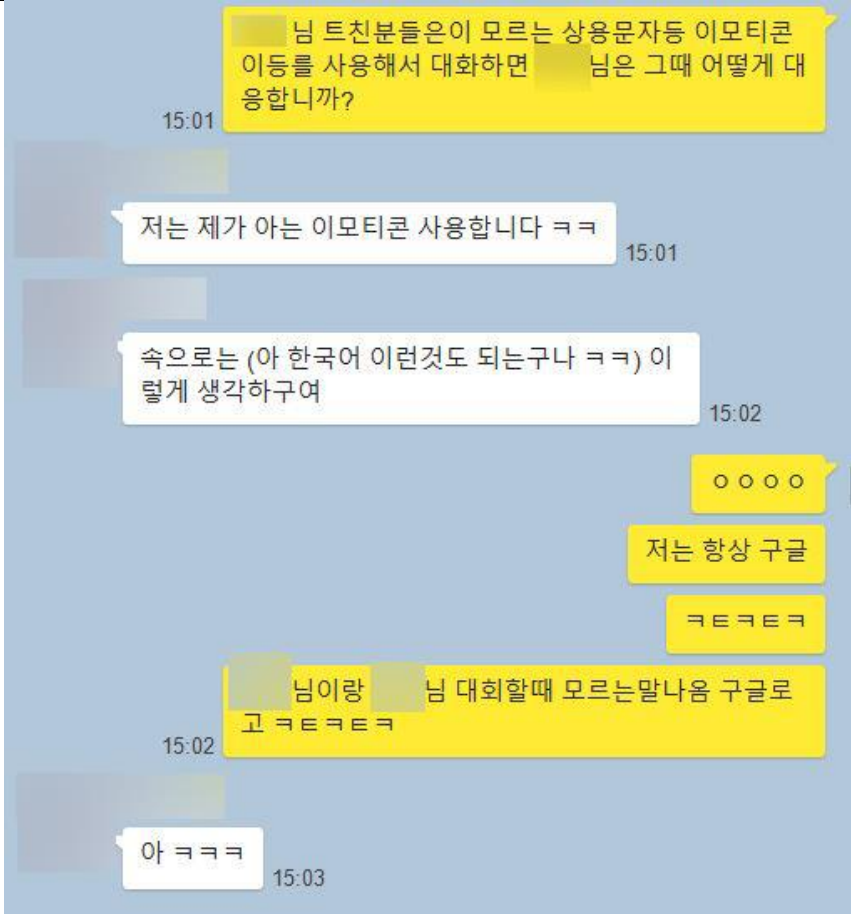
15:01 **Interviewer:** How do you respond when your follower tweeted with unknown glyphs or emoticon to communication?

15:01 **P6:** I normally response them back with emoticon that I know (Lol in Korean)

15:02 I also think to myself that (wow, you can use Korean like that lol)?

Figure 5.49 A screenshot from interview with P6

P6 also believed that she often obtained new typographic and linguistic sign through her Twitter timeline. She admitted that she was influenced by her fandom. During the interview (captured in Figure 5.50), she explicitly explained how this occurred.



14:58	Interviewer: Could you explicitly explain how fandom influences on your internet language?
14:59	P6: If you look at the people on Twitter timeline, there are lots of tweets?
14:59	Interviewer: Ooo
15:00	P6: When I respond to these tweets and communicate with followers, I end up learning new language.
15:00	Interviewer: I see
15:00	P6: That's the influence of fandom. I was influenced by my followers that I fandom with.

Figure 5.50 A second screenshot from interview with P6

This data provides insight into the importance of fan interaction in obtaining new typographic forms. The tweets generated by other followers and their usage of typographic elements provides various examples and cases that allow online fans to obtain new knowledge.

5.7 Summary of findings

This section explores findings related to typographic genres established in online communication. The author believes that there is a conceptual shift in grawlix communication as an online fan is introduced as a new producer of grawlix text within online settings. The findings presented in this chapter provide insights to help unravel grawlix communication used in digital settings. Table 5.6 summarises typographic layouts and conventions used within Osu and Twitter.

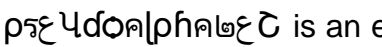
Table 5.6 Summary of findings

Medium Types	Twitter	Osu
Typical context of use	Asynchronous setting (The text could be exchanged in offline and online interaction.)	Synchronous setting (The texts are constantly exchanging through multiple users.)
Typical format and configuration	<ul style="list-style-type: none"> • Character is restricted to 140 characters • Image upload is restricted to four images and only one GIFs • Online text is produced within the compose box. • Online text is accessed through Home timelines. 	<ul style="list-style-type: none"> • Text produced within text box • Text is exchanged through the chatroom display box • No character limitations • Online text is limited to 140 characters and Unicode
Typical treatment of verbal language	<ul style="list-style-type: none"> • Text is mostly accompanying by multimedia mediums. • Text could be displayed vertically, horizontally and diagonally. 	<ul style="list-style-type: none"> • Typographic choices are limited and fixed. • Relies heavily on colour codifications • Text written horizontally only • Codification of signs • Variety in typographic choices (e.g., GIFs, Images, video, etc.)
Typical treatment of visual language	<ul style="list-style-type: none"> • Diverse use of non-typographic features • Highly pictographic • Text layout is dynamic • Use of outsourced materials from other websites. 	<ul style="list-style-type: none"> • Heavy use of characters • Colour codification • Text layout is static • Relies on more than characters and symbols to create a complete image

These findings are aligned with three research sub-questions to describe grawlix in this particular study (see Section 1.5 in Chapter one).

As mentioned in Literature, typography is a multimodal medium (Nørgaard, 2009). to comprehend typography requires understanding of the visual presented in a particular context. The context in research looks into the various considerations. Kress and Van Leeuwen's (2006) a social semiotic perspective of social and cultural context embodied in visual mode. Also, Waller's (1987), the relationship between writer and reader and the medium presents typography on are proven to be important factors to typographic communication. I intended to put these into considerations to understand typographic context and will formulate discussion to answer my research question.

The first research question interrogates the distinctive quality and typographic features that emerged from a study of gawlix communication in online settings. Findings of this section are aligned with the first research question: *What is the essence of gawlix-ness to online fans?* This section aims to describe gawlix-ness in the context of online fans.

My analysis of gawlix examples and the interface of Osu and Twitter suggest that gawlix-ness is characterised by (1) eclecticism and (2) multifaceted characteristics. The findings show that gawlix often involves bricolage processes: users combine and reuse various semiotic resources available online.  is an example of gawlix. Furthermore, typographic elements are not limited to text, but extend to various multimodal elements, such as a GIF or a short video incorporated in Twitter and hypertext links used in Osu, as mentioned earlier in this chapter. It is important to note that gawlix's eclectic and multifaceted characteristics are possible because of digital mediums. Lupton's (2010) mentions of digital medium allows non-professionals to access fonts and design their own text is quite accurate. Although there are many open sources available on internet allow users to access various typographic resources and distribute these. However, it is also important to consider constraints within a medium that motivate the combinations of various outsourced resources.

In the findings, I mentioned the constraints of each medium in relation to available typographic choices. For instance, Twitter's character limitations may encourage users to substitute emoji or images to create a new word or add additional visual cues to a context. In Osu, game players may incorporate more than one characters: there are glyphs and Unicode to create emoticons or images that represent facial expressions. These compensate for the lack of visual and typographic features within game chat.

To discuss the driven force of the gawlix-ness, in this section, I will attempt to explain the contextual behaviour of online fans and their bricolage processes as they use various typographic and semiotic resources. The discussion is centred around the second research questions: *Why do gawlix users practise with gawlix as communication tools?*

The contextual behaviour of grawlix is based on *saliency*. By this means, the user is drawn to what is relevant to online fans. The role of typography in grawlix changes, based on a user's needs. Typography could be used as a visual cue for para-lingual purposes. In some cases, it is used to compensate for the lack of physical presence in face-to-face communication. It is occasionally used to present emotions, facial expression, gestures, atmosphere, and moods of a conversation. Other purposes are the creation of social emblems and personalisation. The document analysis of the artefacts and the interviews with several online fans suggest that grawlix is used as a tool for social interaction. For instance, GIFs, emoji, emoticons and excessive use of typographic characters are used to portray a user's tone of voice, facial expressions and gestures. Also, certain typography represents the user's personality and character, such as when P1 perceived that an excessive use of character ∇ represented 'a playful person'. Various typographic elements are therefore used to display a user's self-image. This may be due to the influence of social networking sites, as these are designed for social interactivity. According to Deumert (2014:28), playfulness is a feature of social networking sites which allows the user to construct a ludic self in the new media context.

The third research question implies various factors that might motivate a user's typographic choices. *The research question reads: How do online fans make the decision to choose a particular typographic element as a grawlix?*

During my data analysis, online fan's rationale for their typographic choices were all subjective and based by personal preferences. However, online fan as a writer is aware of the *appropriateness* of the context and audience. As Harkins (2011:22) stressed importance of use of typography within the context of their own subject in Graphic design practice in literature. The appropriate use of Grawlix is often associated with casual and playful moods in informal contexts. This emerges from the data as many participant views that there are no particular rules but the use of in certain context is important. For instance, P1 points out that use of Gifs or emoticon are not appropriate to use in serious situation because it might undertone the seriousness of the conversation. P2 also shares that she believes there is no particular rules except people must know who they are talking to. P2 described that she often uses emoticons and other grawlix typographical symbols when she is having a personal conversation

with people she is close to. P3 mentioned the appropriateness in the use of typographic symbols is related to a particular group that might not be sensitive to that group. P4 during the interview also outlines that she won't use emoticon or gifs during a serious conversation. P5 distinguishes her different use of abbreviations, emoticon, and emoji during the interview, as she exemplified that she only uses abbreviations/acronyms during gaming chat for efficiency whilst, emoji and emoticons were used to reactions and humorous context between close friends.

P6 shares interesting thoughts regarding to this particular way of writing and choices as similar to interviewed participant, she also believes that there is no rule however she perceives this particular way increase the tones of friendliness and it could bring up conversation naturally flows. P6 regards this particular way of writing and using typographic forms as a tool to create a tone of the conversation, a character and her own writing style. It is important to note that this purposeful usage is attempts to influences on the interpretations of reader. Moys' (2011) view of typographic voice influences on document interpretation and Waller's (1987) view of typographical layout creates a typographic genre are featured from data analysis. The findings show that gawlix as a typographical effect that plays an important role in moods and interpretations of online text. Furthermore, I would like points that the purposes of typographic use in gawlix is to serve informal and playful tone. Therefore, user often bricolages various aspects (the user's knowledge in language, medium, fandom and other media) to create visual saliences. The visual salience of elements depended on what participants intended to signify. For instance, P6's reason for using a mixture of Korean, English and Japanese characters was to emphasise some visually interesting qualities of her message and make the message appealing to attract her followers. This synthesising user's various knowledge and their purposes to visual enhancement may results of eclectic forms.

To contextualise the typographic genres in gawlix, further discussion is covered in Chapter six to address the main research questions introduced in Chapter one.

CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1 Introduction

This section attempts to uncover notions of grawlix communication and its nature by synthesising the findings from Chapter five in relation to relevant literature and my chosen theoretical framework. I intend to address the main research question: *How is grawlix used as an alternative form of linguistic and typographic communication?* An analytical approach was adopted to consider the grawlix genres alongside Waller's (1987) typographic genres model. Based on this discussion, conclusions are drawn. Following this, recommendations for further research and research limitations are resolved in the Conclusion.

6.2 Contextualising online fan

This section begins by identifying the writer and reader syntagms. I aim to display the roles of online fans as writers and readers, as well as the purpose of grawlix in the context of my research interest. These three syntagms are summarised below, based on the findings.

Online fan as a writer. The role of the online fan as a writer is to consider the appropriateness of a conversation in context, which includes the audience. The interview findings indicate that, when online fans are constructing their own text, they often consider factors such as technical constraints, the mood or atmosphere of the conversation, as well as their subjective knowledge and then draw on these influences as the basis for decisions on the typographic layout to use in a digital setting. Online user's complex and synthesising various aspects similar to Harkins' (2010), view of typographic practice involves with designer is being aware of their audience, the context and message intended to express. Furthermore, this finding exemplifies Lupton's (2010) and Yee's (2006) statements of the role of designer and audience is diffusing as digital technology enable co-creations between the designer and writer (Shedroff,2001).

In the findings, I concluded that factors that determine online fans' typographic choices are the users' thematic choices in relation to what they want to emphasise visually. For instance, engaging with the lived experience of P3's various use of emoji in headers made it clear that these served different purposes. A user chose the emoji of a trash can as a substitute for words; on the other hand, the emoticons assembled to spell 'VIEW S' expressed the user's attraction to visual images and her social affiliation with other online fans who were familiar with Drake's album titled 'VIEW'.

Online fan as a reader: The role of the online fan as a reader involves their need to have sufficient knowledge of online mediums and an understanding of the conventional uses of online language. As mentioned by Thomas and Harri-Augstein (1980) in self-reliance in textual interpretation, a user often relies on self-interpretation and self-organised reading strategies. I noticed that most online fans have a certain expectation and a habit of using typography in the certain context. For instance, P1 and P2 believes that Gif is not appropriate to use in serious conversation. This related to Hofstadter (1995), visual processing of identifying key context and habits are featured and contributed to online fan's interpretation.

There is also a need for flexibility to accept and adopt new signs. It is clear that typography used in online context is social. As Tagg and Seargeant (2014) mentioned in literature, the chain of meaning produces in internet and create a various typographic form. Online fan attempts to obtain knew typographical knowledge through their interaction of other online fan and their use of typographic presentation and recreate into their own. During interview, many participants obtain knew typographic signs through their interaction with their follower. I also have experienced this through my own interaction with online fan on Twitter and in-game with Osu.

Grawlix as the online text: Eclectic and bricolage typographic systems are established for social purposes in digital mediums. The purpose of grawlix in this case is to signify paralinguistic features, such as gestures or facial expressions. This was visible in the artefacts produced by online fans, such as emoji, TT TT or xD or Gifs which are often used as alternatives to written reactions or emotional expression. Alternatively, grawlix may portray a user's tone of voice (many participants emphasised that the purpose of online text increased the 'friendliness' of a conversation). This online fan's use of

typography in online is every similar to the quality of typography mentioned by Shaughressy (2009). Furthermore, user tends to use typography as tool to portray herself as some examples demonstrated in findings such as P1 associated excessive use of character with ‘fun’ person. Typography in online is effectively used to portray a self. After contextualising these three syntagms, I will now contextualise three functional structures mentioned by Waller (1987) to formulate genre structure in Grawlix in digital medium to conclude this research findings and discussion.

6.3 Conclusion

This section of Chapter six attempts to re-contextualise the notion of genre shifts in grawlix. I attempt to draw a comparison between grawlix used in printed medium and digital medium to illustrate the genre shift and distinguish what is means grawlix in the content of digital medium (See Table 6.1).

Table 6.1 Summary of genre shifts in grawlix

Waller’s genre structure variables.	Grawlix in printed	Grawlix in digital
Topic structure	Narrative display in displayed block. Each block is sequential.	Compose text through the interface of the medium and the features available on medium. Dynamic outsourcing (Hyper-textuality for additional information.)
Artefact structure	The limited space in the printed medium (paper size, text must not too long to fit into the bubble speech etc.)	Character limitations or limited in technical features such as a limited typographical feature in Osu in game chat. All depends on the digital platforms,
Accessing structure	The reader access text through their prior experiences in reading comic strip.	The online fan access text through online interaction. Socially and through the on-screen medium.
Genres	Use Grawlix for censorship and enhance narrative and emotions in comic story.	Use Grawlix for social communication purposes. Use Grawlix as an expressive medium of self.

The summary shows that there is a definite genre shift in Grawlix. The initial use of Grawlix in comic is used a visual mode to enhance the narrative in the story and express emotions of the character. Contrarily, Grawlix in the digital medium more led to social and interactivity. The online user uses it to express self, rather than tells story. Also, I would like to argue that Grawlix is a dynamic entity for the following reasons,

1. The use of grawlix in online text is interpersonal as the internet language is regarded as heterogeneous because of its various uses in users, genres, and context (Hård af Segerstad, 2002).
2. The interactivity and content sharing of the internet and digital medium allows people to a multiplicity of experiences to socio-cultural product continuously (Shedroff, 2001; Seargeant & Tagg, 2014).
3. There is no specific standard and rules. Many researchers regard grawlix as a visual guideline to comic artists and comic readers to read comics effectively (Walker, 1980, 2000; Van Elburg, 2013; Curb Nottus, 2017). However, grawlix text online is continuously consumed by fans and other online users and reshaped. Online grawlix text is impermanent.

These unique qualities of grawlix in the digital medium differentiates grawlix from the conventional use of grawlix in a comic strip. As long as there are online users and fans to exist, grawlix will continuously evolve and changed.

6.3 Recommendations

A question that some may raise is: 'Why should we, as designers and educators care?' My findings could be developed for educational and economic purposes and successful visual communication. By understanding current social and technological contexts in relation to typographic practice and usage will assist Graphic designers in understanding contemporary typographic manifestations and identifying more comprehensive framework in graphic design practice.

As this study was conducted solely in two digital settings, namely on an in-game chat site and a micro-blogging site, it is likely that there could be various other digital interfaces and mediums that employ different typographic mechanisms and have a different effect on typography. Further investigation is therefore needed to explore these possibilities.

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APPENDICES

Appendix A: Ethics clearance



P.O. Box 652 • Cape Town 8000 South Africa • Tel: +27 21 469 1012 • Fax +27 21 469 1002
80 Roeland Street, Vredehoek, Cape Town 8001

Office of the Research Ethics Committee	Faculty of Informatics and Design
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At a meeting of the Faculty Research Ethics Committee, ethics approval was granted to MISS SO-DAM LEEE student number 211038687 for research activities related to the MTech: Graphic Design degree at the Faculty of Informatics and Design, Cape Peninsula University of Technology.

Title of dissertation/thesis:	A study of Grawlix symbols: An alternative language to conventional linguistic and typographic communication
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Comments

Research activities are restricted to those detailed in the research proposal. **Ethics approval is granted on condition that a consent letter from CPUT management is submitted to the Faculty Research Ethics Committee, which will permit the student to collect data from CPUT students as they will form part of her research.**

 Signed: Faculty Research Ethics Committee	18/5/2016 Date
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Letters of permission

To whom it may concern,

I am a M-tech Graphic Design student seeking to collect data for my research topic: A study of Grawlix symbols: an alternative to conventional linguistic and typographic communication. This research focuses on investigating online users' use of 'Net speaks' such as Emoticons and abbreviations often used on social media or gaming.

PURPOSE OF THE RESEARCH STUDY : I intend to investigate these online communication as they are used on social media/game with the purpose of understanding how and why people use these symbols to communicate. I'm particularly interested to gain some insight as to the manner in which users make sense and attach meaning to these following examples:

SPECIFIC PROCEDURES TO BE USED: By means of semi-structured interview, I hope to gain more insight into my topic at hand. With your consent I would like to conduct an interview. The research procedure will begin with sending you a consent form with a general demographic form to participant's email. Then, the participant will be asked to describe 3 characteristics of their write style on twitter in the demographic form.

Acronym/ Abbreviation (LOL; LMAO)
Use of emoticon (Smiles 😊)
Gif or internet meme
Using a number or Glyph (!*%\$£)

After consent form is submitted to the researcher, the interview schedule will be planned and will conduct an individual interview.

DURATION OF PARTICIPATION AND LOCATION : The interview need to be a maximum of 45 mins and the interview will be hold on the virtual setting such as Skype, WhatsApp or Google Hangout. The interview schedule will be made according to your availability and schedule.

CONFIDENTIALITY: Because of the nature of this project, names (user's Id), personal details of participants will not be revealed during data analysis and write-up. Only the researcher/s will have access to the personal information of the participants for purposes of co-ordination and classification of the data. If you agree to partake in the study, please indicate this by providing your signature on the consent form overleaf.

Kind regards
So-dam Lee

For confirmation on the above mentioned information, contact details of my supervisor and co-supervisor have been provided.

Assoc Prof MONWABISI K. RALARALA
FUNDANI ADMIN
P. 0219596625
RALARALAM@CPUT.AC.ZA



SUBMIT

연구 허가 편지

Cape Peninsula University of Technology (<http://www.cput.ac.za/>) 에서 석사과정을 절차 하고있는 그래픽 디자인 학생입니다.

학생의 논문의 표제는 A study of Grawlix symbols: an alternative to conventional linguistic and typographic communication. 입니다.

이 공부는 인터넷상에서 사용되는 약어 와 그것에 사용된 기호들을 (줄임말, 움짤, 한국어랑씩어쓰는기호나다른언어나, 이모티콘 등등) 대화라때 사용하는것 에 대한 주제를 다루고 있습니다.

예:

줄임말 : ㅋㅋㅋㅋ

움짤: 움직이는 그림들 gif

기호사용" !@#\$%"; A T C발

연구의 목적 :

연구자는 트위터 사용자나 게임올하시는분들이 어떻게, 왜 이러한 기호를 사용하여 의사 소통을하는지 이해하려고합니다. 트위터에서 사용되는 이러한 온라인 커뮤니케이션에 대해 연구를 할것입니다. 이 연구은 어떻게 트위터 사용자가 이러한 임의적인 기호와 그림 문자 에 의미를 부여하여 대화를 만드는지, 그 방식에 관한 통찰력을 얻을목적입니다.

사용되는 구체적인 절차 :

인터뷰를 통해, 주제에 더 많은 통찰력을 얻을것을 목표하고있습니다. 귀하의 동의에 인터뷰를 수행할것이고, 연구 절차는 참가자와 미리 인터뷰일정을 준비한 다음에 1:1 인터뷰를 실시할것입니다.

인터뷰를 시작하기전에 참여 동의서에 싸인을 부탁드립니다.

(참여동의서랑 자기소개표는 이메일로 미리 보내드리겠습니다).

자기 소개서와 함께 본인의 트위터에서 올린글에 대한 특징 3가지를 짧게 이 트위터로

@HandsumAvo 보내주시거나 미리 보낸 자기소개양식표에 스샷이나 써서보내주시면 감사합니다.

참여/ 기간 :

인터뷰는 최대한 45 분이고, 온라인 채팅 (행아웃이나 카카오톡으로) 할것입니다. 인터뷰 일정은 참여자의 일정에 따라 맞추어진 것이고 스케줄 변경도 할수있습니다.

기밀 :

이름 (사용자의 ID나), 참가자의 개인 정보는 데이터 분석 중에 공개되지 않습니다. 참여자의 개인 정보에 대한 액세스를 연구원들만 가질수있고, 연구분류와 분석의 목적으로 쓰이겠습니다

이 연구에 참여하기로 동의하면 동의 양식 종이에 서명을 제공해주세요.

Online form accessed: <https://goo.gl/forms/2MCGvfo5Q0dNZzG22>

연구 허가 편지

연구 동의에 관한 서명

이름/아이디

Your answer

이메일

Your answer

나는 만 18 미만입니다

- 예
 아니요

나는 이 연구에 참여하는것에 동의합니다.

- 예
 아니요

나는 이 동의서에 명시된 모든 정보를 포함한 공부의 목적에 대해 설명과 상의를 거쳤습니다. 그에 관한 질문과 답변을 모두 받았습니

- 예
 아니요

나는 이 연구에 지원해서 참여하는 것 입니다

- 예
 아니요

나는 인터뷰에 참여하는것을 동의하였습니다.

- 예
 아니요

나는 인터뷰 2 주 후이내에 데이터를 사용할 수있는 권한을 철회 할 수 있음을 이해합니다. 철회된 자료는 삭제될것을 이해합니다.

- 예
 아니요

나는 내 신분은 익명으로 위장하여 쓰여질것을이해합니다.

- 예
 아니요

난 내가 아래에 권한을 부여하는 경우 인터뷰에서 변장 추출물 논문 및 후속 간행물에서 인용 될 수 있음을 이해합니다

- 나는 나의 인터뷰에서 간행물 (학술적 용지) 로 인용하는 데 동의합니다
 나는 나의 인터뷰에서 간행물 (학술적 용지) 로 인용하는 데 동의하지 않습니다

나는 인터뷰가 스크린 비디오로 녹화 될 것이라는것을 확인했습니다.

- 예
 아니요

날짜

Time

: AM

BACK

SUBMIT

Never submit passwords through Google Forms.

Appendix C: Sample of participants' demographic information form in English and Korean

1. Where are you from?	
2. How old are you?	
3. What is your sex?	
4. What is your home language?	
5. Do you speak any other language? If you do please tell us.	
6. What kind of fandom are you into?	
7. Who do you normally speak to on online?	
8. What type of activities do you do on online? Fanfiction / fan art/ cosplayer/ passive fan/ gamer/ etc. ()	
9. Could you please describe the way you write on online? (give me 3 characteristics. For example: I mainly use emoticons)	
(Please feel free to write the way you normally write on the social media or online chat, you may use emoticons, acronyms and GIFs, etc.).	

General demographic information (Korean)

1. 국적	
2. 나이	
3. 성별	
4. 모국어	
5. 모국어 말고 다른 언어도 할수있습니까? (있다면 적어주세요)	
6. 어떤 분야의 팬덤이나 덕질을 주로 파십니까?	
7. 어떤 분들과 많이 교류 하십니까?	
8. 덕질 유형이나 전공분야? 글러 / 그림러 / 코스어 / 게임어 / 그이외 ()	
9. 자기가 트위터할때쓰는 글 특징 3 가지만 짧게 써주세요. (트위터나 게임에서 쓰듯이 쓰시면 감사합니다. 이모티콘, 줄임말, 움짤등등 자유롭게 써서 @HandsumAvo 트위터나 게임 채팅에서 스샷해서 보내주시면 감사합니다.	

(Closing)

I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know in relation to this research topic?

Korean

(Opening)

안녕하세요.

인터뷰에 응해주셔서 감사합니다.

인터뷰시작하기전에 다시한번더말씀드리겠습니다.

지금 시작할인터뷰는 스크린캡처랑 비디오로 녹화될것입니다.

인터뷰하는 도중에 불편하신 질문은 대답하고싶지 않다고 얘기주세요.

도중에 인터뷰를 중단하고싶으면 말씀해주세요.

혹시 질문이 이해가안된다고 생각한다면 지적해주시면 감사합니다.

(한국어가좀 서툴어서 오타도많습니다...)

हांदूर

질문을시작하겠습니다.

(Questions)

#트친소_L_이_를_갈_6_7_사_i_처럼_돈_쳐_버_린_알_티_를_잡_o_r

1. 이거 무슨 말인지 해석 해주실수있습니까?

2. 사람들이 종종 이렇게 쓰는걸 봤는데,마티님님을 이렇게 쓰는글들을 어떻게 생각하십니까?

(이렇게 쓰는 특별한이유가 있다고 생각하니까?)

3. 인터넷에 저렇게 쓰거나 울짤 사용해서 대화할때 특별한 규정이나 요령법이 있다고 생각하십니까?

4. 씨치님이 보내주신 캡처중하나에 영어랑 한국어를 섞어서쓰신게있는데, 그렇게 쓰신 이유가 먼가요?

5. 씨치님이 쓰신글들의 트친들은이 어떻게 이해할수있다고 생각하십니까?

인터넷에 대화할때 줄일말이든 울짤을 사용하는게 덕질의 영향이 있다고 생각하십니까?

이렇게 글쓰는것이 덕질이랑 연관되어있다고생각하시나요???

(Closing)

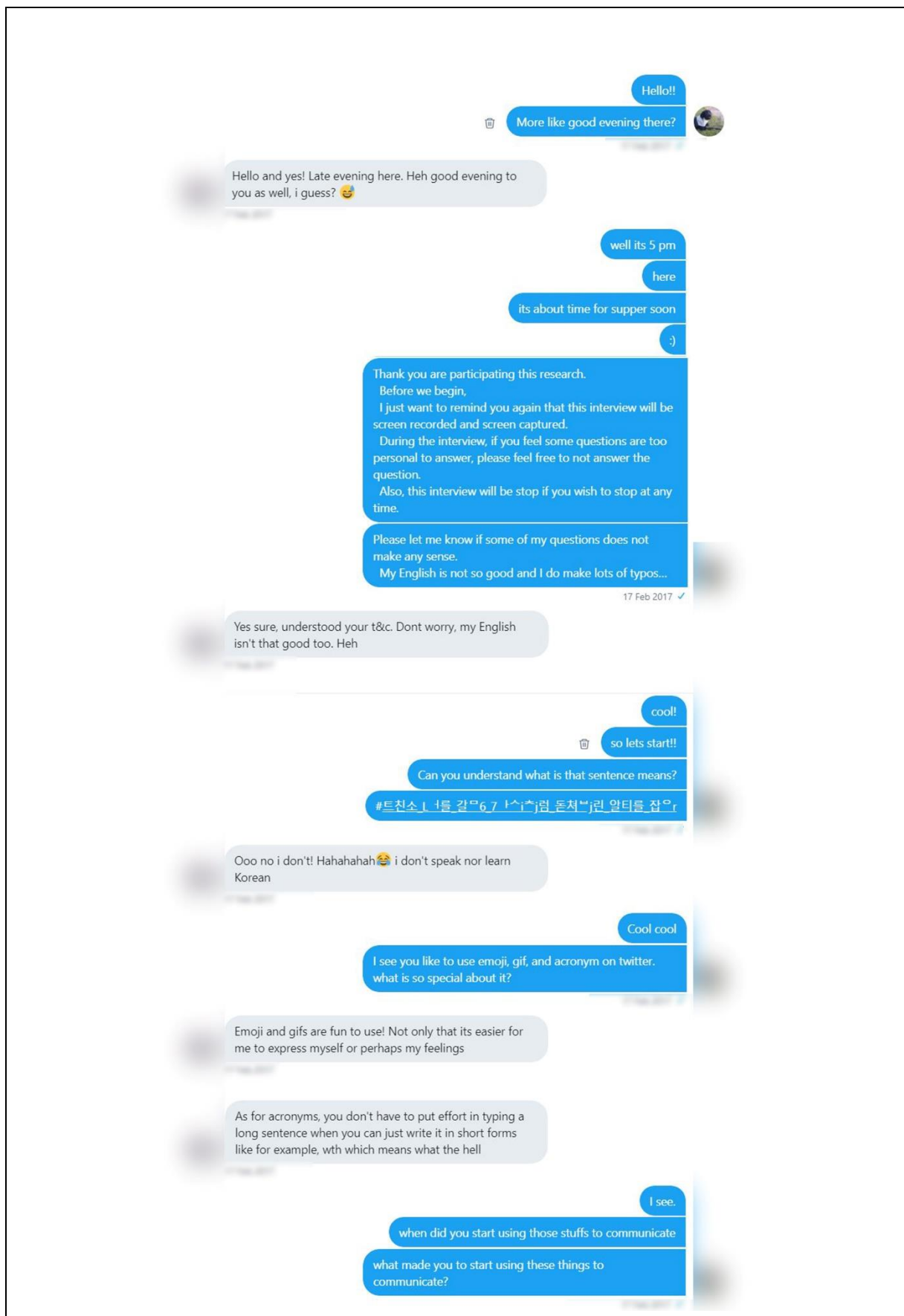
인터뷰 참여해주셔서 감사합니다.

Appendix E: A sample of Demographic info filled by participant

General demographic information

1. Where are you from?	SPAIN
2. How old are you?	26
3. What is your sex?	FEMALE
4. What is your home language?	SPANISH (CASTILIAN)
5. Do you speak any other language? If you do please tell us.	ENGLISH (Advanced level) FRENCH (Basic level)
6. What kind of fandom are you into?	VIDEOGAMES JAPANESE CULTURE ANIME /MANGA
7. Who do you normally speak to on online?	WORLDWIDE FRIENDS
8. What type of activities do you do on online? Sharing thoughts and comments about manga / anime Drawing fan arts and illustrations Research about videogames: news, blogs, videos... Watching episodes from American and Japanese series	
9. Could you please describe the way you write on online? (give me 3 characteristics. For example: I mainly use emoticon)	
- When i speak in english i usually go for the easiest way to write, for example: i write "u" instead of "you". Another example could be using "dont" instead of "don't". I just eliminate letters and symbols to write faster.	
- When i write in Spanish i used the correct form of words but i tend to write a lot of emoticons, mostly: XD or D: but also i included a lot of english acronyms like lol, wtf, lmao. We dont have those expressions in my language so i use them cause a lot of people know them on the internet.	
- I repeat words and emoticons too much. For example, when i want to show im laughing I write: jajajajajaja or emoticons with laughing faces. I think emoticons are good enough to give a reply to a comment, so i always include them.	

Appendix F: A sample of Interview with Online fan (in English)



Hmm i started using emojis few years back, when Apple first developed.

For the gifs, i could say last year. Hahaha 😄

Not gonna lie. I start using these gifs/acronyms all thanks to social media.

I see.



lol

just want to clarify with u saying when apple first developed

you mean their company or their digital gadgets?

My definition of when apple first developed is referring to their digital gadgets. When iphone 3G were released lol

17 Feb 2017

Oh i see

ahaha im gonna ask you another stupid questions

why did u use gif now to me

what was your intention



Its a habit hahahahaha plus we're talking about these emojis and gifs and all

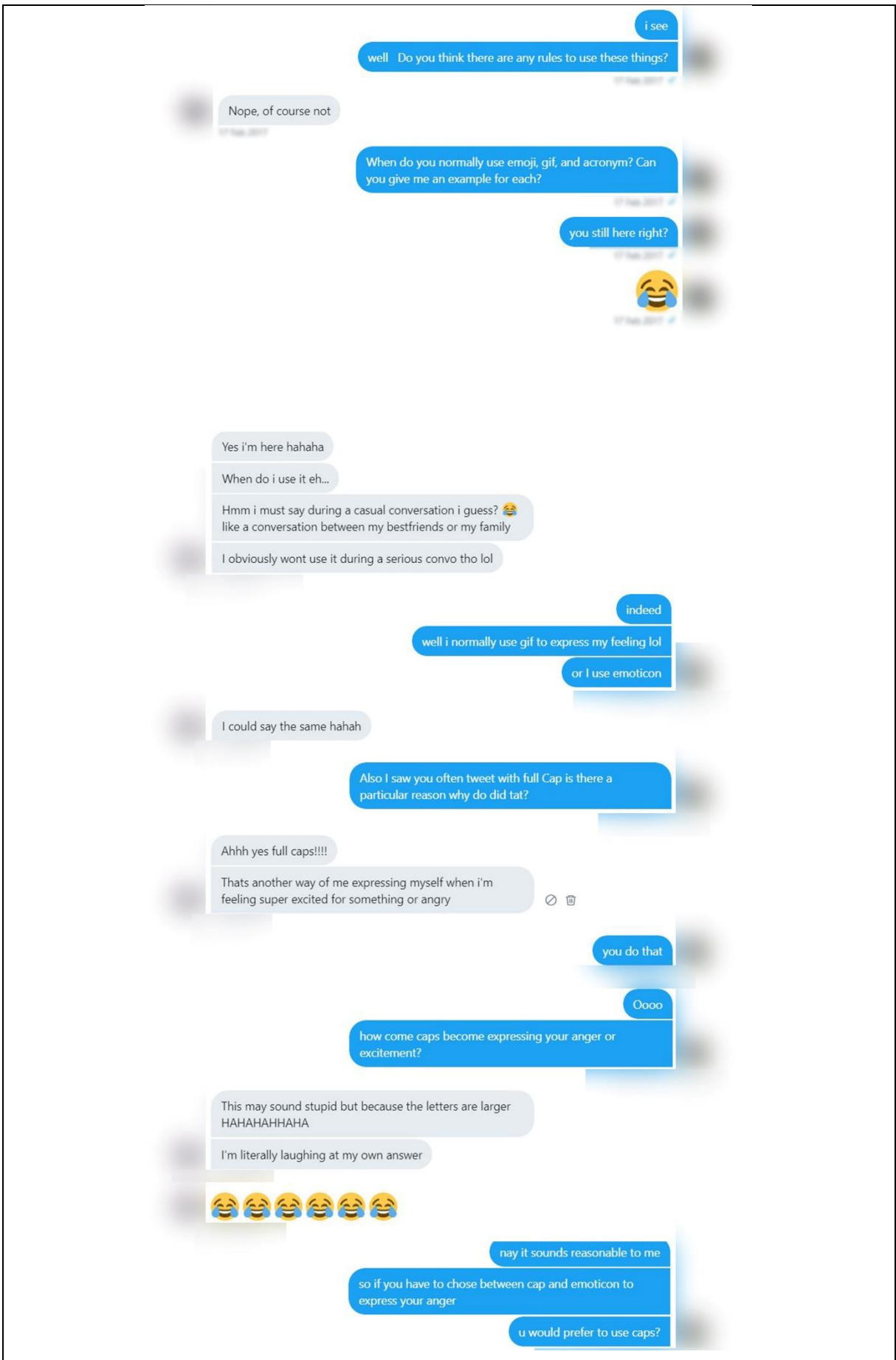
17 Feb 2017

So why not make use of the gifs yeah

17 Feb 2017



17 Feb 2017





Okay that one, using excessive letters

Its a habit hahahahahahahaha

I don't have a particular reason for it actually tbh

cool

Why do you think people communicate like that on twitter?

Sorry communicate like what? Using gifs emojis all?

yeah like using gifs, emoji, abbreviation,caps

etc

Okay hmmm. again, its a way to express themselves.

Or perhaps, to sound more friendlier towards other? 😊

isee

Do you think the way you write on online is also influenced by your fandom?

:D

Hmmm... you can say so 😊

what do you mean? like sort of?? maybe?

50-50? LOL

K

If your friend tweeted something that you cannot understand how do you cope with that situation?

It depends. If its a close friend, i would ask them. If not i would ignore it

isee

Or

the last one

ooo

