Between you and I

Mediated love in long distance relationships

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Preface

Listen very carefully; I shall say this only once (Michelle Dubois from 'Allo 'Allo)

When looking back on this process, I realise that this thesis did not come into being because of me alone. The support, continuous brainstorm sessions and help I received, would have been unnecessary if, by some infinitesimal chance, I had been able to do this all on my own. As it is, I can only give my profound thanks to God for sending those people along my path to help me complete my master's degree.

First and foremost, I am grateful for my supervisors and especially my first supervisor, Joyce Karreman. Thank you for all the laughs I had while receiving feedback about my work. Secondly, I am forever grateful for my parents and brother, who have supported me unconditionally (as parents and siblings are socially obligated to do) throughout all of my life. I hope that I at least made some sense when I talked about my coursework or thesis. Thirdly, I'm thankful for my amazing family members, both near and far, who probably thought I was mental for doing two masters and two theses at once. Thank you for your support in the form of good food, drinks and general silliness. Fourth, to my PSTS-mates, thank you all for listening to my ideas, brainstorming with me, giving feedback or simply letting me think about other people's problems for once. My college experience was superb because you were there with me during that time. Thank you, 'Kameel', for always being on my side and supporting me. It seems that we are indeed stuck with each other until we are 80 years old. Last, but not least, I am thankful for my amazing boyfriend who had to live with a jumbled mess of nerves, tears and laughs for over a year now. Let us look on the bright side, love: I shall do this only once (more)!

Abstract

Long-distance relationships are possible mostly because of the rise of options in communication tools. Drawing on the uncertainty reduction theory by Honeycutt & Planalp (1988), media richness theory by Daft and Lengel (1986), technological mediation and appropriation by Ihde (1990) and Verbeek (2015), this study aims to explore how Western citizens maintain their long-distance relationship through the use of computer-mediated communication. Twenty-eight members of the target group were interviewed in a semi-structured way. Participants expressed why and how they used specific media, for what purpose, how it affected the content of their conversations, if and when it created a sense of uncertainty, as well as whether or not it affected their autonomy. The results of this study show that media usage is vastly different per couple, where each actively chooses the medium for their message. Romantic relationships are maintained via a variety of texts, instant messaging, audio calls and video calls. The conclusion drawn in this study is that, although computer-mediated communication can't substitute for face-to-face interaction, there are multiple aspects of communication media that are beneficial for those in long-distance relationships such as availability, simulating eating together, the option of deep conversations and asynchronous messaging. Uncertainty and a reduction of autonomy are however also side-effects of computer-mediated communication in long distance relationships.

Keywords: digital media, computer-mediated communication, mediation, appropriation, long-distance relationships, uncertainty reduction

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1 INTRODUCTION

Communication technologies have changed social relationships since the moment they were invented, but never were the options for contacting another as varied as they are today. Once limited to face-to-face communication, over the last several decades, new technologies have been created for mediated interaction. The digital age is distinguished by rapid transformations in the kinds of technological mediation through which the sender and receiver encounter one another. The more traditional media, examples being landline telephone calls and postal mail, have found a digital equivalent in a variety of means: email, mobile phone calls, text messaging, instant messaging, video chat, forums, social networks, photo sharing, video sharing, multiplayer gaming and more.

Due to this technological development of media and the systems that support them, people can stay in touch with others over a greater distance, while the response time is drastically reduced when compared to traditional forms of media where there is no immediate reply possible. Traditional relationships where people are geographically near might still be the default romantic relationship, but mediated, long distance relationships– both temporarily or on a more permanent basis – have risen in number because of this technological development.

Long distance relationships are defined as an intimate romantic relationship where the partners are separated from one another in such geographical proximity that they are not physically immediately accessible to the other. There is friction in that situation as being intimate is traditionally defined with being physically near. This raises the question of how lovers in a long distance relationship experience intimacy through the usage and mediation of technology, as well as how a relationship can still exist even when it has become mediated.

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There is still not that much research on lovers in long distance relationships, the media used in these relationships and how these two affect each other. The research that has been conducted on this topic is focused mainly on undergraduate populations and economic emigrants (Arditti & Kauffman, 2004; Maguire, 2007; Maguire & Kinney, 2010; Neustaedter & Greenberg, 2012). The methodologies used were either quantitative research consisting of surveys or qualitative research where a small number of couples would be interviewed.

The number of people who are in a long distance relationship is expected to rise in the years to come, as travel time has decreased and the ways to communicate internationally have increased. In other words, possible obstacles against moving a relationship into a long distance relationship have become less severe. By conducting qualitative research, rich data and in-depth answers regarding experience will be gathered to answer the following research question: *How are Western citizens in committed long distance-relationships affected by the use of computer-mediated communication to help maintain their relationship?* By answering this question, new data on the real-life experience of lovers in long distance relationships will disclose the mutual effect of media on romantic relationships.

The outline of this thesis is as follows: chapter one – which the reader has almost finished reading – gives an introduction to the subject and the research. Chapter two consists of a theoretical framework wherein previous research on defining long distance relationships, uncertainty reduction theory, media richness theory, the differences in face-to-face interaction and computer-mediated communication, comparing media to one another, autonomy, mediation, and appropriation are analysed and discussed. The research question and sub-questions that were boiled down from the theoretical framework will be posted at the end of chapter two. Chapter three focuses on the research methodology, where the design of this

qualitative study is described. In this chapter, the participants are discussed, as well as the interview protocol, topics and data analysis. Chapter four showcases the results of the interviews that were transcribed and coded. Chapter five gives a conclusion on the sub-questions and research questions, as well as the limitations of this research, ending with recommendations for future research.

2 THEORETICAL FRAMEWORK

This chapter discusses the theoretical insights regarding how long distance relationships can be defined as such, relationship development and autonomy, relationships and media. After the chapter on relationship development and autonomy, as well as relationships and media, a sub-question is then stated. This chapter concludes with a primary research question, as well as a repeat of the two sub-questions.

2.1 DEFINING ROMANTIC LONG DISTANCE RELATIONSHIPS

People usually self-define their relationship as a long distance relationship or a geographically close relationship (Aylor, 2003). Long distance relationship may be based on physical geography, i.e., partners not living in the same city (Helgeson, 1994), miles travelled (Schwebel, 1992), or miles and time travelled (Knox, Zusman, Daniels, & Brantley, 2002).

Long distance relationship status may reflect the partners spending two (Holmes, 2004), but also four (Rabe, 2001) nights apart during the work week, with other criteria, e.g., partners have their own residences and pursue a career or having to care for a sick parent, sometimes specified (Jackson, Brown, & Patterson-Stewart, 2000).

This subjective definition ensures the vulnerability of potential inexactness and misclassification (Pistole & Roberts, 2011). Some participants, separated by 80 (Dellmann-Jenkins, Bernard-Paolucci, & Rushing, 1994) and 250 (Horn et al., 1997) miles, have reported as being in a geographically close relationship, though both mileages could easily be a barrier to daily physical togetherness. Though these articles are dated, they exemplify the duality of subjective definitions. Partners may

not know the exact mileage between their locations, and the amount of time apart depends on the method of travel, e.g. car, train or aeroplane. Relational partners may even "disagree as to whether or not their relationship is, or ever has been, a long-distance one" (Stafford, 2005, p. 28).

Geographic distance appears to be central in distinguishing long distance relationships and geographically close relationships, as it triggers attachment responses and adjustments. Although geographically close partners separate daily for work and/or study, they are geographically proximal enough to be accessible if needed (Pistole & Roberts, 2011). This distinct characteristic is reflected in previous methodology for determining long distance relationship status, e.g. in questions about mileage and travel time required for the partners to be physically together and whether physical contact is accessible when desired (Aylor, 2003). Geographical distance and accessibility of the other will, therefore, be used to characterise and define long distance relationships in this thesis.

These relationships are defined as romantic in the way that both partners have an affectionate attachment to the other person, while not being part of the same family. This is shown in acts of goodwill and affective, desiderative and other-motivational responses, e.g. other-regarding concern and a desire to be with the beloved (Abramson & Leite, 2011). As geographic inaccessibility is a barrier for being with their partner, media forms the link through which a romantic relationship can still exist even over a long distance. In this thesis, the words: partner, lover, significant other or other are used interchangeably.

The following section will focus on the way relationships develop, focussing on the uncertainty reduction theory and sense of autonomy within a relationship. This section will conclude with the first sub-question.

2.2 RELATIONSHIP DEVELOPMENT AND AUTONOMY

This section focusses on uncertainty reduction theory by Berger and Calabrese (1974) and Honeycutt and Planalp (1985), and autonomy within relationships. It concludes with the first sub-question.

2.2.1 Uncertainty reduction

When developing a relationship, the other person is an unknown combination of tastes and opinions. In other words, the other person generates a feeling of uncertainty for the other in terms of what to talk about and how to communicate. The uncertainty reduction theory is most often considered a theory of relational development and defined as the notion that, when interacting, people need information about the other party to reduce their own uncertainty. In gaining this information, people are able to predict the other's behaviour and consequent actions, all of which is crucial in the development of any relationship (Berger & Calabrese, 1974). Their theory is explained as a three-stage model, depicted in Figure 1, through which all relations move in a linear fashion.

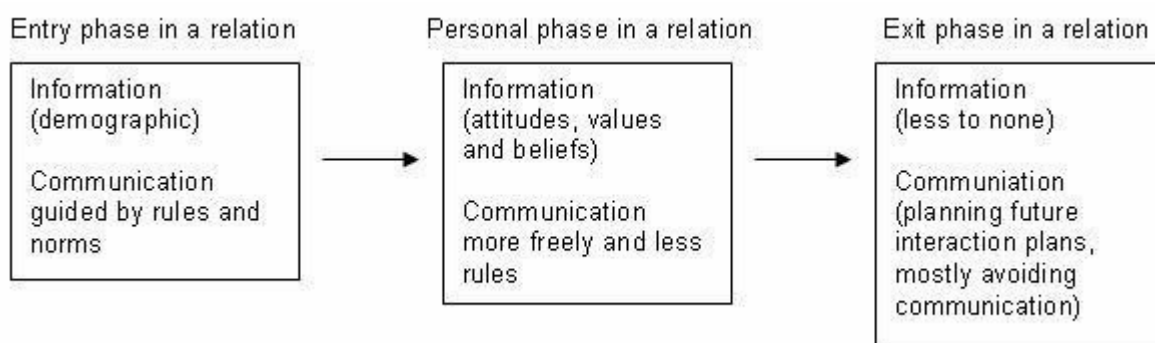*Figure 1*. Model of the Uncertainty reduction theory. Source: Heath & Bryant (1999)

However, one of the criticisms of this theory is that it is a continuous cycle of alleviating uncertainty, rather than Berger & Calabrese's proposed three-stages of 'entry', 'personal' and 'exit'. Uncertainty would continue to increase after initial interaction because of a lack of understanding and impulsive behaviour. Therefore

the theory is also applicable to established relationships (Honeycutt & Planalp, 1985; Planalp, Rutherford, & Honeycutt, 1988). In short, uncertainty reduction theory suggests that in order for relationships to be maintained, relational partners must manage their uncertainty by continually updating their knowledge of themselves, their partners, and their relationship (Berger & Bradac, 1982). This presumption is borne from research, which has established that uncertainty levels are in flux throughout the lifespan of a relationship (Honeycutt & Planalp, 1985; Planalp et al., 1988).

Nevertheless, it is likely that the nature of uncertainty changes in established versus new relationships. Rather than experiencing general uncertainty, or uncertainty about the partner, individuals in established relationships are likely to experience relational uncertainty. Relational uncertainty is uncertainty about the status or future of the relationship (Afifi & Reichert, 1996; Knobloch & Solomon, 1999). Uncertainty about the relationship may be particularly detrimental to relational stability (Dainton & Aylor, 2001).

Knobloch and Solomon (1999) asserted that there were two potential sources for relational uncertainty; extrinsic factors, such as physical distance, and intrinsic factors, such as unequal levels of commitment between the partners. These two sources for relational uncertainty can easily be accounted for in long distance relationships: physical distance is per definition a factor for partners who are in a long distance relationship, and unequal levels of commitment can be viewed as the willingness of each partner to put time into staying up to date with the other, or the willingness to commit to staying faithful to their partner, regardless of a lack of physical contact. Therefore, distrustful feelings born out of relational uncertainty factor in with relational stability of long distance relationships.

Dainton and Aylor (2001) posted that individuals in long-distance relationships experience more considerable relational uncertainty due to the physical distance, concluding that this heightened relational uncertainty among those in long distance relationships will lead to increased jealousy, decreased use of maintenance behaviours, such as openness and assurances, and decreased relational trust when compared to individuals in geographically close relationships.

As a counter-argument to these ideas regarding relational uncertainty as a near inevitability of long distance relationships is a small, but growing body of research which has compared long distance relationships with geographically close relationships. The relationship stability, satisfaction, and trust reported by long-distance couples are, on average, equal to or better than those reported by geographically close couples (Stafford, 2010). Importantly, the quality of long-distance relationships is not driven by the amount of communication involved. Compared to geographically close couples, couples in a long distance relationship spend less time together face-to-face. However, couples in a long distance relationship do not replace the missing face-to-face communication with more mediated communication. Both groups of long-distance lovers and geographically close lovers report an equal amount of mediated communication (Stafford & Merolla, 2007). However, it must be said that this article was written 12 years ago, in a time when video conferencing media weren't as optimized as they are today and the mobility of these media lacked as well.

Regardless, the question that arises here is whether relational uncertainty is actually experienced by couples in a long distance relationship and if so, how the media employed by these long-distance couples are a factor in relational stability and certainty.

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2.2.2 Autonomy within a relationship

The continuous and fast-paced evolution of computer-mediated communication has contributed questions for the redefinition of self and human relationships. The dialectical perspective states that relationships are never wholly stable but are always in flux as people manage seemingly contradictory tensions, e.g. autonomy versus connection (Guerrero, Anderson, & Afifi, 2017, p. 429). The tension is between wanting to remain autonomous and protect the ability to do things on your own, versus wanting to be connected to someone you feel close to. The question which arises after reviewing the literature regarding mediated communication between partners in a long distance relationship is how the lovers' sense of autonomy is affected.

Cell phones provide lovers with the option of constant contact (Katz & Aakhus, 2002), which means that lovers can contact one another anytime they want. Even though this accessibility could increase social connection, it is also a threat to autonomy, since lovers have less control over when their significant other can contact them. Duran et al. (2011) stated that cell phones might tie people "too tightly to their romantic partners" or people may "enjoy the potential for constant connection" that cell phones give (p. 21). Though this is also the case for those in a geographically close relationship when mediated communication is the only option, the ties cell phones give are more critical, and therefore the effects – both negative and positive – could be emphasised even more.

Greenberg & Neustaedter (2013) demonstrated that computer-mediated communication was appropriated and therefore used in ways it was not designed for, becoming a means of creating the presence of the other while not being physically nearby. Autonomy could become reduced because of this since the ability to act as

one wishes to act, is limited because of the mediated presence of the other (Guerrero, Andersen, & Afifi, 2017).

Using video chat to communicate with a loved one could reduce autonomy as well. Due to mobility, interactivity, temporal structure and reach, it becomes necessary to use a specific device at a particular time and place to talk with their lover (Duran, Kelly, & Rotaru, 2011). A person might lie and say that she or he has already agreed to meet up with friends in a bar as a way to gain some autonomy without making the partner feel bad.

Mobile media created the phenomenon of micro-coordination (Ling, 2004), wherein people check in with one another to provide brief updates or quickly arrange meetings and errands. However, compared to other personal media, smartphones are a threat to autonomy, as users can become accountable to others at all times. Mobile media do not create perpetual contact so much as offer the perpetual possibility of making contact (Schegloff, Koshik, Jacoby, & Olsher, 2002).

However, in contrast to the arguments made regarding a reduction of autonomy for people in a long distance relationship, there are also counter-arguments to be presented. When couples who were in long distance relationships were reunited, some stated that the desirable features of long distance relationships, namely autonomy, appeared to be lost and missed upon reunion (Stafford, Merolla, & Castle, 2006).

Autonomy within committed long distance relationships appears to be a less researched niche. An article that does contribute to the discussion states that participants emphasised that being in a long distance relationship contributes to their own personal growth and development. This style of relationship worked for them because they were already highly autonomous (Lindemann, 2017). Being an

autonomous partner in a romantic relationship is, according to Lindemann (2017), enhanced for those in a long distance relationship.

As there is the possibility of heightened relational uncertainty for those with less physical contact or options to see one another, this appears to be a critical factor in long-distance relationships in which media can help alleviate or further negatively affect those in long distance relationships. The first sub-question is, therefore, as follows:

SQ1: How does computer-mediated communication influence relational uncertainty for lovers in a long distance relationship?

To understand the way media relate to long-distance relationships, a comparison must first be made *between* forms of media. The following section will, therefore, focus on relationships and media, beginning with a review of the media richness theory, as presented by Daft and Lengel (1986) and the four measures that determine the richness of a medium. Consequently, computer-mediated communication will then be compared to face-to-face communication. Different aspects of media will then be compared using Baym (2007). The implementation of media by users in their life and relationship will then be reviewed using the technological mediation perspective and notion of appropriation by Ihde (1990) and Verbeek (2015). This section will then end with the second sub-question.

2.3 RELATIONSHIPS AND MEDIA

This section focusses on the media richness theory by Daft and Lengel (1986), research comparing computer-mediated communication to face-to-face communication, Baym (2007)'s framework to compare between media, and mediation and appropriation by Ihde (1990 and Verbeek (2015). It concludes with the second sub-question.

2.3.1 Media richness theory

The media richness theory is a media-comparing theory, created by Daft and Lengel (1986). Though it is over three decades old and criticized for being too broad, this theory can be employed as a basis for comparing different media against each other. Four measures determine the richness of a medium. The first measure mentioned by Daft and Lengel (1986) is the amount of delay necessary for providing feedback after receiving the message. Richer media have shorter delays in time; they are higher in synchronicity. Secondly, the number of cues that are used to transmit information, e.g., face-to-face communication uses spoken words, facial expressions, the tone of voice, and body language to transmit the message; text messages are usually limited to written text and emoticons. Thirdly, the degree of personalisation of a message, e.g. a phone call is more personal than a radio advertisement. Fourthly, the freedom that the media gives to choose a variety of styles of language, e.g. a person can use a great variety of language styles on the phone or in an email (Daft & Lengel, 1986).

There are different forms of media from which the lovers can choose. Most, if not all, are internet-based and research regarding media richness and Internet-based media have either focused on a single Internet medium, such as email or e-chat (Cockrell & Stone, 2011), or treated all Internet media as having the same media richness level (Vickery, Droge, Stank, Goldsby, & Markland, 2004). Various types of Internet media have different degrees of capabilities in delivering information as communication channels (Cai & Jun, 2015). For instance, unlike Internet video

conferencing, it is challenging for the sender and the receiver to communicate information through WhatsApp in a real-time fashion. As all communication is mediated, two partners in a long distance relationship will probably use different media for different reasons and delivery of content.

The following section will discuss whether face-to-face interaction is a requirement for romantic relationships, as Knobloch and Solomon's research suggested, or if computer-mediated communication can replace face-to-face.

2.3.2 Face-to-face versus computer-mediated communication

With the advancement of media and communication technologies, most romantic relationships have become in one way or another dependent on mediated communication (Baym, Zhang, Kunkel, Ledbetter, & Lin, 2007; Fortunati, 2005; Ramirez Jr & Broneck, 2009). The quality of long-distance relationships has changed for the better because of these technological advancements. Close relationships maintained across a geographic distance are relatively common nowadays due to society's increasing mobility and the widespread adoption of communication technologies. These forms of relationships were an 'understudied' phenomenon in the previous century (Rohlfing, 1995), and though there are now numerous articles regarding undergraduates and economic emigrants in long distance relationships, there is still aspects to explore (Neustaedter & Greenberg, 2012).

The ideal form of communication for most in a romantic relationship is still face-to-face interaction, which is also defined as body-to-body communication (Fortunati, 2005), as it is the richest form of communication to express romantic love. One need only quickly touch their lover's cheek or hand, and a message, which would be difficult to express via text, is conveyed. Lovers in a long distance relationship simply do not have this option of touching their loved one and must

resort to mediated communication. If lovers developed their relationship when they were geographically near, and thereby having the option of body-to-body communication, and then proceed to a long distance relationship, the lack of physical touch and limited form of mediated communication might alter their relationship.

Research on long distance relationships has primarily focused on relational satisfaction (Stafford & Merolla, 2007), idealisation of one's long-distance relationship partner (Jiang & Hancock, 2013; Stafford & Merolla, 2007) and conflict avoidance (Stafford, 2010). Long distance relationships stand in contrast to traditional cultural values of what a romantic relationship is and hence are typified as atypical or even problematic relational states (Bergen, 2010; Maguire & Kinney, 2010). Long distance relationships are by definition mediated relationships, deviating from traditional forms of relationships where lovers are physically nearby.

This deviation raises questions on why people who commit to their partner even when physically separated are successful in maintaining their relationship and how the media employed by lovers in a long distance relationship can support the love between people by maintaining or supporting a relationship.

Face-to-face communication is a crucial ingredient in the maintenance of a romantic relationship as tentative conclusions were drawn that distance (emotional, physical or both) profoundly threatens relationships (Ben-Ari & Lavee, 2007; Graham & Christiansen, 2009; Helgeson, Shaver, & Dyer, 1987). The reality is that couples in a long distance relationship are unable to accomplish face-to-face communication as their primary mode of interaction. Especially in romantic relationships where the partners live at a long distance from one another, crossing continents and oceans, employing computer-mediated communication as a tool to maintain their love for one another creates opportunities to retain intimate

knowledge of the other's life, without having the option of intimacy via touching (Tong & Walther, 2011).

It is in the normality and banality of small talk that lovers feel a part of the other's life, examples being 'normal' conversations on how the other's day was or what they did at work (Duck, Rutt, Hoy, & Strejc, 1991; Tong & Walther, 2011). Participants in Aguila's (2009) research – all subjected to a long distance relationship – agreed that computer-mediated communication was inferior to face-to-face communication. However, they also believed that computer-mediated communication was more faithful in recreating face-to-face communication than other tools available to them, e.g. texts and phone calls (Aguila, 2009).

Distance, in turn, may help form communication goals couples in long distance relationships want to achieve, such as merely staying up-to-date with the lover's life or being able to see the lover. They thereby rise to corresponding changes in cognition and behaviour, altering their viewpoint on how much time within a relationship is spent communicating via a medium, that tends to stabilise the relationship (Carstensen, Isaacowitz, & Charles, 1999; Stafford, 2010). Computer-mediated communication systems, in various formats, have become pivotal to the initiation, development, and maintenance of interpersonal, long-distance relationships (Walther, 2011).

These computer-mediated communication systems are involved in the subtle shaping of communication in almost every relational context (Herring & Androutsopoulos, 2015; Walther, 2011). All participants of Aguila (2009) were unconvinced that the technology was exclusively responsible for the success or failure of their romantic relationship—an opinion shared by many users like them (Baym et al., 2007; Uotinen, 2003). Instead, they believed that the maintenance of

their long-distance relationships depended on their careful use of computer-mediated communication.

The following section analyses how the media that are providing the possibility of communication with a distanced loved one, can be viewed as an actant within the relationship itself. It will then show how user experience and appropriation are concepts pivotal for analysing the way lovers use various media for contacting their loved one.

2.3.3 Comparing media

To compare media, Baym (2015) proposed seven concepts: 1) interactivity, 2) temporal structure, 3) social cues, 4) storage, 5) replicability, 6) reach and 7) mobility. These concepts can be seen as an elaboration on the media richness theory and are intended to be used as a way to compare media.

Interactivity can be defined in multiple ways, of which social interactivity is the most interesting one as it is "the ability of a medium to enable social interaction between groups or individuals" (Baym, 2015, p. 7). Interactivity could be seen as the basis of all long distance relationships.

The temporal structure of a communication medium can be categorised in synchronous and asynchronous communication, the first about media that support communication in real time, and the latter meaning there is a time delay. The benefits of synchronous media are the possibility of rapid transmission of messages without spatial boundaries. Synchronicity could enhance the sense of ubiquity that digital media encourages, as well as make users feel more together while they are spatially apart (Baron, 1998; Carnevale & Probst, 1997; McKenna & Bargh, 1998). Asynchronous media ensure that the user may leave a message for the receiver to

read at a later point in time, which could be useful if a person's partner lives in a completely different time zone.

Social cues, which can be contextual, visual, and auditory, ensure the user a possibility to provide further information on a certain amount of context, the meaning of messages, and they construct and support the interpretation of messages and creates a social context within which messages are meaningful. Digital media provide fewer social cues than if the users were communicating face-to-face. However, lovers in a long distance relationship still share a relational context, a shared history and knowledge, which can grow through computer-mediated communication.

Storage and replicability are closely linked to each other. Storage entails the maintenance of messages on servers or SSD over time. Relatedly, replicability is the ability to make copies of messages. These aspects are mostly absent in face-to-face communication unless an audio/video recording is made of the encounter. Computer-mediated communication contrasts to this since websites, devices and company backups may store its usage – replicating the data as well as retrieving it at a later point in time are possible (Carnevale & Probst, 1997). Especially asynchronous media utterances – email, forum messages, texting applications – can be easily saved, replicated, and redistributed to others, which could help lovers in a long distance relationship relive a particular moment or remember a specific conversation.

Reach is purely the distance a medium can still cross to contact another person, which is a more significant distance than face-to-face communication can reach. These two aspects can be related to the trust a person has in their partner, but also in the medium itself.

Mobility is defined as the extent to which the medium is portable – enabling people to send and receive messages regardless of location (Baym, 2015, p. 11). Mobile phones represent the paradigm case of mobility, ensure person-to-person communication is possible without regard to location. The promise inherent in the introduction of mobile media is that lovers in long distance relationships need never be out of touch with our loved ones if they have a working smartphone and internet connection.

2.3.4 Mediation and appropriation

The exact usage of computer-mediated communication by lovers in a long distance relationship is of interest since this can lead to conclusions regarding how mediation helps support relationships. In the post-phenomenological approach to technology that developed out of the work of Don Ihde (Ihde, 1990), technologies are conceptualized as mediators in the relations between human beings and their world. Ihde (1990) states that from the perspective of the "mediation approach" in the philosophy of technology, technologies and humans should not be seen as two opposite sides between which there is an interaction; instead, they are the *result* of this interaction. Users and technologies are not pre-given entities but are actants that mutually shape each other in the relations that arise between them.

Most often, the relationship between humans and technologies is, in fact, part of a bigger system of relationships between human beings and their world in which technologies play a mediating role (Verbeek, 2015). The interactions between human beings and technological artefacts are often characterised regarding functions and use. According to Verbeek (2015), products are designed to be used, the quality of the interaction that people can have with a product is often indicated in concepts such as functionality and usability.

This statement is nuanced by research conducted by technical communication researchers, as functionality and usability aren't the only measures of the design of a product. Usability can be seen as a component of user experience; the quality of interaction of users and products is both effective, as well as affective (Law, van Schaik, & Roto, 2014). User experience is therefore defined as "a person's perceptions and responses that result from the use or anticipated use of a product, system or service" (ISO, 2010).

The two most important questions that need to be asked regarding user experience for this research are 1) regarding mediation, how does technology affect lovers in a long distance relationship, and 2) regarding appropriation, how do lovers affect the technology. Verbeek (2015) states that whether or not appropriation happens depends on the user's performance expectancy, the effort expectancy, social influence, previous experience with similar technologies, demographic variables (e.g. age), and voluntariness of use.

Neustaedter and Greenberg (2012) have investigated how couples use video to hang out together and engage in activities over extended periods of time. Their results show that videoconferencing creates an unmatched way for couples to share presence over distance, which in turn provides intimacy. While valuable, couples still face challenges in using video chat, including contextual (e.g., the location of partners, time zones), technical (e.g., mobility, audio/video quality, networking), and personal (e.g., a lack of physicality needed by most couples for intimate sexual acts) challenges.

Long distance relationship partners seem to choose communication channels based on their perceptions of media richness, i.e. social cues, synchronicity, and mobility (Lee, Bassick, & Mumpower, 2016). This article shows that people who are in a committed relationship actively select their communication medium to contact

their lover, as was speculated in the section above on media richness theory. Neustaedter et al. (2015) followed up on their 2012 research to analyse the value of a specific computer-mediated communication for lovers in a long distance relationship, namely: video conferencing. Their study indicates that people highly value long-term video connections and have appropriated them in some different ways (Neustaedter et al., 2015).

An example of such usage and appropriation of video connections is given by previous research conducted by Greenberg & Neustaedter (2013). Their research shows that long distance relationships are all unique relationship situations, yet there is a similarity in the experienced increased intimacy over distance. Two couples created this mediated intimacy by keeping a video link active between their residences for extended periods of time (Greenberg & Neustaedter, 2013).

For example, when preparing dinner, the video connection would remain active while both partners were otherwise occupied by chopping food or managing the fire. The video connection would be there, and therefore their lover would be there as well, but the connection was not made to create interaction between the two but more to have the presence of the other with them.
Digital communication technologies have rapidly become pervasive parts of people's lives and relationships (Murray & Campbell, 2015). Functions such as communicating, sharing of affection, planning, and learning about one another are examples of how partners within a long-distance relationship use technologies for different functions. Murray & Campbell (2015) conclude that these functions can create both positive and negative outcomes for couples, which is becoming ever more recognised. For example, the technological limitations regarding audio or stability of the video link could create frustration, while it could also help the couple to

experience one another in their respective homes and therefore be more inclusive in their daily life (Murray & Campbell, 2015, p. 125).

Computer-mediated communication is varied due to the different media that now exists. A comparison must be made between the media people in long distance relationships use to understand what aspects of these media are viewed positively, and what is deemed as a negative aspect for themselves or their relationship. Technological mediation must also be a part of this study in order to understand the way media have an effect on a relationship, as it might help geographically separated lovers to connect with one another. The second sub-question in this research is therefore as follows:

> *How does computer-mediated communication create opportunities connecting with a geographically-separated loved one when compared to other communication systems?*

2.4 RESEARCH QUESTIONS

This research aims to use the strong recommendations of past researchers (Baym et al., 2007; Fortunati, 2005; Ramirez Jr & Broneck, 2009; Yum & Hara, 2005) on the need to do more qualitative studies that view media effects without ignoring the nuances and contexts of particular relationships. In developing the preliminary discussion, this paper seeks to understand the distinct experiences of those whose relationships can only — for the meantime, at least — be enacted through computer-mediated-communication. In order to have a focus on the scope of this research, only the experiences of people originating from countries that can be typified as 'Western' will be researched. The research question is therefore as follows:

> *RQ: How are Western citizens in committed long distance relationships affected by the use of computer-mediated communication to help maintain their relationship?*

Two sub-questions have been formulated to support answering the research question. Sub-question 1 is related to relational stability and uncertainty. As Dainton and Aylor (2001) stated, relational uncertainty can become one of the main issues when lovers are forcedly only communicating through a medium. This experience is something only lovers in long distance relationships will have and could be the most prominent way their relationship is affected. The first sub-question to support the research question is therefore as follows:

> *SQ1: How does computer-mediated communication influence relational uncertainty for lovers in a long distance relationship?*

Sub-question 2 supports answering the research question as it grounds the question of what the added benefit of digital media is and why they are used by lovers in a long distance relationship. The second sub-question is therefore formulated as follows:

SQ2: How does computer-mediated communication create opportunities connecting with a geographically-separated loved one when compared to other communication systems?

3 RESEARCH METHOD

The following chapter explains the methods used in order to answer the research questions formulated in the previous chapter. The design of the research is explained in this chapter. The demographic characteristics of the participants, how these participants were gathered and measurements used for the analysis of the study are also described in the upcoming chapter.

3.1 DESIGN

This study's research question is exploratory in nature, as there is little known on what media are used by lovers in long distance relationships and how these media affect the users. A qualitative research method was employed in the form of semi-structured interviews to explore this topic. The researcher had generated nine interview questions, which were answered by all the participants naturally throughout the course of the interview. Much prompting by the researcher was not necessary as one question naturally flowed into the next. The interviews were scheduled both in the physical world, as well as in the digital world via Skype.

3.2 PARTICIPANTS

The demographic variables of the participants are as follows. The ages of the participants ranged from 23 to 35; the average is 28. Gender distribution was nearly balanced with 13 participants identifying as male and 15 participants identifying as female. The shortest duration of the romantic relationship participants was one year; the longest duration was ten years. The average length was four years. In total, the participants created a wide variety in terms of academic backgrounds: communication science, business and management, psychology, philosophy,

engineering, medical, and math. All participants came from countries typified as the 'Latin West', meaning the countries that were shaped historically by Western Christianity (McNeill, 2000). These countries all use the Latin alphabet and have similar cultural and ethical values. Nationalities varied from American, Canadian, Mexican, German, Italian, Dutch and Belgian. The professions of the participants were Bachelor students, Master students, PhD students, recently graduated, unemployed and freelance worker. These participants agreed to be interviewed after hearing of the research according to a snowball-effect. The researcher spread the word that people with the aforementioned qualifications were invited to participate in the research. Word of mouth would quickly spread, where firstly people from the social circles of the researcher were responding. Those people would spread the word in their social circles and so forth. In the end, only four out of thirty participants were known by the researcher beforehand. Two participants retracted their consent for using their data afterwards, making the total of participants of which the data is used 28.

3.3 INTERVIEW PROTOCOL

Before the interview started, the researcher explained to the participants that they could stop participating at any moment. The researcher would continue to explain the reason for interviewing the participant, after which the participant could ask questions for clarification. The researcher would present the participant with an informed consent form, stating all the information mentioned verbally before, which would then be signed by the participant. This could be done both with an actual signature and a digital signature for the participants who were interviewed via Skype. The informed consent form can be seen in its entirety in Appendix A. Two participants wanted to do the interview in Dutch, the other twenty-six interviews

were conducted in English as this was the common language both the participants and researcher spoke and understood at a high enough level.

The interviews took place both in a physical setting, either in offices or other quiet places, as well as in a non-physical setting via Skype. Though it would've been preferable to conduct all interviews in a physical setting, this was logistically impossible to do as some people lived too far away from the researcher to travel to. With the non-physical setting of these interviews, there was more of a barrier between the researcher and the person being interviewed. This could not be circumvented, but it could be alleviated as much as possible by having both the researcher and the person being interviewed sitting in a quiet surrounding during the Skype-call. Earplugs and an external microphone ensured that there was a minimum amount of background noise and static. The Skype-call was recorded using a programme inside the laptop to create a closed circuit of audio recording. The interviews in a physical setting were recorded using a dictaphone.

On average, the interviews took forty-five minutes to complete, excluding settling in and, when the interview was conducted via Skype, establishing a stable connection. Closing the interview was done by summarizing the answer the participant had given on the official questions. This gave the added benefit that participants could correct when necessary or even add final comments. There was no reward for the participants in terms of monetary gains or points needed for course work.

3.4 TOPICS

The topics discussed during the interview were as follows: the first question related to the relationship of the participant with their lover in terms of length and development. The second question focussed on the media they used when they were

geographically near (if applicable) and the media they used when they were geographically separated. The follow-up question centred on the reasons why these media were used compared to other forms of media, and how the mediated communication compares to face to face communication. The third question was explicitly when the media were used, after which the disadvantages of computer-mediated communication were discussed. The fourth question related to the content of conversations differing when they are mediated, and if miscommunications ever happen . The last question asked was about how the user feels when their lover doesn't respond to their texts or calls. The formal overview of what was stated and asked during the interview can be found in Appendix B, where the entire interview schema is inserted.

3.5 DATA ANALYSIS

After the twenty-eight interviews were conducted, they were transcribed in Word. The only words left out from transcription were sounds of thought (i.e., 'eh' 'uh', 'hmm') and repetitive words uttered to think aloud (i.e., I... I think, yes, I think that..). The transcription was imported in the software programme Atlas.ti.

After reading several interviews, it became clear that coding line by line and on the sentence level was often not meaningful. The paragraph level, on the other hand, often featured a variety of themes, making it impossible to label with only one code. Based on this, the focus was placed on the level of meaning. From this perspective, the coding of text occurred at different dimensions, which enabled codes to be made up of lines, sentences, or paragraphs, as long as the essence is the same (MacQueen, McLellan-Lemal, & Milstein, 2008).

Before the twenty-eight interviews could be coded in totality, a codebook was created by the researcher. Five interviews, randomly selected, were coded using open

coding meaning that the codes were created on the basis of the data provided. A second coder coded the same five interviews with the codebook. The intercoder agreement was then measured using the function of Atlas.ti as it comes with a sophisticated tool to measure intercoder agreement, i.e. assess the accuracy of how multiple coders analyse a given body of data.

The Krippendorff coefficient measured the intercoder agreement at a value of 0.864, meaning that there was an 86.4% agreement on which code was given on the same sections of texts. This was an iterative process, meaning that it took multiple edits to the codebook to ensure the Krippendorff coefficient was at high enough percentage of agreement. The minimum percentage should be equal to or higher than 0.8 to make a codebook robust. Therefore, the codebook was validated. The remaining 25 interviews were coded with the validated codebook, which can be found in Appendix D.

The manner of analysis was according to 'the spiral of analysis integrated into the qualitative research process' (Boeije, 2010, p. 90), meaning that the method of coding of data was open coding, axial coding and selective coding. These three steps do not follow each other strictly but are executed in an iterative way. Open coding was used to explore the field. Axial coding was used to describe categories, to further define subcategories and refine quotes. During the process of axial coding, there was a reduction and reorganization of the dataset. Synonyms were removed, an example being the merging of the codes 'WhatsApp positive' and 'texting positive'. Codes which were used sporadically were uncoded, and the most representative codes were selected. The categories that arose are shown in Table 1.

Table 1

Overview of main code groups of the codebook

Code Group	Description	# Quotes in total
Appropriation	Usage of media which was not intended by the designer	17
Audio call	(reasons for) Usage of audio calls	40
Autonomy	(the lack of) Change in self-dependency and autonomy	53
Sharing lives	The way lives are still shared through media even though lovers are geographically separated	105
Comparison face-to-face versus computer-mediated communication	The reason why certain media are used, and how they compare to face-to-face communication	265
Text-based media	(reasons for) Usage of text-based media	103
Development relationship	The progression of the long distance relationship (through media)	96
Uncertainty	Reasons why users feel uncertain in their long distance relationship	81
Video conferencing media	(reasons for) Usage of video conferencing media	125
Technological drawbacks	The ways in which media or the systems needed for media to work are viewed negatively	96

Selective coding was done to determine relationships between groups and codes. The result of these steps is the final codebook which can be found in Appendix C.

Based on the code scheme and main code group, it can be expected that the results will focus on the three groups of media that are used, after which the comparison of computer-mediated communication to face-to-face communication can be made. Lastly, the results will then showcase how media and long distance relationships affect one another. According to the codebook, it can be expected that most participants were satisfied with how they used their media and how media helped them in contacting their loved one. However, significant drawbacks regarding relational uncertainty and autonomy must also be addressed, as more than 80 segments were coded related to uncertainty and over 50 were coded regarding autonomy. The results of this coding process are presented in the following chapter.

4 RESULTS

This chapter describes the results of the study, categorised by the use of media and differences between face to face communication and computer-mediated communication. The results showcase the differences between couples who are in the same relational context and how media interrelates to them and their loved one, as the goal of the research is to explore the experiences of people in a long distance relationship and how media affects their relationship.

Participants used a variety of computer-mediated communication technologies to connect with their distant partner. Each fulfilled a specific need. They commonly used phone-based text messaging for short greetings such as "Good Morning" or "I love you", quick questions throughout the day, for security where some would check to ensure their partner had made it home safely, and (for some) just to stay in somewhat constant contact. Instant messaging was similar, except that it also afforded asynchronous conversations over a more extended time period, such as while one of the partners was at work. Most participants used email or Facebook private messaging for sharing stories, videos they liked or funny items, reminiscing about their relationship, coordinating tasks such as paying bills and planning trips or reviewing documents.

Audio calls were used for more in-depth conversations, where partners needed to focus on one another and their discussion. This might include talking about their relationship or other potentially emotional topics. They said it was also useful for short and timely interactions because it was faster to call someone. They predominantly used audio calls in situations when one or both partners were mobile.

Video chat played a somewhat different role. Nearly all the participants stated they had used video chat as a communication tool for their relationship either before

they became separated by distance, or immediately after moving apart. A few began using video chat for pragmatic reasons, such as that it was faster to talk rather than type their message, and that Skype, appear.in and WhatsApp calls were free. In those few cases, video usage began because it was a by-product of these voice calls, but then became more valued over time. However, for the vast majority of cases, as could be expected, people primarily wanted to see the other person when apart, and share their day-to-day life by hanging out together digitally. Both provided an additional level of emotional connection that other computer-mediated communication technologies could not provide. The following sections provide in-depth details.

Overview of chapter

Firstly, the experiences of the participants regarding their usage of various media will then be discussed per type of medium. These are in order: text-based media, audio-based media, video conferencing media. These three subchapters establish how participants use media in their day-to-day life with regards to their loved one. Secondly, the possibilities arising from the existence and usage of computer-mediated communication for lovers in a long distance relationship are described. These are then compared to the technological drawbacks, which are evaluated in order to understand the negative impact computer-mediated communication can have on a romantic relationship and the users. Lastly, a more detailed analysis is then conducted to make sense of the impact of computer-mediated communication on relational uncertainty and, lastly, on autonomy. These two subchapters are necessary to establish how media and media usage are related to the progression and development of long-distance relationships.

4.1 Text-based media

The way texts, instant messaging and email are used and perceived by participants. Aspects such as storage, asynchronous time and ease of use are mentioned.

Storage. The possibility of having external devices saving conversations, photos, URLs and-so-forth is an aspect of computer-mediated communication that is regarded as positive by some of the participants. A positive attitude towards the option of storage can be categorised into four ways of usage. Participant 1 used this function in the following manner:

> [41] "I would take the conversation and replay the whole situation and to have in my mind what was bothering me or what the thing was where it went wrong so that we can immediately talk about it instead of waiting."

Another way of using this function is by looking back at the beginning and progress of their romantic relationship. Participant 15 stated that:

> [42] "It helps gaining a narrative of the whole story because you have a stronger memory of how the relationship developed. Those become anecdotes that you can retell."

Participant 26 used a similar argumentation for being positive about the storage function of smartphones, laptops and pcs, as it helped them create an archive of positive interactions they have had with their loved one.

> [43] "You can reread nice texts, I do that. Especially now. Telegram has this option that you can send it to yourself, so you have an archive of nice texts. These things are nice."

The third way of using the storage function is just to resolve a dispute regarding whether or not something was stated in the text. This argument is nicely summed up in the following quote:

> [44] *"Usually I reread texts for proving stuff, that I told her something two days ago." (Participant 27)*

The only participant who remarked negatively on the possibility of storage had the reverse argumentation as participant 27:

> [45] *"When you're arguing it's not nice because you can go back into some things and remember the negatives." (Participant 26)*

Email: practicality. Four fragments were about using the medium 'email' on a regular basis, primarily for official communiqués and practical matters. The four participants who used email stated that, as email is mostly for issues that were not time-sensitive, they used this medium when they were discussing practical but non-urgent matters with their partner. Some stated that their email became a check-list of the things that they might still have to do.

> [46] *"For example, he is going here by car to pick me up from Barcelona, and I was looking for: are there parking places, etc. so then we mail with links and such." (Participant 9).*

> [47] *"We also send each other emails because email is this thing that you can use as a to-do list." (Participant 22).*

Email: sharing. The difference between email and WhatsApp or most other text-based media is that there is no urgency behind the message the user wants to send. Because of this, some participants stated that they were able to describe their day or what they wanted to share with their partner more accurately. They, therefore, used

[38]

email as a means of sharing, being more careful with their words than they otherwise would've been. As participant 25 states:

> *[48] "You think a lot about what you write, and I think you don't do that via WhatsApp or calling or video chat. […] Sometimes I just send that. Sometimes I just wait until I have some content to make that connection and then I put that in and send the email. Sometimes I have a mess in my head, and I sit down to type an email and then it's nice; it's an email to her."*

The positive aspects of email are not only the lack of pressure for the sender to type quickly, but also for the responder to read the contents of the email. Participants stated that it would've been strange to have a laptop open when their partner was physically near and then make them see a video they thought was funny. Via email, there is a lack of immediacy and interactivity which creates the possibility to indeed take the time for the message a loved one has sent. As participant 22 stated:

> *[49] "Last week I saw a video of a Georgian singer, a girl who sang beautifully. And then I'm like: I have to send this to her, Georgian singing because we were in Georgia last summer. Sometimes she reacts at the end of the day, sometimes a week later. Which is fine because I really want her to sit down and really look at it."*

Texts geographically near: meeting up. Every participant stated that when their relationship was geographically close, they almost exclusively used a form of text as the medium to contact their loved one. The messages they would exchange could be summarized to scheduling a date, scheduling the place to meet and saying that they would talk when they would see each other again.

> *[50] "We did text but not that much. It was easier to just meet up in person. The text would be about when we would see each other." (Participant 19).*

[39]

Texts: updating each other. The habits of texting changed when the relationship became long distance. Most text sent was on the subject of what the sender or the receiver was doing as a form of checking up on the other.

> [51] *"It was just randomly, we would check up on each other. Where are you? How are you doing, those things."* (Participant 20).

The threshold of sending a message is experienced as quite low, which enables users to texts throughout the day about the events that were happening in their lives in real time.

> [52] *"We texted a lot, the whole day practically. Telegram and texting were just random things throughout the day. 'good morning, what is the plan for today, check this out.'"* (Participant 26).

As this low threshold is one of the critical aspects for WhatsApp and the like, the ease of use of text-based media is stated most often when participants analysed positive aspects of the media they use. Some participants stated that WhatsApp could be used anywhere and anytime, even whilst working or spending time with friends.

> [53] *"[I use] All of the functions of WhatsApp, so WhatsApp-calls, video call and most of the time the messaging, because that is the easiest thing to do when you're multitasking. When you're in a lecture, you can still type away on your laptop."* (Participant 1)

The immediacy and ease of use of text-based media create the illusion or idea that the other is always nearby; the option of sharing events that happened is therefore as easy as if the other was physically there.

> *[54] "Something nice happened or if you've seen a movie that you liked or*
> *some gossip about a common person that you know, you can just share it in*
> *a quick, immediate way via Telegram." (Participant 21).*

Texts: disadvantages. Text-based media are lean in terms of interactivity and the option of social cues. When sending simple messages regarding the weather or if the user slept okay, text is sufficient carrying the complexity of the content. However, a simple question such as how the other is doing could already create miscommunication. Participants stated that the lack of social cues and verbal cues more often than not created miscommunication between them and their loved one. Though emoticons and gifs have enabled users to carry some emotional context to their message, there is still the possibility of the other not understanding or misinterpreting what was actually meant. As participant 1 stated:

> *[55] "The miscommunication that could appear, because you can't read*
> *emotions from your screen and the person isn't using smiley-things. It*
> *becomes more difficult to read the emotions."*

It was stated 16 times that miscommunication happened most often when they or their loved one was confused about whether the message was meant humorously or not. Jokes and sarcasm were talked about most often when participants analysed the drawbacks of text-based media.

> *[56] "That's a thing that is different. It's really miscommunication that*
> *occurs through text because you don't know whether something was said*
> *because it was funny or if something was said because it was serious and*
> *then miscommunication occurs." (Participant 1).*

The way participants solved the problem of miscommunication is by sending emoticons or be more articulate on what is bothering them.

[41]

[57] "We figured out quite quickly that we had to use emoticons to get jokes and such across. Especially I don't always get a joke in a text message, but it's also a language thing with us. Because my English is good, but it's not perfect so he'll say something and I don't understand some of the words or I'll think I understand while it's something completely different." (Participant 18).

[58] "I think, I mean, I used to get angry, I guess. Just as a personality thing, but now I try to be more articulate and just say: Okay, this is where I'm coming from." (Participant 19).

Some participants also reiterated that they felt there was something lacking during text-based communications. Not only the lack of social and verbal cues was mentioned, but also the depth of a conversation was named. As was stated before, texts can be sent without much contemplation of the sender. Because of this lack of thought, some participants stated that the conversations they have via texts are basically without meaning. The introduction of emoticons created more downsizing of the content of conversations. As participant 26 stated:

[59] "You have to read between the lines, and I'd like to focus on nonverbal communication as well. It's sometimes only nonsense that we're texting. Since I moved here, I started using emoji's, which I never did before because it's downsizing a conversation. Five smileys say nothing, give me text. And it's not something you normally do; it's a flow of useless information. It doesn't make you feel better; it doesn't help you connect to the person; it's just empty."

Text-based conversation alone will never suffice for two participants, as they dissociate the answers they receive from their loved one. Participant 23 stated that:

[42]

> *[60] "I think when I only read her words, it's like reading a textbook. You feel less connected to the person during the moment."*

By contrast, there were participants who stated that emoticons, stickers and GIFs created another layer of interaction and added more to the conversation. The participants stated that, instead of only reading what their loved one sent, there was also a sticker, emoticon or GIF exemplifying the message. These forms of visuals created an ambience or mood to view the other one's message in. As participant 15 stated:

> *[61] "Stuff like that, I think, they do add a layer of vividness. They make it more vivid, rather than sending: "I hug you." You send a very emphatic hug. That makes it feel real. Stickers can also feel real. Some stickers are really well done in the sense that they are very expressive. They really make you understand what is going on. Some of them are very perfect to express certain emotions such as surprise or weird reactions. Stickers and GIFs are the reason we rely on Telegram. Because it does have this added layer that makes it easier to have more expressive communication."*

4.2 AUDIO-BASED MEDIA

The way audio-based media are used and perceived by participants. Aspects such as ease of use, real-time interaction and deepened conversations are mentioned.

Various forms of audio-based media were used by the participants. Some relied on the voice note-option of WhatsApp and Telegram, whilst others called via said applications. For ten participants, the primary reason for audio calling their loved one was the ease of use of audio-based applications, as there is no need to type out the message that the user wants to convey.

[62] "If it's a back and forth that goes on for more than ten minutes, I'll just call instead. It's more convenient if you look at how long it takes to plan something or agree on what we want to do next weekend. It's easier in phone call than sending messages back and forth" (Participant 24).

Moreover, there is real-time interaction and immediacy to the conversation during audio calls. Participants stated that they liked that they could get responses to their partner immediately instead of waiting until the other had typed out their message.

[63] "The phone has the advantage of having a direct reply and answer, the immediacy of it. Which I would say has most pragmatic advantages. If I need advice on something or I want to give it, I need some back and forth to have the option to fix it if I said something wrong." (Participant 25).

Audio calls ensured that participants could focus more on what their loved one was said, deepening the conversations they had as they thought more about their responses. Participants stated that they had a positive attitude towards audio calls as they would only have to focus on the verbal cues of their partner, which ensured they didn't have an overflow of information to decipher. Complex messages were usually relayed to audio calls because of those reasons. To summarize:

[64] "If we talk about our feelings or relationship, I would want to do that over a telephone conversation." (Participant 24).

The integration of their loved one into daily lives creates unusual events. Audio calls were most often used either when participants were at home or on the move. The participants who used audio calls whilst driving a car or a bicycle stated that they did so in order to be more efficient with their time, but to also have this idea that their partner was with them in the car. However, this also creates situations that might be

more dangerous than others. Participant 9 relayed the story of how she was talking to her boyfriend about something and how he then became emotional:

> [65] "There was one time when we called, and he was in the car. These days he is in the car, it's efficient to call when he is driving. With WhatsApp call, that was one time, and he cried. And he was in the car driving. That was… I immediately made a joke because I was freaked out. "Please let's talk about something silly before you create an accident." (Participant 9).

4.3 VIDEO-CONFERENCING MEDIA

The way video-conferencing media are used and perceived by participants. Aspects such as emotional closeness, digital presence, a more acute sense of being alone, and social cues are mentioned.

It was stated seventeen times that the participants used video conferencing media merely because they wanted to see their partner's face, as it made them feel emotionally closer to each other. Participants and their partners commonly showed off new things visually over the link. This ranged from haircuts to freckles acquired during their stay in a more sunny country.

> [66] "In the beginning, you can show the house where you live. Or when I had my first freckles, I could cheer with him and show them off." (Participant 9).

The video helped them see their partner's surroundings, whether it was just part of the background or purposely shared by giving the other a video tour around the area.

> [67] "Especially in our situation, since we already have the house in Amersfoort and my boyfriend is doing a lot of renovations in the house, he shows me around the house. And we also have to discuss what we are changing etc. So that's also planning things since we were in contact with an

architect to plan how we want the house to look like. When and where do we replace the walls etc. My boyfriend shows me around with the telephone, so we use WhatsApp videocalls, and he shows the current state, and we discuss what we want. And with the architect, we had, twice, a conversation that they were together in the house and I was there via Skype." (Participant 9).

Others appropriated video calling media to simulate eating 'together' or cooking together. They stated that it felt as if they were just two people, having dinner together.

[68] "Sometimes we have dinner together over Skype. So I would have a pizza, and he would have a pizza, and we would just eat together"
(Participant 3).

The digital presence of the other was also a form of reassurance. Their loved one would "hang around" whilst they were, for example, busy cleaning or cooking. It is the concept of availability, the option of just randomly saying something and knowing the other is there, that made participants use video calling this way.

[69] "If you're just sitting on a couch watching tv, it's easy of course. And if I'm cooking, for example, I can just move her to the kitchen. She can help me with cooking almost. Otherwise, if I walk around, I just walk around busy cleaning with or something and say hi from time to time when I walk by. And if I'm doing walking around a lot, because I'm busy moving stuff or something, sometimes I'm busy, and then I take the laptop with me. I move her around as well." (Participant 10)

Video calling has nearly all of the aspects of body to body communication, excepting of course the touch component. The participants stated that they were more acutely

[46]

aware of this lack of touch during or after a video conferencing session with their loved one. As participant 15 stated:

> [70] *"What I generally feel, well, sometimes I really miss the touching component of course. That's the part that cannot be replaced. So closing that channel of communication, when that feeling is very present, then it feels a little bit sad. You feel the longing particularly sharply there."*

When participants had terrible days, such as problems at work or failing an exam, they would contact their loved one either through audio or video calls. When they used video conferencing as a medium, the worries they had might become more than if they hadn't seen their loved one. Participant 8 stated that she felt more negative emotions after video conferencing her loved one during bad days, especially once she sees herself staring at the screen of her laptop.

> [71] *"You're just sitting there, and you don't feel better. You talked about your worries, but you're still alone. It's only a laptop. If you turn off the camera and you see yourself staring at the screen, I don't like that."* (Participant 26).

Another negative aspect of video conferencing is the loneliness some participants felt. During these video conferencing sessions, they would still realise that they were alone in their room. It was when participants felt either very joyous or sad that they realised the lack of intimacy and physicality during their conversation.

> [72]*"I think when I cry in front of the camera, I don't have anything to hold on to. It's just me, sitting in a chair with nothing and you can see that, and even though you can see him, and he can comfort you with his voice, the one drying your tears is still you."* (Participant 3).

[73] "But still, you miss the touch, you miss having something, even

punching something for a joke. When you laugh, it feels different. You feel

like a maniac, alone in a room laughing at a screen." (Participant 26).

Though these drawbacks are deemed as more severe than the drawbacks of audio

calls and text-based media, the benefits of video conferring pay out more as well.

Skype and other forms of video conferencing media created an experience that felt

more 'real' than participants had initially thought.

[74] "Skype is a great solution. It really feels as if he is less far away because

I can see him and I can talk to him in real time. You see one another, and

that goes a long way. It gives confidence." (Participant 8).

[75] "It is better than I expected. It feels more real than I expected in

advance." (Participant 9).

Because video conferencing feels 'real', participants stated that they had deeper

conversations with their loved one when they were conversing via video. Social cues,

paired with verbal cues, created more depth to conversations than any other form of

media could ever give. The idea of being able to look each other in the eyes whilst

talking was one of the key aspects of using video conferencing media. As participant

26 states:

[76] "We would never talk about it over the phone; it felt more serious if we

were looking at each other. So we would say: "Tonight we'll skype.". I

always like to check if I can be alone at home so I can talk louder or just to

not wear headphones all the time. It was just okay for more serious things,

skyping."

Some people were very aware of their own appearance whilst video conferencing with

their loved one. Even though they shared intimate relationships and had seen each

other "at their worst," multiple participants would only video chat after they had made themselves "look good."

> [77] "I always make sure that I don't look like a hobo when he comes to Skype. What I mean is: I will show up like I showed up now. The decent hair but then, while the conversation continues the bun will come, the sleeves will be rolled up. Then I don't mind. But always, when I turn on Skype, I will fix myself up a bit and then start skype." (Participant 1).

The option of looking at yourself during a conversation is impossible in a physical setting unless there was a mirror taped to the shoulder of the person you're conversing with. All video conferencing media that were used by the participants created a dynamic between users, where they could witness themselves talking to their loved one. This was something that some participants actively realised, and found to be a significant drawback in their conversations.

> [78]"I also find the little picture of myself very hard to look at. I think that's also in skype that I turn off my own cam because I don't like... otherwise, I will look at myself and check if I look all right. I don't want to be focused on me when I'm skyping with him. Because you don't do that in a normal conversation." (Participant 11).

Some participants stated that because they saw themselves, they became conscious of their own quirks, tics and automatic behaviour. This was not caused because their loved one was the one observing their quirks and behaviour, but more a thoughtful reflection on what they saw themselves doing. As participant 9 stated:

> [79] "No, but I was more conscious of my own behaviour. Also, how many times that I watch my phone if I know that Skype is running, then I'm more conscious that I'm checking it again. It's a sort of mirror for yourself."

[49]

[80] "Because I'm more conscious of my own appearance, I do act differently because I see myself making all these non-verbal cues or flirting with my girlfriend. It's harder to do that when you're hyper-aware of yourself." (Participant 22).

4.4 COMPARISON OF DRAWBACKS AND POSSIBILITIES

The possibilities and drawbacks that are arising from computer-mediated communication tools as perceived by participants, compared to face-to-face communication. Aspects such as availability, preferring media over face-to-face interaction, mobility, the sharing of lives and progression of the relationship are mentioned.

Availability. One of the critical aspects of modern communication technologies is that they create a sense of availability, wherein all users can be contacted at any time of the day as long as there is a source of internet available. There were fourteen instances in the interviews that people commented on this in a positive manner, for example:

[1] "But on the other hand, it's also really nice to have this feeling that there is always someone in my pocket. You know? You can just pull out your phone, and you have contact immediately. […] It's nice! It feels nice and not alone. You always have someone to share whatever with." (Participant 11).

The data shows digital media does create more opportunities to connect with a geographically-separated loved one in ways that other communication systems can't. Compared to when lovers in long distance relationship were still geographically near, this appreciation of availability comes up when the lovers are not able to meet up face to face. Participant 4 exemplifies this by stating:

[2] "I think there is also an advantage because though we don't see each

other face to face, we can still talk whenever we want. You can take your

smartphone whenever you want and send a text whenever you want. There

is no limitation in terms of space or time to contact the other."

The smartphone has, according to some participants, created the idea of having to be available to the other all the time. Though the two lovers are distanced, the possibility of having a connection with their loved one at any moment of any day is a negative aspect of smartphone and mobile communication tools. There were twenty-one fragments with a negative attitude towards availability. Participant 15 stated this as follows:

[3] "A feeling that I have is that sometimes, it does feel weird to share so

much when you're on your own physically. You only have the medium in

your hand. Sometimes, what is really weird for me, this channel of

communication and type of communication creates expectations. Such as

requests that are born out of the medium and the practice of using it that

would not otherwise be present. That is: send a picture; I want a reaction."

[4] "This default of always being available for the person. I wouldn't want

that in my physical life. I would need my own time. I would expect her to

only interrupt me for something important. With these devices, the default

became that it's okay always to respond and ask for stuff." (Participant 24)

Others stressed that they felt that being in a long distance relationship is seen as a challenge and that their relationship doesn't become better by being available and connecting to the other all the time.

[5] "I don't want to impose on him and make him be online. It's okay to not

be online. We raised our expectations because now it's possible to be online

all the time. That doesn't mean that that's the thing we should do. I don't

think it makes things better, my relationship that is." (Participant 19)

<u>Appreciation of media</u>. There were twenty-four instances where participants uttered positives on computer-mediated communication and the media facilitating the communication which couldn't be placed into a specific element of the media. The code was therefore named 'computer-mediated communication appreciated', wherein participants stated that the media helped maintain the sense of being in a relationship and of togetherness. For example, as participant 24 stated:

> *[6] "There are a lot of times that the bed feels empty but you can send that in*
> *a message or a 'hmmmmm', and then you know the other feels the same*
> *when she replies like that. You can share that with a partner if you both feel*
> *that way. It's a poor substitute, but it helps a bit."*

Similar experiences were expressed by other participants, so it seems that computer-mediated communication is helping to digitally bridge lovers who are geographically separated.

> *[7] "It makes you feel closer when you're apart. There are 2000 km between*
> *us, and we can just talk, just as you and I are doing right now. There is only*
> *one meter. So in that sense, it definitely closes the distance." (Participant 15)*

<u>Opportunities</u>. This study suggests that digital media can create opportunities for geographically separated lovers to connect romantically still. Multiple participants stated that they became substantially more creative in their usage of media in ways that they wouldn't be if their relationship had been a geographically close one or if digital media hadn't been an option. Participant 22 uses emails to share his interests with his girlfriend in the following manner:

[52]

> *[8] "As long as I am not in the same physical room as my girlfriend, the*
> *physical part of the relationship is in stasis. But as long as we are sending*
> *each other emails with music and videos and tips and whatever, that stuff is*
> *still building. There is a beauty to these media. It makes you creative."*

Three fragments describe how participants would play video games on their computers with their partners. They stated that being able to see or hear them periodically over the video link added to the gaming experience.

> *[9] "Sometimes my only update is that today is a day that I didn't do*
> *anything. Procrastinating and not working all day. Sometimes this is not*
> *super exciting, when there is not much to talk about, we just play games or*
> *watch something. We're not people that feel the need to converse all the time,*
> *constantly talking about something. We just chill and watch something, or*
> *play something." (Participant 6).*

Six fragments were dedicated to computer-mediated communication having similarities to actual face to face communication. Digital media held a sense of replicability of having their lover geographically near, in the way that they felt that the experience was similar. As participant 5 stated:

> *[10] "I think it's quite similar for me at least. Because, still, I have the feeling*
> *that you're talking to a real person and even though there is some distance,*
> *of course, you can't get a hug. It's different, but you still have someone who is*
> *listening to you and who is paying attention to you."*

Nearly all participants seemed to have built up a particular routine in their way of communicating with their loved one via media. Some go as far to state that the experience is similar to having their loved one in the physical vicinity:

[11] "The only difference is that he doesn't come home as in the physical home, but I know that he's going to be around to talk with at a certain point during the day. I think it's quite similar, the only thing you can't do is touch or give a hug, that kind of things. [...] The touch is the only thing that is not there, but that's not there, and it's not going to be there. Everything else works pretty well. [...] At this point, I don't feel like I'm missing anything in it." (Participant 18)

Preferring media over face-to-face. There were ten sections of the interviews where participants stated that they sometimes preferred computer-mediated communication to face to face communication. The most often cited reason is that during a face to face meeting, there is less time to think about what they are saying. As participant 15 stated that:

[12] "When you type, you realise that if you send it like this that she'll probably think that I mean it this way, and I don't mean it this way so you can alternate the text. When you're face to face, you just say something stupid, and you know at that moment that you fucked up. There is no backspace or undo."

Another participant stated that there is the option of stopping the conversation when using computer-mediated communication. As face to face communication entails being in the same physical space, the possibility of stopping a conversation or abruptly retreating into a place of your own is less likely.

[13] "The benefits of it, I can always get my privacy whenever I want. When I don't feel like replying, I can deactivate Wi-Fi and reply later." (Participant 14)

The last argument in favour of computer-mediated communication compared to face to face communication is that there is more of an emotional distance between both users. Mediation is literally created by a digital barrier.

> [14] *"When I feel that we're moving to a more serious or vulnerable topic, the thing is that sometimes those conversations work better via video call because the distance helps. The barrier between me and all the emotional context." (Participant 22)*

Mobility. Users in long distance relationships liked that they could walk, cycle, drive around while still talking to their loved one. As participant 24 succinctly states:

> [15] *"Yes, well, location doesn't matter. I use it [his phone] wherever I want."*

Another participant created a simulation of having her partner next to her while driving her car.

> [16] *"It's when you call, and you're driving, is the same as talking to a person sitting next to you. He'll be on the handsfree set. It won't be a video. I'll just have a conversation as if he's a passenger sitting next to me in the car. You don't look at the person next to you if you're driving; you're just talking." (Participant 18).*

Spontaneous versus planned usage. The participants and their habits of contacting their loved one via video or audio calls could be divided into two groups: those who plan their use of media, which was coded thirteen times, and those who are more spontaneous in deciding when to video or audio call their loved one, which was coded sixteen times. As it takes more effort to have a video conference, these types of media were used more commonly in situations when both partners had the time to stay connected for longer durations.

People managed this by the way they initiated and timed their video sessions. The data shows that nearly all of our participants would use other technologies to check if their remote partner was available to video chat prior to video call them. This varied between using text messages or instant messaging to find out if the partner was in a location conducive to video chat, e.g., at home vs work, and if they weren't busy. While some used the instant messaging capabilities by staying online continuously, others did not as they didn't want to be available for video-calls by people other than their partner.

However, most video chats were not totally serendipitous or one-person initiated. Instead, partners developed routines of when they would be available to each other. Much like a couple living together, they would try and expect to see each other once they had arrived at home after work or school in the evenings, or early mornings, or at other critical times during the day. There are those who can shift around in terms of time, such as participant 21:

> [17] "It can happen, but if it's just like a call, the week call, to just update and tell what happened during the week, then you can sort of plan generally. You can say in general that we'll call on Sunday morning, and then maybe Friday and Saturday you can define the precise slot of hour, Sunday at 10 AM."

By contrast, there are participants who have incorporated their partners into their daily lives, having allotted a specific time slot to video conference with one another.

> [18] "For me, it's not different as having a boyfriend who is there and who comes home from work at five o' clock, and you're at home as well. And you plan stuff in the week as well together, so it's like that." (Participant 18)

Technological limitations. Digital communication technologies are dependent on a number of things, chief among which is electricity and a stable internet connection. Without one of these factors, a connection is more difficult to be made. The data shows that a bad internet connection can therefore severely influence the quality of communication between two long distanced lovers.

> *[19] "There is a bad internet connection and then all of a sudden the person is gone, and you have almost no chance of reaching her again; then it's really frustrating and not good." (Participant 2)*

Though the participants were all from and living in Western countries, technological limitations seem to be an issue still as twenty-eight sections of text were coded as such. When discussing how these technological limitations reflected upon their relationship, none of the participants stated that it impacted their love negatively. However, some stated that they felt more frustration due to having the option of seeing their loved one but the technology not working.

The most often stated way of dealing with static or a bad internet connection can be seen in the quote by participant 10:

> *[20] "Sometimes the internet is flaky, or microphones or videos don't work properly. You can't understand someone properly. You can't hear them or hear what they're saying. Because we have such a high amount of contact, it's not such a big deal. We just accept that this is not the right moment right now."*

Privacy. Another factor influencing how users employ different media is the factor of privacy and concerns thereof. Privacy concerns were coded fifteen times. Some participants stated that based on recent publications of Facebook and the Cambridge Analytics scandal, they switched from using Facebook Messenger and WhatsApp to

other (instant) messaging applications such as Telegram and Signal. The reputation of specific applications as being more privacy aware and encrypted was a reason for some participants to choose to use it.

> *[21] "I like Telegram because it's encrypted. I'm big into that; I'm not into having my data stored. I'm not a fan." (Participant 6).*

> *[22] "[We use] chats of either Facebook messenger and now Telegram because of this Facebook/Cambridge analytics scandal. We wanted to switch." (Participant 6).*

Though not all participants were worried about specific companies' privacy violations, arguments were made about why certain applications or technologies weren't used or trusted.

> *[23] "All your messages will be stored. You don't know where they are. If they hack it, everyone can see them. We don't send really strange things or strange pictures. Because you don't know; it's somewhere in the universe." (Participant 21).*

Moreover, participants who were worried about privacy violations were also more aware of other people reading along in a physical setting.

> *[24] "If I feel like somebody is looking over my shoulder and trying to read my text, I'll just close WhatsApp or put away my phone. I am aware of it, that other people tend to do that." (Participant 14).*

<u>Limitations for communication</u>. Though computer-mediated communication is deemed an excellent substitute to seeing a loved one, it is obviously not the same experience as seeing a lover face to face. Participant 1 noted that the emotional context is completely lacking within computer-mediated communication, especially when it comes to conflict resolution:

[25] "It's like for example that if I get angry with you know, it will affect you less than if I would get angry with you in real life. Because you can shut your laptop when you want to. And this is also like a safe distance, and then it's easier to talk about things, and I don't want to make it easier when it's about serious stuff. I want to do it in real life. I want to feel it, and I want him to feel it too."

When asked to reflect on how computer-mediated communication technology resembles face to face interaction, some participants stated that there was an uncanny resemblance to real-life interaction. Though video conferencing technologies are appreciated, they also make the user feel as if there is something missing.

[26] "It's an uncanny closeness. It does feel closer but not in the same way of being together. At the same time you have the feeling of closeness and being closer and the feeling that something is missing: something is not right."
(Participant 15).

4.4.1 Sharing lives

<u>Supporting your partner</u>. Computer-mediated communication technologies have come far in helping lovers stay in contact with one another, spanning vast distances. However, the way participants felt supported through the use of computer-mediated communication can be divided into two groups: the people who need a physical component to feel reassured or supported and those where words are enough.

[27] "One of the big parts of a relationship is supporting each other in times like that, at least to me, to us, that's a big part of what makes a good relationship, supporting each other. You can't offer that same support to each other through computer mediated technology." (Participant 16).

[59]

> *[28] "So if there's a situation unresolved and you are not able to recognize*
>
> *that or to think yourself in the other's perspective if you don't recognize that*
>
> *the person is left with unresolved feelings, then it makes it difficult."*
>
> *(Participant 2).*

By contrast, the participants who stated that words made them feel supported in whatever problem they had, stress that the attention given by their partner via computer-mediated communication is a way of taking care of one another.

> *[29] "The reason I share my happiness or anxiety or whatever, I want to*
>
> *share that with my girlfriend is this co-living feeling. That you live your life*
>
> *and someone else still knows what you're worrying about. She helps me talk*
>
> *through it, and she'll text me the morning after, the feeling that I'm not doing*
>
> *it on my own is one of the most beautiful things in any relationship. The*
>
> *video chat is part of this process of taking care of each other." (Participant*
>
> *22).*

> *[30] "[It's] Really just talking, knowing that they genuinely care. She asks a*
>
> *lot of questions, so that makes me feel like she genuinely cares and wants to*
>
> *know how I'm feeling or how I was. That really helps me more than physical*
>
> *contact even. Knowing they really care instead of just giving a hug. Anyone*
>
> *can do that. It's really about genuinely caring and asking questions."*
>
> *(Participant 7).*

Humour. When prompted about the general difference of content of communication when talking face to face or talking via a medium, fifteen fragments were about how 'having fun' with their partner differed or how their humour changed. When sharing physical space, these participants stated that they could chat about objects they would see in the room or how something funny would happen, and being able to

laugh about it together before continuing with what they were doing. It appears that mediated communication gives less room to be nonsensical with one another.

> *[31] "I think when we are near to each other, then we make more fun actually. Because I think we can tell jokes over WhatsApp for example, and sometimes we do that, but we both think that it's so hard not to see the reaction to a joke." (Participant 3)*

> *[32] "There is less nonsense. When you're sitting next to each other, you can poke the other and show them something funny. You'd have wasted five seconds and go back to whatever you're doing. You can do that in between." (Participant 16)*

4.4.2 Progression of the relationship

<u>Maintenance</u>. Participants related their media usage and their relationship in either one of two ways: maintenance or growth. The fact that digital media ensured that lovers could still stay in touch with one another, at least in a verbal sense, gave participants the feeling that they were still in a relationship. When prompted the idea that digital media wasn't an option for a certain amount of time, participants stated that they would lack the feeling of being in a relationship. Computer-mediated communication was seen as vital of at least maintaining their relationships.

> *[33] "And right now, because I can send him little messages and I do talk to him more often, you're not necessarily growing but you're at least in stasis. It maintains that you are in a relationship." (Participant 16).*

As the communication they had was mediated, this resulted for some in the feeling that they missed the daily struggles or small events in their lover's life. It appeared, to them, that only the big problems or events were talked about and in doing so, these lovers didn't feel like they were still growing closer together in their

relationship. It would only be when they were in the same physical space that their relationship was growing.

> *[34] "I'd say you also kind of, with the long-distance relationship and mediated technology, you miss the everyday struggles and routine. You can have a moment where one person needs to call, and you can call. But the everyday struggles, you don't see them. Those moments are what can make a relationship grow. Going together through difficult moments is what makes a relationship grow. In a long distance relationship and in such a small time, it's just talking with one another and a wait until we're physically near again." (Participant 21).*

Growth. An important distinction to make is the fact that there is no passivity in a long distance relationship. Though few participants stated this outright when taking into account all their answers and experiences it can be stated that maintaining a romantic relationship via media is working for it. As participant 6 states:

> *[35] "You care about other people, and I think digitally, that makes it harder because instead of passive care and gaining this balance and being passively involved in your life by being there, you have to go out of your way to be like: hey, what do you think about this. Or this thing that I'm doing. Or this apartment I'm moving into. [...] Because every time you have or want to involve someone in your life, you'll have to do it actively. Because otherwise, if you don't actively talk to that person, online or whatever, you just don't talk then."*

Because they put in an effort for their relationship, eight participants stated that their relationship was growing, even though they were only talking via a medium. Since the physical aspect wasn't available, the intellectual or verbal part of the

[62]

relationship became more noteworthy. Moreover, being apart from one another was seen as a test of the lovers' relationship, seeing if the relationship could withstand not being physical and physically near. For some, the lack of physicality heightened the desire and anticipation to see their lover again.

> [36] *"When I moved here, I remember, it became more a daily conversation. So we were exchanging daily what we were doing, our reflections about the books we were reading, so we were sharing our impressions. In that sense, we really developed a closer relationship." (Participant 15)*

> [37] *"I would even say that in a certain way the distance could also help to strengthen the relationship but in a way also increase your desire of meeting each other. Appreciating the other more as well." (Participant 21).*

Meeting again in real life. When distanced lovers would meet again in physical space, their joining would be described as either continuing where they left off or having to get used to the other person again. As distanced lovers are limited to non-physical communication, they stated that they lost touch of how the other person behaved or even looked.

> [38] *"Every time we would meet, it was awkward, or it was unnatural at some point. The other is real; at some point, you forget that the person is there until he is actually there. It takes a day to adjust to what we are. You're just not there to see them and understand them. There are some things that changed for worse and for better, it goes both ways. After some time, you figure that I wasn't there when something happened. Even stupid things, like drinking coffee in the morning. He put sugar in it, but I stopped doing that." (Participant 26).*

[63]

Three participants stated that the sooner they were able to see their partner, the more their anticipation heightened. The entire process of setting up a date to see one another body to body again was only a positive experience, which continued when they would indeed meet and see each other without mediation.

> *[39] "We still have a great relationship, and when we see each other, it's awesome. I think it's nice to anticipate that. It's something to look forward to." (Participant 19).*

As some participants stated, there was some getting used to their partner again once they were reconnected. Participant 21 stated it as follows:

> *[40] "For me, I don't feel uncomfortable if I don't see a partner for a while and then I see her again. For me, I don't feel nervous or uncomfortable, or I'm not used to it anymore. For her, it's a bit more like that. She maybe needs a few days to get a bit comfortable again."*

4.5 RELATIONAL UNCERTAINTY

The way participants perceived feelings of uncertainty regarding their relationship. Aspects such as distrust and alleviating uncertainty and distrust are mentioned.

The distance that is between lovers when they are not geographically close by can create friction or uncertainty in their relationship. Various media can help alleviate this, as lovers can then keep one another up to date on what is happening in their lives while the other is away. However, this doesn't ensure that there is no distrust or more aggravation between two lovers when their only form of communication is mediated.

> *[81] "Yes, we both have that when we don't see each other for a really long time. Then we have noticed that we will have these little discussions about*

nothing more and more and more. It will be like this, and then when we see each other everything is fine again. That's the only distrust that ever happens." (Participant 1).

The feeling of distrust would stem from not knowing what the other is doing. Some participants stated that having appointments or being away for the evening would already give his partner feelings of distrust.

[82] "I think distrustfulness is more her feeling. I'm the one that left, so when I don't answer after so long, she'll be kind of mad and asking what I'm doing. We always have this; even after six years, you can be fearful that there is someone else. If you're not with the other for a certain time, this phenomenon can arise. It depends on what I do in the evening. If one of us not busy and the other is, then there is friction and the possibility of distrust." (Participant 27).

[83] "There is always a bit of an apologize in there. "Sorry, I was busy with this and this." And you try to explain what you did. So a setting to put it in." (Participant 10).

Other participants stated that their feeling of unrest and uncertainty stemmed from themselves. They felt the need to continually be assured of the romantic love they had for their partner.

[84] "After a few days of not seeing each other in real life, I got this feeling of unrest and anxiety. Are we still all right? And then I would want to call her, but these phone calls would never give me enough, and I'm not even talking about texting because that's so shitty compared to phone calls." (Participant 22).

[65]

Trusting their partner even though there was a physical distance between them was something either innate in a relationship or more of a process of getting there.

> [85] "We concluded that we can trust each other, which was not really a question for me, but I didn't know either how to react to being apart. It worked out well, so that's something we accomplished." (Participant 9).

> [86] "In the beginning, I was worried if she didn't text me back after three hours. I would be worried. But now, I'm okay. She'll text me back when she can and wants to." (Participant 27).

However, when feelings of uncertainty arise, there is a more significant issue to alleviate which some participants even describe as paranoia. Causes of this paranoia and distrust were sometimes found in the inability of the other to contact their loved one for a more extended period of time. Participant 20 stated this as follows:

> [87] "It was a very bad phase when he just moved further away, and he didn't have internet, and I had to call, and he'd be busy shifting, and he wasn't texting or calling. That was annoying. You can take one minute out of the day for me."

All participants who described feelings of uncertainty and distrust from or towards their partner stated that talking was the way to resolve this problem.

> [88] "We started talking about it in person, that I wanted to call her more and more conversations and more messages. And she wanted to know why because she felt that she didn't need that necessarily. I learned to reassure myself a bit, and wait a bit, save up some of the stories and talk about them at the end of the week." (Participant 22).

4.6 AUTONOMY

The way participants felt a change in their autonomy in part because of computer-mediated communication. Aspects such as availability and independence are mentioned.

Positives and negatives. Due to the ubiquity of the internet, all participants in this research stated that were the need to arise; they could contact their loved one quickly enough. However, this quickness in response time is also the case for non-essential moments. The fact that people can be contacted whenever or wherever it is perceived as a reduction of autonomy. This is not necessarily a negative impact, but it does change the relationship of lovers with each other and their surroundings. A reduction in autonomy was perceived positively eight times. As participant 1 states:

> [89] "But, now, even when I'm with friends, even when I have a good time, it feels good for me to once in a while to pick up my phone and see whether he missed me, whether he said something. Because I would like to respond to him so that he knows that I'm thinking about him even when I'm with other people, and I want to make sure that he doesn't feel forgotten or something."

Participants didn't mind that they had to think about the needs or wants of their loved one – for them, it meant that they were loved and in a romantic relationship. Caring for the other, wanting to talk to the other and being interested in what the other is doing doesn't equate to sacrificing their own interests in the process.

> [90] "He doesn't change who I am or make me change whom I am by saying I shouldn't do it. It's more like: what is the best way to do this together? What's the best way to make each other better? And I don't ever feel like I have to sacrifice really important stuff to me." (Participant 6).

[91] "We live our own lives and do our own things, but also care about what the other person is doing. It's pretty simple. I'm still going to do the things I want to do, day to day, but I'm also interested in what she is doing, and I also want to talk to her as well. I care about what she is doing." (Participant 7).

The difference is when this ubiquity becomes more than merely keeping each other up-to-date but transform into having to explain what or why a participant is doing something. This reduction in autonomy appears to go hand-in-hand with the idea of being always available through digital media. This is experienced as unfavourable for both the relationship, as well as the independence of the person who has to do the explaining. Participant 3 exemplifies this as follows:

[92] "When I'm back at my parents' place, and we are in the group WhatsApp with our friends over there, and someone asks: "Who wants to go chilling tonight?". People would respond on that, and he sees that as well. He would then ask me if I'm going to chill tonight. And then I always need to say that I can say yes, but it's not so nice when I have to explain myself when I don't go there for example. There's not a good or bad answer to that, I think, but it feels that there is. When we know the same people, I feel like I have to give him a reason why I go or don't go to a thing."

Independence. All participants stated that they would rather have their partner nearby and a reduction in independence and autonomy, meaning that they would have to think about their partners' needs and wishes in a more physical and intimate way. As this was not the case, the advantages of being in a long distance relationship were experienced as positives by most. The benefits of being in a long distance relationship in terms of autonomy were mentioned nine times. These participants explicitly stated that they liked having greater control over their plans from day to

day. They didn't feel like they lacked in anything whilst being in a long distance relationship; instead, they would feel the support and love of their partner without having the added social obligations.

> *[93] "That's something I am okay with, and I really like the distance and independence. I can lead my own life. I don't have a lot of obligations to meet. I don't have to go out with his friends or out to dinner with his colleagues. It's not a compulsory thing. It's okay that you have your own friends and life on the side. I like being independent and autonomous and distant from his life." (Participant 20).*

Moreover, these participants stated that they felt stronger because of the experience of being in a long distance relationship. Because their partner wouldn't be there to help them solve their problems, they grew in terms of independence and self-reliance. Participant 19 stated this as follows:

[94] "I'll talk about it with him on the phone, and I'll do that. I'll kind of make myself feel better over the phone by talking to him. [...] I have to make myself do that more rather than depend on him to make myself feel better. He can still do it but it's not as much, so I have to do more of my part. More like supporting me in doing that. It's kind of nice in a way; it makes me feel more independent; I can deal with stuff myself more. It's harder, but it's also good in a way."

5 DISCUSSION

This chapter starts by answering the two sub-questions, after which the research question is answered. Limitations of this research are then discussed, concluding in recommendations for future research.

5.1 CONCLUSION

5.1.1 Sub-question 1

The first sub-question of this research was as follows: How does computer-mediated communication influence relational uncertainty for lovers in a long distance relationship? The answer to this question is as follows: relational uncertainty seems to stem from the fact that one of the two partners doesn't know what the other is doing or when the other doesn't respond in a specific timeframe. Some relational uncertainty does appear to come into being due to a lack of response of a partner via digital media. When their partner doesn't respond within a reasonable timeframe, or when they go out for a night of drinking, some partners become uncertain about their significant other remaining faithful to them.

Contrary to Dainton and Aylor (2001) however, there doesn't seem to be a general increase in jealousy, decreased usage of maintenance behaviours and decreased relational trust. The data shows that all participants perceive themselves having implicit trust in their partners, thereby corresponding with Stafford (2010). However, the results show that feelings of uncertainty and distrust arise regardless. It can be concluded that computer-mediated communication contributes some to relational uncertainty, as the perceived availability of a loved one creates expectations of immediate responses. If these expectations aren't met, uncertainty about what the other is doing can arise.

5.1.2 Sub-question 2

The second sub-question was framed as follows: How does computer-mediated communication create opportunities connecting with a geographically-separated loved one when compared to other communication systems? The answer to this question is as follows: via appropriation of video conferencing media, people connect to their loved one in ways that are unattainable via traditional forms of media. Video conferencing has the added benefit of being able to see the other in real time, creating a shared digital presence.

Because of this, people in long distance relationships can have dinner together, cook together, clean together or even 'do nothing' together via this open video connection. Video conferencing, therefore, creates opportunities for being a part of their loved one's life in a more life-like and intimate setting. Moreover, through the usage of texts, lovers can know what the other is doing and thinking in an intimate manner. Sending a text has become symbolic for letting the other know that she or he is missed or that the other is thinking about them. This would create intimate connections, crossing time and space. As participant 24 stated: "There are a lot of times that the bed feels empty but you can send that in a message or a 'hmmmmm', and then you know the other feels the same when she replies like that."

5.1.3 Research question

The primary research question of this study was as follows: How are Western citizens in committed long distance relationships affected by the use of computer-mediated communication to help maintain their relationship? The answer to this question is not straightforward, as multiple aspects of participants' life and sense of self were affected by the use of computer-mediated communication in their long-distance relationship. Users employ media to maintain or grow their relationship in varied ways. Specific forms of media are used for distinct ways of communication,

corresponding with Duran et al. (2011). Participants actively decided which medium suited which message.

Text-based media were connected to communications such as short updates on what is happening during the day, greeting one another in the morning and saying 'sleep tight' to close the day, the sharing of practical information, shared check-lists and to-do lists. Drawbacks that were noticed during texting or emailing their partner consisted of a lack of substance to the messages, a higher risk of miscommunication and the contrary idea of having to always be available for the other. These negative feelings were negated by disabling Wi-Fi or internet on smartphones when participants didn't want to be disturbed or talk to their partner.

As we have seen in the results-section, the leanness of text-based media ensured that the more complex messages were sent over audio-based media. These communiques would be about more important matters that ensured the need for an immediate reply. Ease of use is the primary reason for audio calling one another, with having a more personal conversation named secondly. It can be concluded that audio calls create a higher sense of connection to a loved one, as there are more in-depth conversations to stimulate a growing sense of being together. Verbal cues are an essential aspect for long distance lovers to feel connected.

The results demonstrate that video conferencing was the most challenging form of media to use, as the nature of these media entails more advance planning in terms of dates and time. This form of communication is however also deemed as the most rewarding. The most complex conversations are held via a video conference. The benefits given by video conferencing are feeling closer to the other, verbal and social cues, digital presence, reassurance and the simulation of nearness. People in long-distance relationships appropriate video conferencing media to simulate daily conversations when coming home from work, helping each other cook, watching the

other fall asleep and eating meals together. These findings correspond with Neustadter et al. (2015).

The results showcase that drawbacks of video conferencing are the acute awareness of not being physically near to the loved one, the constant reflection of the user via the dual screen, as well as technological limitations which could hinder a stable video conference. The mirrored image of themselves isn't noted by everyone, but those who do note it, change their behaviour as a consequence of their own image. When technological limitations arose, such as a failing internet connection, people would simply accept this as is and try another time again.

The conclusion drawn from this is that lovers in long distance relationships share their lives with their loved one in various ways. As they use different media for specific messages, they experience having their partner engaged and involved in their lives, confirming Tony & Walther's (2011) conclusion. Moreover, the results show that lovers in long distance relationships carefully select and use digital media to communicate with their loved one. This helps contribute to maintaining a healthy, romantic long-distance relationship, which is in line with earlier research by Aguila (2009), Uotinen (2003) and Baym et al. (2007).

Media both partially shapes the relationship, as well as the users themselves. Being available to their loved one is one of the most significant advantages as well as drawbacks of computer-mediated communication. There is a duality in having this endless option of contacting the other: it's deemed as positive to known that the loved one can be reached at a moment's notice, yet it's perceived as detrimental to always be expected to respond in a specific timeframe. For some, this impedes on their sense of independence and autonomy. The results show that some participants actively close their phone or internet connection in order to maintain their sense of autonomy.

Availability and autonomy are to concepts that are linked together in this study. Remaining autonomous, especially in a long distance relationship, and protecting the ability to do the things you want to can be seen as a contrast to being connected to the person you love. Video conferencing media especially take time to arrange and set up. Having to answer to your loved one's calls or text can take up more time than planned or could even impede with other plans with friends.

The data further shows that, though autonomy and connection with a loved one create tension, these different notions are managed by people in a long distance relationship. Sometimes the balance swings to having more connection and a lessened autonomy and sometimes it's vice versa. This is in line with Guerrero, Anderson, & Afifi (2017).

In short, to answer the research question how Western citizens in committed long distance relationships are affected by the use of computer-mediated communication to help maintain their relationship: it can be concluded that people who use computer-mediated communication whilst in a long distance relationship are affected by this practice in a profoundly personal and intimate way as they continue to share their lives together. Sometimes they change their availability for the other to ensure they maintain a sense of autonomy. Due to the near-constant option of availability, they can contact their loved one whenever they want to and vice versa, creating the possibility of lessened autonomy and heightened uncertainty if no answer to a message sent arrives. However, media that create these negative aspects also helps ensure that lovers still share their lives together, even when they're physically separated. Though personal autonomy and connections to their loved one create a personal tension for lovers, the added benefits of computer-mediated communication ensure that this is a drawback they are willing to overlook. Even though these forms of media usage can contribute substantially to creating relational

uncertainty, the remedy for this is the same as the cause of it: mediated communication. Trust, it can be concluded, is a must to form a committed long-distance relationship.

5.2 LIMITATIONS

The scope of this research was limited to the capacity of time constraints, which ensured that only twenty-eight people, within the social spheres of the researcher, in committed long distance relationships were interviewed. Though this is a substantial and robust number, more participants from various socio-economic classes and ages would've generated more data to substantiate the conclusions drawn. Moreover, respondent bias could've happened as participants were gathered through self-selection. Only those who thought of themselves as being in a long distance relationship responded as affirmative to being a participant in this research. Furthermore, there was the possibility of self-inclusion. Participants were not opposed to being a part of this research, whereas others who would also fit the qualifications of being in a long distance relationship did not, thereby perhaps narrowing the outcome possibilities in this research. As all respondents were in stable relationships, this created a more one-sided view on media usage in long distance relationships.

Qualitative data analysis is sometimes deemed as mere conjecture and subjective interpretation. This was negated via testing of the researcher's codebook via intercoder reliability. However, it must be said that the robustness and reliability of a codebook shouldn't be reduced to a value or percentage of agreement. Instead, it is in the discussion of codes, their meaning, interpretation and intended usage that a codebook is genuinely validated. This potential weak spot was negated as the coding of transcriptions and recoding of the codes and codebook was an iterative effort,

wherein the researcher discussed and consulted with her second coder multiple times. Though quantitative research would have resulted in a higher number responses and experiences shared, the data that would result from surveys are lean in the sense that they have to be interpreted by both the person filling in the survey as well as the coder. At the same time, quantitative research alone wouldn't allow for immediate follow-up questions.

5.3 CONTRIBUTIONS TO THE FIELD

Mediated, romantic love in long-distance relationships has been a subject of interest in the academic community for some time. The most exciting conclusion which can be drawn from this research is that defining long distance relationship can't be 'self-defined', as most articles in the literature suggest. All participants in this research stated that they were in a long distance relationship not due to mileage, national borders or time constraints but rather the fact that they wouldn't be able to go to their partner as quickly as was needed if the occasion arose. This research, therefore, adds to this research topic by arguing that geographically proximity resulting in accessibility if needed should be the standard for defining a relationship as long distance or geographically close-by.

This research has shown that people in long-distance relationships share their lives with their significant other in different ways. As some are okay with emails and an occasional audio call, there are those who need continuous texts and video conferencing to maintain their relationship. This conclusion adds to the body of academic work as it gives a more diverse view in the way users enhance and maintain their relationship through media. Whereas Neustadter et al. (2012) stated that all geographically distanced lovers oftentimes appropriated video conferencing media, this research shows that this is not the case. The conclusion can be drawn that video

conferencing media is employed to simulate having a traditional relationship, e.g. eating together, coming 'home' at 18:00 and so forth. However, this is hardly as often the case as Neustadter et al. (2012) concluded.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Most remarkable is the way an email is a specific tool for couples in long distance relationships. By doing this research, there is now more insight in the thoughtfulness of those in long distance relationship in their communications with their loved one. Texts are simple messages that are read and responded to throughout the day, but email is a medium that is used to reach the other in a thoughtful manner. The usage of email within long distance relationships or relationships, in general, seems to be a niche in current research and must be explored further.

The subject of interest of this research can be viewed differently per individual. Though there are standardized questionnaires to measure love, trust, jealousy and so forth, it is more comfortable to ask about these subjects in an interview. Though the person being interviewed might have to think for some time about her or his answer, it would be a more accurate description of what they feel or experience than any Likert-scale gives as surveys do not create as rich a form of data. However, it can be argued that a mixed method of both surveys and interviews would result in more robust data. Whilst reviewing and analysing literature for the theoretical framework, the methodologies varied between the qualitative methodology in the form of interviews or self-reports and quantitative methodology in the form of questionnaires. I would strongly encourage future research to be a mix of surveys and interviews. For example, surveys would be able to measure to some degree the amount of self-reliance and autonomy a person already feels, which could

be compared to other participants and the responses they would give during interviews.

Lastly, the usage of concepts such as face-to-face and body-to-body might have to be reassessed in view of participants stating that they oftentimes looked at their own face as well as the screen itself during video conferencing calls. Furthermore, face-to-face doesn't encompass the mediated communication happening during video conferences, whereas body-to-body is factually incorrect as well. Though this research doesn't give a conclusive redefinition, it can be the kick-off for a well-thought discussion on this topic. As a starting point, I would like to suggest 'screen-to-screen' as it is there where the image of the other and the self is presented for both users.

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7   APPENDIX

7.1   APPENDIX A – INFORMED CONSENT FORM

Title research: Between you and I

Responsible researcher: Marloes M. Battjes, BSc

To be completed by the participant

I declare in a manner obvious to me, to be informed about the nature, method, target and [if present] the risks and load of the investigation.

I know that the data and results of the study will only be published anonymously and confidentially to third parties. My questions have been answered satisfactorily.

[If applicable] I understand that film, photo, and video content or operation thereof will be used only for analysis and / or scientific presentations.

I voluntarily agree to take part in this study. While I reserve the right to terminate my participation in this study without giving a reason at any time.

Name participant:

Date: Signature participant:

To be completed by the researcher

I have given a verbal and written explanation of the study. I will answer remaining questions about the investigation into power. The participant will not suffer any adverse consequences in case of any early termination of participation in this study.

Name researcher: Marloes M. Battjes

Date: Signature researcher: ....*Marloes Battjes*.............

7.2 APPENDIX B – INTERVIEW SCHEMA

Open the interview

a) Official meeting – casual questions regarding health/journey to the place.. Ask if they are okay with me recording the conversation. State that they can withdraw from and stop the interview at any given time without question. State that all data will be anonymized.

b) Lay out the reason for interviewing the person.

Ask if they are okay with me recording the conversation. State that they can withdraw from and stop the interview at any given time without question. State that all data will be anonymized. The results will be used to analyse the effect of CMC on LDRs – explain global outline of research thesis. Questions will, therefore, focus on the usage of CMC and how CMC is employed in daily life of lovers who are geographically separated. The interview will take about 45 minutes to an hour.

c) Ask if the interviewee understood the reason for interviewing and if they have questions.

d) Ask first question of the global interview schema, and then go on.

Interview schema

What media do you use when contacting your loved one?

Why?

How do you use these forms of media?

Could you please describe when you use the media during the day?

How does computer-mediated communication compare to face-to-face communication when you're communicating to your loved one?

- Author's note: See if they mention interactivity, temporal structure, social cues, storage, replicability, reach and mobility (Baym).

- If not mentioned, discuss the notion of distance – does CMC create more distance between the two so more personal problems can be more rationally dealt with.

In what manner does CMC create opportunities, which you otherwise wouldn't have, when you're contacting your loved one? In your experience, what are the disadvantages of CMC compared to FtF communication?

What is the content of mediated conversations and does that differ from f2f conversations?

Do miscommunication ever happened and if so, how come?

- Author's note: see if they experience any limitations to their communication via CMC. Static noise, Wi-Fi has gone wrong, people coming in and walking out of a room.

What happens if the other doesn't respond to your message – how do you react or does this never happen? Do you feel like you can say everything you want to say during a video-chat or other ways of communicating?

f) Closing the interview

Reflect on the course of the interview. Summarize briefly what the main points and conclusions were. Thank the interviewee for their corporation and time.

7.3 APPENDIX C — FINAL CODEBOOK

Code	Name	Description	Examples	# Quotes in total
Group: Appropriation				
AP1	Appropriation	Usage of media which was not intended by the designer	"Otherwise if I walk around, I just walk around busy cleaning with or something and say hi from time to time when I walk by. And if I'm doing walking around a lot, because I'm busy moving stuff or something, sometimes I'm busy, and then I take the laptop with me. I move her around as well."	**17**
Group: Audio call				
AC1	Ease of use	The lack of effort needed to do an audio call	"It's easier in phone call than sending messages back and forth."	11
AC2	Immediacy	Having an instant reply to whatever you want to tell	"If I need you to answer something quickly, I'll just call you to get it over with."	11
AC3	More personal	Feeling closer to the other and having more personal talks	"Because I found that you can send each other 20.000 messages, but at some point, you just want to hear their voice."	18
Group: Autonomy				
AT1	Change	A noted change in autonomy and self-reliance	"You care about other people, and I think digitally, that makes it more hard because instead of passively care and gain this balance and passively involved in your life by being there, you have to go out of your way to be like: hey, what do you think about this."	14

AT2	Growth	Becoming more self-reliant and having heightened autonomy	"It's important to have separate lives because you are in separate lives. And you shouldn't influence your life too much by the other person."	8
AT3	Loss, positive	Autonomy is lessened, but this is viewed positively	"I'm happy to think about somebody other than myself. That makes me satisfied to know that I have somebody else involved in my life in that way. That's a really good feeling. That's not a sacrifice of autonomy; it's a sharing of it."	19
AT4	Not Changed	There is no change in autonomy or self-reliance	"Even before we entered the LDR, we were quite independence in that sense. We liked doing stuff together but if he wanted to go do something, then that was fine with me as long as it was reasonable and the same with me."	12
Group: Sharing lives				
SL1	Part of daily lives	Lovers feel as though they are actively a part of their partner's daily life through the use of media	"I want to give him the feeling that he is kind of with me there. For example, a question we ask each other many times is, where are you and what are you doing? So I like to also show him what I'm doing, then he can see: oh, she's making something. And I think that's nice to receive."	38
SL2	CMC: sharing	Lovers share their going about with their partner, which can also be viewed as a negative	"But now I'm in Enschede; I share a lot more. Because it's harder to know what someone is doing, yeah, it's a way to be involved and keep in touch really. I share more of what I actually do and experience, what I feel like."	15
SL3	CMC: sharing negative		"Not too much because it's not nice to hold a picture up of doing all these nice things and you're not there. A huge downside of sharing all the nice moments, well, the other isn't there."	5
SL4	CMC: supporting partner	The way partners can still support each other via the usage of media	"The best way to help someone is anxious or depressed is literally just to stay and be with them in a space. And without that space being there, there is not much to help with when it gets to that point. In other times when	42

			it's not so bad like that, it's mostly like playing games. You don't even have to chat. Just being together in a digital space is enough."	
SL5	Shared digital agenda	The way a digital agenda helps partners share their lives and coordinate events	"In zoverre ben ik, zijn wij, beiden erg onafhankelijk van elkaar. Omdat je echt je eigen leven hebt en altijd hebt gehad. Alleen in het weekend moet je dan wel rekening met elkaar houden."	2
SL6	Playing online games	How partners play online games to spend time together	"We would go into a game, and you have this open mic chat, and we would talk through it, but we would talk about the game or random things that would pop up in your head. It feels like spending time together; we would also do that when he would visit – chilling and playing. But it feels like doing something, not only talking. You have this corporation idea or something."	3
Group: Comparison face to face versus computer mediated communication				
COMP1	Availability: positive	The option of contacting the other at any given moment is viewed positively and negatively	"It's also really nice to have this feeling that there is always someone in my pocket. You know? You can just pull out your phone, and you have contact immediately."	14
COMP2	Availability: negative		"I also want to live in the moment. And it's also a challenge to live apart. You don't want to be together all the time."	21
COMP3	CMC: appreciated	Divers ways of saying positives about CMC	"It changes how you engage in the relationship. It also forms the basis of your actions, of your relationship. Because I think seeing each other is one way to build a connection and share stuff but doing this via media is also a way. And it also really works, at least in my case."	24
COMP4	CMC: similar to f2f	The way CMC is similar to or resembles f2f communication	"It's different, but you still have someone who is listening to you and who is paying attention to you. and if you just want to get something out after a bad day, there is someone on the other side listening and answering."	

COMP5	CMC: preferred over f2f	The instances that participants prefer using CMC over f2f	"I think for me, because I'm pretty introverted, quite a bit, it's easier for me to talk about some topics like initially to get the initial feelings on a topic. To get somebody's initial's feelings about a topic out. On this or on voice chat versus in person. Where I'm like uncertain if I should ask them about something or not. It's much easier for me to be straightforward and ask questions because people can't see how I'm reacting because my face gives way too much away about how I think about the topic."	10
COMP6	Difference: f2f and CMC	The way CMC differs from f2f communication	"That's not completely the same, also because I think that when you're skyping, you always feel like you have to talk. And in real life, you can just watch a movie together without talking. Last time we skype for 5.5 hours, but we were constantly talking and talking and talking and talking. So instead, it's also nice to just do something or do nothing and not feel the pressure, so to say, to talk constantly."	40
COMP7	GCR: media used	The media used when the couple was still geographically close-by	"We mostly do a phone call or just texting. We use WhatsApp or messenger for pictures. Otherwise, just the phone, because we would see each other quite often – every two days. So we don't have to use anything else."	18
COMP8	Mobility: positive	The option of using media and contacting their partner wherever the user wants is viewed positively	"I think there is also an advantage because when we don't see each other f2f, then we can still talk whenever we want. You can take your smartphone whenever you want and send a text whenever you want. There is no limitation in terms of space or time to contact the other."	30
COMP9	Planned usage of media	Media usage is not spontaneous but planned ahead	"It's like planning a real-life meeting; we will choose a date and a time. Like 'oh yeah, then and then we can skype'. It's not random."	13
COMP10	Storage: negative	The different interpretations regarding the way CMC stores textual and audial messages. This	"When you're arguing it's not nice because you can go back into some things and remember the negatives."	1

COMP11	Storage: neutral	is viewed negatively, neutral and positively.	"I think WhatsApp is very momentarily. It's always the latest message that is most important to you, basically. I barely read back."	14
COMP12	Storage: positive		"Maybe when I want to make a point or when you want to know a recipe you once made together, and you think: you want to eat that again, so it's more a memento or something."	21
COMP13	Spontaneous usage	Media use to connect with a loved one that is spontaneous	"I tried doing that because I am that kind of person, but it is nicer if you just call someone out of nowhere. No expectations of someone to be there, because expectations over such a distance are difficult. When your expectations aren't met, you get disappointed easier so in my eyes; it is easier to do it spontaneously, without knowing if the person is available."	16
COMP14	Temporal structure: negative	Experiences and arguments why the lack of immediacy and disregard of the factor of time is negative and positive	"I had difficulties with that at the beginning of our relationship because I was the person who would always respond as quick as I can. I wouldn't use things like 'oh, but I was in a lecture, and I couldn't use my phone for 30 seconds'. He actually adapted himself, and now, with me, he does respond as quick as possible which I like so we don't have that floating around thing."	12
COMP15	Temporal structure: positive		"We use WhatsApp because it's easy and you can have short moments of contact, and you can answer whenever you want."	31
Group: Text-based media				
TM1	Email: practicality	The practicality is reason for using email as a form of communication	"It sounds a bit formal, but we use email for practical things. For example, he is going here by car to pick me up from Barcelona, and I was looking for: are there parking places, etc. so then we mail with links and such."	6
TM2	Email: sharing	The possibility to share meaningful content with the other	"You think a lot about what you write, and I think you don't do that via WhatsApp or calling or video chat."	6

TM3	Explanation: photo	A photo says more than a thousand words, giving context and more information	"It's primarily text, but sometimes photos or videos. Just to give some more context about the things we're talking about."	16
TM4	GCR texts: meeting up	When geographically close-by, texts were used to meet up	"Just everyday messages, actually. "what are you doing?" or "do you have time to meet up?". Because when we were geographically near, we wanted to meet up as much as possible because we knew it wouldn't be possible to meet up in a couple of days. It was just for saying good morning and good night, and we would see each other during the day."	6
TM5	Texts: updating each other	Giving short updates during the day is possible through texts	"It was just randomly; we would check up on each other. Where are you? How are you doing, those things."	21
TM6	Texts: disadvantages	The disadvantages of texts and text-based media	"I think when I only read her words, it's like reading a textbook. You feel less connected to the person during the problem solving-moment."	23
TM7	Texts: ease of use	The easiness of text-based media	"The photos and texts it's mainly the running commentary on what I'm dealing with. It's more micro. It's mini-conversations. If I have something interesting or funny and I don't want to call her for just that, I'll just send a photo or text her."	17
TM8	Texts: positive emotions	General positive emotions regarding texts, texting and text-based media	"Well, I asked him many, many times whether he didn't think it went too far. But he always said: "No, I feel so loved and missed when I come back to WhatsApp and see all the messages."."	8
Group: Development relationship				
DR1	Development relationship geographically near	The way the couple met and became romantically involved when they were geographically near	"I met my partner on a party in Aachen, which is a city in Germany. I was going there regularly for a student event where they would show old German movies, and it was big student party. We went to a smaller house party, and at a certain moment, I sat down next to a girl I didn't know, and we started talking, and we immediately hit it off. That's how I met my girlfriend."	48

DR2	LDR: change in media use	The change in media use due to the couple becoming long distance	Well, I'd say not necessarily a reduction in WhatsApp use or anything. But it obviously switched to videocalls, on whatever format.	11
DR3	LDR: growth relationship	The growth of the romantic relationship due to or regardless of them being long distanced	"I think it's still growing, but it's slower. When we're finally together, I'd lie if that's not the goal. I think it'll be so amazing when I'm done and we'll be finally together – we did this for two years."	18
DR4	LDR: maintaining a relationship	The way romance and the relationship is maintained across long distances	"We're deepening the relationship, but in baby steps. For me coming here, and him having changes in his life, we're still a part of each other's lives. He's still someone experiencing my life because of the phone calls. I still talk to him every day for at least thirty minutes to an hour. And I'll tell him what I'm doing or my plans or what happened to my friends or family. He's still a part of my life."	11
DR6	Meeting again IRL	How it feels to meet each other again in real life, physically	"I'm just super excited. I'm always super excited. I blab. I'm just super excited. I don't know; it is just nice to see somebody and be like: hey, you still exist. You're still your own person. And things are fine, and they are the same as online."	8
Group: Uncertainty				
U1	Distrust towards partner	Feelings of distrust that have arisen during the long-distance relationship regardless of media	"Yes, we both have that when we don't see each other for a really long time. Then we have noticed that we will have these little discussions about nothing more and more and more. It will be like this, and then when we see each other everything is fine again."	1
U2	LDR: frustration	Feelings of frustration, not explicitly sexual, due to the fact that the couple is geographically separated	"Sometimes he misses a phone call. That we can't get in touch or something, which is annoying because I'd be going to bed."	5
UC3	Miscommunication: audio call	The way miscommunications come into being through the use of computer-mediated	"Via the phone, that happens more often. She was super focussed on the voice, dissecting it and all it could mean. She would pick that up as something negative."	3

UC4	Miscommunication: solving it	communication, specifically in audio calls and texts, and the way this is solved	"I think, I mean, I used to get angry, I guess. Just as a personality thing, but now I try to be more articulate and just say: Okay, this is where I'm coming from. He understands that, and I think I'm the type of person who wants to resolve it right then and there, but he needs a little bit of time, not too much. Like an hour, and then he'll come back, and we'll talk. We're both the type of people who will linger on it. We'll try to resolve it and then it's done."	17
UC5	Miscommunication: texts		"Now I notice that you can misunderstand each other quickly. When it evolved from dating to being connected, the connection was harder to feel using WhatsApp. It's easy to misunderstand someone, and even with the connection you can misunderstand the other even if it's heart to heart."	20
U6	Trusting partner	The trust that is felt and sometimes re-established between partners in a long distance relationship	"I think that's the ground basis for a long distance relationship, and also for the usage of the media. Especially, I get the point with the texting back and such, but I think you have to put yourself in the other person's perspective more often and have to realise that the person is probably having a normal day as you are."	24
U7	Uncertainty	The way uncertainty can arise in a long distance relationship and how these feelings of uncertainty are resolved	"In the beginning, it gave me a lot of anxiety because I wasn't sure about our relationship yet."	5
U8	Uncertainty: resolved		"Nowadays I'm more mature and calm, but it used to be that our arguments be on this. I need to be there when you call, and you can't be there when I call, that is a weird dynamic. Like he is expecting me to be there always and that's not okay. But now it's okay, because we learned from our past lessons, that we text if we can't talk. Else I get paranoid, yes."	6
Group: Videoconferencing media				

VM1	Behaviour changed	The way users change their behaviour during video conferences	"Yeah, also when I'm talking with you or whoever, I will take a look at myself. I don't know why. And then, if I would look like a hobo, I wouldn't feel comfortable anymore. When you talk f2f, you don't see your own face. You don't see what you look like. When you're at skype you can secretly take a look at yourself to check; I don't know what to check but yeah."	17
VM2	Digital presence	The presence of the other created via an open connection in video conferencing media	"I did that. It works fine. It's nice that she is actually there. And if friends are over, she can meet them. I'll leave her in the corner, and she can watch."	14
VM3	Video conference negatives	General negatives and positives regarding video conferencing	"I hate saying goodbye since it's not natural. And if you click it away a little too soon and he still says something."	36
VM4	Video conference positives		"I think it's nice to be part of what he is doing, and it's nice to have him when I would otherwise eat alone. So it feels like we are doing stuff together."	34
VM5	Deepened conversations	The way video conferencing and video conferencing media facilitate deepened, thoughtful conversations	"We would never talk about it over the phone; it felt more serious if we were looking at each other. So we would say: tonight we'll skype. I always like to check if I can be alone at home so I can talk louder or just to not wear headphones all the time. It was just okay for more serious things, skyping."	17
VM6	Social Cues	The possibility of seeing the other's face, posture, spacial context and other social cues	"Because you have a face to face contact. You have the emotions, the facial abilities, nonverbal communication to some extent. Yes, that aids."	7
Group: Technological drawbacks				
TD1	CMC: lacking	The way computer-mediated communication is still lacking	"I feel like the intimacy; there is no screen; there is a person in front of you. That makes a lot of difference. You can be alone with a computer, but you are not alone with a person."	53

| TD3 | Privacy concern | Concerns that users have for their privacy whilst using media | "I don't trust my phone to keep my data secure." | 15 |
| TD4 | Technological limitations | The technological limitations inherent to digital media | "For example, there is a bad internet connection and then all of a sudden the person is gone, and you have almost no chance of reaching her again; then it's really frustrating and not good." | 28 |