A nexus analysis of domestic video chat: actions, practices, affordances, and mediational means

by Dorottya Cserző

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**School of English, Communication, and Philosophy
Cardiff University**

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Summary

This thesis explores the use of domestic video chat (VC) applications such as Skype or FaceTime. The present research contributes to a growing body of work on the medium of VC by building on the concept of *affordances* (Hutchby, 2001b) in order to explore how the capabilities of the technology are used in practice outside of the professional sphere. This study is unique in the field of VC because it combines findings from micro analyses of recorded VC sessions and interview data under the framework of nexus analysis (Norris & Jones, 2005b). The video recordings were analysed using an approach informed by conversation analysis (Hutchby & Wooffitt, 1998) and the interviews were analysed using inductive qualitative coding (Gibbs, 2007; Mason, 2002).

The findings indicate that in VC interactions the roles of *caller* and *called* have little significance in the openings and closings. *Noticings,* which were especially common in the openings, play a vital role in relationship maintenance through VC. In some cases these noticings led to *virtual tours,* which were resources for expressing alignment and constructing a joint attentional frame. Practices of paying attention appeared to be a central concern for participants; therefore a second maxim of VC was formulated: *focus your attention on the VC interaction* (for the first maxim see Licoppe & Morel, 2012). The maxim of attention is suspended in *lapsed VC encounters*, which were framed as exceptional use and were only practised by a minority of participants. Finally, it is argued that the affordances of a technology cannot simply be classed as a 'limitation' or 'possibility', because they are context dependent. Therefore, a thorough analysis must take into account the mediational means (bodies, objects, and the environment), the mediated actions, and the relational histories of the participants.

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Parts of the analysis in Chapters 6 and 7 have been published or accepted for publication (Cserző, 2016, in press). This includes transcripts of video recordings and the associated analysis. The publications are cited as relevant throughout the thesis.

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1   Introduction

> *I used [video chat] a lot more when I first got my MacBook. It was like a novelty ((laughs)). So it was a fun thing to do. But now I only really use it sort of yeah, every two weeks really. And it depends, cause my dad's a pilot, so we FaceTime when he's away, but it's only if he goes away for a long time rather than a short time. - Lucy*

Lucy is an undergraduate student I interviewed about her use of video chat (VC). At the time of the interview, she had been using VC software (Skype and FaceTime) for four years, mostly to keep in touch with her parents and her boyfriend, who lived in a different city. Lucy's account presents two distinct ways of relating to VC: at first she used VC just because she could, but over time VC took on a specific role – connecting her to her father when he goes away for a long time. This change in Lucy's use of VC is an example of a wider phenomenon, which has been called the *domestication of technology* (Baron, 2008c; Baym, 2010; Berker, Hartmann, Punie, & Ward, 2006; boyd, 2014a; Christensen, 2009; Deumert, 2014a; Spilioti, 2016).

If a technology is domesticated, it means that the novelty has worn off and using that technology feels 'normal'. For example, at some point Lucy stopped using VC for fun, and started to view VC as the natural way to communicate with her father during his travels. When encountering a new technology, people approach it by adapting practices from other similar technologies. In the later stages of domestication users can start to develop creative ways of utilising the technology, sometimes even in ways that go against the intentions of the developers of the technology.

The present research is a timely investigation of VC practices because VC is currently undergoing the process of domestication. It is no longer new, but it is also not so integrated into everyday life that it has become unnoticeable (Longhurst, 2017, p. 4). Therefore, it is possible to explore the boundaries of acceptable norms of use even as savvy users are pushing these boundaries by using VC in unintended ways. From the

beginning of the project, I was particularly interested in identifying and exploring these creative ways of using VC.

The title of this thesis also indexes that the domestication of VC is well under way: the term 'domestic VC' indicates that VC has already been domesticated, at least to some degree. But the term 'domestic' in the title is primarily meant in a different but related sense. In this thesis I explore the use of VC in the home rather the workplace. This distinction is important because the technology was first developed for professional purposes. To distinguish between the two, I use *videoconferencing* to refer to the medium used in a professional setting or for work-related matters, and VC for interactions in the home or oriented towards personal relationship maintenance.

I chose to focus on domestic VC use because this environment seemed more likely to foster the kinds of innovative uses I was interested in. However, work-based VMC use is also relevant as it was brought up by some interviewees who have used VMC in a work-related setting. In addition, the boundary between the two types of use is not always clear, as work colleagues can also be friends (as in the example analysed in chapter 5) and work-related matters can be discussed via VMC from the home or while on holiday.

1.1 Methodology overview

Compared to previous media, the distinguishing feature of VC is undoubtedly the camera. VC was designed and is often understood as an 'upgraded phone call' where the users can not only hear but also see each other (Harrison, 2013; Neustaedter et al., 2015). However, the camera can do much more than just show a person's face, which creates a potential for innovative practices. Therefore, analysing the visual modes together with the verbal exchanges is a key part of this research. This was accomplished by collecting video recordings of 29 VC interactions and analysing them using conversation analysis (Hutchby & Wooffitt, 1998) to study speech, gaze, posture, gesture, and camera movement. Thus, the micro-analysis of the videos furthers research in the field of embodied interaction.

In order to find out about participants' VC habits, preferences, and their perceptions of the medium, I also conducted interviews with 29 participants including Lucy and six participants who also appear in the video recordings. I asked participants about the frequency of their VC sessions, how long they have been using VC, and who they talk to

on VC. We also discussed how VC sessions are arranged, the possibility of having a spontaneous VC session, and the spaces that are most suitable for conducting VC. I transcribed the interviews and analysed them through inductive qualitative coding (Gibbs, 2007; Mason, 2002).

The findings of the interview analysis are brought together with the micro-analysis of the videos using the framework of nexus analysis (Norris & Jones, 2005b; R. Scollon, 2001b; S. W. Scollon & de Saint-Georges, 2011). The strength of nexus analysis is that it focuses on the intersection of different practices and tools. Thus, nexus analysis provided a framework for exploring attitudes to VC and other forms of communication (chiefly phone calls, instant messaging, and face to face interactions), the use of different types of VC devices (PCs, laptops, smartphones, tablets), and the physical environments most commonly used for VC (bedrooms, living rooms, and public spaces). The research questions (introduced below) focus on key concepts in nexus analysis.

The combination of interview analysis and micro analysis of video is unique within the field of VC studies, as previous work has focused either on interviews (for example Longhurst, 2017; D. Miller & Sinanan, 2014) or on VC interaction at a micro level (Licoppe, 2017a, 2017b; Licoppe et al., 2017; Licoppe & Morel, 2012, 2014; Rosenbaun & Licoppe, 2017), but not both. Furthermore, while previous studies highlighted the experiences of mothers and grandparents (Ames, Go, Kaye, & Spasojevic, 2010; Longhurst, 2013, 2016), most of my participants were young adults living independently. Therefore, I examine VC habits within a group that has not yet been studied. Throughout the thesis, I will demonstrate that the living arrangements of my participants shape their VC experiences in a fundamental way. In addition, the timing of this project allows me to comment on the changes brought about by the spread of VC compatible smartphones and tablets and increasingly generous mobile data packages, which happened after data collection for the early VC studies (Licoppe & Morel, 2012, 2014, Longhurst, 2013, 2016, 2017; D. Miller & Sinanan, 2014; Rosenbaun & Licoppe, 2017) was completed. Finally, I compare my video recordings of laptop-based VCs with previous studies of smartphone-based VC interactions (Licoppe & Morel, 2012, 2014).

1.2   Research questions

The main research question I set out to answer is 'How are the affordances of VC used in domestic video calls?'. The concept of *affordances* was introduced to computer mediated

communication (CMC) research by Hutchby (2001b). Hutchby suggested that the affordances of an object or technology frame but do not determine the possibilities of action that can be taken with it. Therefore, in addition to the practical capabilities of the technology (what it can and cannot do), researchers also need to consider the norms of use. This thesis contributes to a growing number of CMC studies (reviewed in chapter 2), building upon and expanding the theory of affordances by incorporating the concept of *polymedia* (Madianou & Miller, 2013; D. Miller & Sinanan, 2014), the role of affect (Nagy & Neff, 2015), and the idea of encouraged and negotiated uses (Shaw, 2017).

I approach the main research question by answering three sub-questions formulated around the key concepts of the framework of nexus analysis (R. Scollon, 2001a):

1. What chains of lower-level actions can be identified in VCs, and how do they structure VCs?
2. What are the intersecting practices in VC, and how do they shape the interactions?
3. What mediational means are used in VC, and how are they used?

The key concepts (lower-level action, practices, and mediational means) will be discussed in detail in Chapter 3 (section 3.3). Briefly put, the first question focuses on the smallest meaningful units, for example camera movements, gestures, changes in posture, or utterances. Through the micro analysis of the videos I identify these smallest units and explore how they are chained together to create recognizable actions such as openings, suspensions, and virtual tours. I also reflect on the roles of the chained actions within the specific VC, and VCs in general if the interviews indicate that such actions are a common feature of VCs. The second question considers norms, habits, and exceptional uses of VC as reported by participants with comparisons to their practices relating to other forms of communication. The third and final question examines the physical space, objects, bodies, and language used during the VC.

1.3 Thesis structure

Chapter 2 provides a literature review, starting with definitions of key terms and a brief history of the development of VC. I critically reflect on different models of the relationship between technology and society and argue that the theory of affordances is the most appropriate for studying VC. In chapter 3 I give an overview of the analytical frameworks used in subsequent data analysis, namely conversation analysis (CA) and

nexus analysis, and outline the role of the different types of analysis in answering the research questions. Chapter 4 introduces the participants, the data generation and collection process, and the interview analysis methods. This chapter also provides account of the practical methodological decisions made in light of the principles of CA and nexus analysis.

Chapters 5 to 7 comprise data analysis and discussion, each with a different analytical and conceptual focus. Each of these three chapters focuses on one of the research questions stated above, with references to the other two key concepts in nexus analysis. Thus, Chapters 5 to 7 all refer to lower-level actions, practices, and mediational means. First, I examine reoccurring chains of lower-level actions (openings, noticings, interruptions, closings) in Chapter 5. I also discuss practices of availability management, the preliminary work of organising VCs, and differences between smartphone-based and laptop-based VC software. Chapter 6 explores practices of attention management in VC with reference to the attention economy (Goldhaber, 1997; R. H. Jones, 2005a), focused encounters (Goffman, 1963), and multitasking. I analyse changes in posture during a VC involving extended multitasking, and the work involved in accomplishing a digital showing (Rosenbaun & Licoppe, 2017). Finally, in chapter 7 I focus on space as a mediational means in VC through the investigation of physical spaces, screen space, virtual space, and relational space. I conclude this chapter with a micro-analysis of two virtual tours, which represent an innovative VC practice. In the conclusion (Chapter 8) I bring together the findings from chapters 5 to 7. I summarise the answers to the research questions, reflect on the framework of nexus analysis and theories of mediation in social interaction, and make suggestions for further studies.

2 Literature review

In this chapter I introduce the definition of the term *video chat* (VC) as used in the thesis along with other related key terms (section 2.1). Then, I summarise the history of VC (section 2.2), highlighting the defining features of this medium. I situate VC research within the wider field of Computer Mediated Communication (CMC) (section 2.3) and discuss the concept of affordances, which is the central theory underpinning my research (section 2.4). Finally, I review existing research on VC presenting the findings grouped around the affordances of VC (section 2.5).

2.1 The medium, the software, and the hardware

Throughout my research I have used the term *video chat* to refer to the use of a variety of different software running on PCs, smartphones, and tablets. Video chat (VC) can be conceptualised as a medium which transmits live videos together with audio between two or more devices equipped with cameras, microphones, and speakers using an internet connection. The medium can be accessed using a number of different software or platforms which share the same core features. My participants have used and discussed VC via the following freely available services: Skype, FaceTime, Google Hangouts, the Tinychat platform, Viber, Snapchat, WhatsApp, and Facebook Messenger.

In line with current research (Licoppe et al., 2017; Longhurst, 2017), I have also found that Skype was the most popular VC software. In fact, the Skype brand is so widespread that in everyday usage it has been converted into a verb which can be used to refer to VC regardless of brand or supplier (Harper, Rintel, Watson, & O'Hara, 2017). However, I have found that FaceTime was also widely used among my participants, and has also been converted to a verb (as in 'we facetime regularly'). Therefore, when referring to software, I use capitalised versions (Skype, FaceTime), but when participants use *skype* or *facetime* as a verb I use all lowercase.

In terms of devices, in the interviews participants discussed using desktop PCs, laptops, smartphones, and tablets, but the video recordings only featured laptops, one PC, and one smartphone. For the participants making the recordings using a PC or laptop was necessary in order to run the recording software. There were no such restrictions for their interlocutors, who also all used laptops with the exception of one participant who used a

smartphone and one who used a desktop PC. The interviews indicate that the type of device has more impact on the user experience than the software; however, participants sometimes conflate the two, for example by consistently using FaceTime on their iPhone and Skype on a laptop. In these cases, they may talk about the differences between using FaceTime and using Skype even though the cause of the difference is the type of device, and not brand of VC software.

To summarise, I use the term *video chat* to cover interaction via a range of different software and devices. These software have more in common than what differentiates them, at least for domestic users. The devices do change the experience of VC, and these differences are discussed where relevant in the thesis. *Video chat* is also an accepted term within the literature (Ames et al., 2010; Buhler, Neustaedter, & Hillman, 2013; Follmer, Raffle, & Go, 2010; Judge, Neustaedter, Harrison, & Blose, 2011; Longhurst, 2013; D. Malinowski, 2014; Neustaedter & Greenberg, 2012; Neustaedter, Jones, O'Hara, & Sellen, 2018; Rosenbaun, Rafaeli, & Kurzon, 2016a; Sindoni, 2011a), although there are also two other closely related terms in use: video mediated communication or VMC for short (e.g.: Gamer & Hecht, 2007; Heath & Luff, 1993; Marshall & Notley, 2014; O'Conaill, Whittaker, & Wilbur, 1993; van der Kleij, Schraagen, Werkhoven, De Dreu, & Maarten Schraagen, 2009), and videoconferencing (e.g.: Campbell, 1998; Chapman, Uggerslev, & Webster, 2003; Collins, Gutridge, & James, 1999; Dunbar, Jensen, Tower, & Burgoon, 2014; Hjulstad, 2016; Pitcher, Davidson, & Napier, 2000). In recent years, some researchers have also started using the term 'video calling' (Harper, Rintel, et al., 2017; Neustaedter et al., 2018; Rintel, 2013b, 2013a; Rintel, O'Hara, Rostami Yaganeh, & Rädle, 2015), however, this term is not as widely used as VMC and can be considered synonymous with VMC. For the purposes of this research, video mediated communication encompasses video chat, which is VMC in domestic settings, and videoconferencing, which is professional VMC use. Thus, by using the term video *chat* I emphasise the personal and phatic nature of the interactions that are the focus of the present research. In addition, VC can be used as a countable noun and indexes the bounded nature of the 'calls', which I will argue is a fundamental feature.

2.2   The development of video mediated communication

The most remarkable aspect of the history of VMC is how long it took for the technology to become popular after it first became available (Brubaker, Venolia, & Tang, 2012; Kirk,

Sellen, & Cao, 2010; Rintel, 2014; Schnaars & Wymbs, 2004). The key to understanding the delayed success lies in the relationships between VMC and other available communication technologies, especially the telephone. Other communication technologies must be considered because, as Bolter and Grusin (1999, p. 60) argue, new media do not arrive in vacuum: '[e]ach new medium is justified because it fills a lack or repairs a fault in its predecessor, because it fulfils the unkept promise of an older medium'. In the case of VMC, the older medium is clearly the phone, as videophones have been anticipated since the invention of the telephone (Schnaars & Wymbs, 2004, pp. 198–199) and the first such device was marketed by Bell Labs as the 'Picturephone' in 1962 (Harrison, 2013).

Thus, the first VMC device was seen as an extension of the phone which allowed users to make 'calls' using a phone line, with the camera focused on the speakers' faces. This device was mainly used by executives to talk to each other and did not become a commercial success (Harrison, 2013; Neustaedter et al., 2015). However, videoconferencing had been introduced to the workplace and it still remains in use today. Although the workforce may not always be enthusiastic about using this technology, it can save travel time and costs and supports dispersed teams which makes it a valuable tool in the workplace (Brubaker et al., 2012; Luff, Heath, Yamashita, Kuzuoka, & Jirotka, 2016) and has inspired a vast number of studies exploring the benefits and drawbacks (for reviews see Bohannon, Herbert, Pelz, & Rantanen, 2012; Fullwood & Finn, 2010; Lawson, Comber, Gage, & Cullum-Hanshaw, 2010; Simpson, 2009; Stuhlmacher & Citera, 2005).

After the introduction of video calls, researchers began experimenting with a different way of using VMC: the media space. In a media space the connection is 'always on', and the aim is to create and maintain awareness and presence between different locations over long periods of time (Harrison, 2013; Rosenbaun, Rafaeli, & Kurzon, 2016b). In this set up the camera is focused on a wider area rather than a close-up of a face, which makes it easier to show documents, objects, or the hands of a user. The first media spaces were created in the 80's (Harrison, 2013; Neustaedter et al., 2015) and are still a site of exploration for researchers today (Luff et al., 2016). Although some prototypes have been developed and tested for domestic use, such systems are not yet affordable for the general public (Judge et al., 2011; Neustaedter, 2013; Neustaedter et al., 2015).

Domestic VC did not take off until after 2000, when VC began to be integrated into desktop PCs. This meant that by purchasing an inexpensive webcam and microphone, users could interact via VC using their pre-existing internet connections and free software (Kirk et al., 2010). Even though VC poses no additional cost after the initial investment in the equipment and the internet, VC sessions continued to be referred to as 'calls' (Harrison, 2013; Neustaedter, 2013). Initiating a VC and a phone call are undeniably similar, especially for smartphone users: the user selects a contact from a list, taps a call icon (which resembles an old-fashioned phone receiver), and ends the interaction by tapping another icon to 'hang up'.

Skype was first launched in 2003, as one of several VOIP (voice over internet protocol) services (Longhurst, 2017). In 2004, Schnaars and Wybms published a paper attempting to explain VMC's lack of success. By 2005, eBay saw the potential in Skype and acquired it for $ 2.6 billion and by 2010 researchers started publishing papers exploring the popularity of desktop VC (Ames et al., 2010; Kirk et al., 2010). The main reason for success was that the technology required for VC became increasingly cheap and widely available, removing economic barriers from contacting people living in different countries (Ames et al., 2010; Kirk et al., 2010; Madianou & Miller, 2013; Neustaedter & Greenberg, 2012; Seitz, 2015).

2.3   Researching technology in society

VMC research is situated within the larger field of Computer Mediated Communication (CMC). The interest in VMC is relatively new not only because the technology is recent, but also because historically CMC research has focused on text-based data such as emails, instant messaging, and blog posts (Androutsopoulos, 2006, 2013; Crystal, 2006; Georgakopoulou, 2006; Giles, Stommel, Paulus, Lester, & Reed, 2014; Herring, 2010, 2016; Paulus, Warren, & Lester, 2016). This is now changing with an increased interest in online multimodal content such as videos, images, gaming, and webpages as multimodal hypertexts. Although the details of the findings of early CMC research may not be relevant for VMC, CMC researchers have developed theories about the relationships between society and technology which provide the basis for the present research. In addition, the devices used for VMC (whether PCs, laptops, or smartphones) were all used for text-based communication before VMC became possible. This means that expectations and practices surrounding VMC are formed by users' experiences with these

text-based (and in the case of the phone, auditory) media, as well as face to face interactions.

The ideas of the sociologist Erving Goffman in particular have made a lasting impression in the field of CMC. Although Goffman's focus is on face to face interaction and most of the technologies studied today did not exist at the time (1963, 1971, 1974a, 1981b), his theories continue to provide insight into how and why people interact with each other via communication technologies (Deumert, 2014b; Gerhardt, Eisenlauer, & Frobenius, 2014; Gershon, 2017; Gershon & Manning, 2014; R. H. Jones, 2004; Licoppe, 2004, 2013, 2017a; Lindroth, 2012; Longhurst, 2016; Luff et al., 2016; Norris & Pirini, 2017; Rettie, 2009; Rosenbaun et al., 2016b; Williams & Weninger, 2008). Goffman's theories remain popular because they enable researchers to link micro analyses to larger questions about culture and society (Bezemer & Jewitt, 2010). The theories are particularly relevant for scholars of mediated communication, as one of Goffman's main contributions was to show how all human interactions are mediated, for example through frames and self-presentation (D. Miller & Sinanan, 2014, pp. 6–7). Therefore, I draw on Goffman's theories throughout the analytical chapters, updating them to take into account communication via VC.

In researching CMC, scholars must take a stand on the nature of the relationship between technology and society. According to one line of thinking, 'forms of technology actively cause new forms of social relations to come about' (Hutchby, 2001b, p. 442). This belief is commonly reinforced in the popular media and has been historically prevalent. Often it is accompanied by pessimistic visions: for example Socrates was concerned that the invention of the alphabet would lead to a decline in knowledge, while today many are concerned that video games cause violence, texting is destroying language, or smartphones make people anti-social (Baym, 2010; Deumert, 2014a; D. Miller & Sinanan, 2014; Spilioti, 2016). Other times, technology is seen as the solution to social problems. For instance there was a hope that social media would bring people together, eradicate divisions, and encourage the spread of democracy around the world (boyd, 2014a).

In academic terms, the theory that technology can cause changes in society has been labelled *technological determinism*. This approach characterised much of the early research on CMC (Androutsopoulos, 2006; Baym, 2010; Georgakopoulou, 2006; Herring, Stein, & Virtanen, 2013; R. H. Jones et al., 2001; Thurlow & Mroczek, 2011). From this perspective, CMC is a deficient medium because it filters out important conversational

cues which are present in face to face communication, the 'golden standard' against which all else was measured (Baym, 2010). There are countless VMC studies which explicitly or implicitly subscribe to this point of view (for example see Allan & Thorns, 2008; Bohannon et al., 2012; Campbell, 1998; Chapman et al., 2003; Charles, 1981; Hauber et al., 2006; Simon, 2006; Stuhlmacher & Citera, 2005; Thorns, Allan, Barclay, Chamberlain, Kerr and Scott, 2008). However, the problem with such an approach is that it fails to recognise that technology is created by people, and thus technology and society both shape each other while simultaneously being shaped by the other. In order to better account for this reflexive relationship, Hutchby has argued that researchers need to examine both what the technologies make *possible* and how technologies are *used in practice* (Hutchby, 2001a, pp. 26–33) by building on the concept of *affordances.*

2.4   Affordances in CMC research

Hutchby (2001b) borrowed the concept of affordances from Gibson's (1979) work on the psychology of perception (for a more detailed overview of the history of the term see Nagy & Neff, 2015; and Shaw, 2017). According to Hutchby's definition, affordances are 'functional and relational aspects which frame, while not determining, the possibilities for agentic action in relation to an object' (2001b, p. 444). He argues that this concept allows researchers to move away from approaches rooted in technological determinism.

This practical approach has been taken up by scholars exploring mobile phone use (Hutchby, 2005; Rettie, 2009) and new media practices surrounding instant messaging and VC (R. H. Jones, 2005b; Kelly, 2015; Meredith, 2017; Rintel, 2013a, 2014, Sindoni, 2011a, 2011b). Other scholars have engaged with the concept in a theoretical way, expanding and updating the key ideas. For example, Norris and Jones (2005e) have incorporated the concept into their framework of nexus analysis (discussed in the following chapter in section 3.2).

One point of criticism repeated by several scholars is that Hutchby's model overlooks the role of affect in the use of communication technologies. Madianou and Miller (2013, p. 170) for example explain that researchers must consider 'moral, social and emotional concerns' because in what they call the state of polymedia, individual acts of communication have been separated from their costs, which means that users cannot justify their choices with economic reasons. Thus, for users, 'the primary concern shifts from an emphasis on the constraints imposed by each medium (often cost-related, but

also shaped by specific qualities) to an emphasis upon the social and emotional consequences of choosing between those different media' (ibid.). As a result, each medium becomes partly defined through what it is not: '[e]mail is not simply email; it is defined relationally as also not a letter, not a text message and not a conversation via webcam; which, in turn, is not a phone call' (p. 175). Therefore, while Madianou and Miller build upon the concept of affordances, they contrast their approach with Hutchby's in that they call for the consideration of the entire constellation of media available to the participants rather than focusing on a single medium (see also D. Miller & Sinanan, 2014, pp. 135–136).

Similar arguments have been put forward by Nagy and Neff (2015) who maintain that a complete analysis of affordances needs to account for design features; as well as user expectations, beliefs, and perceptions; and emotional state. Furthermore, Gershon (2010, p. 391) builds on the idea of affordances by discussing media ideologies, which she defines as 'what people believe about how the medium affects or should affect the message' (see also Gershon, 2017; Gershon & Manning, 2014). Lastly, in her comprehensive review of affordances, Shaw (2017, p. 4) also claims that the role of affect does not receive enough attention in Hutchby's original treatment of the concept. She suggests that for a more nuanced understanding of affordances, researchers should incorporate the notions of dominant, negotiated, and oppositional readings. This is important because '[t]echnologies are not ideologically neutral in their design, in what types of interaction they allow or disallow' (p. 6). Therefore, she recommends that researchers consider in their analyses what uses are encouraged by the technology.

In this thesis I also build on Hutchby's concept of affordances to explore what is possible via VC and how VC is used in practice. I also incorporate the role of affect, the notion of polymedia, and the idea of encouraged and negotiated uses of affordances as described above. However, I argue that rather than using affordances and constraints as a pair, it is preferable to use only the term 'affordances'. This argument is based on Hutchby's original account of the term: he describes affordances as being both *enabling* and *constraining* (Hutchby, 2001b, pp. 447–448), as setting boundaries to what is possible simultaneously delineates what is not possible. Therefore, it is misleading to retain a concept (*constraints*) to refer only to things that are not possible. Thus, in this thesis I use 'affordances' to refer to the possibilities, limits, and uses of VC.

Much of the literature follows the traditional use of the term, referring to affordances and constraints as a pair (for example see Georgakopoulou, 2006; Herring, 2010; R. H. Jones, 2009a; R. H. Jones & Hafner, 2012; Norris & Jones, 2005e, 2005a). One exception is Nagy and Neff (2015, pp. 1–2), who problematized the use of the paired terms on the grounds that the expression fails to capture the complexity of the phenomenon under study. I suggest that the problem with the term 'affordances and constraints' is that it sets up a binary value system, creating a false dichotomy. This dichotomy can obscure whose value judgment is expressed – the analyst's or a participant's? Furthermore, universal judgements are difficult to make as the very same property may be viewed as an advantage by some users and a disadvantage by others. This was evident from the interviews I conducted, and will be demonstrated throughout the analytical chapters. In addition, it is also supported by examples in the literature, as discussed in the section below. Therefore, I will use the concept of affordances to understand the possibilities and uses of VC (together with the limits), without relying on simplistic value judgements implied by the paired use with 'constraints'.

2.5   The affordances of video chat

In this section, I provide a review of the literature structured around the various affordances of VC. As the field of VC research is relatively new, the review covers work done in a variety of disciplines including education, business and management, human computer interaction (HCI), and communication. Due to the different foci and approaches, these studies discuss different affordances. Some of the studies reviewed below use the term 'affordance' and may name one or two affordances that are explored in the paper. However, none of them provide a comprehensive list of all the affordances of VC and many list findings without relating them to the concept of affordances. Therefore, I have grouped together related observations and findings from the literature, creating the list of affordances presented here. This list reflects the current state of the technology and it is likely that the affordances of VC will change as software and hardware is developed further.

As a type of distance communication technology, the affordance of VC to connect to distant locations is part of the definition and unremarkable in itself. There are many such technologies, one of the oldest being letter writing and newer ones including talking on the phone and instant messaging. New media is always viewed in comparison to older

media, which puts the focus on the distinguishing features of the new medium (Bolter & Grusin, 1999; Gershon, 2017; R. H. Jones et al., 2001). Therefore, it is unsurprising that the affordance of sound transmission is rarely discussed in the context of VC: this affordance is both widely used and widely researched in connection with the phone. Thus, the affordances of connecting distant locations and transmitting live sound are largely taken for granted within VC.

The new feature of VC is undoubtedly transmitting live images. This is reflected in the following discussion as 'visibility' is divided into five subsections (facial expressions and body language; gaze; field of view; objects and space; and digital mirror). These sections address the different ways that the live images shape VC interaction. However, before examining the visual affordances I consider three other affordances that shape this medium: synchronicity, fragility, and touch.

2.5.1 Synchronicity

One of the defining features of any digitally mediated mode of communication is the degree to which it supports synchronous interaction (Bolander & Locher, 2014; Georgakopoulou, 2006; Herring, 2007, 2010; Rettie, 2009). In the case of VC, the consensus is that synchronicity is one of the key affordances of the medium (Allan & Thorns, 2008; Develotte, Guichon, & Vincent, 2010; Olaniran, 2013) and a main advantage over other forms of distance communication (Lawson et al., 2010). This feature affords users immediate feedback, which has been linked to an increase sense of social presence (Lombard & Ditton, 1997; Sindoni, 2011a, 2012, 2013). It is so fundamental that it is often taken for granted until there are technical issues disrupting it, as discussed below.

2.5.2 Fragility

Compared to synchronicity, fragility has not been so central within CMC research. However, it is widely documented within the context of VC, and it is of significance precisely because it can undermine synchronicity. One chief concern is that the technology itself can create audio or video distortions or even fail completely, rendering the interaction subject to break-down at any time (Develotte et al., 2010; Lawson et al., 2010; Olaniran, 2013; Thorpe, 1998). For this reason, users may co-ordinate VC sessions on other, more reliable media such as phone calls or instant messaging (Ames et al., 2010; Licoppe, 2017b; D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012). Audio distortions seem to be particularly disruptive, while video disruptions are often

overlooked unless they create comprehension problems (Rintel, 2010, 2013b). In fact, audio and video distortions are so common that Rintel (2013b) describes them as 'a fundamental part of the experience of video calling' and suggests that they should be considered as one of the affordances of VC, as I do in this thesis. When co-participants are blamed for technological failings (for example a delay in the audio is interpreted as a deliberate delay in the answer) such disruptions can undermine the success or tone of the interaction (Fullwood & Finn, 2010). However, this feature can also be exploited: for example inattention or inappropriate responses can be blamed on technological rather than relational trouble (Rintel, 2013a), and the knowledge that the interaction is easy to terminate can be comforting to some users (Harper, Watson, & Woelfer, 2017).

Furthermore, VC is also fragile in the sense that even when the technology is working as it is supposed to, there is no reciprocity: users do not know how they appear at the other end, and one party may see the other without being seen themselves (Fish, Kraut, & Chalfonte, 1990; Rintel, 2013a). In addition, part of the local context is inaccessible to the distant interlocutor (Arminen, Licoppe, & Spagnolli, 2016; Licoppe, 2017a; Licoppe, Verdier, & Dumoulin, 2013; Sindoni, 2012). This requires VC users to isolate themselves from their respective environments in order to create a joint interactional frame (de Fornel & Libbrecht, 1996; Licoppe, 2017b). This frame is easily broken, for example when the VC session is interrupted by other people at the physical locations or by incoming summons via other media (Rosenbaun et al., 2016a).

2.5.3   Touch

In the context of domestic VC, users often refer to 'keeping in touch' with their loved ones (Ames et al., 2010; Harper, Watson, & Licoppe, 2017; Longhurst, 2013; O'Hara, Black, & Lipson, 2006; Villi, 2012; Zouinar & Velkovska, 2017), even though physical touch is not currently possible through this medium (Longhurst, 2013, p. 670; D. Miller & Sinanan, 2014, p. 61). This is also true of other distance communication technologies, but it is more noticeable in VC interactions, because participants can see each other's bodies while they communicate. The impossibility of touch may be self-evident to adults using VC, but young children often try to touch the people on the screen and need to learn to avoid doing so in order to participate in VC interactions in an appropriate manner (Kelly, 2015; Longhurst, 2013).

In domestic VCs the lack of touch can cause discomfort when users would like to touch each other but are unable to (Longhurst, 2017, p. 4), especially for long-distance couples (Neustaedter et al., 2015). However, the lack of physical presence may be beneficial in some situations if one of the parties is very shy or nervous (Derrer, Fullwood, Davis, Martino, & Morris, 2006; Fullwood, 2007). For example in a study on students who had difficulties interacting with others face to face, Thorpe (1998) found that the participants improved their communication skills significantly by using VC and carried over these skills to face to face situations. Furthermore, similar effects were found in a study on psychotherapy via VC (Simpson, 2009). Therefore, the lack of touch is often viewed negatively, but it can be seen as a welcome affordance for some users.

2.5.4   Visibility

Sight is often prioritised over other senses in various contexts (Lefebvre, 1991; Rose, 2001), including within human communication (Jewitt, 2009). While the affordances discussed so far are quite similar to those of the phone, VC is the first medium that affords synchronous communication with visual access over a distance. Therefore, there has been a lot of interest in what can be seen and shown via VC. In this section I review five ways that the affordance of visibility is used in VC. Each of the subheadings below focuses on one aspect of the video images visible during the VC.

Facial expressions and body language

Seeing the physical body of interlocutors has been highlighted as one of the most important aspects of this medium (Geenen, 2017; Harper, Rintel, et al., 2017; Hauber et al., 2006; Longhurst, 2013, 2016; D. Miller & Sinanan, 2014; O'Donnell et al., 2013; Olaniran, 2013). This is also the main intended purpose of the video feed: the first VC system was configured to show the face of the speaker, and this design principle is still in operation in today's systems (Harrison, 2013; Neustaedter et al., 2015). One of the reasons that seeing facial expressions and body language is a valued affordance is because it is perceived to provide a more accurate sense of the interlocutor's 'true' feeling and emotions (Longhurst, 2016, p. 133, 2017, p. 670; Madianou & Miller, 2013), and help to avoid misunderstandings (Buhler et al., 2013; Neustaedter & Greenberg, 2012; Satar, 2016).

Accessing true emotions by seeing the face and the body has been shown to be essential in mother-child relationships (Harper, Rintel, et al., 2017; Longhurst, 2013, 2017;

Madianou & Miller, 2013). The choice of 'mother' rather than 'parent' is deliberate, as it is often seen as the mother's job to be the household communicator due to stereotypes about women's communication skills (Cameron, 2003; Christensen, 2009; Longhurst, 2016). When children are young, seeing them is also important because they grow and change so rapidly, and communicate primarily through visual rather than verbal means (Follmer et al., 2010; Kelly, 2015; O'Hara et al., 2006). However, for young adults being seen may be problematic: while parents may want to exercise their 'right to see', the young adult can interpret this as unwelcome surveillance and try to resist by avoiding using VC (Harper, Rintel, et al., 2017; Kirk et al., 2010; Longhurst, 2013).

The visual affordances of VC can be experienced as 'too revealing' in other contexts as well. For example, in interactions that are serious and emotionally charged visual access can become overwhelming (Harper, Rintel, et al., 2017; Harper, Watson, & Woelfer, 2017; Longhurst, 2013, 2016; Madianou & Miller, 2013). Furthermore, allowing the self to be seen in this way can also cause self-conscious feelings in more mundane VC interactions (O'Hara et al., 2006; Olaniran, 2013), but there are also indications that such feelings decrease over time as users domesticate the medium (Brubaker et al., 2012).

Gaze

Gaze, a crucial resource in human communication (Kendon, 1990), has been widely studied within the medium of VC. Due to the location and angle of the camera in relation to the screen, VC users have three choices in terms of gaze[1]: they can look at their screens, the camera, or away from the screen. It is impossible to make eye contact over VC because when a user looks at the other person on the screen, they appear to look down; in order to create the illusion of looking directly into the interlocutors' eyes the user must look at their camera, which means that they cannot see the other person (Allan & Thorns, 2008; Arminen et al., 2016; Bohannon et al., 2012; Chen, 2002; Derrer et al., 2006; Develotte et al., 2010; Fish et al., 1990; Fullwood, 2007; Fullwood & Finn, 2010; Garner & Buckner, 2013; Monk & Gale, 2002; Satar, 2013; Sindoni, 2011a, 2013). Therefore, the most natural place to look (at the screen) can create a negative impression, as looking downwards in face to face interactions can be interpreted as inattention or untrustworthiness (Chatting, Galpin, & Donath, 2006; Fullwood & Doherty-

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[1] This applies to commercially available devices for domestic use. There are dedicated videoconferencing systems available for business use which can simulate eye contact, but these are not currently affordable for the average consumer.

Sneddon, 2006; Shephard & Knightbridge, 2011). Looking into the camera for extended periods of time is impractical as the interlocutor is not visible, but competent VC users learn to gaze at the camera at strategic times (Develotte et al., 2010; Pardasani, Goldkind, Heyman, & Cross-Denny, 2012). Furthermore, experienced VC users interpret gazing at the screen as a sign of attention (de Fornel & Libbrecht, 1996; Licoppe, 2017b). Thus, face to face gazing practices cannot be directly transferred to VC. This may cause feelings of awkwardness initially, but over time VC users can learn to adapt their strategies and interpretations.

Field of view

Cameras, unlike the human eye, have sharp boundaries around what they can 'see'. In addition, when three dimensional space is projected onto a two dimensional screen some distortion is unavoidable. Furthermore, the location of the camera in relation to the other person is not where an interlocutor's eyes would normally be. Therefore, similarly to gazing practices, gestures and non-verbal communication must be modified in order to be successfully deployed in VC (Derrer et al., 2006; Fullwood, 2007; Heath & Luff, 1992, 1993, 2000; Rosenbaun et al., 2016b). Pointing in particular is challenging because it is a system of meaning-making developed to be used in shared space, and it does not work in the same way on a two dimensional screen (Keating, Edwards, & Mirus, 2008), or even in enhanced media spaces (Luff et al., 2003, 2016). Other gestures such as blowing kisses or waving and sign language must also be aligned with the camera. Therefore, they can be carried out more effectively if the users can see themselves on the screen (Keating et al., 2008; Neustaedter et al., 2015).

The VC set up provides a fragmented view of the body, as typically only one part of the body is visible on the screen (Sindoni, 2013). When the view is a close-up of the face, much of the body is not shown on the screen, which can lead to a sense of decontextualisation (Develotte et al., 2010). Therefore, if only the face is shown it is important to use facial expressions strategically (Seitz, 2015) as there is very little scope for other non-verbal communication. This is in fact the standard set-up for domestic VC (Licoppe & Morel, 2012), which will be discussed in detail in chapter 5. However, the standard is subverted for example in cybersex between strangers where the face is what is least often shown and individual body parts are contextualised via text based chat (R. H. Jones, 2008).

Although the main focus is on seeing and showing the body and especially the face (Harrison, 2013; Neustaedter et al., 2015), some of the immediate environment is also visible via VC (Arminen et al., 2016; Longhurst, 2013). What is visible is to a great extent controllable by the users and this can be exploited strategically for impression management. This feature is very important in domestic VC because the location is often private (bedroom) or semi-private (living room), which contrasts with the more public spaces used in workplace videoconferencing (Harper, Watson, & Woelfer, 2017; Kirk et al., 2010). For example, users of experimental always-on video systems managed the impression given by choosing relatively public areas within the home, blocking the camera, or cleaning up the visible area (Buhler et al., 2013). Similar behaviours were noted in public VCs (public Google Hangouts sessions, where the VC was broadcasted to a wider audience via YouTube), in which some participants blocked their camera, angled the camera away from themselves, or presented a still image (Rosenbaun et al., 2016b). Utilising the limits of the field of view is especially important to young adults using VC with their parents – while the parents might want to see the 'crucially informative surroundings', the young adults prefer to frame a limited view of their homes and even their bodies to exercise their autonomy, as found by Kirk et al. (2010, p. 139). The field of view is also essential to consider when work-related VCs are conducted from home (Brubaker et al., 2012; D. Miller & Sinanan, 2014, pp. 177–178; Seitz, 2015), especially in a high stakes situation such as a job interview (Longhurst, 2017, pp. 83–86).

Objects and space

As mentioned above, cameras built into current VC devices are designed to focus on a person, which makes showing larger areas tricky (Neustaedter et al., 2015). This is a challenge for users attempting to stream major life events such as graduations, birthday parties, weddings, and funerals (Neustaedter et al., 2015) but these cameras are well suited to showing smaller objects or parts of the surroundings. While in the previous section I considered what can be seen *in addition to* the body of a VC user, here I discuss how objects are *deliberately brought into focus* in a way that can temporarily obscure the body of the interlocutor. Such *showings* appear to be common in VCs (Licoppe, 2017a; Licoppe et al., 2017; Rosenbaun & Licoppe, 2017; Zouinar & Velkovska, 2017) and can even be the main motivation to initiate a VC (O'Hara et al., 2006). They are especially valued by parents or grandparents interacting with young children who find it difficult to partake in audio only calls but can participate in VC by producing showings (Ames et al.,

2010; Follmer et al., 2010; Geenen, 2017). Such uses are common in domestic VC despite the effort required to use the system in a different way than it was designed.

Digital mirror

One of the unique features of VC is the live video feed where users can monitor themselves (Sindoni, 2011a, 2012, 2013), which functions as a digital mirror. Although people are used to looking at themselves (in mirrors, photographs, or videos) being continually confronted with their own image is unlike these familiar experiences and therefore fascinating (Longhurst, 2017, p. 44). In addition, people often strike a pose or put on a specific performance for the benefit of the mirror, photo, or video in a way that is very difficult to maintain over an entire VC conversation; therefore, looking at the digital mirror during a VC allows users to observe themselves in the course of an ordinary conversation, which was not possible before VC (D. Miller & Sinanan, 2014, p. 16). Attitudes towards the digital mirror appear to be polarised: for some it creates the uncomfortable feeling of being observed (Fullwood & Finn, 2010), but it can make VC more enjoyable for young children (Ames et al., 2010; Holloway, Green, & Love, 2014; Yarosh, Inkpen, & Brush, 2010), and it is a crucial resource for users communicating with sign language (Keating et al., 2008).

2.5.5 Summary of the affordances of video chat

Affordances are 'real' in the sense that VC software have the affordance of transmitting live videos with all the features discussed above. However, they are not necessarily always relevant, as users can choose to turn off the video feed, block the camera with a sticky note, walk off screen, or engage in any number of behaviours that will utilise some affordances and ignore others. How they choose to employ VC depends partly on their experience and expertise with the medium and partly on their personal preferences. Part of the rationale for this study is that the experience of using VC is no longer new, but it is also not so integrated into everyday life that it has become unnoticeable (Longhurst, 2017, p. 4).

As demonstrated repeatedly in the review, the same affordance may be valued by some users and disliked by others, at least in some situations. Furthermore, users may also feel ambivalent about certain affordances: Madianou and Miller (2013, p. 178) report that one of their participants usually likes being able to see her children via VC, but will avoid using VC when she is upset. Even as I attempted to consider the affordances

independently, it has been apparent that they are in fact interdependent; for example the bodies of the users are shown through cameras with a fixed field of view and cannot be physically touched.

In this thesis I set out to explore the complex relationships between the different affordances of VC and how they are used in domestic interactions. In chapters 5-7, I will present my analyses and discussion of the affordances and use of VC structured around three key concepts in nexus analysis (chains of lower-level actions, practices, and mediational means). In the following chapter, I introduce and evaluate the analytical frameworks that have guided my research, concluding with nexus analysis and the concepts at the core of the later chapters.

3   Analytical Frameworks

My research is based on a range of methodological and analytical approaches and underlying theoretical frameworks. These approaches are conversation analysis (CA), nexus analysis, and qualitative interviewing, all of which share a commitment to inductive data-led research. In this chapter I outline the key concepts of two of the approaches: CA (3.1), and nexus analysis (3.2),and I conclude the chapter by reflecting on the practice of triangulation in research more broadly (3.3). These discussions set the stage for the following chapter, in which I describe the research process and give an introduction to the data.

3.1   Conversation Analysis

Conversation Analysis (CA) can be defined as 'the systemic analysis of talk-in-interaction', the aim of which is 'to discover how participants understand and respond to one another in their turns at talk, with a central focus being on how *sequences* of action are generated' (Hutchby & Wooffitt, 1998, pp. 13–14 original emphasis). The reference to *turns at talk* specifically could be interpreted to mean that CA is primarily interested in speech and pays little attention to anything else involved in communication. Historically, most of the CA studies have indeed focused on speech and CA is known for its attention to the details of talk. However, there is no conceptual reason for this: CA set out to study not just language but interaction in all its complexity and the focus on language is due to the use of audio recordings rather than a lack of interest in other aspects of communication (Mondada, 2016) which is also indicated by a number of early CA studies based on video data (C. Goodwin, 1979, 1981, 1986, Heath, 1984, 1986; Sacks & Schegloff, 2002; Schegloff, 1984a). As video technology has become easily accessible, there has been a growing interest in studying embodied communication, the effects of which are discussed throughout section 3.1.

CA is a 'bottom-up approach', which means that the researcher should practice 'unmotivated looking' to find patterns in the data rather than deciding *a priori* what concepts will be relevant (Ten Have, 2006; Wooffitt, 2005). The basic principles were set out by Harvey Sacks in his lectures (which were published by Gail Jefferson in 1992, second edition in 1995) but have since been developed further by many others. It is not only a method for studying the social world, but also a set of procedures for collecting, transcribing, and analysing data (Hutchby & Wooffitt, 1998, pp. 93–94). In this section I

consider key issues in CA: the focus on sequences (3.1.1), commitment to naturalistic data (3.1.2), the meaning of context (3.1.3), the role of recordings and transcripts in research (**Error! Reference source not found.**), the approach to multimodal analysis (3.1.5), and the relationship between technology and CA (3.1.6).

3.1.1 Sequences

As indicated by the definition above, sequences are the main concern of CA. This is because each utterance or turn creates context for the following one (C. Goodwin & Heritage, 1990), making sequential placement one of the most powerful tools in conversation. Sequences are also essential for exploring participants' understandings, as replies give an indication of how an utterance was heard (Button & Sharrock, 2016; Mondada, 2011). It is exactly the attention to the precise timing of interaction that makes CA so well suited to video analysis (Knoblauch & Schnettler, 2012; Mondada, 2016). However, CA based video analysis has also challenged the notion of sequentiality by showing that there can be multiple simultaneous relevant actions (Deppermann, 2013; Mondada, 2016). Therefore, analysts need to deal with simultaneous trajectories of action even when the 'no gap, no overlap' rule (Sacks, Schegloff, & Jefferson, 1974) is in operation on the level of speech.

3.1.2 Naturalistic data

Within CA, the norm is to study 'naturally occurring' or 'naturalistic data' (J. M. Atkinson & Heritage, 1984; Hutchby & Wooffitt, 1998; Psathas, 1995; Silverman, 2001, p. 97; Ten Have, 1999). This means that rather than analysing interactions that took place solely for research purposes, researchers should strive to observe interaction that would have happened regardless of the research. Speer took issue with the whole concept of 'natural data' (Speer, 2002a, 2002b, Speer & Hutchby, 2003a, 2003b), sparking a debate (Hammersley, 2003a; Hutchby, 2001a; Lynch, 2002; Potter, 2002; Ten Have, 2002). This debate in a sense goes beyond CA, as other approaches also discuss the question of naturalistic data. However, these articles refer to CA explicitly and the question is so central to this approach that many definitions of CA include a reference to naturalistic data (for example Hutchby & Wooffitt, 1998; Stivers & Sidnell, 2013).

Speer's main argument is that it is impossible to observe interaction without influencing the behaviour under observation; therefore, the naturalness of the data cannot be determined based on the method of collection and the role of the researcher (Speer,

2002a). Potter (2002) maintains that although participants are in fact generally aware that they are being observed and this may impact their behaviour to some degree, there is still value in minimising these effects: the focus on the methods of data collection is justified because data collected in an experimental setting will yield different patterns than data collected in a more natural setting. On this point, I agree with Potter and in the early stage of my research I made considerable efforts to make the recording of the VC interactions as unobtrusive as possible (this is discussed in detail in section 4.1). However, I agree that a participant's orientation to the recording device does not 'invalidate' the recording (Speer & Hutchby, 2003a) and that methodology, ethics, and analytics are inseparable from each other (Speer & Hutchby, 2003b).

3.1.3   Context

The debate around context and CA has been described as 'almost legendary' (McHoul, 2008) and has inspired several special issues dedicated to the topic (*Research on Language and Social Interaction* 1990/1991 and 1998, *Discourse & Society* 1997–9, and *Journal of Pragmatics* 2008). The main question can be formulated as such: what can be included in interactional analysis in addition to the recording? Broadly speaking there are two possible answers: nothing, or a limited range of additional information. The first position has been referred to as the 'strong version' of CA (Maynard, 2003), 'sequential purism' (McHoul, Rapley, & Antaki, 2008), and 'mainstream CA' (Pomerantz, 2012), depending on the author's opinion about the position. According to this view, the point of the analysis is to examine the participants' understanding of the interaction, which means that any relevant categories will be demonstrably oriented to (Antaki, 2012; Pomerantz, 2012; Schegloff, 1992, 1997, 1998b, 1999b, 1999a). This position has been criticised for being too restrictive, and several researchers have advocated for the inclusion of additional (ethnographic) materials in the analysis (Billig, 1999b, 1999a, Hammersley, 2003a, 2003b; Maynard, 2003; Waring, Creider, Tarpey, & Black, 2012; Wetherell, 1998). Furthermore, a case has been made that in the analysis of video data in particular, even a close analysis is not enough to provide a full understanding of the interaction without additional data because non-verbal actions are often ambiguous (Deppermann, 2013; Knoblauch & Schnettler, 2012).

There is also a third position, not discussed here, which would question the validity of an interactional approach entirely and argue for an altogether different approach. The

present research aligns with the second position: I value the power of CA to explore the underlying organizational structure of interaction by focusing on sequences (or to use the terminology of nexus analysis, chains of lower-level actions), but I use it in combination with other methods rather than exclusively. The CA analysis allows me to uncover underlying patterns of interaction and answer questions of *how:* how are affordances used, and how do they structure interaction? However, I am not a purist, because I am also interested in how the affordances are perceived, which cannot be answered by CA alone. Therefore, I also rely on interviews (discussed in the following chapter in section 4.6), using the nexus analysis framework to combine insights in systematic ways (discussed in section 3.2).

3.1.4   From audio and video recordings to transcripts

The bedrock of doing CA is recording interaction so that it can be replayed as many times as necessary during analysis (Ayaß, 2015; Hutchby & Wooffitt, 1998; Pomerantz, 2005; Psathas, 1995). This has been a distinctive feature of CA from the earliest days. Sacks explained that the reason for using audio recordings was that they 'constituted a "good enough" record of what happened. Other things, to be sure, happened, but at least what was on the tape had happened' (1984, p. 26). Therefore, early studies used audio recordings and focused on the verbal features with a few notable exceptions taking an embodied approach to interaction (C. Goodwin, 1979, 1981, 1986, Heath, 1984, 1986; Sacks & Schegloff, 2002; Schegloff, 1984b). As technology developed, there has been a push to use video recordings as a standard rather than audio recordings on the grounds that video captures even more detail (Bezemer & Jewitt, 2010; S. E. Jones & LeBaron, 2002; Pomerantz & Fehr, 1997). The switch to video recordings, however, has introduced new challenges in transcription (Mondada, 2014c), prompting Ayaß (2015) to question the status of transcripts in CA in light of the increased interest in multimodal aspects of interaction.

In CA, transcription is a crucial analytical step, to be carried out by the researcher herself. The resulting transcripts represent the data, but the primary data is the recording and not the transcript (M. J. Atkinson & Heritage, 1984; Ayaß, 2015; Coates & Thornborrow, 1999; Hutchby & Wooffitt, 1998). Transcription is equally important for audio and video recordings, but the issue is that while there are well established transcription conventions for audio data (the Jeffersonian transcription system), the same is not currently true for

video data. Using an approach that was originally developed to deal with audio only data means that the transcription system prioritises speech (Mondada, 2014c). This may be evident in the transcript if speech is presented more prominently than other modes (Ochs, 2006) as seen in some early studies (C. Goodwin, 1984; Heath, 1984, 1997; Schegloff, 1984b). Furthermore, the primacy of speech is also made explicit as guides for CA informed multimodal analyses recommend starting with transcribing speech, adding further features later on (Heath, Hindmarsh, & Luff, 2010; Norris, 2004a; Ten Have, 1999).

Selectivity is another issue that must be considered in a new light for video data. The rationale for selecting specific extracts for analysis should be clarified for both audio and video data (Ayaß, 2015; Wetherell, 1998). However, video recordings are even more selective in the features that are transcribed and analysed than audio recordings, as there are more potential features to choose from (Ayaß, 2015; Deppermann, 2013). Although screen captures from video recordings can now easily be incorporated into transcripts without modification, they are still not direct representations of the data because they stand for a stream of moving images (Ayaß, 2015; Bezemer & Mavers, 2011). Therefore, when presenting extracts, I clarify my selection criteria both for the extract under analysis and the images included in the transcript.

3.1.5   Multimodality in CA

CA is one of the several methodological frameworks dealing with the issue of *multimodal communication* or *embodied interaction*. Within CA, *multimodality* is used to refer to the 'various resources mobilized by participants for organizing their action – such as gesture, gaze, facial expressions, body postures, body movements, and also prosody, lexis and grammar' (Mondada, 2016, p. 338). Like other approaches to multimodal interaction, CA holds that all communication is multimodal and the different modes work together to create meaning (Bezemer & Jewitt, 2010; Jewitt, 2016; S. E. Jones & LeBaron, 2002; LeVine & Scollon, 2004; Norris, 2004a; Seyfeddinipur & Gullberg, 2014). What is distinct about the study of multimodality in CA is that unlike other approaches, (for example Knight, 2017; Knight, Evans, Carter, & Adolphs, 2009; Norris, 2004a, 2016), the modes chosen for analysis are not pre-determined, but rather identified through repeated viewing of the video. Furthermore, multimodality within CA focuses specifically on the bodies of participants (Mondada, 2014c, p. 138). The selection and transcription process for the videos in this project is discussed in detail in section 4.5.

3.1.6 Technology and CA

Technology has been intertwined with the methodology of CA from the beginning. Without recording devices it would not be possible to replay interactions and arrive at the detailed transcripts and interpretations that are the key to CA. In the previous section, I have also shown how the developments in technology (widely available video recordings and PCs able to deal with large amounts of video data) have changed what is considered a 'good enough' recording and prompted new transcription conventions. Therefore, CA very much depends on technology.

In addition, CA has also had a strong interest in researching the use of communication technologies. The first CA studies were carried out on recordings of phone conversations, because these were easy to record and the recording preserved all the features available to participants during the interaction (Arminen & Leinonen, 2006; Hopper, 1992; Hutchby & Barnett, 2005; Mondada, 2014c; Sacks, 1984; Schegloff, 1986). As a result, there is a large amount of literature on the details of landline phone conversations (Auer, 1990; Bolden, 2008; Drew & Chilton, 2000; Hopper, 1991, 1992; Houtkoop-Steenstra, 1991; Hutchby, 2001a; Lindström, 1994; Schegloff, 1986, 2004; Schegloff & Sacks, 1973). When mobile phone became widespread, researchers were interested in how the new affordances (personal rather than shared phone numbers, caller ID, and portability) changed interaction (Arminen, 2005; Arminen & Leinonen, 2006; Arminen & Weilenmann, 2009; Esbjörnsson & Weilenmann, 2005; Hutchby, 2005; Hutchby & Barnett, 2005; Katz E. & Aakhus, 2002; Licoppe, 2009; Rettie, 2007, 2009; Weilenmann, 2003).

CA has also been a useful approach in human-computer interaction (HCI) (Hutchby & Wooffitt, 1998, pp. 240–245), as modern computers are increasingly directed through language rather than mechanical switches (Hutchby, 2001a, p. 9; Suchman, 1987a). Within CMC, CA has not been widely used as CMC has focused on text based and/or asynchronous communication which lends itself to different kinds of analyses. However, CA has been used to study instant messaging (Berglund, 2009; Elsner & Charniak, 2010; Marcoccia, Atifi, & Gauducheau, 2008; Meredith, 2017; Panyametheekul & Herring, 2003) and it is a popular approach within the field of video mediated communication (Arminen et al., 2016; de Fornel & Libbrecht, 1996; Dooly & Tudini, 2016; Harper, Rintel, et al.,

2017; Licoppe, 2017b; Licoppe et al., 2017; Licoppe & Verdier, 2013; Rintel, 2013b, 2013a; Rosenbaun & Licoppe, 2017; Rosenbaun et al., 2016b; Satar, 2013, 2016; Sindoni, 2014; Zouinar & Velkovska, 2017). Perhaps because VC is understood metaphorically as an upgraded phone call (Harrison, 2013; Neustaedter et al., 2015), using CA (which was developed on phone calls) appears to be an obvious choice for researching VC. The main challenges for such an approach are recording naturalistic data, and analysing the video recordings in a systematic way. In this section, I have considered how video recordings can be subjected to a CA analysis. In the following section, I outline the key concepts of nexus analysis, which was the guiding framework for a systematic analysis of the different types of data.

3.2   Nexus analysis

The framework I used to link the micro analyses informed by CA and multimodal analysis to broader questions was nexus analysis, which is conceptualised as 'the methodological arm of' mediated discourse analysis or MDA for short (S. W. Scollon & de Saint-Georges, 2011, p. 75). This framework was well suited for the present research because the concept of affordances is at the core of nexus analysis, it incorporates analyses of non-verbal actions, and it encourages the use of different data sources (R. H. Jones, 2004; Norris & Jones, 2005a; R. Scollon & Scollon, 2007; S. W. Scollon & de Saint-Georges, 2011). The aim of nexus analysis is to explore how people use different tools (which are referred to as mediational means, discussed below), which aligns closely with the research questions of this project.

The basic analytical unit in nexus analysis is the *lower-level action*, which, chained together with other lower-level actions, constructs a higher-level action (Norris, 2004b, 2011, 2016; Norris & Jones, 2005d). A lower-level action is defined as the smallest meaningful unit, for example an utterance, gesture, or a shift in posture or gaze direction. The chains of lower-level actions combine together to form a recognisable higher-level action such as a conversation or dinner with friends. This unit of analysis is fundamentally multimodal, which makes it suited to investigate interactions where speech is not necessarily the dominant mode (Norris, 2004a, 2016). Thus, the first analysis and discussion chapter (chapter 5) focuses on the basic analytical unit, the lower-level action, and on the ways that these actions are linked together. Lower-level actions are also

discussed in the other analysis and discussion chapters in relation to specific video sequences, which serve to illustrate the arguments laid out in these chapters.

After the sequences of actions have been examined in chronological order, the researcher can begin to explore the *practices* that constitute the higher level actions. In nexus analysis, *practice* is defined as 'a historical accumulation within the habitus/historical body of the social actor of mediated actions taken over his or her life (experience) and which are recognizable to other social actors as "the same" social action' (R. Scollon, 2001a, p. 149). Examples of practices include handing an object, queuing, the question/answer sequence, greeting, paying for an item. When discussing practices, the emphasis is on the repetition of the 'same' action over various separate occasions and different kinds of practices, rather than the chronological sequencing of actions in a single instance (Norris & Jones, 2005f; R. Scollon, 2001a). VC practices are explored in chapter 6, with a focus on practices of paying attention. Furthermore, specific actions are linked to abstract practices throughout the discussion in chapters 5 and 7.

In order to carry out a higher-level action, participants rely on a number of *mediational means* including physical space, objects, background music, body parts, language, and so on (R. Scollon, 2001a). Nexus analysis holds that there is no unmediated action, which is why the approach was originally referred to as '*mediated* discourse analysis'. Part of the analysis is identifying what kinds of actions are amplified or restricted by the particular mediational means, also considering how different tools can be combined or used in non-normative ways (Norris & Jones, 2005e). This is the focus of the final analysis and discussion chapter, where I examine the spaces used by my participants during VCs.

The concept of mediational means directly draws on the notion of affordances. Jones et al (2001) have argued that traditional CMC research often makes the mistake of focusing on the mediational means, leading them to interpret the actions taken 'as effects of the media' (p. 4). In contrast, nexus analysis states that the affordances of a medium do not determine the actions that can be taken through it, but merely create tension between what a person wants to do and what can be done (Norris and Jones 2005d; Norris and Jones 2005a; Norris and Jones 2005c; Jones and Hafner 2012:10). This perspective makes it possible to step away from the 'deficit-model' in which CMC (and therefore VC) is viewed as an imperfect replica of face to face communication.

The final key analytical concept is the *site of engagement*, defined as 'moment in real time, enabling mediated action to occur, which is brought about through various social practices as well as through multiple mediational means' (Norris & Pirini, 2017, p. 26). Analysing a site of engagement requires the analysis of the real time interaction as well as the histories of the relevant social practices and the affordances of the mediational means. This is what makes it possible to combine micro and macro analyses and different data sources into a coherent whole.

The *site of engagement* has also been conceptualised as a 'window in time' (Norris & Jones, 2005b, p. 139; R. Scollon, 1998, p. 11), which is a metaphor that resonates deeply with the phenomenon of VC. On laptops and PCs (which were the most common devices used in this data set) VC is manifested by opening virtual windows on a computer screen in order to interact or engage with other people in real time. The role of the screens and windows will be discussed in detail in Chapter 7. However, the sites of engagement for this research are broader than just the VC windows on the screens: they encompass the other mediational means including not only the software and the hardware, but also the bodies of the participants, the chairs, sofas, or beds they sat on during a VC, the rooms or public spaces they walked around in, and the languages they used. These mediational means appear on the screen captured videos and are also mentioned in the interviews. Relevant social practices (norms of communication in face to face interaction, phone conversations, and instant messaging as well as VC) can also be inferred from the video recordings, and they are directly discussed in the interviews.

3.3   Combining methods

In this chapter, I have shown that non-verbal modes of communication have been successfully incorporated into a CA based analysis in a number of studies. Although CA was first used to analyse audio recordings, it is well suited to video analysis due to its commitment to fine-grained analysis of recorded interactions. In this research, the purpose of the micro analyses was to explore chains of lower-level actions during VC and observe how the affordances are used *in situ*. These analyses are supplemented by an exploration of the interviews, which shed light on habitual patterns of VC use and perceptions of the limitations and capabilities.

My motivation in combining these approaches was not to 'triangulate' in the sense of corroborating findings by checking the validity of one analysis against the other (Bullock,

2016, p. 332). Instead, the aim was to answer different but related questions and explore different aspects in order to arrive at a more complex understanding (Gibbs, 2007; Gillham, 2005; Waring et al., 2012). Such a combining of methods is fundamental in nexus analysis, which provided the framework for linking together the different findings. It has also been recommended for researchers using video data (Jewitt, 2011) or analysing CMC (Bolander & Locher, 2014) due to the complex nature of studied material.

In this chapter, I have laid out the principles underlying the collection of the video data and the rationale for supplementing this data and the associated analyses with qualitative interviewing. In the following chapter, I provide an overview of all the data collected during the research, together with methodological choices made during the analysis of the videos and the interviews.

4   Data, methods, and ethics

This research project is built on three different sets of data, and hence requires the use of a combination of research methods. In this chapter I outline and reflect on the methods used during planning, data generation, transcription, and analysis for each of the three sets: domestic VC recordings in section 4.3, elicited coursework data in section 4.4, and interviews in section 4.6. When discussing the interviews, I use the term 'data *generation*' rather than 'data *collection*' to reflect my theoretical approach to working with interview data: during interviews, knowledge is co-constructed rather than 'collected' (Baker, 1997; Byrne, 2012; Mason, 2002). Each of these sections also provides some general information about the participants who provided the data, and the ethical guidelines followed. The information provided in this chapter is expanded as necessary in the analysis chapters. In section 4.5 I describe the transcription and analysis of all videos. To provide context, I start with a short summary of the pilot study and how it has informed the main research (section 4.1), and outline the ethical guidelines for the whole project (section 4.2). I end the chapter with a brief summary of my methods (section 4.7), setting the stage for the following analysis and discussion chapters.

4.1   The pilot study

The data for the pilot study came from video recordings of the openings of nine Skype calls. The recordings were made by two primary participants, Shanice and Sarah. After obtaining consent from their conversational partners (the secondary participants), Shanice recorded three conversations with her mother and grandmother in her home town in California and Sarah recorded six conversations with four of her close friends from her home, Northern Ireland: Lucy, Nora, Vivian, and Elaine. Both Shanice and Sarah were based in Cardiff at the time of the recordings, although Shanice was on a trip around mainland Europe during one of the calls. Efforts were made to also obtain recordings from male participants for the pilot study, but due to technological problems these recordings were unusable.

The videos were created by the primary participants using the freely downloadable screen capturing software Debut Video Capture. This software recorded the entire screen of the primary participant's laptop along with the sound, creating a video. In this set-up the camera acts both as a medium of communication for the participants, and a recording device for the researcher. Shanice and Sarah kept their own video feed visible on their

own screen too. This was the default setting of the VC software they used (Skype) and how they normally use VC, and it also ensured that all participants of the conversation would be visible on the recordings.

The main benefit of using screen capturing software is that it is a relatively unobtrusive method, which requires no additional equipment. However, it provides a limited amount of context, which is why some VC studies have supplemented screen capturing with external cameras set up in the room (for example Geenen, 2017; Norris, 2016). In these studies the external cameras have proved very useful for example for recording posture changes from a different angle. Nonetheless, I was concerned that using an external camera would deter participants (of which there were already few). Furthermore, it has been shown that users of video chat software are very sensitive to what appears on the screen (Licoppe & Morel, 2012); so much so, that they are in effect 'all-in-one producers, directors, editors, and spectators for the video images they produce and are confronted with' (p. 427). Therefore, it seemed fruitful to analyse the video feed that is consciously produced by participants, even if it means that there is limited contextual information available.

Although the thesis is based on the analysis of newly collected videos and interviews, the analysis of the videos collected in the pilot study has shaped the design of the main research. I also revisit the findings of the pilot study in light of the later analysis in Chapter 5. In addition, I conducted an interview with Shanice about her Skyping habits in late 2011, which I have analysed together with the interviews collected in 2014 and 2015.

4.2   Ethics

This study was granted ethical clearance by the School Research Ethics Committee (SREC) at the School of English, Communication, and Philosophy and follows established practices in the field of language and communication research (for example The British Association for Applied Linguistics, 2016). In fulfilment of the requirements of the SREC, all digital data collected was stored on secure password-protected servers and hard copies of transcripts and consent forms were stored in lockable rooms on University premises. These materials will be disposed of in a confidential manner after the completion of the project. Original recordings were not shared with anyone outside of the supervisory team and transcripts were appropriately anonymised in presentations and publications (Cserző, 2016, in press). All participants signed consent forms outlining the

above guidelines (see appendix pp. 230, 231, 232, 237). Participation was voluntary, and participants were free to withdraw their contributions at any time. The final portion of the consent form contained options for the distribution of research materials containing identifiable data (unaltered audio and video recordings and still images from videos). These questions worked on an opt-in basis, the default option being that no such materials would be used in presentations and publications. Participants chose different options, with some asking to remain completely anonymous and others allowing the distribution of unaltered materials. Further details about the anonymization process are provided for each dataset in the sections below.

4.3   Domestic video chat recordings

For this research project, I wanted to focus on VC used outside of the work context. Therefore, the goal was to recruit participants who would record their VC conversations with a regular VC partner (a family member, close friend, or romantic partner). In line with the principles of CA (discussed in section 3.1.2), the aim was to collect recordings of 'naturally occurring' interactions; therefore, I searched for experienced VC users who have frequent conversations with the same partner and asked them to record one or more of their regular VC sessions rather than setting one up for the sake of the research. Selecting participants based on their experience with the topic under study is called *theoretical sampling* (Seale, 2012, p. 146) or *purposive sampling* (Silverman, 2014, pp. 60–61), and it is often used in qualitative research where the depth of analysis poses practical restrictions on the amount of data that can be analysed (Mason, 2002, pp. 120–121).

In order to make detailed analysis possible, it was necessary to only collect recordings from interactions where the language used was English. There were no restrictions based on age, gender, or any other attribute. This kind of flexibility was necessary because of the inherent difficulties in gaining access to video recordings of this nature. Indeed, in their textbook on video in qualitative research, Heath et al. write

> *'It has long been recognised that qualitative research can pose significant challenges to gaining access, securing consent and planning projects. Video can exacerbate these difficulties and, unless carefully managed, can undermine the possibility of undertaking the research.'* (Heath et al., 2010, p. 14)

Initially, a higher number of potential participants volunteered. However, it proved challenging to find pairs of VC partners where both members gave their consent to participate. Finally I was able to recruit four primary participants who advocated on my behalf to the secondary participants. The pseudonyms of the participants, together with the length of the recordings are presented in Table 1 below. Participants are referred to by first name only pseudonyms following standard naming conventions for data collected in personal settings (Schegloff, 1999b).

Table 1 - Personal VC recordings

Primary participants	Secondary participants	Number of recordings	Total length of recordings
April	Burt	1	00:33:28
Bryn	Dan	3	00:58:44
Paul	Ray	1	01:18:59
Kate	Diane, Charlie	2	00:16:05
	total	7	3:07:16

The first pair to join the study were Bryn and Dan, a long-term couple. In 2014, Bryn was based in Cardiff during the week but travelled to another city in the UK on the weekends to stay with his partner Dan. While Bryn was in Cardiff, they arranged Skype calls every day. Bryn and Dan agreed to record three of their Skype calls in their entirety, and although they were given the option to edit the recordings before submitting them for analysis they did not do so.

The second couple who provided a recording was April and Burt. In 2015, April was living in Cardiff and Burt was living in the US. They had originally met and started dating during their studies in the UK, and after Burt moved back to his home town, they continued the relationship at a distance with personal visits whenever possible. While apart they communicated every day in a variety of ways, including Skype, Facebook Messenger, text messaging, emails, online games, letters, postcards, parcels. The plan was to obtain three recordings from this second pair also, but due to a combination of technical and personal problems, April could not make any more recordings after the first one.

The final full recording came from Paul, who recorded a VC session with his friend Ray in 2014. One of aims of this call was to work on an academic paper they were writing together at the time, but they also discussed personal topics. This recording differs from the previous ones not only because the two participants are not romantically involved,

but also because this pair talked less regularly to each other. Furthermore, in contrast to the others, this was not purely a 'keeping in touch' call, but also had an instrumental purpose.

The final videos came from Kate, who recorded the openings of two of her VCs. One video is only one minute long, and contains the opening of a VC with a close friend (Diane). The other is almost 15 minutes long, and contains part of a VC with Kate's brother, Charlie. In 2014, Charlie was working in Thailand for a year and had regular VCs with Kate during his travels.

All the pairs had close relationships, whether romantic, friendly, or family ties. They had also been talking to each other via VC regularly before they created the recordings. The recordings were made using the Debut Video Capture as in the pilot study, except in the case of Bryn who used a MacBook rather than a PC. He was provided with a licensed copy of Screen Record Studio, as no free software was available for Macs.

All of these recordings met the criteria defined at the outset of the research: the participants spoke in English and they are 'naturally occurring' in the sense that the VCs were not set up because of the research. This means that the VCs would have happened regardless of the research, although the interaction was no doubt shaped by the observation, as all participants refer to the research at some point in their conversations. In terms of language, all participants were native English speakers apart from April and Paul, who are both from Germany. April and Paul communicate in English in both their personal and professional lives every day, including their VC sessions with Burt and Ray, who do not speak German.

4.4   Coursework data from the Digital Literacy and Language module

In 2013 an opportunity arose to collect VC recordings from a more formal context. As part of an undergraduate module on Digital Literacy and Language, students were given the task to conduct two interviews over VC and Instant Messaging (IM). They were to record the VC interviews using screen capturing software and save the chat logs from the IM interviews, writing a reflective account comparing the two modes. The recordings, logs, and reflective accounts were to be submitted for assessment. The students were also required to submit consent forms to ensure that their interviewees gave their consent for these materials to be shared with the module leader. The form gave the option to

participate in my PhD research. While granting access to the module leader was not optional, providing access to me for research purposes was voluntary (see appendix p. 232). The material collected this way will be referred to as the 'DLL data', short for Digital Literacy and Language, which was the name of the course. The DLL data was collected over two years from two successive cohorts of students.

In the first cohort there were a total of 56 students on the course and it was anticipated that less than half would consent to participate. The students were also encouraged to fill out an anonymous questionnaire about their VC habits, which 20 of them completed (the list of questions and the results of the survey are available in the appendix p. 233). The aim of this questionnaire was partly to collect some background information; however, there is no way to know for certain whether the students who gave consent for their videos to be analysed in the study filled out the questionnaire. A secondary aim was to gauge how many students could be encouraged to participate, as it seemed likely that fewer students would consent to share their videos than the number who were willing to fill out the anonymous questionnaire. The analysis of the questionnaire answers also proved helpful in developing the interview question schedule, discussed in section 4.6.

In the 2013 cohort there were seven students in total who agreed for their videos to be analysed in the present study (see Table 2). Each of these students conducted two interviews using VC, but the recordings were only analysed if the interviewee also consented to participate in the research. Therefore, some interviewers were able to provide two recordings, while others provided one. In total, eleven recordings were collected from this cohort, as shown in the table below.

Table 2 - Summary of DLL participants in 2013

Interviewer	Interviewees
Fay	Gina, Hugh
Ian	Jake
Anna	Colin
Laura	Molly, Nancy
Becca	Dawn, Emily
Olivia	Penny

Rachel	Sally, Tessa

In the 2014 cohort I was able to achieve a higher response rate for the VC habits survey (50 responses in total). The questions were slightly modified, but covered the same main topics as in the previous year. The number and length of videos collected in 2014 is very similar to that of the first cohort, with six students opting to share their videos, all but one obtaining consent from both of their interviewees (eleven recordings in total from this cohort).

Table 3 - Summary of DLL participants in 2014

Interviewer	Interviewees
Alan	Ben, Chloe
Pippa	Oscar, Rob
Sian	Tracy, Wendy
Dina	Ellie
Gemma	Holly, Luke
Mark	Irene, Nathan

In total, the DLL 2013 videos add up to 1 hour 20 minutes and the 2014 videos add up to 1 hour 45 minutes. This brings the total of coursework prompted videos to just over 3 hours, the same length as the domestic video recordings.

In 2014, I was also able to interview three of the students who had provided videos. In these interviews, I asked questions relating specifically to the VC interview they had conducted for the module as well as the general questions used in the other interviews, discussed in detail in the following section. An analysis of the DLL specific questions and project plans has been published in a chapter focusing on the DLL data (Cserző, 2016). Out of all the DLL videos, only one is analysed in detail in this thesis due to the process of transcription and selection detailed in the next section.

4.5   Transcribing and analysing the video recordings

Working with video data requires balancing a number of competing demands, and as discussed in Chapter 3, there is not (yet) a standard way to transcribe video data within

CA.. In this section, I explain the process of transcription and analysis and the choices that were made during this process. I discuss the different types of transcripts created throughout the project, selection criteria for video extracts, the issue of preserving the privacy of my participants, and finally I return to the question of the 'naturalness' of the videos.

In line with the principles of CA (M. J. Atkinson & Heritage, 1984; Ayaß, 2015; Coates & Thornborrow, 1999; Hutchby & Wooffitt, 1998), I considered the video files to be the primary source of information, from which 'data can be identified' by repeated viewing and transcription. Therefore, I distinguish two types of transcripts: *working transcripts*, which facilitate the analysis process, and *demonstrative transcripts*, which serve as selective and purposeful representations of the videos within the thesis (Deppermann, 2013; Norris, 2004a; Satar, 2016). The working transcripts are synched with the video file in the transcription software, and they are meant to be viewed together with the video. The demonstrative transcripts are closely based on the working transcripts, but they need to be intelligible without the video, so they include still images and additional descriptions.

The transcription and analysis process was facilitated by the CAQDAS (Computer-Assisted Qualitative Data Analysis Software) Transana. The main strength of this software is that it allows viewing of the video during transcription and syncing of the transcript with the media file (Mavrikis & Geraniou, 2011). After importing the videos into Transana, I created a rough first transcript of all the videos. I watched the full videos at regular speed, stopping the videos to make annotations and repeatedly viewing ambiguous sequences. Time index codes were inserted before and after every annotation, which made it easy to identify relevant sections of video in the later stages. In the first instance I created verbatim transcripts for talk during the opening, closings, and surrounding any interruptions (including incoming messages and calls as well as physical interruptions). I also wrote a summary of the stretches of talk in between the transcribed sections (marking shifts in topic), noted any involvement in other activities (for example typing, eating, or tidying), and sequences where talk did not play the primary role (for example when a participant showed her room).

The initial working transcripts were then used to select extracts for further analysis: I chose to focus on opening, closings, and interruptions (discussed in chapter 5);

participants engaging in activities other than the conversation (chapter 6); and showing sequences (featured in chapter 7). The relevant video clips were identified by reading through every transcript, and they were saved using the 'Collections' feature in Transana, which is a tool for grouping selected extracts together. After identifying the relevant video sequences, I refined the transcripts for these extracts through repeated viewing of the video adding further details. Similarly to recent CA based studies (Ayaß, 2015; Deppermann, 2013; Mondada, 2011, 2013, 2014a, 2016; Stefani & Horlacher, 2017), the transcribed features included speech, gesture, posture, facial expressions, gaze, and movement. Following the principles of CA, these modes were analysed when participants demonstrated an orientation to them in the interaction (Ten Have, 2006; Wooffitt, 2005). Focusing on one type of sequence at a time, I looked for patterns across the different videos, consulting the emerging literature on VC interactions.

The insights from the analysis are discussed throughout the next three chapters, but not all of the extracts analysed are included as transcripts in the thesis, as there was another selection process for identifying extracts to be included in the body of the thesis. When more than one extract was available (for example in the case of openings and closings) I chose an extract that combined multiple features discussed in the chapter and/or belonged to a pair of participants not discussed elsewhere in the thesis. Thus, I have included an extract from each primary participant providing a domestic recording. In regards to the DLL videos, one recording was closely analysed as it included an example of a showing and a participant engaging in other activities (cooking) throughout (this video is discussed in chapters 6 and 7). The other videos were only subjected to the initial rough transcription, as many of them were missing the opening and/or closing of the VC and they did not include interruptions, multitasking, or showing sequences.

Demonstrative transcripts were then created for the extracts chosen to be included in the thesis (the full video transcription conventions are available in the appendix p. 227). These transcripts were created using a simplified version of the Jeffersonian transcription conventions (M. J. Atkinson & Heritage, 2006). The full Jeffersonian system was not used because even without the inclusion of non-verbal aspects, a transcript using the full system can be hard to follow (Smith, Hollway, & Mishler, 2005). My goal was to include non-verbal features while keeping the transcript as simple as possible and retaining enough detail to support the analysis (Ochs, 2006, p. 167). This was partly in response to

feedback on the transcripts created in the pilot study, which included systematic notation of gaze direction for the full videos. Feedback on these transcripts indicated that a simpler system would be more reader friendly, which was a priority for the transcripts included in the thesis.

Therefore, the new transcripts incorporate all the aspects that indicate the relationships between the actions (overlaps, latching, incomplete turns, and pauses), as these are fundamental for representing and analysing the interaction sequence (Hepburn & Bolden, 2012). In terms of the descriptors of delivery, I retained symbols for the features that appeared most commonly in the chosen videos (questioning intonation, excited intonation, and syllable lengthening). Non-speech sounds such as laughter and coughing or unusual delivery (for example singing) is represented by descriptions rather than specialist symbols. Actions such as typing, clicking, gestures, or changes in posture are also incorporated into the main body of the transcript, differentiated from verbatim speech with double parentheses. The only exception is one of the videos analysed in Chapter 7 (section 7.4.2), where the non-verbal actions are indicated in a separate column for ease of reading, as this extract contains many non-verbal actions that coincide with speech turns.

I considered including video clips of the transcribed extracts, but this proved to be unfeasible. Although it would have solved some of the problems of transcribing such complex data (Flewitt, Hampel, Hauck, & Lancaster, 2009), it would have also made it impossible to ensure the anonymity of my participants. However, I have included screenshots (or in some cases altered versions of screenshots) from the videos to illustrate features that are difficult to describe, such as compositional elements. These still images also contain identifying features which are not usually transcribed in writing (Bezemer & Mavers, 2011; Mason, 2002), but some of my participants gave their permission for me to use such images with only screen names obscured. For participants who wished to remain anonymous, I created tracings of the still shots that I would have otherwise used (for example see Figure 1 below). The tracings were created using the software SketchBook, which allows the use of different 'layers'. Making the still shot the base layer, I traced the features I wanted to preserve on a second layer. I then saved the image created in the second layer, which resulted in drawings similar to the ones used by other researchers using video data (Bezemer, Cope, Kress, & Kneebone, 2013; Heath et

al., 2010; Sindoni, 2013). Creating tracings was preferable to pixelating the faces of participants (as in for example Licoppe et al., 2017; Lobinger, 2016), because pixelation would have obscured some of the features being analysed, such as gaze direction or facial expressions.

Figure 1 – Anonymised tracing

As the participants created the recordings themselves, they were certainly aware of the recording at the beginning and the end of the conversation. Similarly to previous findings, at times they explicitly address the topic of being recorded precisely in the openings and closings (Hutchby, 2001a). In some cases, this was to clarify to the secondary participant that they were being recorded (an example will be discussed in chapter 5). The recording also served as a transitional topic, as found in previous research (Maynard, 1980). Lastly, the recording was also a source for joking and teasing (Hazel, 2015; Speer & Hutchby, 2003a).

Therefore, to address the notion of the 'naturalness' of the data, I do not claim that my participants 'forgot' about being recorded, although I do believe that they were less uncomfortable than they would have been with an external camera pointed at them (for further discussion on "naturalistic" video data see Knight et al., 2009). However, I analysed some features, such as dealing with interruptions, that are unlikely to be substantially affected by the knowledge of being recorded (C. Goodwin, 1981;

Hammersley, 2003a; Heinrichsmeier, 2016). In other cases, such as in the case of showing sequences, I argue that participants oriented primarily to local concerns even if they continued to be aware of the recording (Heinrichsmeier, 2016). Therefore, these videos are 'natural' in the sense that in contrast with the interviews discussed in the next section, they represent interactions that would have happened regardless of the research project.

4.6   The Interviews

I conducted interviews in order to generate members' generalisations and accounts of individual experiences in line with the practice of nexus analysis (R. Scollon, 2001a, pp. 163–164). Interviewing was the appropriate method for this purpose because it is considered to be especially suited to finding out about people's attitudes, perceptions, and beliefs (Bullock, 2016, p. 330; Mason, 2002, p. 63). It is also one of the most wide-spread research methods used in qualitative research (De Fina & Perrino, 2011; Holstein & Gubrium, 1997), and a pervasive feature of popular culture in general (P. Atkinson & Silverman, 1997). However, there is disagreement among researchers using this method (as well as among those who oppose this method) about what exactly can be discovered through interview research. Therefore, in this section I provide a brief summary of the major arguments regarding facts, subjectivity, and validity.

Early approaches to interviewing (often associated with positivism) have been described as a process of excavating pre-existing 'facts' from a passive interviewee (Gubrium & Holstein, 2003b; Holstein & Gubrium, 1997; Mason, 2002; Rapley, 2001; Silverman, 1997). According to the excavation model of interviewing, the interviewer can gain access to the truth if they ask questions in the correct way (Baker, 1997; Fontana, 2003; Gubrium & Holstein, 2003a). The 'facts' exist independently of the interviewer, whether they are the interviewees' thoughts and feelings or objective facts about the world.

This positivist approach has been criticised for being overly simplistic, especially by those associated with constructionism. According to the constructionist perspective, the interviewer and interviewee work together to construct meaning (Gubrium & Holstein, 2003a; Holstein & Gubrium, 1997). The benefit of this constructivist approach is that it recognizes the role of the interviewer and acknowledges the context in which the interaction takes place (Rapley, 2001). However, it can make it difficult to make connections between what happened in the interview and the wider world:

> *'radical social constructionists suggest that no knowledge about a reality that is 'out there' in the social world can be obtained from an interview, because the interview is obviously and exclusively an interaction between the interviewer and interview subject in which both participants create and construct narrative versions of the social world'* (J. Miller & Glassner, 1997, p. 99).

Therefore, it has been suggested that researchers should attend to both the 'what' and the 'how' of the interview (Brinkmann, 2013, pp. 151–152; Byrne, 2012, p. 212). In other words, they need to take note of what participants say while keeping in mind the context in which they are talking. One way of achieving this dual focus is to acknowledge that interviewing is a subjective method in two ways (Brinkmann, 2013, p. 143; Gillham, 2005, p. 6). Firstly, the interview is an interaction between specific people and cannot be repeated in the same way with other people. Secondly, the analysis is interpretative, and therefore subjective[2].

Brinkmann (2013) argues that subjectivity is a necessary part of interviewing because the processes it focuses on are themselves subjective:

'in qualitative interviewing, all there is the human factor. There would not be anything to analyze, were it not for the human factor— human beings talking, interacting, understanding (or not), and interpreting each other — but this does not mean that analyses and interpretations cannot be rationally discussed and assessed' (Brinkmann, 2013, p. 143).

Therefore, 'valid research' in this context means that the researcher should provide a true representation of the interactions (the interviews) that took place (Brinkmann, 2013, p. 153; Gillham, 2005, p. 7). For this reason, I ensured that any extracts presented in the thesis are not only representative of the phenomena they are to exemplify, but also true to the entire interview and are not taken out of context. I also made sure to include extracts from each interview, although some participants are quoted more often than others.

I chose to conduct semi-structured interviews, which is the most wide-spread form of interviewing (Brinkmann, 2013, p. 19). Semi-structured interviews facilitate the

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[2] This is not particular to interview research because all raw data require interpretation, and facts do not speak for themselves (Gillham, 2005, p. 8).

discussion of pre-established topics chosen by the researcher in the participants' own terms (Kvale, 2007, p. 12). This is achieved by using an informal tone, open questions (Byrne, 2012, pp. 209–211; Magnusson & Marecek, 2015, p. 47; Mason, 2002, p. 62), and an 'openness to changes of sequence and forms of questions in order to follow up the specific answers given and the stories told' (Kvale, 2007, p. 51). However, there is also a clear focus on the research topic, which requires extensive preparation on part of the researcher (Gillham, 2005) (the preparations undertaken are discussed in the following section). Each interview was one-on-one, because I was interested in individual descriptions rather than group discussions. In addition, some of the questions could be perceived as quite personal, especially for the participants who used VC to communicate with romantic partners.

4.6.1   Design

When designing the interview guide, I started by revisiting the semi-structured interview I had conducted in 2011 during my MA. At the time of this interview, I was already planning the MA dissertation on the topic of using Skype, and the interview was to shape the pilot study. The interviewee was Shanice, a friend who was originally from California. I chose to interview her because I was aware that she regularly used Skype to keep in touch with friends and family. I designed the question schedule based on a preliminary literature review and my own experiences of using Skype. The interview lasted almost half an hour, and in line with the semi-structured approach, I complemented the planned questions (listed in Table 4) with spontaneous ones during the interview.

Table 4 - Pilot interview question schedule

1.   How often do you use Skype?

2.   Are your calls usually pre-arranged?

3.   Does it matter who initiates the call?

4.   Do you pay special attention to what you wear?

5.   Have you experienced any difficulties in using Skype?

        What kind?

6.   Can you remember a time when you thought 'I'm so glad

I can use Skype to talk to someone'?

7.   Is skyping similar to using the phone? Why/how?

8.   Which do you prefer? Why?

In order to develop the interview guide for the main study in 2014 I listened to this pilot interview, transcribing all the questions and summarising the answers. I added some of the questions that were asked spontaneously during the interview to the interview guide (the full revised guide is presented in Table 6). I also removed question 3 (Does it matter who initiates the call?) as it broke the flow of the pilot interview. Finally, I rephrased question 7 (Is skyping similar to using the phone?) to be more open (Can you compare VC to another form of communication?), leaving it to participants to name other modes of communication that were relevant for them.

I tested the updated list of questions by interviewing Bryn in October 2014. After listening to and partially transcribing this interview, I decided to send some of the questions to the participants in advance in the form of a short survey (see Table 5). For all following interviews, participants were asked to complete the survey and return it either electronically or in a hard copy before the interview (the answers to the survey questions are available in the appendix p. 258). They were asked to provide their age, gender, and occupation, and answer six questions about their VC habits.

Table 5 - Pre-interview survey

1. Please list all the video chat software you have used. (For example: Skype, Facetime, Google hangouts, etc.)

2. How often do you use video chat?

3. When did you first use video chat?

4. Who do you talk to via video chat?

5. What locations have you video chatted from? (for example bedroom, living room, kitchen, Café, hostel, etc.)

6.   Are your video chat sessions usually pre-arranged or spontaneous?

Using a survey before a qualitative interview in order to establish context is a technique recommended to researchers (for example in J. Miller & Glassner, 1997, p. 106; Phellas, Bloch, & Seale, 2012). In general, questionnaires are 'best employed as a survey technique to gather relatively straightforward factual data in response to closed questions' (Gillham, 2005, p. 166). The questions in the survey are such closed questions, contrasting with the open questions posed during the interviews (listed in Table 6 below). By separating the questions in such a way, I was able to capitalise on the strengths of both methods (surveys and semi-structured interviews).

A further advantage of the survey was that it provided a starting point for the interviews, which was especially useful in the interviews where I had not met the participants previously. Thus, I had a general impression of how participants used VC before the interviews, and could start by asking for further details or clarifications (for example: 'have you been using Skype every week ever since you first started using it?). In addition, it also provided participants an indication of what to expect during the interview, and a chance to reflect on their practices in advance. After creating the questionnaire, the interview guide was updated to the final version (see Table 6)

Table 6 - Final interview guide

Discuss answers to questionnaire

Do you pay special attention to what you wear, where you are, or how you arrange the room?

Do you pay attention to the background on the other side?

What device do you use for VC?

Have you experienced any difficulties in using VC? What kind?

Can you compare VC to another form of communication?

Are there things you do differently now than in the beginning?

Would you describe yourself as a VC user?

Do you always have the feedback video on?

Can you think of a time you were really glad you could use VC to talk to someone?

Would you like to add anything?

Conducting semi-structured interviews entails variation in the order and phrasing of the questions. For example, the question *'Can you think of a time you were really glad you could use VC to talk to someone'* was only used to prompt less chatty interviewees, and was not asked as default. Nonetheless, the guide is a good indication of the topics covered in the interviews.

The process of testing and reviewing the interview questions was shorter and less complicated than the one suggested for example by Gillham (2005). However, Gillham discusses interviews as a first exploration of a topic (which may be followed by further interviews as well as other methods of data generation). In contrast, when creating the interview guide I had transcribed significant portions of my videos as well as having completed the preliminary analysis of the DLL 2013 data set (including the project plans), which meant that I already had a sense of some important themes which I wanted to explore in the interviews. One of these is the location(s) used for VC, and what made them suitable or unsuitable for the purpose. Several questions related to the VC habits of my participants, in order to find out what is 'normal' for them. I was also interested in whether my participants considered themselves 'expert users' and how their habits have changed over time.

I conducted interviews with 29 participants in total including 19 students recruited via email advertisements (see appendix p. 236) and 10 acquaintances who were VC users (including Bryn, April, and Burt, who had provided some of the video recordings). Similarly to the videos, the interviews were also collected using *purposive sampling* (Silverman, 2014, pp. 60–61). I targeted students at my university because the majority of them come from other cities, and are thus likely to have friends and family living in other cities or countries, providing them with an incentive to use VC software. In addition, as 'digital natives' they are expected to be competent users of digital technologies (boyd, 2014b; Hargittai, 2010; Palfrey & Glasser, 2008; Taipale, 2015), including VC. Including acquaintances allowed me to interview participants from a wider age range, providing

further perspectives. In particular, it proved especially useful to talk to people who occupy different roles within their family (children, parents, and grandparents), as this has been linked to different patterns of VC use (Ames et al., 2010; Geenen, 2017; Harper, Rintel, et al., 2017; Harper, Watson, & Woelfer, 2017; Holloway et al., 2014; Kelly, 2015; Longhurst, 2013, 2017; Madianou & Miller, 2013; O'Hara et al., 2006).

Three of the interviewees were students on the DLL module who had provided access to their videos. I started these three interviews by focusing on questions arising from my analysis of the DLL videos and then moved on to discuss their general VC habits. One of the interviews was carried in out in Hungarian rather than English. Anna was one of the undergraduate students who responded to the email sent out in the department. She saw my name and recognised me as Hungarian, and wrote to me in Hungarian to arrange a time for the interview. As we were already communicating in Hungarian, I felt she would be more comfortable conducting the interview in our shared first language. Quotes from Anna are presented in the original with accompanying translation.

I provided interview participants with standard consent forms (see appendix p. 237) which gave them the option of remaining anonymous. Most participants preferred to be referred to by their real first name, and appropriate pseudonyms were assigned to those who wished to remain anonymous. Where other people are referred to by name in interview extracts, the names have been changed. For interview participants who also gave video recordings (Bryn, April, and Burt) the same pseudonym was used across the different data sets.

4.6.2   Participant overview

In total, I interviewed 29 participants about their VC habits. The average length of the interviews was 22 minutes, but they varied considerably: the shortest one was 11 minutes (Yasmin), and the longest one was April with over an hour, carried out in two sessions. The audio recordings of the interviews add up to over 11 hours in total. The age of the participants is presented in Table 7.

Table 7- Interviewees by age
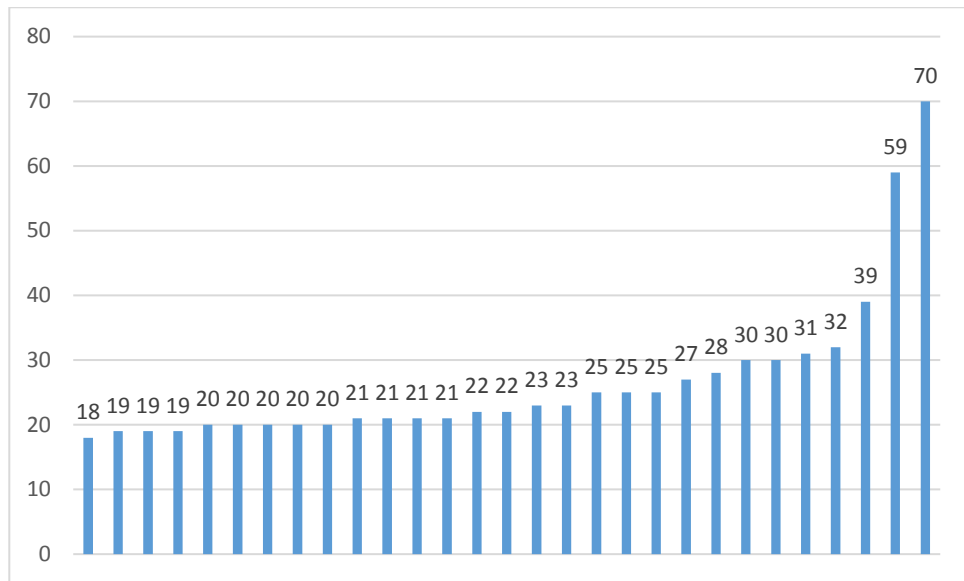
Twenty participants were full time undergraduate students between the ages of 18 and 25. These interviewees had very similar living arrangements (occupying a single a room in a shared house) and comparable VC habits, especially in terms of location. The other nine participants had a range of occupations (in full time employment, studying and working part time, on maternity leave, and one retired participant) and different living arrangements (for example living in a shared house, with a partner, or with young children).

At the time of the interviews, all participants had been using VC for at least two years. I categorised them into three groups according to their length of use (see Table 8). The group with the least experience had been using VC for 2 to 5 years. This was the largest group, and the amount of experience only seems 'little' in comparison with the other two groups, who have been using VC for 5 to 8 years or over 8 years.

Table 8 – First use
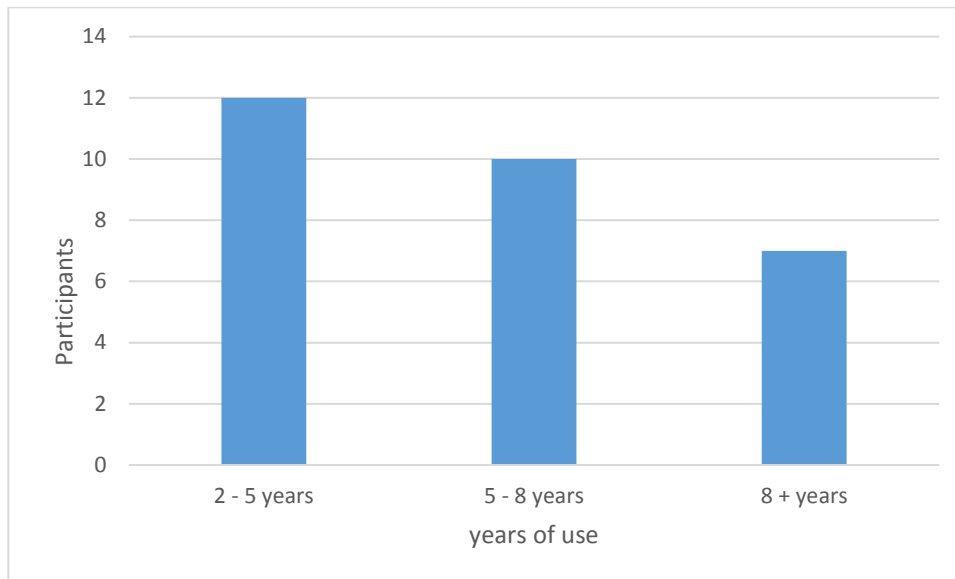
Remembering the time of the first use was not always easy for participants. For example, in the pre-interview survey David wrote *'I know for sure that I was using Skype from summer 2011 onwards. I must have used it before that too, but I'm not sure when'*, and several others indicated that the date provided was an estimate. This is similar to what Longhurst (2017, p. 32) found in her study on Skype use, and indicates that for these participants, VC is no longer experienced as 'new', but has become part of normal life to some extent, the memory of the first use fading away with repeated exposure. Several participants mentioned life events as reference points, typically moving to a new place or having a close friend or family member move to a new place, like Rachel in Extract 1 (bold font is used to indicate the most relevant expressions in the example).

Extract 1

Dorottya: Okay right so I see that you use video conferencing **very often**, *has that been like that um throughout ever* **since you've started using it**? *Or…*

Rachel: Not really, I didn't have much need for it **when I was at home**. *Mainly cause everybody who I videoconference with now, I don't live with anymore or don't see as often. Like friends who are in uni or my family who I don't see anymore. The only reason I started using it like way back then was because when* **people were on holiday** *or* **my brother went to uni** *I started talking to him on Skype and things, and* **my dad like had a job in London** *so we*

*didn't see him very often. So I used it for that kind of thing. So **I've definitely increased it since going to uni, being away from home***.

Based on her survey responses, I identified Rachel as a frequent VC user. When I asked her whether that has been the case from the beginning, Rachel described two distinct periods which are separated by one event: when she moved to another city to start university. Before university, she had little need to use VC, as the people who she wanted to talk to were physically close (and presumably reachable by other means, including face to face meetings). Occasionally, some of these people would travel, but this was presented as the exception rather than the rule and we can assume that they returned to the original location. However, after Rachel moved 'away from home' she was far away from her family and friends most of the time, which encouraged her to increase the frequency of her VC use.

This extract also highlights that in order to find out how much experience users have, we need to consider the frequency of use as well as the time elapsed since the first use. For many participants, how often they use VC has changed over time. However, when the interviews were conducted, most participants were at least weekly users (see Table 9).

Table 9 – Frequency of use
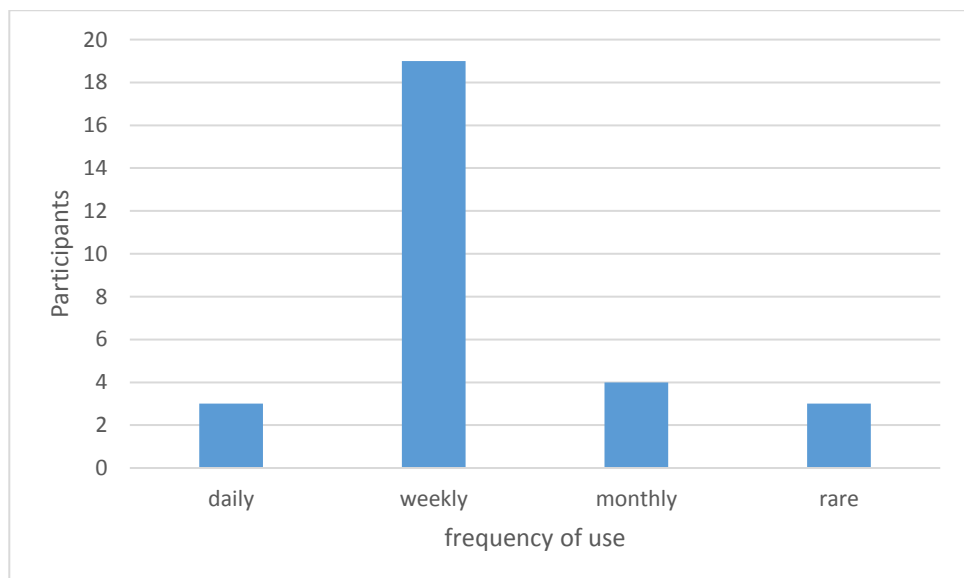
Considering the length and frequency of VC use, it is not surprising that most participants (22) said that they would describe themselves as a VC user in response to a direct question during the interview. When asked 'Would you consider yourself a VC user?', only

two participants (both rare users) replied with a definite 'no'. Five participants were ambivalent, stating that they perhaps were in the past or could be in the future, but not necessarily at the time of the interview.

4.6.3   Transcription

One of the most important choices to be made when working with interviews is the transcription system used in preparation for analysis and in publications, because transcription is an interpretative process, and not a neutral representation (Brinkmann, 2013, p. 61; Coates & Thornborrow, 1999; Duranti, 2006; Gibbs, 2007, p. 10; Gilbert, 1997, p. 147; Gillham, 2005, p. 121; Ochs, 2006, p. 167). Different transcription systems highlight different aspects, which means that the selection should 'reflect the particular interests – the hypotheses to be examined – of the researcher' (Ochs, 2006, p. 167). Section 4.5 discussed the choice of transcription system for the video extracts, which is a detailed CA based system. For the reasons outlined below, a different system was used for transcribing and presenting the interview transcripts (the transcription conventions for interview quotes are available in the appendix p. 229).

Using a CA based transcription system or a version of the Jeffersonian transcription system (M. J. Atkinson & Heritage, 2006) is advocated by many researchers adopting the methodology of interviews. For example, Potter and Hepburn (2005) argue that a full Jeffersonian transcription is needed to capture all important aspects of an interview, even if the focus is on content and not interaction. However, in a direct response to this paper, Smith, Hollway, & Mishler (2005) question whether CA truly is the only appropriate transcription system for interviews. The three critics highlight that no one transcription method can be universally recommended, and that different transcription methods serve different purposes. In particular, they criticise CA for making it hard to follow the topic, as the dense use of specialist symbols gets in the way. This position is echoed by Kvale (2007, p. 97), who writes that CA type detailed transcriptions 'are neither feasible, nor necessary, for the [qualitative analysis] of large interview texts in common interview projects'. Rather, Kvale recommends prioritising a readable style, omitting repetitions and hesitations in extracts (p. 132) which is also supported by other researchers (Brinkmann, 2013, p. 124; Gillham, 2005, p. 124; Magnusson & Marecek, 2015, p. 172).

There is a similar dispute regarding the need to transcribe and include interviewer talk in any published extracts. On one hand, Rapley (2001, p. 306 original emphasis) insists that

'*at the very least* interviewers' talk should *always* be included' regardless of the analytical stance, because anything less only provides a partial or decontextualized account of the interview (see also Silverman, 2014, p. 199). However, Holloway (Smith et al., 2005) argues that an answer is not just a response to the question immediately preceding it, but everything that has happened leading up to it (from the moment of recruitment). Therefore, it is impossible to represent all of the relevant context in the final paper, and the researcher must reflect on this and present a summary rather than just a transcript of the interviewer talk immediately before, during, and after the chosen extract (Smith et al., 2005). In this thesis I have taken the second approach, providing summaries of the context consistently and including my own contributions where clarity requires.

In summary, researchers promoting the use of CA for transcribing any interview argue that important aspects will necessarily be missed if another, less detailed system is used. This is especially so for the contributions of the interviewer, which are often overlooked. However, others argue that the question of providing 'enough' context is more nuanced than including as much detail as possible about the immediately surrounding talk. According to this view, the transcription should be as simple as possible while still containing enough detail to support the interpretations and claims made in the analysis (Ochs, 2006, p. 167). What is 'enough' detail is determined by the research questions, and a valid representation hinges on reflexivity rather than an overabundance of detail (Gibbs, 2007, pp. 90–93).

In my case due to the large number of interviews it would have been impossible to fully transcribe all of them within a reasonable time frame. Outsourcing the transcription was undesirable, as I needed to familiarise myself with the data in great detail and it would have been financial burden. Thus, I began by producing detailed CA transcripts for six of the interviews: Shanice, Bryn, Ben, Dina, Mark, and Gemma (the full CA transcript for Ben's interview is available in the appendix p. 247). As transcribing every instance of verbal back-channelling and the exact timing of overlaps proved overly time consuming, I decided that it would be more productive to start with a rough transcription of all the recordings and add more detail gradually to the sections chosen for analysis, which Gillham (2005) refers to as *selective transcription*.

The transcription process is considered the first step of analysis, as the researcher becomes familiar with the data (Brinkmann, 2013, p. 61; Fielding, 1997, p. 147; Gibbs,

2007, p. 10; Gillham, 2005, p. 121). In addition to that, creating transcripts also allowed me to utilise the text search of the CAQDAS software NVivo (discussed below), which aided the analysis greatly. However, throughout my research I considered the transcripts to be a representation of the audio recordings rather than 'data'. Therefore, during coding I listened to the recordings before assigning the codes.

Following the recommendations of Gibbs (2007), Gillham (2005), Silverman (2014, p. 111), and Smith et al. (2005), I started by creating a full rough transcript for the three earliest interviews: Shanice, Bryn, and Ben. I also produced a full transcript for the three DLL interviews, as the topics discussed in those would be different than the remaining interviews. I then created partial transcripts for the remaining interviews, alternating between verbatim transcriptions and summaries. During the analysis process described below, I extended the summaries into detailed transcripts where necessary. The extracts as they appear in the text were simplified (by omitting hesitations and repetitions) keeping in mind the principles outlined in this section.

4.6.4   Coding and analysis

I chose to use the CAQDAS software NVivo (version 10 and later 11) to manage, annotate, and analyse the audio recordings from the interviews. The transcripts of the six fully transcribed interviews were originally created in Transana, but the coding and analysis functions of this software proved difficult to use. Therefore, I transferred the transcripts to NVivo and continued the transcription and analysis of the remaining files using this tool. I added information collected via the questionnaires, creating a database of the participants which was linked with the interviews. After the six full interview transcripts were completed, I annotated the remaining interviews. Specifically, I transcribed each of my questions, summarised the participants' answers, and assigned the speaker for each interview segment.

Once I had listened to all the interviews, I created a list of 'codes' which represented some broad topics that were discussed. 'Code' can be defined as 'a researcher-generated construct that symbolizes and thus attributes interpreted meaning to each individual datum for later purposes of pattern detection, categorization, theory building, and other analytic processes' (Saldana, 2013, p. 4). By starting with descriptive codes (Saldana, 2013, pp. 87–91), it is possible to organise the data, become more familiar with it, and find out something about it as a whole (Gibbs, 2007, p. 4; Mason, 2002, pp. 150–159).

Thus, it is an essential step in the analysis which provides the basis for more complex analyses. The transition from descriptive coding to higher levels of abstraction is done by grouping the initial codes together and revising the coding system to reflect patterns across the data (Gibbs, 2007, pp. 43–44; Rivas, 2012, p. 375).

At the beginning of the coding stage, the main question is how to create the codes to be used. The two main approaches are concept-driven coding and data-driven coding (Brinkmann, 2013, p. 62; Gibbs, 2007). In concept-driven coding, '[t]he categories or concepts the codes represent may come from the research literature, previous studies, topics in an interview schedule', or 'hunches' (Gibbs, 2007, p. 44). In contrast, data-driven coding (which is used for example in grounded theory) means that the researcher approaches the data with no preconceptions, and builds the codebook based on the data (Gibbs, 2007, pp. 45–46). However, the two approaches are not exclusive, and most researchers rely on both to create the list of codes (Gibbs, 2007, p. 46). When using concept-driven codes (which are also called provisional codes), these need to be revised in the process of applying them to the data (Gibbs, 2007, pp. 44–45; Mason, 2002, p. 160; Saldana, 2013, pp. 144–147). The systematic revision of the coding scheme is the core of producing good quality research. The process of coding, like qualitative research in general, is necessarily a subjective process. Therefore, the key is to practice reflexivity rather than attempting to be objective or neutral (Gibbs, 2007, pp. 90–93).

I started with concept-driven coding, based on the interview guide (for example *compare, background, device,* and *problems*) and some other topics that appeared to be salient during the annotation process (for example *audio only, professional, multi-party,* and *old user*). I then identified the relevant interview sections for each code, going through the annotation or transcription for each interview and listening to audio where necessary. For some codes, it was possible to start by creating a text search query (for example to search for 'attention', 'face', 'awkward', or 'screen'). However, since not all the interviews were transcribed verbatim these searches were always supplemented by going through the interviews one by one. During the coding process I also added new codes to the list, merged codes, or split codes into sub categories. These changes to the coding scheme were also applied to the interviews that had already been coded.

At the end of this recursive process I ended up with 28 codes in total, which are listed in the appendix (p. 238). The coding process allowed me to identify two overarching themes

which became the focal points for the analysis presented in chapters 6 and 7. First, I discovered that the participants seemed to discuss different aspects of space. This prompted me to revise and elaborate the codes based on repeated listening and reading, leading to the following list of codes (all related to space): location, camera space, distance, background, screen, public, and virtual tour. During the analysis, I found that these extracts could all be linked to nexus analysis' concept of mediational means. Thus, the focus of chapter 7 became the *mediational means*, with particular attention to space.

When looking for a second theme, 'attention' stood out as the code with the highest number of references. On further inspection, a number of further codes also provided exchanges related to attention: self-image, compare, learning, multi-party, age, showing things, privacy, and intrusive. These codes related to the concept of *practices*, therefore, in chapter 6 I explore practices of paying attention in VC.

In writing these two chapters I followed the same general steps: first I collected all the sections with codes that were relevant to the themes. I grouped these interview sections in different ways, until I found a pattern that was meaningful. Then, I searched the video recordings for instances that illustrated the issues outlined by the interviews. Thus, I conducted an inductive analysis of the interviews and a micro-analysis of chosen sections of the video recordings.

The third analysis chapter (Chapter 5) is dedicated to a close analysis of the chains of lower-level actions within VCs, with a focus on openings. This chapter differs from the other analysis chapters in how the central theme was identified, as it is based closely on the pilot study, which means that it was planned from the earliest stages. The relevant material for this chapter was not found through inductive analysis of the interviews, but through the analysis of the structure of VC interactions as they appear in the video recordings. In this chapter the role of the interviews is to provide information about what VC users do *before* the start of the VC, for example the arrangements they make.

4.7   Summary

The present research is unique among studies of VC in that it combines micro analyses of video recordings with analyses of interviews. The findings from the different types of analyses are brought together under the framework of nexus analysis. This was achieved by focusing on three key concepts in nexus analysis: chains of lower level actions,

practices, and mediational means. The analysis and discussion is presented in three chapters, which are built around the three concepts listed above. However, the structure of the thesis is also informed by the inductive analyses in the sense that the specific chains of actions, practices, and mediational means were identified through engagement with the collected videos and interviews. It would be impossible to fully discuss all the possible chains of actions, practices, and mediational means that are relevant for VC interactions within a thesis. Therefore, I chose the ones that appeared salient in the recorded VC interactions and the interview discussions.

I begin the analysis and discussion of the data with the smallest unit of analysis: the lower-level action (Chapter 5). This chapter focuses on the chronological sequences of actions as they appear in the videos and the accounts in the interviews. Next, in Chapter 6, I examine how certain sequences of actions relate to other types of higher-level actions. In shifting the emphasis from chronological sequences to recognisable actions across different activities, I move the discussion from chains of actions to practices. In the final analysis and discussion chapter (Chapter 7), I examine the mediational means, in other words the cultural tools that are used during VC interactions. In the concluding discussion, I trace the links between the chapters and summarise the answers to the research questions. Finally, I reflect on the theoretical contributions of the thesis in relation to the methodology of nexus analysis and Goffman's theories of mediation in human interactions.

5 Chains of lower-level actions: openings, noticings, suspensions, resumptions, and closings

This chapter addresses the research question 'What chains of lower-level actions can be identified in VCs, and how do they structure VCs?'. The focus of this chapter is on the smallest meaningful units of action, the way they are chained together sequentially, and the role of the chained actions within the VC. The structural features are discussed with particular attention to openings, as this has been a fruitful area of inquiry for some time for the study of phone conversations as well as face to face encounters. The reason for this is that openings are compact and interactionally dense because they must accomplish multiple goals; the most important being determining whether or not co-participants will engage with each other and if yes, in what manner (Schegloff, 1986, p. 113). Thus, openings set the tone for the entire conversation. In addition to openings, I also consider interruptions and closings, as mediation is particularly visible in such sequences (Dooly & Tudini, 2016, p. 42). In this chapter I draw on extracts from the video recordings and interviews to explore presence in VC (5.1); the standard body posture during VC (5.2); pre-openings (5.3); openings (5.4); noticings, which are commonly used in openings but also elsewhere in VCs (5.5); an example of a VC opening (5.6); dealing with interruptions through suspensions and resumptions (5.7); and finally, closings (5.8).

5.1 Presence

Establishing *co-presence* is the starting point for any kind of interaction (Heath, 1984, p. 249). However, the concept is problematic in the context of VC, as for most of human history it was impossible to have co-presence without physical proximity, which is still considered to be crucial for co-presence by some (Altschuller & Benbunan-Fich, 2010; Bregman & Haythornthwaite, 2003). Today communication technologies have challenged us to reconsider what co-presence means by offering the chance to communicate quasi synchronously with distant interlocutors. The first such technology was of course the telephone, 'which enabled people to talk as if they were in co-presence when in fact they were not' (Hutchby, 2001a, p. 85). The achievement of co-presence without physical proximity is the 'essence' of communication technologies (Fish et al., 1990, p. 4), which is why it has been at the centre of CMC research (Lee, 2004; Lombard & Ditton, 1997).

There are several contributing factors to creating a sense of co-presence over physical distances. In the context of synchronous communication, Rettie (2009) has emphasised the role of sharing time, which is characterised by consistent availability (Altschuller & Benbunan-Fich, 2010; Bregman & Haythornthwaite, 2003; Goffman, 1963), reciprocal orientation, and immediate feedback (Bregman & Haythornthwaite, 2003). There is also a subjective experience of connectedness and closeness (Bente, Rüggenberg, Krämer, & Eschenburg, 2008; Licoppe, 2004; Villi, 2010, p. 151) which has been termed *social presence* (Ijsselsteijn & Riva, 2003; Short, Williams, & Christie, 1976). If these conditions are fulfilled, it can be said that technologies like VC and the phone allow for a special type of co-presence where the spatial co-location is achieved by electronic means (Hutchby, 2001a, p. 1; Zhao, 2003), sometimes referred to as *mediated co-presence* (Gershon & Manning, 2014; Rettie, 2009; Villi, 2010, 2015) or *virtual co-presence* (Altschuller & Benbunan-Fich, 2010; Bente et al., 2008; Brewer & Dourish, 2008; de Fornel & Libbrecht, 1996; Develotte et al., 2010; O'Hara et al., 2006; White & White, 2007).

The potential for communication technologies to connect people who are physically absent is seen by some to threaten relationships with physically co-present people. Mobile phones in particular have been criticised for facilitating what has been termed *absent presence* (Gergen, 2002): a situation where someone 'ignores' physically co-present others because she is engrossed in another activity such as listening to music, reading something, watching TV, or most importantly, communicating with other people on her mobile. Gergen argues that although mobile phones did not create this problem – it has been an issue since the discovery of printing – they have made it more prevalent, as people are now tempted to reach out to others who are physically absent, to the detriment of those who are physically present. This highlights that physical presence is no guarantee for social presence. However, there are numerous ways of getting the attention of someone sharing the same space, which means that social presence can easily be re-established in physical presence.

In contrast with the above, during VCs social presence is dependent on the microphone, speakers, camera, software, and the internet, all of which are prone to breaking down. This is one of the reasons mediated co-presence is experienced as 'far more fragile' (de Fornel & Libbrecht, 1996, p. 50) and is often perceived as inferior to embodied presence (Deumert, 2014c, p. 9). This fragility is aptly captured in Scollon's model of phone

communication (1998, pp. 70–74), which shows that by making smooth transitions from one topic to another interactants also indicate to each other that the channel is working. In the same manner, VC users can signal their presence to each other by participating in the conversation. In addition, they also have non-verbal means to indicate their accessibility and availability. Rather than relying on gaze, which is the main resource for indicating attention in face to face interaction, the main strategy on VC is to take up and remain in the appropriate position in relation to the VC device, which has been termed the *talking heads arrangement*.

5.2   Talking heads arrangement

Face to face interaction is to a great extent shaped by what Goffman called an 'eye to eye huddle' (1963, p. 95) and Kendon (1990) called an 'f-formation'. Licoppe and Morel (2012) suggest that in video chat, this is approximated by a 'talking heads arrangement'. This means that in VC the head of the participants should be visible on the screen, for example like in Figure 2.

Figure 2

Licoppe and Morel (2012) show that this is the normative expectation for what should appear on the screen, and it has a great role in the organization of the entire VC interaction. The arrangement plays a key role in openings in particular, as it contributes to identification and recognition and establishing footing (Goffman, 1981a). The talking heads arrangement can be expressed as a maxim, 'put the face of the current speaker on

the screen' (Licoppe & Morel, 2012, p. 400). In practice, this maxim, similarly to Grice's maxims (1989), is often violated. Therefore, the maxim is not a prescriptive rule, but something that participants observably orient to. Furthermore, it is a resource for meaning making during VCs, as violating the maxim prompts participants to scrutinize the produced images to determine 'their "gazeworthiness" and relevance to the ongoing interaction' (Licoppe & Morel, 2012, p. 408).

One implication of violating the maxim is that there is a problem with the availability, recipiency, or involvement of a participant (Licoppe & Morel, 2012, p. 427). Therefore, VC users work to maintain the talking heads arrangement throughout the interaction (Ames et al., 2010; Rintel, 2014) in order to maintain a sense of co-presence. The maxim can also be relaxed in order to show objects or spaces (Kirk et al., 2010), which will be discussed in chapter 7.

The interviews provided further support for the pivotal role of the talking heads arrangement in VC interaction. 20 of the 29 participants discussed seeing faces at some point in the interview (this number excludes references to 'face to face' interaction). For example, at one point Dina succinctly said: 'I think the whole point of Skype is to see your face, cause otherwise you just pick up the phone and call somebody'. In another vivid example, Shanice's comparison of phone calls and VC focuses entirely on what it means to see someone's face during a conversation. This extract highlights that when people talk about seeing the other person on VC the face metonymically stands for the person.

Extract 2

*Shanice: When you're talking to someone it changes the conversation when you can see how people react to what you are saying. What their **facial** expressions are. It's closer to talking to someone in person and that can change a conversation. If you're on the phone with someone and you tell them something and they say 'oh okay' that's all you really get, you have to base it off of what they say but if their **face** is all scrunched up or they have a big smile on their **face** it changes the connotation of what they're saying and how they're saying it.*

The particulars of the standard arrangement depend on the materiality of the device used for VC. Licoppe and Morel (2012, p. 420) describe two distinct arrangements for laptops and for mobile phones. When using a laptop, interlocutors produce a medium headshot

which shows the head and the upper part of the torso. On a mobile phone users typically produce closer headshots, as it would be uncomfortable or impossible to hold the phone far enough away to incorporate the upper body into the view. However, the situation today is more complicated with the appearance of tablets. Firstly, they are in size between laptops and mobile phones and secondly, they can be either held in hand or set down on a surface via stands, which are now also available for smartphones.

My interviews indicate that users tend to use more than one device – only six participants reported using a single device, which was a laptop in every case. This shows that practices have changed a lot in just four years, as a previous study reported that all participants used a laptop or PC (Kirk et al., 2010). Among the participants who use different devices, there were varying preferences. One of the advantages of laptops and tablets was that they have bigger screens compared to phones, which allows the viewer to see the other person more clearly. This was mentioned by seven participants as a feature influencing their choice of device. A further advantage (referred to by eight participants) is that they are easily set down on a surface, leaving the hands free and allowing the user to move around 'unburdened', as Mark said. Both of these points are evident in Extract 3 below:

<div align="center">**Extract 3**</div>

Dorottya: Do you prefer using FaceTime on your phone or do you like doing it more on the laptop?

Gemma: Well I used to do it on my phone, but now I prefer to do it on my iPad. Just because it's like, a bigger screen, and I can leave it there and kind of do other things as well as talking.

However, eight participants noted that the size of laptops in particular can also be a disadvantage, because they are too heavy to carry around comfortably. The interviews indicate that most VC users have at least tried using different devices, and they prefer devices which fit well with their VC habits. The phone is seen as the more 'spontaneous' device which requires less planning than more stationary devices. In addition, they are associated more with 'play' whereas the laptop or PC is often a tool for work. Tablets fall somewhere in between: they are generally used for entertainment and are easy to carry around, but they can also be set down and require a Wi-Fi connection. With so many options to choose from, users need to make an effort to make themselves available on

the right platform to the right people if they want to be reachable. Thus, in the following section I discuss availability management techniques and how users come to make VCs.

5.3   Negotiating availability: pre-openings

Before any kind of interaction is to take place, would-be interactants must establish each other's availability:

> *'The initial problem of coordination in a two-party activity is the problem of availability; that is, a person who seeks to engage in an activity that requires the collaborative work of two parties must establish, via some interactional procedure, that another party is available to collaborate' (Schegloff, 1968, p. 1089).*

In face to face communication, indicating (un)availability for contact is primarily done via gaze (Goffman, 1963, pp. 92–95; Kendon, 1990, p. 51; Schegloff, 1986), posture, and spatial arrangement (Kendon, 1990, pp. 247–249; Mondada, 2009; Mortensen & Hazel, 2014; Tuncer & Licoppe, 2018). This is not possible when using mediated technologies such as the phone or VC, which was one of the main issues with early VC systems. For example, Fish et al (1993, pp. 57–58) found that the users of their workplace VC system felt that the technology was intrusive because they had no way to manage their availability. This has also been identified as a key feature in landline phone call openings (Schegloff, 2004), where the caller is aware that they may be interrupting and the called is aware that the caller has limited resources to assess their current activities. On mobile phones, this problem can be avoided by the use of texting, which does not require an immediate response from the receiver and thus is perceived as less of an imposition (Rettie, 2007, 2009). In calls to mobile devices, Weilenmann (2003) has shown that the opening often contains availability checks, which can also be carried out indirectly by asking about the location.

For VC sessions, such availability checks tend to be carried out before the call using the instant messaging system built into the platform or other media such as text messaging (Licoppe, 2017b; D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012). I investigated the practice of arranging VCs in more detail by asking my interviewees whether their VC sessions are pre-arranged or spontaneous via the questionnaires and in the interviews. Although several participants wrote that their VCs were 'spontaneous', upon further discussion it became clear that this does not mean that they call their VC

partners 'out of the blue': for example Madeline told me 'I text them and see if they're free and if they say yes then I FaceTime them'. Some participants did report calling others 'out of the blue' or being called without warning, but these were framed as exceptions: either rare (and thus tellable) occasions, or limited to close relationships (with parents, siblings, or partners) where people can just tell each other if they are unavailable without negative consequences, as in the extract below.

Extract 4

Dorottya: So you said it's spontaneous, so does that mean that you just call somebody straight out of the blue, or would you still send a message before to check whether they're available?

Saara: Because it's normally family members- just um- well with my husband I actually quite often check that if he's free or like uh he's not like trying to get out to go out on a meal or whatever. But with my parents if they show online I'm pretty much thinking that well if I'm disturbing them, they're gonna tell me so yeah just call.

Saara's response highlights that it is not just the closeness of the relationship that makes it appropriate to call without warning. She indicates that by being familiar with her husband's habits, she knows that he is likely to be online even when he is not available. Therefore, she checks his availability whereas this is not necessary with her parents. This strategy echoes the findings of Kirk et al (2010, p. 138), who note that their participants 'were aware of the common rhythms of availability of the people they were calling' as they were engaging in VC with people they knew well. Similar practices were reported by Ames et al. (2010), who found that VCs among close family members were always preceded by a phone call, but scheduling a specific time and date was seen as 'strange and unnatural' (p. 149).

Returning to the links between location, availability, and activity, I found that the home was by far the most commonly used location for VC. This resonates with findings about phone calls: although in theory mobile phone calls can and do happen anywhere, people still often talk in their homes because 'certain places are considered more, or less, appropriate for a mobile-phone conversation' (Weilenmann, 2003, p. 1602). The interviews indicate that the home is an appropriate VC location because it provides privacy and control over interruptions (this will be discussed in more detail in chapter 7 section 7.1).

Before the start of the VC interaction, the software provides a number of options in order to signal (un)availability. Building up a contact list in itself is a way of exercising control in a way that is impossible in face to face interaction (R. H. Jones, 2004): only those on the contact list can contact a user. The selectiveness of the VC contact list was noted in a study by Kirk et al. (2010) and also by Fortunati (2002) in the context of mobile phones:

> *'the mobile tends immediately to become a strong booster of intimacy among those within the social network of the user. The purpose of the mobile is to be reachable not by everyone, but only by those with whom we want to communicate - intimate friends and selected others whom we want to contact us'* (Fortunati, 2002, p. 51).

In other words, technologies such as VC software provide more opportunities for users to adjust the 'volume' of communication at will, choosing to respond to or ignore certain messages or summons, or manipulating their availability (Baron, 2008b). However, control over the contact list is a feature that varies considerably over the various platforms used for VC and is an area where the interests of users and VC service providers may clash. Following the recommendations in Shaw's (2017) essay on the concept of affordances within digital communication research, in this section I explore contact list management options and availability settings which are encouraged by the various VC platforms.

In terms of how contact lists are built, there are major differences between apps developed primarily for use on smartphones (such as WhatsApp, Viber, or FaceTime) and software initially developed for desktop PCs. Smartphone VC apps automatically connect to the contact list stored on the phone. In fact, Viber present this as a selling point on their website: under the heading 'Why Viber?' 'Instantly integrates with your own contact list' is listed as one of the four bullet points (Viber Media, 2017). In contrast, when a user first downloads Skype onto her PC and creates an account, she will start with an empty contact list she can add other users to. While it is possible to import contacts in bulk from other lists, this is not encouraged in the same way as on smartphone apps. It seems that this difference is important to some users who want to be more restrictive in the contact lists they use for VC than those they use for other modes of mediated communication. For example, Sally said that she prefers to use Skype for VC over FaceTime or Viber,

because it is more private and 'you can add, delete, block people'. Similarly, April explained that she has disabled the VC function on Facebook because 'if I want to talk to my friends face to face I have them on my Skype [contact list]'. However, other users prefer convenience over control: Camille told me that she uses FaceTime more than Skype, simply because the former is 'built into' her phone.

Within the contact list, users have the option of appearing as 'available' or 'unavailable' at the very least. This may only be an indication of whether or not the VC user's device is connected to the internet or running the given VC software, but most have further options such as 'busy' or 'away' that are activated based on user activity or can be self-selected (for an overview of this function on Skype see Ayaß, 2014). Customisable 'away messages' were in fact a key feature of early IM systems deployed strategically and extensively by their users (Baron, 2008e). Thus, pre-programmed availability markers are an important tool to negotiate availability, and the interviews revealed several ways of relating to them. Five interviewees stated that they will not log into their VC software on their laptops unless a VC session has been pre-arranged using another channel of communication. Other users are almost always logged in, but engage in IM exchanges to check availability before stating a VC, for example as in Figure 3.
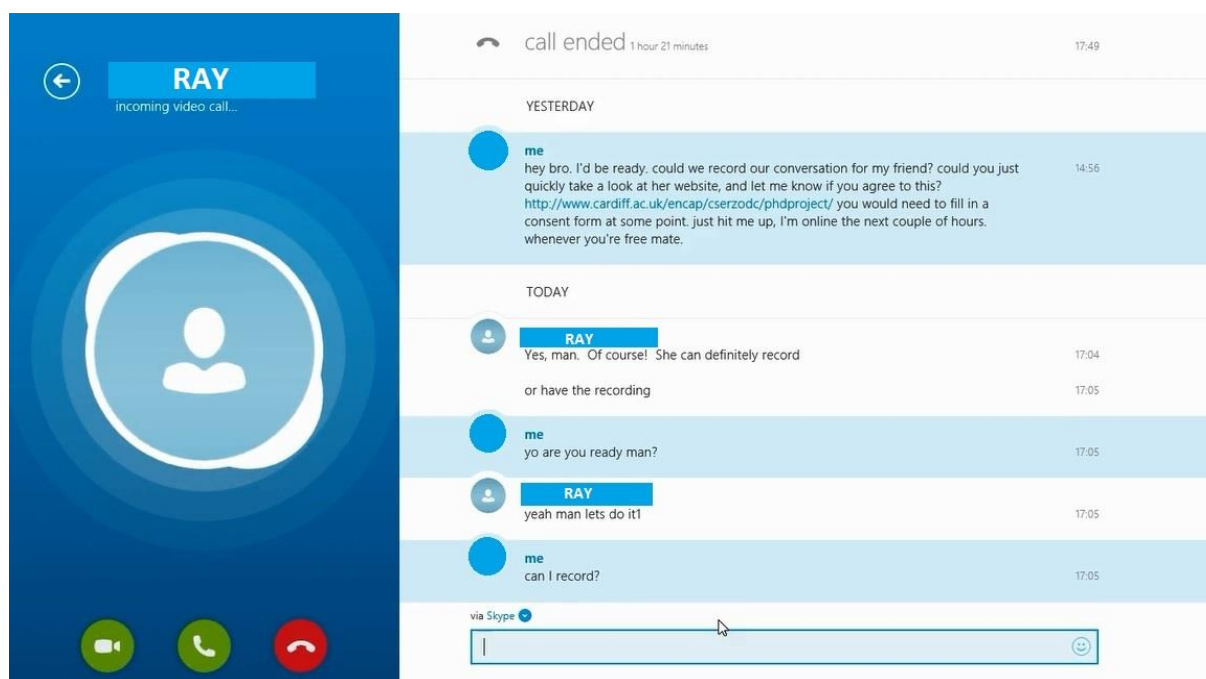
Figure 3 – IMing before the VC (Paul and Ray)

In this screen capture, we can see the instant messages exchanged before the VC between Paul and Ray just as the summons for the video call appears on Paul's screen. At the time of the recording, Paul and Ray were collaborating on an article and as they were located in different countries, they carried this out via email and VC. The first message was sent by Paul (who appears as 'me' on the screen) the day before the VC. In this message Paul informs Ray that he is ready and that Ray should 'hit him up whenever he's free'. He also asks Ray if he agrees to have the VC recorded for my research, and sends him a link to a webpage with information about the study. Ray only replies 27 hours later, agreeing to the recording (Yes, man. Of course! She can definitely record // or have the recording). The time stamps indicate that Paul was online when Ray sent the message, and immediately replied with 'yo are you ready man?'. The direct address opening this message is notable, since the first message already contained a greeting (hey bro). However, considering the time elapsed between the two messages it seems appropriate, and it can also be interpreted as a signal moving from asynchronous to synchronous communication. Ray replied 'yeah man lets do it1' and initiated the VC as Paul reformulated the question about the recording (can I record?). After that, Paul accepted the call and the VC commenced (the opening of the VC is analysed in detail in section 5.6 below).

This single screenshot reveals a complex organisational history. The first message indicates that there was a pre-existing agreement of some work to be carried out by Paul, and a future VC session to be held once this work is completed. It would also be possible to trace the history further back to the first drafts of the paper and the first VC discussing it (this one is clearly one in a series of VCs between the two) or even their face to face meetings which sparked the idea for the paper, but that is outside the scope of this chapter. Presently, what is important is that there was a vague plan to have a VC at some point in time. Although the first message suggests 'the next couple of hours' as a suitable time, Ray did not reply until the next day. However, once both of them signalled their availability, the VC was initiated within one minute. This short exchange ensured that both participants were ready and available for what turned out to be a long VC (lasting 1 hour and 18 minutes).

Other ways of negotiating availability include ignoring VC requests or stating unavailability after accepting the VC. However, such gate-keeping strategies are more

direct and thus face-threatening (Goffman, 1967). In addition, sometimes deliberate avoidance strategies can fail. One example came from Piotr, who uses Skype on his laptop, where he prefers to stay 'invisible'. His boyfriend is aware of this habit and has started to initiate videocalls to Piotr regardless of whether or not he appears to be online. In addition, the spread of smartphones further complicates the situation, as shown in Extract 5. At the time of the last interviews, almost all participants owned a smartphone. The preferred option built into these devices is 'always connected', which means that being 'unavailable' requires more effort, as illustrated in Extract 5.

<div align="center">**Extract 5**</div>

Piotr: I've got Skype on my phone as well and some- I don't really know how that works, it's very confusing. Cause sometimes I am invisible- I think I'm invisible, because that's what I have on my computer, but then my phone seems to be saying something else.

In face to face communication people who do not wish to be available must take active measures to signal unavailability, for example by using *involvement shields* (Goffman, 1963, p. 38-42). In CMC (including communication via PCs and smartphones) the users must make an effort to make themselves available by charging and switching on their devices, curating their contact lists, going online, and logging into the software. However, as users rely on these devices throughout the day (for both communication and solitary entertainment or information seeking), the effort required can be minimal. In addition, there is considerable variation in the default settings of the specific apps or software used. Some apps, especially if they run on phones, encourage an 'always available' policy. This means that users can expect their messages or calls to be transmitted virtually instantly. Other apps give the user more control in deciding when they want to log in and which other users will see them as 'available'.

To make matters more complicated, it is not uncommon to be logged into the same account on multiple devices at the same time; therefore, users may not always be aware what device is being used on the other end. Furthermore, although there is a tendency to be 'always on' (on some technology at least) this does not mean that people can expect instant responses, as the contacted person may be otherwise engaged or choose to ignore incoming messages. It seems that there are double standards when it comes to attitudes towards availability: studies have found that while phone users like being able to access others on their mobile phone, they dislike always being available to be

contacted (Baron, 2008d; de Gournay, 2002), and similar sentiments were expressed by my own participants. Therefore, it seems that functions such as blocking, logging out, or pre-negotiating VC on IM are key to the success of current VC software.

The impact of the integrated IM and the 'always on' policy becomes even clearer if we consider the practices reported four years before the data was collected for this project. Kirk et al. (2010) found that their participants took 'availability' (as indicated by the software) as enough to warrant the initiating of a VC. This was possible because their participants did not log into the software unless a call had been arranged. It was also necessary, as IMing was not integrated into the system, which is actually one of the recommendations the authors make for future development. Among their participants, a spontaneous VC required sending a text message or making a phone call to prompt the other party to log in. Therefore, it is clear that both the social practices surrounding VC and technological affordances (chiefly integrated IM) have evolved, as indeed they are likely to continue to evolve. Furthermore, it is also apparent that users find ways of negotiating their availability by utilising the mediational means at their disposal.

5.4   Openings

Few studies have so far explored the openings of domestic VCs (a notable expection being Licoppe, 2017b); but there is an abundance of literature on the organisation of phone call openings, which provide a good starting point for the present discussion. VCs, like phone calls, are non-accidental (Schegloff, 2004) and clearly bounded interactions. Research on phone calls has shown that the reason for calling (Sacks, 1995) must be addressed in the opening and shapes the following conversation (Hutchby, 2001a, pp. 89–91; Schegloff, 2004), even when the reason is just to keep in touch (Drew & Chilton, 2000). Thus, boundedness and reason-for-calling are two features which can be assumed to have an impact on VCs, as they have shown to play a role in the organisation of interaction over the phone. However, there are also key differences as the lack of the visual mode, which does not apply to VC, also has a great impact on phone call openings (de Fornel & Libbrecht, 1996, pp. 57–58; Hopper, 1992, p. 10; Schegloff, 1986, p. 118). Visual access, together with the differences explored below, means that VC openings are more variable and 'less straight forward' than phone call openings (Licoppe, 2017b, p. 352).

Firstly, as discussed above, it is very uncommon for VC users to initiate a VC completely 'out of the blue'. Instead, VCs are either scheduled in advance, or users preform an

availability check via IM before the VC (these strategies can of course be used together as well). This impacts the opening of the actual VC, because it 'blurs when a greeting occurs, and what role it has – after all, people may have greeted one another long beforehand' (Licoppe, 2017b, p. 355). This is not to say that VCs should start without greetings – they are in fact present in every example cited in the literature and collected for the present research. Instead, Licoppe shows that in VCs there are often *multiple* greetings (see also de Fornel & Libbrecht, 1996, p. 58) and that later greetings serve to indicate that users can see each other's faces (Licoppe et al., 2013). This is an important concern for VC users because unlike picking up the phone, accepting a VC does not currently lead to an instantaneous audio and video connection (Licoppe, 2017b, p. 361). The potential delay in connection also has implications for speaker turn allocation. Licoppe (2017b) argues that in VC the first greeting is an acknowledgment that the co-participant has become visible rather than an answer to a mechanised summons, as in Schegloff's study of landline phone call openings (1968). This explains why Licoppe found that in some cases, the called can produce the first greeting without creating any conversational trouble.

VC openings resemble mobile phone openings in that 'both caller and called parties can treat one another as to all intents pre-identified at the start of a call and so dispense with many of the identification and recognition sequences' (Hutchby, 2014, p. 88). This is in contrast with earlier studies of land line openings, where caller identification was not technologically enabled (Hutchby, 2001a; Schegloff, 1986). It is possible to skip identification and recognition sequences on VC because users tend to have individual personal accounts. All participants in this study had individual accounts, although sharing an account is certainly possible and may be more frequent in an institutional environment. If there is doubt about the identity of the interlocutor, this can also be established in any IM exchanges preceding the VC or done visually as soon as the video feed becomes available.

A general goal in the opening of any interaction is to achieve *phatic communion* (B. Malinowski, 1923), which 'serves to establish and consolidate the interpersonal relationship between the two participants (…) [and ease] the transactions to and from interaction' (Laver, 1975, p. 236). This is accomplished through the use of formulaic language such as greetings, remarks about the weather, and small talk (Laver, 1975, p. 218). After phatic communion has been established, conversation may move on to

discuss the reason-for-calling if there is a special one, or it may consist entirely of phatic communion if it is a habitual call (Drew & Chilton, 2000).

In the introduction to a volume dedicated to small talk, Justine Coupland (2000a) argues that phatic communion has been viewed in an ambivalent way in research: although Malinowski notes that it fulfils an important social function, it is also seen as aimless and uninteresting. The volume (J. Coupland, 2000b) challenges the negative evaluation of phatic communion and small talk, treating them as worthy subjects of inquiry. As the majority of the data for this project comes from habitual VC calls between intimates, small talk and phatic communion are a central concern.

Based on findings in the literature and an analysis of the recorded VC openings, it is possible to construct a *candidate sequence* for VC openings. A *candidate sequence* is an underlying structure in a type of interaction. Although it may not appear as such in actual interaction, parts of it appear in all real world realisations of the interaction type (Jefferson, 1988, pp. 418–419). Finding a candidate sequence for the openings of Skype video-conversations was the main goal of the pilot study (Cserző, 2012). This candidate sequence was created based on Schegloff's phone call opening sequence (1986), other versions of this sequence modified for mobile phones (Arminen & Leinonen, 2006; Hutchby & Barnett, 2005), and the collected data (video recordings of nine Skype call openings). Similarly to Licoppe, (2017b, p. 352) I found that that the openings of VCs were more varied than the openings of phone calls.

I was able to account for this variation by building on Bolden's (2008, p. 302) concept of *first talkable*, 'a topic that may have warranted the interaction in the first place'. This concept makes it possible to differentiate between topics which could have been on the participants' 'agenda' before the call and *noticings* (discussed in detail in the following section), which I called 'arising topics'. The main finding of the pilot study was that there is a 'slot' for noticings (discussed in detail in the following section) between the phatic how-are-yous and the first talkable. Therefore, I propose the following candidate sequence for opening VCs:

1) summons [caller]
2) answer [called]
3) recipient designed greeting *

4) return greeting *

5) (how-are-you sequences) *

6) (noticing) *

7) first talkable

This candidate sequence is a modified version of the one identified in the pilot study, as the analysis of new data and findings in new publications have prompted me to revise it. The how-are-you (HAY) sequences and noticing are in brackets because they are optional sequences. The other elements are universal, but there is still scope for variation because the first greeting in a VC is response to the appearance of a video feed, and not an answer to the summons. Therefore, the first speaker can be either called or caller, which has implications for turn distribution thereafter. Furthermore, the star symbol (*) indicates that there may be multiple greetings, HAY sequences, and noticings before the introduction of the first talkable.

5.5   Noticings

In looking at the opening sequences of VCs, I found that there was a lot of variation caused by *noticings*, which have since been identified as a key organisational feature in VC (Zouinar & Velkovska, 2017). A noticing can be defined as an action that 'makes relevant some feature(s) of the setting, including prior talk, which may not have been previously taken as relevant' (Schegloff, 2014, p. 219). Thus, noticings function retroactively which means that

> *'the element or feature singled out retroactively by a noticing was not a source of the noticing until the noticing made it such source. Thus, even though the surrounding environment and the prior talk are filled with potential sources for noticings, not every feature or (part of a) prior turn is singled out for being noticed. This indicates that those noticings that are done in social interaction, are done for cause.' (Keisanen, 2012, p. 201)*

Therefore, in this section I discuss what roles noticings play in the organisation of VC interaction and why they appear to be so common.

The function of noticings has been studied within interaction in cars during driving (M. H. Goodwin & Goodwin, 2012; Keisanen, 2012), which has been identified as an interactional space that encourages noticings due to the constantly changing environment. This is

contrasted explicitly with private homes (Keisanen, 2012, p. 203), which I will show is the most common environment in domestic VCs. Nonetheless, noticings are common in domestic VC and they are an important resource for controlling the distant location, a way of 'doing' intimacy, and a tool to aid transitions and establish common footing.

In an early paper on VC interaction (then termed 'Videophonic Exchange'), de Fornel argues that there is an inherent asymmetry in these exchanges because each participant only has access to her own space, making it impossible to control what happens in the other side (de Fornel & Libbrecht, 1996, p. 53). In domestic VC today, physical access to the distant location is no more possible than two decades ago, although there are attempts to develop ways of solving this issue for example with the use of telepresence robots (Herring, 2016; Luff et al., 2003). In the domestic context, it seems that users have developed powerful ways of social control via noticings. In their investigation of physical interruptions in public Google Hangouts, Rosenbaun, Rafaeli, and Kurzon (2016a) found that non-ratified persons (such as spouses or friends) were drawn into the interaction when distant VC partners produced noticings relating to them. In another study, Licoppe and Morel (2014) show that noticings can influence what is shown and how the camera moves during a virtual tour. Similarly, in two video extracts that will be discussed in detail in chapter 7, noticings produced by one participant encourage the other to give a virtual tour (that is, show their environment). Thus, noticings can help compensate for the asymmetrical access by expressing what is notable and showable, and compelling the distant interlocutor to change what is shown. Of course, one can try to resist (for an example see Licoppe and Morel, 2014) but not without consequences: in close relationships, the other has 'a right to see' (Harper, Rintel, et al., 2017, p. 334; Kirk et al., 2010, pp. 139, 143), which brings us to the second function: creating intimacy.

Zouinar and Velkovska (2017, p. 402) argue that in VC 'setting talk'[3] (which is introduced via noticings and includes practices of showing the environment or objects) is not simply 'small talk' (J. Coupland, 2000b) as in face to face interaction where the participants share the same environment:

> '*Showing practices do not only structure the sequential and topical organization of family video conversation, but are also*

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[3] There is a lot more to be said about the impact of the setting on the VC, which will be discussed fully in chapter 7.

involved in the accomplishment of intimacy and closeness: the type of relationship between participants is highly consequential on what is shown, especially concerning person's body and local environment, and how is it shown. Moreover, shared history and mutual knowledge that characterize close social relationships are important resources participants rely upon to make sense of what they see on the screen.'

Thus, by producing noticings, VC users can (indirectly) ask to be shown intimate spaces or features that may seem uninteresting to outsiders, for example new wallpaper (Licoppe & Morel, 2014), or an unremarkable kitchen (Cserző, 2016). This in turn constructs the relationship as one where such trivial topics are relevant, reinforcing the intimacy between the interlocutors. Furthermore, noticing small and mundane changes such as a change in room decor or a new haircut is a powerful way of showing the other person that 'your mind is with them' because it indicates an understanding of time in terms of the relationship (Volume II of Sacks, 1995, p. 167), and demonstrates intimate knowledge of the interlocutor (Licoppe, 2017a).

A third function that noticings can fulfil is management of the interactional sequence. Similarly to the phone, noticings in VCs can also be a way of delaying the first talkable, which indicates to the other party that there is no urgent news or business to discuss (Bolden, 2008, p. 319; Drew & Chilton, 2000). Such noticings mark the purpose of the call as 'just keeping in touch' and have an impact on how the interaction unfolds. The only difference between phone and VC noticings deployed for this purpose is that due to the visual channel, on VC participants are also able to produce visually occasioned other-oriented noticings, for example about each other's setting and appearance. As indicated by the candidate sequence, there were many examples of noticings preceding the first talkable in the videos collected for both the pilot study and the present study. An early study on the use of VC also found a prevalence of sequences related to the appearance of the interactants, which seemed to 'provide a transitional theme before moving on to the real reason for the call' (de Fornel & Libbrecht, 1996, p. 63). Thus, the phatic nature of noticings makes them a resource for facilitating transition to the reason-for-calling in VCs. This means that noticings can often be found in the opening sequences. However, they can also appear later in the interaction because '[a]spects of any given setting are

regularly utilized as a resource to generate topical talk, or to make transitions between topics' (Maynard, 1980, p. 283).

In less regular calls noticings inserted into the opening sequence accompanied with laughter can also help to establish a humorous footing (Goffman, 1981a), as in the opening discussed in the following section. Finally, noticings can also refer to an ongoing activity the participants might be engaged in, such as eating. These topics are a tool not only for the participants to express their focus of attention (on the location, appearance, or actions of the other participant) but also to give an account for their lack of focus (in case of technological problems, unforeseen interruptions, or simultaneous involvement in other activities). Thus, they seem to create a common ground between distant interlocutors and highlight that the parties are doing something together while orienting to a better understanding of the situation. Therefore, they are a key part of achieving social co-presence via VC.

5.6   A case study

In this section I show how the concepts discussed in this chapter so far are relevant in an analysis of the opening of one of the recorded VCs. The two participants appearing in the extracts are Paul (the participant who made the recording) and Ray. The IM exchange preceding the VC has been discussed in section 5.3, which is where we pick up. Paul and Ray are researchers who met by chance while they were both conducting ethnographic research in the same location. They developed a friendship and decided to collaborate on a paper together. The recording was made shortly after Paul returned to his home institution after collecting data in the field, while Ray was still in the city that they met. Paul reported that at the time they were in frequent contact with Ray using a range of media (VC, email, IM, and social networking sites). In addition to working on the paper and discussing their respective careers, Ray also kept him updated about recent local events and notable happenings with mutual acquaintances. As all of these topics are discussed in the recorded VC session, it can be considered a typical example of their exchanges. The transcript of the opening is presented in three extracts which follow each other without any omissions.

The transcript in Extract 6 begins when Paul starts the screen recording. Due to the way the software (Skype) works, we can see the previous messages exchanged on the screen (see the image in turn 5). These were analysed in section 5.3, but here the focus is on the

interaction as it unfolds during the recording. This extract demonstrates several of the features discussed, including multiple greetings and HAY sequences, the caller speaking first, and the use of visual resources. It ends with a brief discussion of the recording, which is the first topic discussed after the HAYs.

<p align="center">**Extract 6 - Moving from IM to VC**</p>

1.   Paul: ((opens Skype)) [(((types 'yo are you ready man?'))]

2.   Ray: ((types 'Yes man. Of course! She can definitely record {ENTER} or have
the recording'))

3.   Ray: ((types 'yeah man lets do it!'))

4.   Paul: ((types 'can I record?'))

5.   Ray: ((summons))
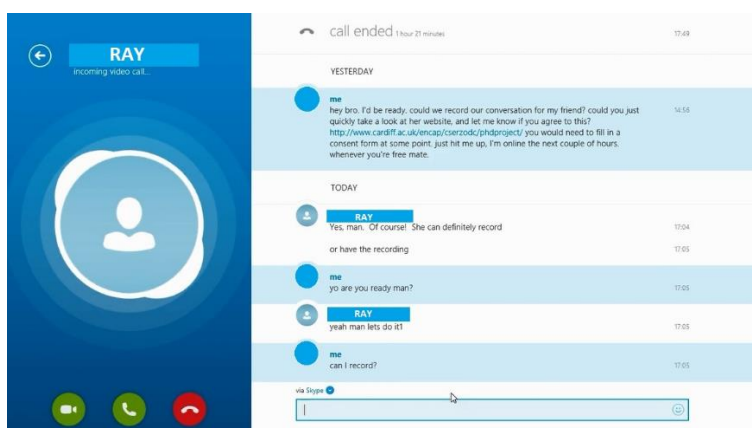
6.   Paul: ((answer)) ((video comes on))
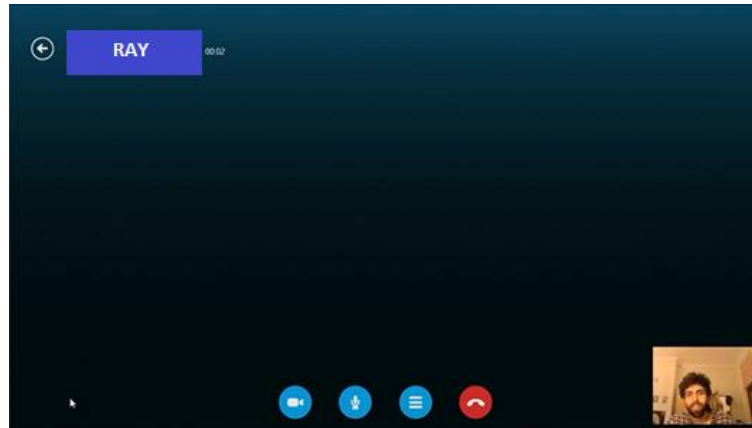
7.   Ray: yo

8.   Paul: yay ((waves hand in front of camera))
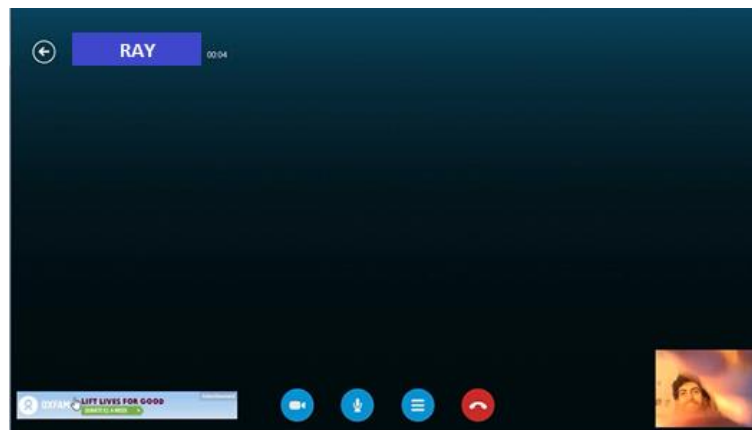
9.   Paul: yo yo whass[up man]

10.   Ray: [((video comes on)) sup man]

11. Paul: [how you doing]

12. Ray: [how's it going]

13. Paul: man Ray I'm recording this stuff

14. Ray: great

15. Paul: okay? so [whenever you]

16. Ray: [okay]

17. Paul: want uhm you wanna say something off record then let me know

18. Ray: okay

19. Paul: okay ((laughs))

My analysis of this extract suggests that the notions of caller and called are even less straight forward in VC than previously suggested. In this case, Paul is the one who first suggest the VC in their IM exchange. Paul makes this first suggestion the day before the VC actually takes place, and on the day of the VC he is also the one to initiate the interaction when he sees that Ray is online (turn 1). However, it seems that he holds off on initiating the call because he wants to confirm with Ray that he is comfortable with this particular VC being recorded, as Ray's agreement to participate (turn 2) did not specifically refer to their immediate impending VC. As Paul is typing to confirm consent (turn 4), Ray starts the VC (turn 5) which means that he is technically the caller. However, Ray (the caller) is also the first to speak by greeting Paul (turn 7) likely because Paul's video becomes visible (turn 6) before Ray's (only in turn 10).

In terms of the asymmetry between caller and called, the situation is also unconventional, partly because this is a data gathering interaction. Both Paul and Ray are aware of the main reason for calling: to collaborate on a paper together. However, Paul also knows that he is already recording the interaction, which Ray is not necessarily aware of until

Paul explicitly tells him (turn 13). Therefore, it could be argued that the caller and called have either equal information, or that in this case the called has more information about the purpose of the VC before it is made. If we disregard the recording aspect, which is certainly not typical in VCs, the two participants have equal information about both the timing and the reason for the call. This challenges the view that the caller is at an informational advantage, leading to a state of 'caller hegemony', which is often the case in phone calls (Hopper, 1992; Hutchby & Barnett, 2005; Schegloff, 1986).

Regarding the greetings, there are several moves that could be viewed as greetings across three different modes: typed chat, speech, and hand gesture. This is significant because as Kendon (1990, p. 259) argues, '[a]lthough the highly conventionalized nature of [greetings] might appear to provide no information, a great deal of information can be encoded in the precise manner of the performance'. In this case Paul types 'yo' (turn 1) which is echoed by Ray in turn 7 in speech, eliciting a 'yay' and a wave from Paul (turn 8) followed by two more 'yo's (turn 9). As argued previously, the 'yo' in turn 1 can be interpreted as a move from asynchronous to synchronous communication and turn 7 indicates that Ray can now see Paul. This requires a response from Paul, even though he cannot see Ray yet, which is perhaps why he produces so many pseudo greetings over turns 8 and 9 (a 'yay', a wave, and two 'yo's). Paul does not produce a greeting upon seeing Ray, but he does produce a second HAY.

The heavy use of *yo* together with *bro, mate*, and *man* used in the IM exchange function as solidarity markers similar to 'dude' (Kiesling, 2004, forthcoming) indexing their identity as heterosexual males with a knowledge of and affiliation with hip-hop culture (Cutler, 1999). This is also indexed by the use of *sup man?* in the first HAY exchange (turns 9-10) which is followed by a more conventionally formulated HAY exchange (turns 11-12).

Both HAY sequences are produced in overlap, in fact turns 9 and 10 are so synchronised that it is almost impossible to tell who is saying it – the voice belongs to Paul but Ray is also mouthing the expression ('sup man) at the same time. When I asked Paul, a trained linguist, to watch the video to help me determine who says the line he also found it very difficult to decide. None of the HAYs get a reply, as in the slot where an answer would be imminent (turn 13) Paul changes the topic to announce that he is recording the interaction and offers to go off record if necessary, (turn 17) which is acknowledged by Ray (trun 18). The topic of the recording is not discussed at length, and as shown by

Extract 7 it is not followed by an exchange of reportable newsworthy events but a noticing from Ray (turn 20), which delays the introduction of a true first talkable further.

Extract 7 - Noticing the 'marking look'

20.   Ray: your hair's looking kind of long there

21.   Paul: ((combs hair with his hands))

22.   Paul: shit man ah *Ich hab meine Haare gerauft* you know I've been c-
                   marking essays all day just like

23.   Paul: ((buries hands in his hair))

24.   Ray: [(aw you still got it) I can see yeah you got that]

25.   Paul: [sitting there you know like tsk aaaw ((laughs))]

26.   Ray: you got that look

27.   Paul: yeah

28.   Ray: (   )

29.   Paul: ((laughs)) monchi[chi]

30.   Ray: [( )]

This sequence starts with Ray's comment about Paul's hair (turn 20) which prompts Paul to account for his earlier activities. It seems that Paul does not take this as referring literally to the length of his hair but on the way it is styled (or not styled), as due to their regular VCs it is unlikely that his hair had visibly grown since they last saw each other. First, he ruffles his hair with his hands (turn 21) which serves as an enactment (Bavelas, Gerwing, & Healing, 2014) of what he has been doing that would make his hair look 'kind of long' as Ray puts it. Then he uses a German expression '*Ich hab meine Haare gerauft'* which translates roughly to 'I've been tearing my hair out'. As Ray does not speak any German, it seems that Paul uses the expression because it is his first language and he has trouble expressing his sentiment in English. Throughout this extract he relies repeatedly on enacting 'tearing his hair out' (turns 21 and 23) and making exasperated sounds (at the end of turn 25) to illustrate how 'marking essays all day' (turn 22) made him feel. Ray indicates that he understands (turns 24 and 26) and makes two further comments which are unintelligible (turns 28 and 30). Thus a noticing relating to Paul's appearance provided a slot for him to recount his day and his current state, after two HAYs remained unanswered in the first section (Extract 6). In the following Extract, Paul begins with another HAY (conventional apart from the use of *man*) but before Ray can answer he produces his own noticing about Ray (turns 31 and 33). His assessment of the temperature in Ray's location appears to be based on Ray's hat and/or thick sweater, which has been visible since the video feed appeared in turn 10.

Extract 8 - Noticing the temperature

31.   Paul: how are you man it's it's a- is it cold in [{PLACE NAME}]=

32. Ray: [yeah]=

33. Paul: =man you look like you're in the Himalayas or something you look
               you look like an Austrian

34. Ray: ((laughs silently)) yeah it's cold

35. Paul: [yeah?]

36. Ray: [it's] cold in the winter man

37. Paul: aw

38. Ray: I mean (no) it's it's only in the house that it's really cold at night

39. Paul: mm

40. Ray: um and I I get all bundled up you know like ((pulls hood over his
               head))

41. Paul: mm [shit man]

42. Ray: [right] cool then uh

43. Paul: yeah

44. Ray: gotta get- trying to stay warm but I had I had a really fun day uh
               (INTERN'S NAME) came over and we're now starting to work (…)

Just as Ray's earlier noticing allowed Paul to talk about his current state, Paul's phatic noticing also provides an opportunity for Ray to talk about how he is in general. The temperature in Ray's location is also relevant because it is different from when they were both there a few months before this VC. Similarly to Paul earlier, Ray also provides an enactment, this time of 'bundling up' against the cold night (turn 40). In turn 41 Paul reacts to Ray's report with falling intonation which initiates the closing of the pre-topic segment. This is taken up by Ray in the next turn (42), which can be interpreted as a framing move (Sinclair & Coulthard, 1992) marking the end of the weather talk and making the introduction of a new topic imminent. This is not taken up by Paul, who produces a token of affiliation (turn 43). Thus it is now up to Ray to introduce a new topic, which he does in the same turn as producing the last utterance relating to the temperature (turn 44).

The topic introduced by Ray in this final turn (his work with an intern) is the first talkable, as it is the first topic that may have been on the participant's agenda (Bolden, 2008) before the VC. Before turn 44, the entire interaction can be viewed as phatic, with the possible exception of the turns addressing the recording (13-18). However, the recording itself is not topicalized, as Ray provides minimal tokens of acknowledgement (*great*, *okay*, and another *okay*). Thus the first talkable is introduced over a minute into the call, which is a significant delay considering that the earliest opportunity to introduce it is after the greeting exchange. Furthermore, although the topic relates to work, it is Ray's solo work and not Ray and Paul's joint work. Their joint work (the paper they are working on) is only introduced 10 minutes into the VC and is done 'smoothly' via stepwise topic progression. Thus it seems that Paul and Ray have a 'no-reason-for-call' relationship (Sacks, 1995, p. 777), which *requires* them to call each other when they have no reason for calling. In this case, there is a reason for calling (which both of them are aware of) but by delaying the discussion of this reason until *after* the first talkable they can downplay the importance of this reason, and construct this particular VC as a call between friends. The friendly aspect of this interaction is also reinforced in several other ways throughout the VC, for example by extensively discussing other topics after the paper has been dealt with, use of humour and laughter, consuming drinks, and Paul's interaction with Ray's partner when she appears on screen.

Thus, this opening displays several of the features that have been discussed in the literature and the earlier sections of this chapter. There is co-ordination via IM preceding the VC, which shapes the timing of the VC and sets the agenda. There are several greetings or pseudo greetings, which have different roles (a move to synchronous interaction, acknowledgement of the video feed, greeting). The timing of the greetings shows the orientation towards the talking heads arrangement, which is maintained by both participants throughout the opening. There are also multiple HAY sequences, but interestingly these are not the turns that elicit a report of state of affairs. After a brief discussion of the recording, there are two noticing sequences, all of which delay the introduction of the first talkable. These noticings and the following phatic discussions are enabled by the visual link: the participants make inferences based on the other's appearance, displaying their familiarity with each other. Simultaneously, the noticings also serve as indicators that the participants are focusing on their interaction, which they construct as primarily friendly despite the task oriented nature of some of the later discussion.

5.7   Suspending and resuming interaction

Later in Paul and Ray's VC their interaction is interrupted by the appearance of Ray's partner, which prompts them to temporarily suspend their conversation. Similar interruptions also occur in the VCs between Bryn and Dan, and have also been discussed in the context of public Google Hangouts (Rosenbaun et al., 2016a), phone calls (Keisanen, Rauniomaa, & Haddington, 2014), and face to face interactions (Ticca, 2014) under the label *suspensions* and their counterparts, *resumptions*. These phenomena are explored extensively in Haddington, Keisanen, Mondada, and Nevile's (2014) edited volume on multiactivity where they provide the following definition:

> *Suspending an activity momentarily puts it on hold because of multiple demands, but also indicates that its resumption is foreseen: the activity is not abandoned but only postponed. In other words, a suspension maintains the relevance of the suspended activity while that suspended activity is "backgrounded"* (Haddington, Keisanen, Mondada, & Nevile, 2014, p. 25).

Therefore, suspensions are not particular to VC, but they do appear frequently because as I will argue in the next chapter, VC provides an environment that encourages multiple

activities, which can easily lead to the situation described above. In particular, incoming messages or summons and interruptions from physically co-present others are unexpected occurrences that must be dealt with during the VC (Rosenbaun et al., 2016a). In this section, I focus on how suspensions and resumptions are managed during a VC, starting with an example from a VC between Bryn and Dan presented in two extracts.

In the third of three VCs recorded by Bryn and Dan, the VC is interrupted by a phone call from Bryn's sister, Jane. Coincidentally, the phone starts ringing just as Bryn and Dan are discussing Bryn's imminent trip with Jane (the end of which is transcribed in turn 1). Extract 9 provides a transcription of the interaction from just before the ringing of the phone to the beginning of Bryn's conversation with Jane.

In this extract, Bryn addresses Dan and Jane at different times. From the video recording, it is clear to the analyst and the participants (as indicated by the lack of observable interactional trouble) who Bryn is addressing at any given time. This is inferable from the verbal content and Bryn's posture and gaze. Posture and body torque (Schegloff, 1998a) in particular have been identified as key resource for indicating involvement during suspensions in general (Haddington, Keisanen, Mondada, & Nevile, 2014; Sutinen, 2014). In VC, the main indicators are gaze and head orientation (Rosenbaun et al., 2016a). These cues would be overly complicated to transcribe, and as the participants wished to remain anonymous, they cannot be shown in the form of screenshots. Therefore, the transcript contains labels indicating the addressee of Bryn's utterances.

<div align="center">

Extract 9 - Suspending the VC due to an incoming phone call

</div>

1. Bryn: ((to Dan)) yeah well I've put my stuff and it goes it's all fine (.) but I can't take anything else d'you know what I mean? like (.) I'm gonna have to do some [work on the Monday aren't I ?]

2.   [((Bryn's phone rings))] [((Bryn's phone continues to ring))]]

3. Bryn: [((to Dan)) oh hang on it's Jane]

4. Bryn: ((on the phone)) hello

5. Bryn: ((on the phone)) it's alright

6.   Bryn: ((on the phone)) oh right what d'you need?

7.   Bryn: ((on the phone)) the expiry date hang on a sec I'll have a look now

8.   Bryn: ((to Dan)) shall I ring you back or are you alright to wait a second

9.   Dan: just wait [I'll just go wash up (   )]

10.   [(((they both go off camera))]

11.   Bryn: ((to Dan)) okay

12.   ((Bryn stays off camera for 35 seconds, only sounds of objects being moved are audible))

13.   ((Bryn returns into camera view and picks up the phone from the bed))

14.   Bryn: ((on the phone)) sorry love ((opens a soda)) I was just thinking what should I bring my extra stuff in ((drinks soda)) (…)

The first turn in this extract is a relatively long statement from Bryn regarding the impending trip with Jane, which is interrupted by a phone call. As soon as the phone starts to ring, Bryn turns away from the laptop to look at the phone, but he also completes his sentence. This indicates a simultaneous orientation to Dan and the phone. As the phone continues to ring (turn 2), Bryn produces a change-of-state token 'oh' (Heritage, 1984) followed by a prototypical suspension turn: 'hang on' + an account ('it's Jane') (Keisanen et al., 2014). The summons of the phone (turn 2) is very quickly followed by a suspension turn (turn 3) and the opening of new activity (greeting Jane in turn 4) without any response or interjection from Dan. This is a typical response to an incoming phone call during an interaction, as phone calls are time sensitive, unpredictable, and hearable by all (Ticca, 2014). Therefore, Dan can project Bryn's actions based on what he can hear and see via the VC, and it is sufficient for him to produce a single utterance in this extract (turn 9, discussed below).

Bryn answers the phone by greeting Jane (turn 4) and from the next two turns we can assume that they both skipped the HAY sequences. This is followed by another change-of-

state token (oh) and a framing move (right) (Sinclair & Coulthard, 1992), indicating the start of some business. It turns out that the reason for Jane's call is that she needs some of Bryn's passport details in order to complete check-in for their trip, which is a requirement for adding luggage. Turn 7 includes another suspension turn (hang on a sec), this time directed at Jane, which Bryn accounts for as necessary for him to find the required information.

However, since he has already put Jane on hold, he also takes the opportunity to co-ordinate with Dan. Turn 8 illustrates clearly the two options that VC users have in these cases: hang up and call again later, or keep the VC running and background interaction with the VC partner. In this case, Dan suggests to leave the VC running (turn 9) and takes the opportunity to go off camera while the VC interaction is on hold (turn 10).

Bryn acknowledges Dan's choice (turn 11) and goes to retrieve his passport (turn 12), returning with a can of soda as well (turn 13). He apologises to Jane (turn 14), presumably for the delay in resuming the phone call, although this is not made explicit. They resume the conversation with a topic related to the call (packing for the trip), but not directly addressing the reason for calling (the request for information). This continues until Bryn has found the relevant information (not included in the extracts), showing that searching for information, talking to Jane, and drinking a soda are not incompatible tasks, unlike talking to Dan and talking to Jane.

After Bryn gives Jane the requested information, they continue discussing related topics (luggage prices in general) while Dan is off camera. This portion of the interaction (1 min 58 sec in total) was omitted from the transcripts presented here, but it is available in the appendix p. 266. Extract 10 shows how the closing of the phone call is co-ordinated with the return of Dan, which makes resumption possible.

Extract 10 – Resuming the VC

15.   Bryn: ((on the phone)) maybe cause it's international I dunno (.)

16.   Bryn: ((on the phone)) yeah

17.   Bryn: ((on the phone)) ((laughing)) yeah

18. Dan: ((returns to screen munching on something))

19. Bryn: ((on the phone)) okiedoke

20. Bryn: ((on the phone)) alright then my love I'll speak to you- yeah see you later

21. Bryn: ((on the phone)) bye:

22. Bryn: ((to the phone)) ooh hello? ((looks at phone screen))

23. Bryn: ((to Dan)) what you eating?

24. Dan: ((moves food closer to screen)) kay

25. Bryn: a what?

26. Dan: Special K bar

27. Bryn: oh (.) mmm (.) she just wanted to (.) check in

Turn 15 shows the last turn in which Bryn is engaged in topical talk with Jane. At the same time, he is browsing the website of the airline with which they are flying, which means that only Dan's video feed is visible in the recording at this time. While Jane replies, Dan returns to his laptop, reappearing on the screen (turn 18). It is possible that in her responses between turns 15 to 20 (which are inaudible on the recording) Jane initiates the closing of the phone conversation. Nonetheless, it is likely not coincidental that the first turn Bryn produces after Dan returns (turn 20) moves the phone call towards the closing. At the same time, he closes the browser and makes the VC window full screen again (which also makes him visible on the recording once more). There seems to be a timing issue with the closing (turn 21), as indicated by the repair initiation in turn 22 (ooh hello?), but it is unclear what the issue is and it remains unresolved.

The resumption in turn 23 is unceremonious, simply asking Dan what he is eating without any apology for the interruption. The smoothness of this transition back to the VC from the phone call indicates that the interruption was not particularly disruptive to the VC interaction. This is because a resumption 'retrospectively displays the importance of the

suspensive event, in terms of temporal length, length of the inserted fragment and intensiveness of the new focus of attention' (Mondada, 2014d, p. 58). In this case, the suspension is topically relevant, since it is preceded by talk about Jane and the upcoming trip. It also allows Dan to do something off screen and return with some food, which means that he is not idly waiting for Bryn to finish the phone call. This contrasts sharply with the resumptions discussed by Sutinen (2014), which were achieved gradually and in collaboration between all present participants. Bryn and Dan are able to transition back into the VC quickly and smoothly for two reasons: unlike Sutinen's examples, there was only one suspended activity, and Dan was not involved in the inserted activity. Therefore, as soon as the phone call is closed it is clear that the VC will resume.

In terms of topicality, turn 23 is a noticing introducing a transitional topic which is dealt with very quickly (turns 24-26). In turn 24 Dan first responds to Bryn's noticing non-verbally by moving the cereal bar closer to screen as his mouth is visibly full. This is followed by a short verbal identification (kay) which is then expanded to the full name (Special K bar) after a repair request (turn 25). After displaying recognition (oh), Bryn explains what the reason for Jane's call was, and they continue to talk about Jane and developments in her life. Thus, topic-wise they return to Jane, who was both the cause of the suspension and the part of the topic under discussion before the suspension.

These two extracts show a complex interaction with multiple suspensions and multiple activities running side-by-side. The two conversations are incompatible with each other, so Bryn focuses on one at a time switching back and forth between the two. During the opening and closing of the phone call, Bryn also orients to the VC with Dan as a backgrounded activity through his posture and turn design. Other activities, such as eating, drinking, and searching for information, are compatible with and are done simultaneously with the ongoing conversation. The apparent ease with which they handle the suspension and resumption also shows how practiced they are at VCs, which they engage in five times a week with each other.

In addition to the interruption by the phone, this recording also includes a second type of suspension which has not yet been studied in the context of VC: leaving the range of the VC device. This is more than simply going off camera, which while being a violation of the maxim of VC still allows users to both hear and be heard by the distant interlocutor. In contrast, leaving the range of the device actively halts interaction.

In Bryn and Dan's interaction, there are examples for both types of behaviour. During turns 11 and 12 Bryn is off camera but stays within the room (and thus the range of the device). This means that in the recording we can hear him say 'okay' to Dan, although Dan may not hear this due to having left the room. We can also hear the noises of objects being moved while he is looking for his passport, which indicates to any listener that although he is off-camera, he is still within range and thus available to be summoned back if needed. In contrast, Dan leaves the room and the range of the device completely for a short period. During this time, all Bryn can do is wait for Dan's return as he continues to talk to his sister on the phone.

Such suspensions also happened in recordings made by other participants, indicating that it is not uncommon for VC users to leave the interaction for short periods of time. This is notable because similar behaviour on the phone is not typically tolerated: silences are treated as problematic (Rettie, 2007). Therefore, on VC there are two main types of suspensions: those dealing with other interactions on screen and leaving the range of the VC device. Both types of suspensions need to be relatively short, otherwise interlocutors might ask to postpone the VC, as discussed in the next chapter.

5.8   Closings

The closings of interactions in general have drawn less attention than the openings, which is certainly the case for CA research on phone calls (but see Auer, 1990). This may be because while closings contain ritualistic elements and set formulae (Goffman, 1967), there is a much greater scope for variation than in openings (for example see Button, 1987). This variation is necessary because closings 'need to be adaptable to a virtually unlimited range of sequence and topic types' (Schegloff, 2014). Furthermore, Schegloff and Sacks (1973) have identified what they call 'the closing problem' which is that the 'turn taking machinery' of conversation 'generates an indefinitely extendable string of turns to talk' (p. 294). Therefore, closings are a collaborative effort between the participants of a conversation and consist of sequences with identifiable beginnings and ends – the end of the closing sequence being the end of the interaction.

The closing sequences can be quite lengthy, especially in phone conversations (which were the basis for Schegloff and Sacks' observations) where interactants must rely solely on verbal exchanges. In a study on the use of mobile phones, Rettie (2007) found that phone call closings can be perceived as problematic and difficult, and even a reason to

avoid taking or making phone calls all together for some users. In face to face interaction, participants use both verbal and non-verbal means to bring the interaction gradually to a close (Broth & Mondada, 2013; LeBaron & Jones, 2002; Schegloff & Sacks, 1973). Thus phone call closings are distinct because they must be achieved by verbal means only, but also because they are clearly bounded, just as phone call openings. Furthermore, Sacks has argued that the roles of caller and called are also relevant in closings, as it is up to the caller to bring the conversation to a close (Volume II, Sacks, 1995, pp. 360–366).

Another important aspect of closings is that they are a site for relational work (Schiffrin, 1977), carried out for example by making jokes (Rintel, 2014; Schegloff, 2014). The relational aspect was linked directly to variation in research by Spilioti (2011) who showed that in text messages the presence of closings could indicate distance in the relationship or could be deployed strategically to mitigate face-threatening acts. She also highlighted the importance of viewing the medium (in her case text messaging) in the context of the other media used to communicate between the same participants: she found that some closings functioned as a closing of interaction for the day, not just the text messaging exchange.

Based on these findings and the affordances of VC, we can infer some of the features of domestic VC closings. Firstly, VC closings are expected to be varied, with some formulaic features. These formulaic features can be manifested both verbally (saying goodbye) and non-verbally (by waving). Kirk et al (2010, pp. 139–140) found that visible closing gestures such as 'over-exaggerated waving' were becoming the norm in VC. The same study also found that VC users found the closings 'awkward', which suggests that the awkwardness of phone call closings is not only due to the lack of visual cues, but perhaps the boundedness of the interaction that applies to both communication technologies. An alternative explanation is that as the roles of caller and called are largely irrelevant in VC openings, it may be unclear who should initiate the closing sequence.

The abruptness of the closing can be mitigated by continuing the interaction via for example the IM system integrated with the VC platform. This option is very useful in cases when the VC ends due to technical problems, when a closing has not been completed (or even initiated). Thus, VC is commonly used in conjunction with IM, as well as communication via other platforms such as email or social media. Therefore, it is important to consider whether a VC closing also functions as the closing of the interaction

for the day. For example, in the closing analysed below, April and Burt agree to play a video game together later in the evening after Burt has had time to eat dinner.

At just over 30 minutes into the VC session, Burt is the first one to overtly orient towards closing the interaction by stating 'I've gotta eat dinner I'm starving'. During the VC session, they update each other about the day's events and make travel plans for Burt's upcoming trip to the UK while constantly teasing each other and exchanging jokes. Then, they move on to discuss a letter that Burt's Granma sent to April. As they are doing so, they are interrupted by loud sirens coming from Burt's open window. The sirens prompt Burt to recount an accident that had happened the day before, after which he abruptly states he needs to make dinner (the full transcript from this point onwards is available in the appendix p. 267). This leads to another teasing sequence, this time about Burt's eating habits which ends with Burt once again stating that he needs to eat (this is turn 3 in the transcript below). After that, April asks if he wants to play a game after dinner, and they both orient towards closing the interaction, hanging up two minutes after Burt's first mention of leaving to eat dinner.

<div align="center">**Extract 11 – April and Burt bring their VC to a close**</div>

1. Burt: then pretzels (.) eating in my sleep (.) their salt smeared all over my face

2.   (pause)

3. Burt::   alright so I'm gonna go eat

4. April: okay

5.   (pause)

6. April: okay d'you wanna play a game after that

7. Burt: yeah we can

8. April: yeah

9. Burt: it'll probably be like half an hour cause I gotta grill (.) and cook is that okay?

10. April: u::m what's the time now

11. Burt: it's uh elven your time

12. April: yeah that's fine

13. Burt: yep

14. April: yep (woop woop)=

15. Burt: =cool

16. April: okay

17. Burt: alright

18. April: okay

19. Burt: thanks for skyping

20. April: mhm

21. Burt: uh good bye to you and Dorottya ((waves))
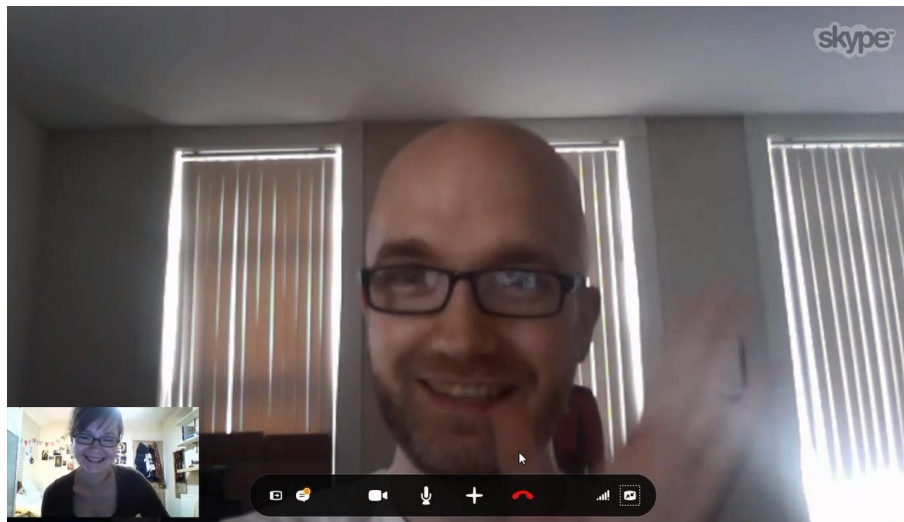
22. April: ((laughs)) yay you made it weird okay=

23. Burt: =yay

24. April: ((laughs))

25. Burt: we're thirty minutes in and I finally went awkward

26. April: oh (.) yeah

27. Burt: ((laughs))

28. April: okay bye

29. Burt: good bye

30. April: ((hangs up)) ((turns off recording))

This example demonstrates that identifying the beginning of the closing sequence can be a challenge in itself. In the description above I begin with the first turn that topicalizes the closing, and summarising the earlier interaction to show the shift in topic. However, closing moves do not necessarily topicalize the end of the interaction: for a turn to be categorized as a closing move, it is sufficient for it be an 'item that is bereft of topic continuation or initiation features in a turn subsequent to a topic bounding turn', giving other participants a 'free turn' (Button, 1987, p. 102). In typical closings, once both

parties have produced a closing turn (such as 'okay' or 'all right'), the next turns should be terminals (such as 'bye') (Button, 1987). Here, we see a longer string of closing turns (turns 13 to 18), followed by a thank you (turn 19), and jokes about the recording (turns 21-27), before the first terminal (turn 28).

It appears that the topical marking of closings is characteristic of VC interactions. Only five of the seven domestic VC recordings include the closings, as Kate stopped the recordings before the end of the VC session. Of these five VC closings, four have explicit turns that verbalize participants' orientation toward leaving. Similarly to Burt, Dan states that 'he's off (to bed)' shortly before the end of each VC. In the case of Paul and Raj, there is no statement regarding immediate future actions, but Paul promises to send Raj an email with an updated version of their paper at some point in the future just before they hang up. Such explicit closing moves may be necessary because pauses can be a product of lag or other technological trouble; therefore, subtle closing practices such as the ones described by Button my not suffice. Furthermore, as argued in the next chapter, changes in posture, which have been shown to play an important role in closing face to face interactions (Broth & Mondada, 2013), are much less visible on VC. Therefore, similarly to phone calls, closings are to be accomplished by primarily verbal means, with the exception of the token parting gestures described below.

In the videos, the participants make parting gestures by blowing kisses (Bryn and Dan), waving (Burt and Paul), giving a thumbs up (Paul), and a peace sign (Paul) in addition to conventional verbal goodbyes. Thus the choice of gesture indexes the nature of the relationship, which is a romantic one in the case of Bryn and Dan and 'hip-hop bros' in the case of Paul and Ray. In terms of the relevance of the roles of called and caller for the initiation of closings, the number of recordings is too low to make generalised claims. However, the case of Bryn and Dan suggests that the closing may habitually be done by the same person regardless of the roles of caller and called, as in all three cases it is Dan who initiates the closings, and he is caller in two cases and called in one. There are also 14 closings in the DLL videos, but these are not discussed here as they constitute a very specific kind of interaction (conducting an interview for coursework) which would lead to limited insight into domestic VCs, the focus of the present thesis.

5.9   Conclusion

In this chapter I have focused on chains of lower level actions in VCs, with particular attention to openings. I have shown that maintaining social co-presence requires the VC users to remain in the talking heads arrangement or account for their deviation from this arrangement. Due to the personal nature of the VC recordings analysed, phaticity is a key feature of the interactions. This is manifested both in what is discussed, and what is shown. Social conventions surrounding VC have evolved together with the software and the hardware: the VC platforms of today integrate IM, which is deployed strategically to mitigate the intrusiveness and abruptness of the suddenly appearing video feeds. Furthermore, participants can choose devices that fit their preferences and habits, as most platforms are available on PCs (including laptops), smartphones, and tablets. The use of other channels to arrange VCs and the potential delay between accepting the call and the transmission of the video impacts on the openings of the actual VC, which has a knock-on effect on the following interaction with regards to speaker turn allocation. I have also shown that noticings are commonly used for a variety of purposes. Although noticings often relate to mundane topics, this is no way diminishes the importance of noticings for these interactions.

Thus, I have shown how the affordances shape lower-level actions. VC provides limited visual access to a distant location via the internet. This creates the opportunity for a more flexible interaction than on the phone, with a greater tolerance for suspensions (both self-initiated and responding to summons from other channels). The informational asymmetry that was inherent in landline phone calls is almost completely erased on VC: participants know who is calling before picking up, and frequently the timing and agenda of the VC is negotiated before the VC starts. The first speaker may or may not be the caller, which means that the stable categories of 'caller' and 'called' are less relevant than emerging categories such as speaker and listener and as discussed in later chapters, 'show-er' and 'viewer'. This has implications not only for the openings, but also the closings of VC interactions. It may be unclear whose responsibility it is to initiate the closing, and subtle closing moves may be less effective than in face to face interaction. This can explain why VC closings, similarly to phone call closings, are seen as 'awkward'.

To maintain an uninterrupted VC interaction, users must stay close to their devices. As these devices are multi-functional, it is easy for users to transition to and from other (less

synchronous) modes of communication, and I have shown that is a valuable affordance for regular VC users. However, these VC devices also provide a number of potential distractions, which is considered in the following chapter dedicated to practices of paying attention in VC.

6 Practices of paying attention

It turned out that there was something terribly stressful about visual telephone interfaces that hadn't been stressful at all about voice-only interfaces. (…) Good old traditional audio-only phone conversations allowed you to presume that the person on the other end was paying complete attention to you while also permitting you not to have to pay anything even close to complete attention to her. (Foster Wallace, 1996, pp. 145–146)

Foster Wallace' satirical account of a fictional VC system provides a concise summary of a very real problem within VC interaction: there is a tension between the desire to engage in other activities during the VC, and the expectation of getting the full attention of the VC partner. It appears that the camera 'foregrounds the question of whether or not another person is actually giving you their attention' in a way that is unique to this medium of communication (D. Miller & Sinanan, 2014, p. 18). In this introduction, I explore why attention is such a central concern in VC and discuss practices of multitasking which shape expectations in VC.

Before exploring the topic of attention in VC interactions, I would like to clarify the definition of *practice* in nexus analysis and the links and difference between chains of actions and practices. The research question this chapter focuses on is 'What are the intersecting practices in VC, and how do they shape the interactions?'. In nexus analysis, *practice* is defined as 'a historical accumulation within the habitus/historical body of the social actor of mediated actions taken over his or her life (experience) and which are recognizable to other social actors as 'the same' social action' (R. Scollon, 2001a, p. 149). Compared to other social science methods, nexus analysis takes a much narrower view of practices: for example, gift giving or sheep farming are referred to as 'practices' in other approaches, while in nexus analysis these would be seen as examples of a nexus of practice (Norris & Jones, 2005f). Practice in the narrow sense includes actions such as

handing an object, queuing, the question/answer sequence, greeting someone, or paying for an item (Norris & Jones, 2005f; R. Scollon, 2001a). Practices are linked together as chains of actions, but instead of focusing on the chronological sequence, here we focus on the repetition of the 'same' action over various separate occasions and different kinds of actions. For example, in the previous chapter I examined how a first speaker is selected in VC in the course of the opening. In this chapter, I explore how VC is intertwined with other activities. Following the guidelines for conducting nexus analysis (R. Scollon, 2001a), I examine the practices shaping VC interaction through the analysis of the interviews with VC users complemented with observations of VC use as recorded in the videos. Throughout this chapter, I discuss the various relevant intersecting practices, the histories of these practices, and their role in other chains of actions.

Attention is a crucial commodity that we trade in our interactions: we *pay* attention to others and hope to *get* their attention in return (Goldhaber, 1997; R. H. Jones, 2005a). Attention is also finite and relative, which means that if we pay more attention to a certain person or activity, we are paying less attention to another. Although we cannot easily quantify attention, we have a sense of what it means to pay *enough* attention. This metaphorical understanding of attention applies to all kinds of communication, not just VC. However, as I will demonstrate below, different mediational means (IMing, phone, and speech) come with different expectations about the appropriate distribution of attention for the duration of the interaction. The problem in VC is that none of the practices that are routinely used in previous media work in the same way. Therefore, learning new ways of distributing, signalling, and interpreting attention is a crucial part of the domestication process for VC.

Throughout this thesis, I use the term *multitasking* to refer to the state of intertwining more than one activity, regardless of whether the activities would be described as *tasks* in their own right. Initially, I intended to avoid using the label *multitasking* in the interviews as well as in the thesis because it is associated with the workplace (Haddington, Keisanen, Mondada, & Nevile, 2014; R. H. Jones, 2009a), and my research focuses on domestic use of VC. However I found that my participants used *multitasking* to describe their practices even when I avoided this term (for example by phrasing my questions about multitasking as 'doing something else' during the VC). Therefore, in line with the principles of CA (Hutchby

& Wooffitt, 1998; Sacks, 1995; Ten Have, 2006; Wooffitt, 2005), I highlight the members' perspective by following their usage.

Research on CMC has found that IMing is rarely done without some form of multitasking. Ethnographic studies by Jones (2004, 2005a, 2009b, 2009a, 2010) show that IMing usually involves switching between multiple chat windows as well as other activities such as listening to music, browsing the internet, and sending photos. Jones (2004) suggests that the attraction of instant messaging is precisely that users are able to engage in multiple activities at the same time, *while displaying appropriate attention in multiple interactions.* However, multitasking during an IMing session is not necessarily something to be concealed: Baron (2008b, 2013) and Rettie (2009) found that their participants considered multitasking to be appropriate behaviour when communicating via IM. Therefore, it appears that in IMing multitasking is the norm, although in certain cases users may make efforts to conceal their involvement in other activities.

Phone calls require more attention than IMing. Some activities that commonly accompany IMing, such as listening to music or talking to other people, would be very disruptive during a phone call. There is also evidence that unlike in IM exchanges, people expect to have the full attention of their interlocutor during phone conversations (Baron, 2008b; Rettie, 2009). However, since people cannot see each other it is possible to carry out some activities (such as walking, cleaning, or checking email) without alerting the other person and/or disrupting the conversation (Kirk et al., 2010).

In VC, it is almost impossible to conceal multitasking (Brubaker et al., 2012; Kirk et al., 2010). This is also true for face to face interaction; however, as argued in the previous chapter, co-presence is far more fragile in VC than in situations of physical proximity. This is partly because audio and video problems are so common (Rintel, 2013b), and partly because VC users generally cannot use their lower bodies to indicate attention the way they can in face to face interactions (Kendon, 2004; Schegloff, 1998a), as the lower body is not usually visible on VC. Therefore, previous studies of VC have suggested that there is less tolerance for multitasking in VC than in face to face interaction, and that VC requires an investment of attention unlike any other form of communication (Ames et al., 2010; Brubaker et al., 2012; Buhler et al., 2013; Kirk et al., 2010; D. Miller & Sinanan, 2014, p. 154).

Overall, it appears that people tend to multitask to some degree when using the distance communication technologies that came before VC as well as during face to face communication. Therefore, it is natural that they would want to do the same during VC. However, it appears that the affordances of VC emphasise such distributions of attention in a unique way. Consequently, VC users must carefully negotiate their involvement in other activities with their VC partners or refrain from multitasking altogether.

The following three sections of this chapter explore attention practices in VC in relation to Goffman's model of *focused encounters.* First, I examine how this concept, which was created to describe face to face interactions, can be applied to the context of VC (section 6.1). The model is a valuable starting point for the present discussion because it describes the kind of interactions where participants expect to have the full attention of their interlocutors. The analysis of the interviews and the videos indicates that for most of my participants, VCs are indeed focused encounters. The following section (6.2) focuses on a small group of participants who reported using VC in a way which subverts the accepted practices in focused encounters. These *lapsed encounters* are characterised by long silences and involvement in other activities which are incompatible with focused encounters (for example watching TV or studying). In the next section (6.3) I examine how my participants deal with a unique challenge in VC: the screen which facilitates the interaction by showing the interlocutor can also become a distraction when it displays incoming messages or the participants pay too much attention to their own video feeds.

In the second half of the chapter, I build on the discussions in the first three sections of the chapter in order to arrive at a more complex understanding of the intertwining of different practices in VC interactions. In section 6.4, I review different theoretical frameworks for analysing involvement in multiple activities. The review includes Goffman's model of attention tracks (1974b) as well as approaches based in CA (Haddington, Keisanen, Mondada, & Nevlie, 2014; Rosenbaun et al., 2016a; Stefani & Horlacher, 2017) and nexus analysis (R. H. Jones, 2004; R. H. Jones et al., 2001; Norris, 2016; R. Scollon, Bhatia, Li, Yung, & Teach, 1999). Finally, I present two analyses of recorded VCs, the first one focussing on posture in a recorded VC featuring multitasking (6.4), the second on the management of a joint attentional frame in the preface of a digital showing (6.6). In the conclusion (6.7), I reflect on the theoretical models

introduced throughout the chapter and sketch out the emerging interactional norms in VC.

6.1   Focused encounters

Goffman observed that face to face interactions are organised around *focused encounters*, which he defined as interaction occurring 'when persons gather close together and openly cooperate to sustain a single focus of attention, typically by taking turns at talking' (1963, p. 24). Although he is talking about embodied communication that can be perceived by the naked senses, he foresees that his observations may also apply to modes of mediated communication that did not exist at the time: '[w]hen two-way television is added to telephones, the unique contingencies of direct interaction will finally be available for those who are widely separated' (p. 16). Furthermore, studies of phone calling practices have found that people treat phone calls as focused encounters (Baron, 2008b; Rettie, 2009). Since VCs are so closely linked to phone calls, extending the concept of focused encounters to the context of VC is a solid point of departure for the exploration of practices of paying attention in VC.

A typical VC session can be described through slight modifications to Goffman's definition: persons gather close *to their screens* and openly cooperate to sustain a single focus of attention, typically by taking turns at talking *or showing things to each other*. In the previous chapter, I have considered the key aspects of turn-taking in VC and in section 6.6 I analyse an instance of a digital showing (Rosenbaun & Licoppe, 2017). In the next chapter, I will also explore the practice of *virtual tours*, during which participants show each other their physical surroundings. In this chapter I examine the different ways that attention is distributed during VCs by problematizing each part of the above definition: Do people engaged in VC stay close to their screens? Do they sustain a single focus of attention? What do they focus on?

The video recordings indicate that for much of the VC, participants *do* have a single focus of attention, which is the VC interaction including the conversation and the visible images. The primary participants (who made the recordings) rarely open up other windows (especially ones that are unrelated to the interaction), and from what is observable it seems that the secondary participants focus on the VC as well: they stay close to their screens without significant posture changes. However, it is possible that this is partly due to the observer effect; participants may have made a greater effort than

usual to focus on the interaction because it was recorded. The instances where participants do orient to other activities are discussed in this chapter case by case.

In line with previous studies of VC (Longhurst, 2016), my interview data also indicates that the ideal of VC as a focused encounter is a prevailing ideology. For example, Mark stated emphatically that in contrast to text-based media, VC and phone interactions require a user's full attention:

<div align="center">**Extract 12**</div>

Mark: I wouldn't like to talk to someone [on VC] and not be giving them not my hundred percent of my full attention. If someone wanted to do that to me I'd be quite annoyed. On text-based mediums you kind of expect people to be talking to other people at the same time but with phone or Skype (…) you should give the other person your full attention if possible.

Most of my participants (16 out of 29 interviewees in total) expressed similar views, explicitly stating that they prefer to focus on the VC and/or expect the same from their partners. Two further participants mentioned that although they would happily engage in other activities during the VC, their conversational partners ask them to focus on the interaction, as shown in Extract 13.

<div align="center">**Extract 13**</div>

Dorottya: So um would you often be doing something else while you're talking to people?

Kayleigh: Yeah all the time, I'm always multitasking um or trying to multitask ((laughs)) my mum does tell me to stop sometimes um she thinks I'm not really involved in the conversation but yeah usually I'm doing two things at once.

Dorottya: So she'd prefer you to kind of give her your full attention.

Kayleigh: Yes definitely.

Furthermore, three of my participants mentioned that they might ask the other person to move somewhere else if they feel that they are 'too distracted' by their surroundings. In the most extreme case, April even rescheduled the VC because she wanted to discuss personal topics with her best friend, who was distracted by other people in the room and incoming phone messages. These comments indicate that it is not enough to avoid

multitasking: a focused VC encounter requires users to choose locations and times where interruptions can be minimised.

For the users who subscribe to the ideology of VC as a focused encounter, giving their full attention to their conversational partners leads to a 'better quality' interaction. However, for other users the requirement to focus on the VC can be overly demanding and restrictive. These users enjoy the VC more if they are also free to pursue other activities during the conversation. In the interviews eight participants mentioned that they like to multitask during a VC. In Extract 14, Gemma explains that although when she first started using VC she used to sit down and focus on the interaction exclusively, over time she has become more relaxed in her approach. This seems to be a common experience, as five other participants also framed multitasking as something they have started doing as they became more practised VC users.

Extract 14

Dorottya: Okay um are there things you do differently now than in the beginning?

*Gemma: Mmmm I suppose- like d- obviously it depends who I'm speaking to but if I'm speaking to my mum because we facetime quite regularly, I don't feel- not obliged but like to **sit there and only speak**, like I will gladly have my iPad on FaceTime you know while I'm off **doing other things**. Whereas like when I first moved away from uni, or when I was like first using Skype and FaceTime, I would've thought that you would've **had to sit there and engage fully in conversation**. Whereas now I realize that- esp- de- obviously depends who you speaking to, but especially when speaking to my mum and my sister and that, they're quite happy for me just to have them in the background talking while I'm **doing other things as well**. So I suppose I do that more than I did when I first started using it, but apart from that I don't think there's anything else that I would do differently.*

*Dorottya: Okay and does that mmm make you, I dunno **more happy** to do it because you know it's not gonna be so **intense just sitting there**…*

*Gemma: Yeah yeah that's the thing like it's nice like if I want to sit down and have like an **intense** conversation then I can. But it's also nice to know that it can just be kind of **relaxed** like I can still facetime and have the conversation face to face, but I don't have to be completely **tied** to sitting on my chair at my desk. I can **move around** in my room, I can you know **do little like bits and bobs** while I'm talking, which is what I would do at home. So I*

*suppose it is good to **not have that intensity**, to have **like a bit of option** in what I wanna do as well as talking.*

In her description Gemma draws a clear distinction between two opposing ways of using VC. On the one hand, there are 'intense conversations' where she is not allowed to leave the desk. In analytical terms, these seem to correspond to focused encounters in the strictest sense. On the other hand, there are relaxed conversations where she can move around or engage in other activities. It seems that she prefers these relaxed conversations, which are exclusively held with her mother or sister. In addition, the relaxed mode of using VC is something she has developed (together with her mother and sister) over time through the domestication process.

When there is a single joint focus of attention in VC, the focus is typically on the conversation. However, it can also be a joint activity requiring some form of screen sharing or distant collaboration. In the interviews participants mentioned that they use screen sharing in order to watch movies together, teach each other how to accomplish a certain task on the PC, or gain access to otherwise off limits Facebook accounts. In addition, some like to play computer games with their conversational partners during the VC. Other examples of joint activities were playing a musical instrument, repairing a sink, and repairing a sewing machine. In these three cases the VC becomes task-oriented and the joint activity requires one participant to interact with their physical surrounding and the other one to focus on their screen.

Therefore, we can conclude that the concept of *focused encounters*, which was developed in the context of face to face interaction, can indeed be applied to VC. The majority of my participants say they expect to have the full attention of their interlocutors for the duration of the VC. This means that they should stay close to their screens and focus on the conversation. For some participants, multitasking makes a VC more enjoyable, and the requirement to stay close to the screen may be relaxed. If participants choose to multitask, the other activities must be compatible with VC; otherwise, the VC is suspended, like in the example discussed in the previous chapter (section 5.7), or the focused encounter becomes *lapsed encounter*, as in the examples below.

6.2   Lapsed encounters

In the interviews, seven of my participants described using VC in a way that breaks all the rules of focused encounters: they did *not* sustain a single focus of attention and they did

not stay close to their screens, yet they *did* leave the VC software running and thus the VC continued in a sense. Instead of participating in a focused encounter, they left the VC window open and went about their day (for example to watch TV, do housework, or study). Borrowing another of Goffman's (1963) terms, I refer to these interactions as *lapsed encounters*, but similar practices have been discussed under the label *open connection* (Buhler et al., 2013; Kirk et al., 2010; Neustaedter & Greenberg, 2012; Neustaedter et al., 2015), or *always-on video* (D. Miller & Sinanan, 2014; Neustaedter, 2013; Rosenbaun et al., 2016a).

Goffman uses the term *lapsed encounter* to refer to people who are considered to 'be together' and have the right to start communicating abruptly for example while walking silently, dozing on the beach, or staring at the fire (1963, p. 102-103). This definition can be applied to VC because by leaving the software running, VC users make it possible to restart communicating abruptly. In the silences between these exchanges they can remain aware of each other's activities despite the physical distance between them. The term *lapsed encounter* also highlights the boundedness of these interactions: VC users must engage in focused interaction before and after the lapsed encounter. Without focused interaction, it is currently impossible to start a VC, and as illustrated by Extract 15, ending the VC without focused interaction would be considered rude.

Extract 15

Dorottya: So when you end these calls, when you've shifted into the not paying attention anymore but staying connected, would you then have to get their attention again before you sign off?

April: Yeah of course we say goodbye to each other ((laughs)) God. I'm not being rude. No, no, no, no, yes, of course we do!

Lapsed encounters are similar to the suspensions discussed in the previous chapter (section 5.7) in that the participants stop interacting with each other for a period of time during a VC. However, the interviews indicate that in lapsed encounters these interactional lulls are more frequent and much longer than the suspensions in the recorded VCs. In my analysis of suspensions and resumptions, I focused on the interactional work involved in transitioning between different interactions. In the present

discussion, the emphasis is on the expectations regarding availability, attention, and continued co-presence for the duration of the VC.

Silences have different meanings during focused and lapsed encounters. In focused encounters, silences are problematic because they represent a lack of response. However, in lapsed encounters silence can indicate involvement in other activities, which is completely acceptable. In physical presence and via VC, long silences are acceptable (under the right circumstances) because presence is expressed by other means. In phone calls, where the only way to express presence is verbally, silence is unacceptable (Rettie, 2007, p. 42). Therefore, by transmitting live video, VC has made it possible to participate in a synchronous but loosely structured interaction.

Lapsed encounters have been observed in three different contexts: long distance relationships (Kirk et al., 2010; Longhurst, 2017, p. 111; D. Miller & Sinanan, 2014, p. 57; Neustaedter et al., 2015), study sessions (Buhler et al., 2013; Kirk et al., 2010; D. Miller & Sinanan, 2014, p. 57), and work-place video communication systems (Bly, Harrison, & Irwin, 1993; Fish et al., 1993; Heath & Luff, 1992, 1993). I found that April's account of her VC habits with her sister was very similar to the lapsed encounters in romantic relationships reported in the above mentioned studies, and two of my participants (Bryn and Camille).

Extract 16

April: When I skype with my sister it's **not for the purpose of having a conversation** that much. Like when she calls me we talk about stuff that's going on (…) But **there comes a point** while I'm talking to her **where there's just no need to talk**. (…) **we're just comfortable enough** to stay connected even though we're not paying attention anymore. So it's like an unspoken agreement between the both of us that **it's okay now to shift your attention to something else**. But I think **that is very special and limited to certain relationships** and also to the fact that when I skype with my sister it's probably late in the evening, she's not doing anything else, she's just watching TV. And I'm not doing anything else, I'm just sitting there doing something and that's just it. **It feels very natural because that's like the moments when we sit together and we talk when I'm at hers**. And then we watch TV and we talk about something for two minutes and then we do something else again.

April, like Camille and Bryn, talks about having lapsed encounters via VC with one specific person only. There is a 'natural transition' from focused encounters into lapsed encounters, which evokes the experience of cohabitating or physical visits. The silence is viewed in a positive light, it is proof that there is no pressure to talk within the relationship. Thus, paying less attention contributes to a feeling of intimacy, which is at odds with the rules of engagement in focused encounters.

For three other interviewees, lapsed encounters were something more deliberate and functional. Anna explained that she regularly engages in what she calls 'Skype tanulás' (Skype study sessions) with some of her friends. This means that they start a group VC, turn the sound off, and study individually. When they want to take a break, they look at each other on the screen and every once in a while they 'knock' and engage each other in conversation before returning their attention to studying. Jessica also mentioned that she likes to do revision while video chatting with her boyfriend.

<div align="center">

Extract 17
</div>

Dorottya: Okay so when you say that you're um doing revision does that mean then that like the call will last a long time but you're not really talking cause you're revising?

*Jessica: Um no **we tend to get distracted a lot**. Um it does it tends to last longer and there are like **bits where we're not talking** but we tend to be like you know "oh what does this mean? This makes no sense I can't read my writing." Uh and then we show it. "Oh it probably says this. Uh I'll google it for you if you want" you know stuff like that. And then we s- get distracted and started talking about something completely different and be like "we should really be revising shouldn't we" and then we don't.*

Similarly, Madeline likes to log into 'Tinychat', a self-defined 'online video chat community' and keep the video chat window open while she works on her writing. The other people in the VC room are also writers, and Madeline told me that Tinychat provides a creative space for them where they can inspire each other and help each other when they are stuck. It seems that she too participates in lapsed encounters, with each person focussing primarily on their own writing but interacting with each other occasionally.

In contrast with the positive approaches to lapsed encounters described so far, some of my participants expressed their dislike of these types of interactions. For example, in his

pre-interview questionnaire Mark wrote '[v]ery occasionally I have used FaceTime spontaneously, usually in a very casual, almost playful manner' (for a summary of all the questionnaire answers see appendix p. 258). When I asked him what he meant by a playful VC, he recounted the story of a VC session with his friend while he was travelling overseas.

<center>**Extract 18**</center>

*Mark: [my friend] happened to be around at a friend's house but it was all people I knew as well. So what actually happened was it went from being like a five-ten minute chat between us, and then he went back into his room where they all were, and it was one of those weird moments when you have a bit of a thought process about technology where he kind of **took me into the room and just left the laptop there**. So then there was **no real direct conversation** but I was sat via Skype in the room with them for about two hours. And I wasn't really concentrating I think I was doing something. (…)*

Dorottya: So it was kind of like an open window between you guys but you weren't really engaging?

*Mark: No I mean you know it was kind of- you could at times but **it was odd**. But that's what I mean overall that was being playful or different. Like **I don't really like that experience**. I don't really find it that beneficial.*

Although Mark did participate in a lapsed encounter, as evidenced by his story, he did not enjoy it and would not like to repeat it. In addition, in two of the interviews I asked the participant whether he would consider using VC in such a way. In both cases, the answer was 'no'. Thomas said that leaving the VC open but not focussing on it did not sound good, and Piotr also responded negatively, as shown in Extract 19.

<center>**Extract 19**</center>

*Dorottya: Okay. Um right I wanna just ask you something that came out of the other interviews so um some people said that they like to have like the video like a video chat running but they'd be mainly doing other things, so it would just kind of be there. Like **the channel is open but they're focussing on something else**.*

*Piotr: I don't like that. My boyfriend does it sometimes, **I hate it**. It's like, **what's the point of having it on?** If you are talking to someone, just talk, you know, that that's fine but- and*

<center>111</center>

*you can do other things at the same time, but if you are just doing other things and then you only have the Skype in the background I dunno. I was like "what's the whole point? **It kind of requires my attention somehow, so I might as well not bother**".*

Piotr's response indicates that for him, the point of VC is to have focused encounters. This appears to be the dominant approach to VC within my participant group and previous studies of VC – lapsed encounters are practised by a minority of VC users. The software and hardware are also designed to be used for focused encounters, similarly to phone calls. Therefore, lapsed encounters are a negotiated rather than an encouraged use of VC. Developers have been working on purpose-built always-on video systems for domestics use (Judge et al., 2011; Neustaedter, 2013; Neustaedter et al., 2015), but these are not yet wide-spread.

Thus, the affordances of VC make it possible for users to engage in a very peculiar kind of interaction: they can leave the VC channel open, but direct their attention to unrelated activities. This behaviour is similar to the situations in which two people share the same space, but engage in separate activities. In the face to face situation they are available to each other just by virtue of physical proximity, with no additional effort required. On VC there is some effort involved in opening up the channel of communication due to the physical distance. However, once the channel is open, it is easy to continue running the software – even if some users may not see the point of doing so.

6.3   The screen as a source of distraction

In face to face encounters, posture is one of the most important resources for displaying and organising attention (De Stefani, 2014; Kendon, 1990, 1992; Nielsen, 2014). During VC, the standard body orientation results in the talking heads arrangement (Licoppe & Morel, 2012), which means that the lower part of the body is off screen, and the upper part is relatively stable (Keating, 2016). When participants deviate from this position, their change of focus is clearly visible: for example, all the interruptions discussed in Chapter 5 are accompanied by changes in posture. However, simply maintaining the correct posture is not enough, because the screens can become a source of distraction for example if the users become too absorbed in looking at their own video feed, as in Extract 20 below.

Extract 20

Dina: I sometimes sit there and my sister will go "you stop looking at yourself", you can't help but look, it's like looking in a mirror. And since my camera's at the top of my laptop and the screen's at bottom right-hand corner and I don't want to look into the camera, that's bizarre, so the eye contact's always very off, I'm looking down.

Gazing at the self is a particular problem in VC because unlike any other form of communication, VC users are faced with live video feeds of themselves on the screen by default (Longhurst, 2017; D. Miller & Sinanan, 2014; Sindoni, 2011a, 2012, 2013). Although it is possible to turn this off, not many do, and seven of the interviewees explicitly told me that they were unaware of this option.

In addition to monitoring their own video feeds, VC users can also direct their attention to other chat windows or software running parallel to the VC. Although interlocutors cannot see each other's' screens (unless screen sharing is turned on), they can make assumptions about what is displayed on the screen based on given off cues. These cues may be 'body idioms, facial expressions, keyboard and mouse behavior and verbal comments about it' (Lindroth, 2012, p. 137), as well as shifts in gaze (Licoppe, 2017b), changes in the amount of light given off by the screen (which influences the visibility of the other person's face), or even a clear reflection of the screen if the other person is wearing glasses (Licoppe, 2017b).

The interviews indicated that participants do monitor each other for signs of multitasking during a VC. Therefore, I decided to identify and analyse any instances where a participant opened up a window unrelated to the conversation in the domestic video recordings. I did not include instances where a participant was looking up information relevant to the conversation, as in these cases the information seeking was not a 'distraction' but instrumental to the conversation. Cases where the multitasking is related to the conversation are discussed in section 6.6 below, and in the next chapter in section 7.2.

As shown in Table 10, there were only six examples of such activities which were spread out over three different VCs (the other three domestic VCs did not contain any instances). One of the reasons why this number might be so low is that the primary participants avoided such activities as they were aware that their screens were being recorded. In

addition, the secondary participants may have well engaged in side activities on the screen, but without access to their screens this was not noticeable in the recordings. The only exception is example B, where the recording shows that the secondary participant (Ray) is typing. As this is not followed by an incoming message on Paul's screen, it is unclear what Ray was typing or who he was writing to.

Table 10 - Multitasking on the screen

example	description	VC code	Length of side activity	Purpose of side activity
A.	Paul receives an IM	Paul - Ray	53 sec	Opening, reading, and replying to an incoming IM
B.	Ray types something	Paul - Ray	3 sec	Unclear
C.	Kate opens browser	Kate - Charlie	7 seconds	Unclear
D.	Kate opens browser (2)	Kate - Charlie	12 seconds	Unclear
E.	Kate gets a notification	Kate - Charlie	14 seconds	Reading an incoming Facebook notification
F.	Bryn checks his diary	Bryn – Dan 3	36 seconds	Checking the schedule for the upcoming days

Three of the examples (C, D, and E) are carried out by Kate in the course of a single VC with her brother Charlie. These instances are spread out across the 14-minute recording, which ends as they are deep in discussion (it is unknown how long the VC continued after the end of the recording). In these cases it is Charlie who does most of the talking, with Kate providing appropriate responses at the right time. Similarly to example B, Kate's multitasking does not appear to disrupt the flow of the interaction and is not overtly attended to by the interlocutor (Charlie).

In Paul's case the multitasking takes a longer time because he has trouble finding how to access the IM, which he only achieves 32 seconds after the notification appears. When he opens the incoming message, it turns out that it is relevant to the ongoing VC, as it is a message from one of his friends asking about his availability: *'Hey chattest du noch mit [Ray]???'* (Hey are you still chatting with Ray???) to which Paul replies with *'ja gerade. meld mich gleich'* (yes at the moment. call you soon). Just as Ray's typing in example B was audible on Paul's end, it is likely that when Paul types an answer to the message Ray can hear him typing. However, Paul and Ray continue their conversation once again without attending to the multitasking, and they do not end the VC for another 24 minutes.

In Bryn's case, there is a 16 second pause (silence) while he is looking at his diary. This silence is broken with a framing move (Sinclair & Coulthard, 1992) by Dan (*'right')* which is echoed by Bryn, before he asks *'are you off?'*. This is followed by the closing, and the VC ends less than a minute later. This example differs from all the others in that the conversation does not continue when the other window is opened, and the VC ends shortly after. At this point in the interaction (which is twice as long as the other two recorded VC between Bryn and Dan) it appears that both participants are orienting to the closing of the interaction.

In summary, the videos do not contain many examples where the participants can be observed using the screen to display information irrelevant to the conversation. These instances are not explicitly addressed in the interaction, although typing, notification noises, or longer pauses provide audible cues for the interlocutors. The interviews indicate that some VC users do monitor each other for signs of competing on-screen activities, but there were no instances of direct challenges in the video data. Rather, on the few occasions that the participants did engage in multitasking on the screen, the other activities were intertwined smoothly with the VC.

In the remainder of this chapter, I continue to explore the ways in which VC can be entangled with other activities. In section 6.4, I introduce the theoretical approaches to multitasking that underpin the analyses in sections 6.5 and 6.6. In the conclusion (6.7), I reflect on the relevance of these models for the analysis of VC interaction.

6.4   Theoretical models of attention and multitasking

Goffman's (1974b) model of multitasking builds on the metaphor of *attention tracks*. Goffman proposed that in any encounter, there are three metaphorical attention tracks: the main track, the directional track, and the disattend track. The *main track* 'provides an official main focus of attention' for participants (p. 201). The *directional track* contains signs that are themselves excluded from the main track but regulate it in some way. Goffman provides the example of punctuation, but an example more relevant to the present focus is posture (Kendon, 1992), which is discussed in more detail in section 6.4 below. Finally, the *disattend track* contains actions that are wilfully ignored by participants, for example bodily functions (scratching, yawning, coughing, etc.).

In the case of video chat, the main track would typically be the conversation (including speech and facial expressions), or any objects that are put on display purposefully. For the directional track, one of the most important resources apart from posture is camera movement, which will be discussed in detail in the next chapter (section 7.4). In addition, certain sequences (for example noticings) can provide information about the interaction as a whole, as shown in the previous chapter. The disattend track can incorporate a wide range of activities: making and drinking a cup of tea or coffee (as mentioned earlier), but also the occasional audible mouse click or short burst of typing as well as bodily functions which are disattended in other contexts too. However, such activities can only be disregarded if they are not too intrusive, and it is up to the conversational partner to ignore or comment upon them.

Goffman's model has been criticised on the basis that although it allows for multiple tracks, there is a clear hierarchy between them. In contrast, research has shown that when using technologies (for example watching TV, listening to music, or reading) people rarely direct their attention 'in a focal, concentrated way to any single text or medium' (R. Scollon et al., 1999, p. 35). Therefore, scholars using nexus analysis have argued that in the context of CMC it is more accurate to talk about multiple foci of attention or *polyfocal attention* (R. H. Jones, 2004; R. H. Jones et al., 2001; R. Scollon et al., 1999) and Norris (2016) has developed a practical framework for tracking changes in attention during polyfocal interactions. Similar arguments have also been made by researchers taking a CA approach, who refer to this phenomenon as *multiactivity* (Haddington, Keisanen, Mondada, & Nevlie, 2014; Rosenbaun et al., 2016a; Stefani & Horlacher, 2017). The aim

of research on multiactivity is to examine 'the ways in which two or more activities are interwoven and made co-relevant within a given interaction' (Rosenbaun et al., 2016a, p. 295). In working with the concepts of polyfocal attention or multiactivity, the goal is not to identify the main focus of attention, as in Goffman's model, but to examine how the participants orient to the different ongoing activities in the moment. In the following analysis, I take such a granular interactional approach in order to examine the distribution of attention throughout a VC session involving multitasking.

6.5   Signalling attention via posture

When VC users engage in multitasking, posture can be just as important a communicative resource as in face to face communication. In the recording analysed in this section Tracy moves in and out of the talking heads formation and the camera's field of view as she attends to cooking a meal during a VC with Sian. In the analysis, I show how Tracy's changes in posture allow her to continue pursuing all of the relevant higher-level actions.

The primary participant, Sian, recorded this VC interview with her friend Tracy as part of her coursework for a module on Digital Literacy and Language (details about the module and coursework can be found in section 4.4 and in Cserző, 2016). 'Sian' and 'Tracy' are pseudonyms, as both of them have given me consent to analyse the recording but asked to remain anonymous in any publications. For this reason, instead of using the original still shots from the videos, I have included tracings which retain the data relevant to the analysis but obscure identifiable details. The tracings are for illustration only, analysis was carried out based on the original videos.

At the beginning of the recording, Sian is in her bedroom, getting ready to record a VC interview with her friend, Tracy, about her use of social media. When Tracy accepts the VC, Sian adjusts the windows on her laptop so that she can see both the VC window and her list of questions that she has prepared in a Word document (see Figure 4). This window arrangement allows her to attend to two higher level actions: conducting an interview, and having a VC conversation with a friend.
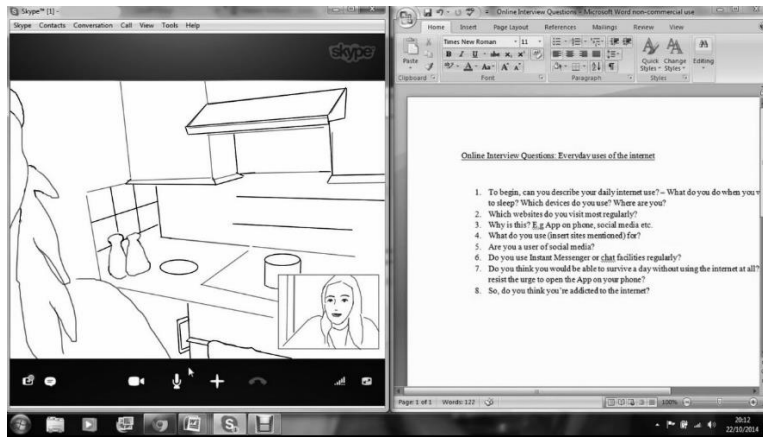
Figure 4

The beginning of the interview is delayed because Sian notices that Tracy is in the kitchen, and this leads to a virtual tour of Tracy's kitchen and living (analysed in detail in the next chapter, in section 7.4). After Tracy returns to the kitchen, Sian is able to begin the interview, and Tracy continues to cook while answering the questions. The table below summarises Tracy's posture changes during the video chat indicating the timing of each action in relation to the entire recording. These changes are meaningful because some of them result in a violation of the VC maxim (Licoppe & Morel, 2012, 2014), and many of them show a modified version of the talking heads arrangement.

Table 11: Posture changes during the video chat

Time (mm:ss)	Action	Relevant image
00:11	When Tracy's video comes on, she is looking at the screen and her upper body is in the frame. She is standing, cooking in the kitchen and her laptop is on a counter next to her, angled so that she is in the frame.	Figure 5

Figure 5

Time (mm:ss)	Action	Relevant image
00:22	Tracy picks up the laptop for the tour of the kitchen and living room	Figure 6
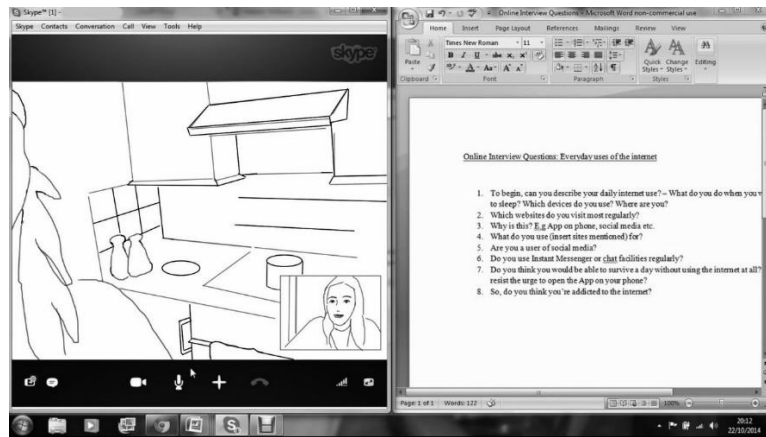
Figure 6

00:46   Tracy frames her face, then returns to the kitchen   Figure 7

Figure 7

	Tracy puts the laptop on the counter and goes back to the cooking	
00:51		Figure 5
02:21	Tracy leans forward, resting on the counter and suspends cooking	Figure 8

Figure 8

05:05   Tracy straightens up and attends to the cooking   Figure 9

Figure 9

| | Tracy adjusts the screen, her head is now outside of the frame | |
| 06:08 | when she is standing | Figure 10 |

Figure 10

06:14	Tracy leans forward again	Figure 8
07:59	Tracy straightens up	Figure 10
08:54	Tracy readjusts the screen, so that her head stays in the frame while standing	Figure 9
09:53	Tracy leans forward	Figure 8
10:26	Tracy straightens up	Figure 9
10:38	Tracy leans forward	Figure 8
11:45	Tracy straightens up	Figure 9
12:40	Sian hangs up	

The maxim of VC (Licoppe & Morel, 2012, 2014) states that VC users should put the face of the current speaker on the screen. In addition, research on VC has found that the typical set-up results in the 'talking heads arrangement', showing a close-up of the participants from the shoulders up (Licoppe & Morel, 2012). In this recording, the maxim is relaxed or suspended in order to accommodate the requirements of cooking at various

points. Throughout the recording Tracy chops ingredients, stirs the pot, and puts food in the oven. When she is focussing on these activities, her face is either not visible in the frame (for example see Figure 10), or she stands further away from the camera (for example Figure 5 and Figure 9).

The opening shot (Figure 5) shows Tracy facing the screen, standing further away than the standard talking heads formation. She produces a talking heads shot at the end of the virtual tour (Figure 7) as she returns to the kitchen. After that, she puts the laptop on the kitchen counter and does not move it again apart from adjusting the screen angle (08 min 54 sec into the recording). When the laptop is stationed on the counter, she moves between two positions: leaning on the counter, producing a shot close the standard talking heads formation (Figure 8), and standing next to the hob (Figure 9 and Figure 10). Her changes in posture indicate shifts of focus between the two higher level activities of cooking and having a VC conversation.

The highlighted rows in the table show the four periods when Tracy leans on the counter and backgrounds the cooking. The first happens between 02:21 and 05:05, the second from 06:14 to 07:59, the third from 09:53 to 10:26 and the final one from 10:38 to 11:45. This means that in the VC which lasts for 12 minutes and 29 seconds, Tracy is foregrounding cooking for 6 minutes and 20 seconds and she is foregrounding the VC for 6 minutes and 9 seconds, splitting her time almost equally between the two tasks. For Tracy the VC is embedded within the longer activity of cooking, which has started before the call and will end only after it is over. The smooth intertwining of the two activities (cooking and VC) demonstrates Tracy's expertise in both.

During this VC there is a very unequal distribution of attention: Sian gives her full attention to Tracy treating the VC as a focused encounter, while Tracy is shifting between foregrounding the VC and cooking her dinner. Furthermore, Tracy orients to the relational aspect of the VC interaction by giving Sian a virtual tour of her home. In contrast, Sian attempts to begin the interview as soon as possible (as shown in Cserző, 2016) and she literally has the interview questions in front of her for the duration of the VC, as shown in Figure 6.

In the case of Sian, who does not engage in other activities during the VC, Goffman's hierarchical model of attention (1974b) appears to be the most accurate. For Tracy, it

would be very difficult to identify a single main focus, as her attention shifts between cooking and participating in the VC. Tracy is able to intertwine these activities smoothly because they rely on different resources (Stefani & Horlacher, 2017): manual manipulation, and talk. This video recording demonstrates not only that both kinds of models of attention (hierarchical and polyfocal) can be used to describe VC interactions, but that the two models can be applied to the same interaction, depending on the perspective of the participant.

6.6   Focussing on the medium

Throughout this chapter, I have discussed people paying attention to each other without much discussion of the mediating technology. This simplification is partially justified because the participants talk about their VC interactions as if they were talking to each other directly. For example, when comparing VC with other distance communication technologies, they often referred to VC as 'face to face communication' (as in Extract 21 below).

<center>**Extract 21**</center>

April: If I want to talk to my friends face to face I have them on my Skype.

Matt: It's much nicer to interact face to face than over the phone.

These expressions are in a sense more accurate than what is usually understood as 'face to face' communication: in physical co-presence, we have 'body to body' communication (Deumert, 2014c), but VC interaction is often truly 'face to face' because the faces are the only body parts visible on the screens. However, such simplifications obscure the fact that users are actually interacting with their screens, and not directly with each other. This is easy to forget when technology is running smoothly, but at certain points (such as openings, closings, and connectivity problems, as discussed in Chapter 5) the mediating technology becomes foregrounded. In this final section, I analyse such an incident in a VC between Kate and Charlie, presented in three extracts and summary of some omitted turns (the full transcript is available in the appendix p. 271).

The first extract begins 8 minutes and 36 seconds into the VC, after a tour of Charlie's room which is discussed in the next chapter (section 7.4.1). The interaction revolves around a 'digital showing' (Rosenbaun & Licoppe, 2017), the joint viewing of a digital file, which is a photo of the house Charlie is about to move into. The total length of this video

<center>122</center>

extract (1 min 44 sec) already indicates that the interaction is not accomplished without problems. The fact that the participants do not abandon their goal despite the numerous difficulties indicates that viewing the photo together is important to both of them. They work together to achieve a joint attentional frame, but in order to do so they must deal with their individual equipment, which presents each of them with different challenges.

In the first segment (Extract 22) the problem arises from a lack of familiarity with the Skype interface: Charlie has to find out how to send a photo through Skype. The second segment (Extract 23) shows Kate accepting the file. This action is carried out without any problems, but it provides an opportunity to explore the agency of the PC/VC software, which becomes relevant for the analysis of the final segment (Extract 24). The final segment demonstrates how technological trouble brings the focus of attention onto the mediational means which are taken for granted elsewhere in the interaction. As in the previous analyses, the unit of analysis is the action (C. Goodwin, 2000; Norris, 2016; Norris & Jones, 2005d). Many of the actions are utterances, but this interaction also relies heavily on actions taken via the PC (i.e.: clicking the mouse and typing).

Digital showings consist of three main stages: the preface, where the showable is made relevant; the showing of the digital object; and the response and assessment from the viewer (Rosenbaun & Licoppe, 2017). In this case, the showing starts 5 minutes after the preface, because the conversation moves to other topics while Charlie is searching for the photo. The photo is first mentioned after the opening and some small talk (J. Coupland, 2000b), when Charlie tells Kate that he will soon move to a new a place (3 min 14 sec into the conversation) and asks Kate if she wants to see it. Kate says that she does, so Charlie starts to search for the file but while he does so they continue talking about his new place and future flatmate. This reminds Kate that she is also expecting a new flatmate to move in with her (4 min 8 sec), and it appears that this is such an absorbing topic that Charlie forgets about sending a picture of the new house, at least for the time being. They continue to discuss Kate's future lodger for over 3 minutes – Charlie thinks he may know him from university. Eventually Charlie tries to share the Facebook profile of his university acquaintance with Kate, but due to the privacy settings she is unable to view the page. Charlie says 'yeah no worries I can do it this way then' and while Kate waits for something to happen, she notices the colour of Charlie's room. This leads to a virtual tour of the

room (analysed in Chapter 7 section 7.4.1), after which Charlie asks how to send a picture on Skype (turn 2).

Extract 22 – how to send a picture

1. Kate: oh [no]

2. Charlie: [right] how do I send um how do I send you a picture on Skype

3. Kate: it's like [save]=

4. Charlie: [oh]=

5. Kate: =the picture and then (.) oh I {don't know} actually
   {she moves the mouse and a menu appears at the bottom of
   Charlie's video}

Figure 11

6.   (1.0)
   {Kate moves her mouse over the '+' icon, a label appears with the

Figure 12

7. Kate: oh yeah save the picture and then (.) {like put your mouse just over my}

{as she is giving the instructions she moves the mouse as described}

8. Kate: face and {a little} (.) bar will come up at the bottom and you can put

{she moves the mouse back over the '+' icon}

9. Kate: [add send and share]

10. Charlie: [oh yeah send]

11. Kate: that's it

12. Charlie: {got it} got it got it got it got it [got it]

{Kate moves her mouse away from the bar}

13. Kate: [got it]

{singing} {the menu disappears}

The first phase of this interaction, transcribed in Extract 22, focuses on the issue of sending a picture via Skype. This topic is introduced by Charlie with the *framing move* (Sinclair & Coulthard 1992) 'right' in turn 2, which partially overlaps with Kate's last reaction to the room in turn 1. Charlie may have been thinking out loud, but Kate treats his turn as a real question and attempts to answer it starting in turn 3, although here she mentions 'saving' a picture rather than 'sending'. Turn 4 consists solely of 'oh', a change-of-state token (Heritage, 1984) produced by Charlie, which is difficult to interpret without

having access to his screen. As he utters this token he appears to raise his furrowed brows slightly but very quickly his face takes on a focused expression once again. This is the expression he wears from the beginning of turn 2 throughout this extract, and it is visible in Figure 11. Kate continues her instructions until in turn 5 she realises that she does not have the answer either. At this point, she abandons the instructions and after a change-of-state token ('oh' in turn 5) she admits that she does not know. At the same time, she starts moving her mouse around, apparently to explore the menus and find the right option. Very quickly, she finds a solution.

Turn 7 starts with another change-of-state token ('oh yeah'), this time indicating the upcoming solution, and she repeats the phrase abandoned in turn 5 ('save the picture and then') followed by instructions on how to move the mouse (turns 7-8), ending by reading out the text box 'Add, send and share' (turn 9). Although her instructions are not very precise (she skips the step of hovering the mouse over the '+' icon), Charlie does indicate that he has found a solution with another change-of-state token in turn 10. Kate acknowledges this, (turn 11) and Charlie asserts emphatically that he has 'got it' (turn 12), repeating the phrase 5 times, with Kate joining in a sing-song voice for the final one (turn 13). After Charlie has managed to send the file, it is up to Kate to accept the request, save the file, and open it. In Extract 23, Kate starts to interact directly with her PC as she receives the file transfer request.

Extract 23 - Accepting the file

14.   (4.2)

15. Charlie: here we {go}

{Kate receives a file transfer request}

16. PC   {makes a notification noise}

17. Kate: whoa {purp purp}

            {she imitates incoming picture notification noise}

18. Kate: do I have to save as

            {she clicks on 'save as'}

19. PC   {pop-up appears with the following warning: 'Files can contain

            viruses. We strongly recommend you use anti-virus software to scan

            files you receive, even if you know the sender. Are you sure you want

            to accept this file?'}

Although Charlie stated at the end of Extract 22 that he has 'got it', Extract 23 starts with a 4.2 s pause – it seems that he has found *how* to send a file, but still needed time to accomplish the task. Therefore, turn 15 is important because it signals the moment he has actually sent the file at his end. The file transfer request appears on Kate's PC without delay, which is also marked by a notification sound (turn 16). This seems to catch Kate off-guard, as she voices her surprise ('whoa') and then playfully imitates the sound in turn 17. This is followed by a question ('do I have to save as') in turn 18. Without waiting for an answer, Kate clicks on 'save as'.

Finally, the PC displays a warning about potential viruses (turn 19) which is an answer to Kate's click in turn 18. In this extract, I have marked turns 16 and 19 as belonging to the PC because Kate starts interacting directly with it, rather than Charlie through the PC. Although turn 16 is a direct result of Charlie sending the picture from his PC, it is more

difficult to draw a link between him and turn 19. While he clearly intended to send the file, the same cannot be said about the virus warning, and he may well be unaware that it appeared. For example, if Kate had ticked the box next to 'Do not ask me again' at the bottom of the warning on a previous occasion it would not have appeared. Furthermore, in the following interaction the PC seems to respond to Kate's actions with some delay, which is the main reason that saving and opening the file takes such a long time.

The literature also provides precedent for conceptualising computers as participants with agency. Suchman (1987) argues that the term 'interaction' is appropriate for describing what goes on between people and machines, even though in the original sense it applies to communication between humans. She writes that 'interaction between people and machines requires essentially the same interpretative work that characterizes interaction between people, but with fundamentally different resources available to the participants' (p. 180). This may seem self-evident today, when the idea is so well established that it is inscribed within the name of the field of Human Computer *Interaction* (HCI). However, this was not always the case:

> *in using a modern computer, the actions we engage in involve not so much the operation of switches and levers with some determinate physical outcome as engagement in a form of dialogue with the machine. (…) At certain points, such as when we create or save a file, when we move a file from one location to another, or when we ask the computer to do something that it cannot do or does not understand, the system presents us with a set of choices and asks us which we would prefer.* (Hutchby, 2001a, p. 8)

In other words, software designers started borrowing terms from human interaction as computers were increasingly manipulated through language (Suchman, 1987b, p. 11). The personification of computers is built into the system with expressions such as 'dialogue box', which makes it possible to analyse the sequence by treating the machine as a participant in the interaction.

Returning to the present case study, Extract 23 ended with a file transfer request appearing on Kate's screen (turn 19). This file transfer is not completed until turn 42 in Extract 24 (shown below), 40 seconds later. The transcript of the turns in between has been omitted, but the interaction is described for continuity (the full transcript can be

found in the appendix p. 271). After pressing the 'save as' button in turn 18 and ignoring the virus warning (by clicking 'OK'), Kate is presented with another window, which requires her to choose the location to save the file. As she is looking through the available locations, she accidentally presses a key and the options disappear, leaving her with a blank box. After an unsuccessful attempt at retrieving the drop-down menu, she decides to abandon the attempt by pressing cancel and start the process over by repeating her action from turn 18 (clicking on 'save as'). This time she completes all of the steps, and gives the command for the PC to save the file in the 'Documents' folder. However, the PC provides no indication of carrying out this task for 11.5 seconds, when it produces a notification noise in turn 42. Until then, Kate searches fruitlessly for the file in the Documents folder, while Charlie states that the file 'should come up in the conversation'. This statement positions him as the more competent user, which contrasts with Extract 22 where Kate gave suggestions to Charlie. After the notification noise, a file icon has indeed appeared in the chat window (turn 43), and all that is left to do is to open the file.

Extract 24 - The file arrives

42. PC   {there is a notification noise}

43. Kate: {she closes the file browser, there is a link to the file in the chat
                                window}
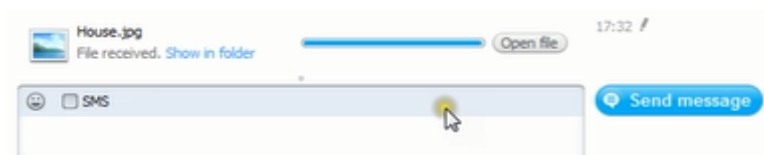
44. Kate: {oh yes} (.) you are right
                {she clicks on 'Show in folder' but nothing seems to happen}

45.   (3.0)

46. Kate: {she clicks on 'open file' but again nothing seems to happen}

47.   {7.3}

48. Charlie: {this is my house}

                {Kate opens a file browser window}

49. PC   {a second file browser opens}

50.   (4.0)

51. Kate: {hang} on a minute {it's not it's not happy}

                {she closes the second file browser} {she moves her mouse over the

                file}

52. Kate: {she clicks on the file}

53.   (3.8)

54. PC   {the photo appears}
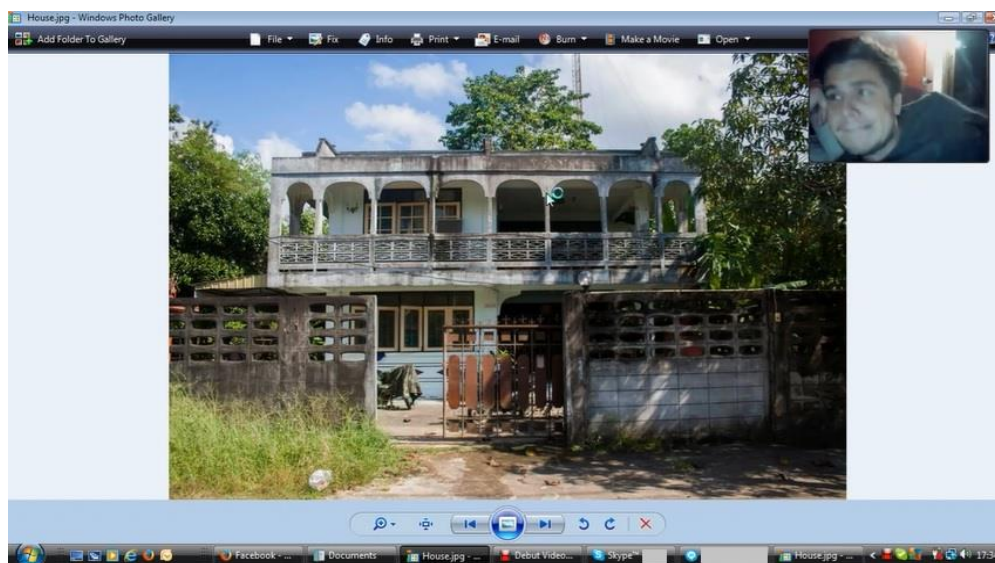
55. Kate: whoa (2.4) it's a bit mashed

The final portion of this interaction (Extract 24) starts with file notification noise in turn
42. Then Kate assesses Charlie's previous claim ('it should come up in the conversation')
as correct, and she attempts to open the file by clicking on 'show in folder' (turn 44). As
nothing seems to happen, she clicks on 'open file' but once again, nothing seems to

happen on her screen. The lengthy silence (over 10 seconds in total) is broken by Charlie's declaration ('this is my house' in turn 48). This utterance demonstrates that maintaining the talking heads formation is not necessarily sufficient in itself – although Kate is visible to Charlie and appears to be involved in a task relevant to both of them, she remains silent for too long without indicating the reason for doing so. Charlie does not know that Kate cannot yet see the photo, and appears to interpret the silence as interactional rather than technological. Kate does not signal to Charlie that there is a problem until turn 51, at which point she has decided to locate the file by herself (turn 48) rather than continuing to wait for the PC to respond to her previous two actions, only to receive the PC's delayed response to these actions in turn 49.

The personification in Turn 51 ('[the PC] is not happy') indicates that because of the delayed responses, the PC has indeed become a third participant in this interaction for Kate. After she clicks on the file (turn 52) it finally opens (turn 54) after another delay (turn 53). Kate immediately voices her surprise (whoa) and provides an initial assessment of the house (it's a bit mashed), indicating the end of the task of receiving and opening the file, and opening the final phase of the digital showing, in which they assess the photo.

The most striking aspect of this interaction is that Charlie and Kate pay a lot of attention to the mediational means itself. This is evident in their language (references to the software and/or the PC), the extended silences during which one of them waits for the other to complete a specific action on their PC, and the overall goal, sharing a photo via Skype. These extracts show how users' expectations about what should be on the other person's screen and how long certain actions should take can shape the interaction. It seems that relatively long silences are tolerated, as long as the users are aware of what the other person is doing. For this reason, participants of digital showings often vocalise the actions they take on their screens (Rosenbaun & Licoppe, 2017). However, keeping the interlocutor informed can be taxing when a user is faced with an unexpected technical problem while carrying out a task.

The role of the VC devices shifts over the course of this recording. In Extract 22, it is referred to as a passive medium through which a photo can be sent (how do I send you a picture on Skype?). In the next segment, Kate is faced with pop-up windows which are triggered directly by Charlie's actions. The first one (the file transfer request) can be

linked directly to Charlie's goal (sending a photo), but the second one (the virus warning) only impedes the task. In the final segment (Extract 24) the device is referred to as if it were capable of emotions ('it's not happy'), and a close analysis of Kate's on-screen actions shows that the problems arise due to a long delay between Kate's mouse clicks and the response from the PC. Thus, the VC device transforms from an opaque channel of communication into a participant in the interaction. What is more, this 'participant' is capable of causing Kate and Charlie to suspend their main activity, and determines when it can be resumed.

6.7   Conclusion

At the beginning of this chapter, I posed three questions about VC interactions: do people stay close to their screens? Do they sustain a single focus of attention? What do they focus on? The first of these questions explores the extent to which VC users maintain the talking heads arrangement, which was introduced in Chapter 5. The analysis of Sian and Tracy's VC suggests that in cases where other activities are intertwined with a VC, the talking heads arrangement (Licoppe & Morel, 2012) may not always be feasible. Instead of maintaining a close-up of the face throughout the VC (as suggested by the maxim of VC as described by Licoppe & Morel, 2012), participants may orient to remaining within the view of the camera while moving further away from the VC device. Although Sian and Tracy's interaction was the only one where extended multitasking was observable in the videos, the interviews indicate that other participants also engage in multitasking during VCs.

Since multitasking does occur during domestic VCs, it is clear that users do not necessarily sustain a single focus of attention. However, with the exception of lapsed encounters, VC users do display an orientation toward the conversation by remaining within the camera's field of view, contributing to the conversation in an appropriate manner, and refraining from activities that are incompatible with the VC. In terms of on-screen activity, some participants mentioned that the digital mirror can be distracting, but they rarely engaged in on-screen activities (such as browsing the internet or sending messages to other people) that were unrelated to the VC interaction. It appears that during VCs the norm is to focus on the interlocutor and users hold each other accountable for lapses in attention. Insufficient attention is not only considered rude, but can even be grounds for terminating the VC. Therefore I suggest that there is a second maxim at work in VC

interaction. In addition to keeping the speaker's face visible, VC users also need to focus their attention on the VC interaction. The maxim of attention applies to all participants, regardless of their momentary status as speaker or listener.

This second maxim also partially answers the final question: What do users focus on? Most of the time it is the VC, including the image on the screen and the ongoing conversation. If there are technical problems, the focus will be on the software or hardware, making the medium suddenly visible (as in the extracts from Charlie and Kate's VC). Other activities (for example cooking, tidying, consuming food and drinks, and smoking) are compatible with VCs if they allow the participants to pay 'enough' attention to each other. When participating in lapsed encounters, VC users can engage in activities that require their full attention (such as studying or writing), or make it difficult to continue a conversation (watching TV). The value of lapsed encounters is not determined by attention, but by remaining available to each other without the pressure to talk. However, focused attention is necessary in the openings and closings at the very least, even if participants suspend the VC for short periods (as in the example in the previous chapter, section 5.7) or spend most of the time focusing on other activities.

Thus, Goffman's concept of focused encounters has proven to be a useful starting point for understanding VC interaction. Where participants adhere to the norms of focused VC encounters (which is in most of the recorded VCs), they appear to prioritise the VC over any other activities. In these cases Goffman's hierarchical model of attention seems to be the most accurate representation of the distribution of attention. If there is extended multitasking, as in the case of Tracy, it may be difficult to identify a main focus of attention for the duration of the interaction. Instead, it is more fruitful to consider the changes in the orientation towards the different activities as indexed by the conversation, posture, and gaze. A further complication is that the same interaction may be polyfocal for one participant and a focused interaction for another. Such diverging attention structures may also arise in other forms of communication, especially when people are not physically co-located.

Practices of multitasking which are acceptable in other contexts (instant messaging, phone calls, face to face encounters) must be adapted, negotiated, or completely abandoned during VCs. Parallel activities are not only visible (as in face to face situations) but also amplified, because of the expectation that whatever appears on the screen must

be showable. In addition VCs are initiated deliberately and just like on the phone, there is always a reason for calling (Drew & Chilton, 2000; Hutchby, 2001a, p. 89). There is no pretence of 'having coffee' or 'grabbing lunch'. By initiating and accepting a VC, both participants are declaring their intention to focus on the conversation, unless they have already developed a habit of participating in lapsed VC encounters as in the case of April and her sister. Therefore, VC interactions are arguably more intense than any other form of communication in the sense that they require a complete dedication of attention.

While some participants saw the intensity of VC as *constraint*, others valued the kind of deep engagement it *afforded*. For the first group, the intensity could be eased by engaging in multitasking. For some, one of the main *affordances* of VC is that it is possible to do while carrying out other tasks. This illustrates very well why it is important to avoid the value judgment implied by the dichotomy of *affordances* and *constraints*, as argued in the literature review in section 2.4. Domesticating VC involves exploring what is possible, and developing practices that feel comfortable.

In the analysis of Charlie and Kate's video exchange, I examined how the participants attended to the mediating devices while they worked on bringing their attention to the photo of Charlie's future accommodation. This was necessary because the photo could not be shared without taking actions through the laptops. As the participants started moving and clicking the mouse, the screen that had formerly featured nothing but the live videos became populated by menus, pop-up dialogue boxes, and file browsers. These mediational means were directly involved in bringing about the digital showing. However, the participants also relied on other mediational means: their physical environment. In the final analytical and discussion chapter, I turn my attention to these elusive mediational means, the spaces that shape VC interactions.

7   Space as a mediational means in video chat

My first experience with using VC was during a six week language course in Athens in the summer of 2008. I did not own a laptop, let alone a smartphone, and there was no computer at my accommodation. The only time I had internet access was when I visited one of the many internet cafés in the area. These cafés were predominantly frequented by local teenage boys who wanted to play computer games, so they were not exactly a cosy place to conduct intimate conversations with my parents and my boyfriend, who were my only Skype contacts. However, I still preferred this method of contact over using an international calling card from a public phone, which was the only other way I could hear their voices. - Dorottya

This account of my early VC use highlights how access to *mediational means* (in this case electronic devices and the internet) can shape what it means to engage in VC. Over time, the mediational means at my disposal have changed, and this has completely transformed my experience of using VC. Like most of my participants, I now use VC in the privacy and comfort of my home or any accommodation I happen to temporarily occupy. In this chapter, I explore the mediational means used by my participants, with particular attention to the spaces that are made relevant during the interaction. In line with the 'spatial turn' in the social sciences (Fenwick, Edwards, & Sawchuck, 2011; Jaworski & Thurlow, 2010; McIlvenny, Broth, & Haddington, 2009) I approach *space* as an interactional achievement rather than an abstract concept.

Mediational means is one of the key concepts of nexus analysis. In his introductory chapter, Scollon (2001a, p. 148) provides the following definition:

> *A mediational means (a term in either singular or plural) is defined as the semiotic means through which a mediated action, that is any social action, is carried out (communicated). In this definition 'semiotic' is intended to convey not just abstract or cognitive systems of representation such as languages or systems*

of visual representation, but also any and all material objects in the world which are appropriated for the purposes of taking a social action. This would include, for example, the layout and design of the room as well as the grammatical structure of any utterances made by the social actors.

I have already touched upon the mediational means in the discussions of chapters 5 and 6. In Chapter 5, I examined the role of the specific software and hardware during VC openings and I have analysed the language used in the various extracts presented throughout the thesis. So far, I have focused on the mediational means that are available to both participants for the duration of the VCs: I have analysed how participants orient to the camera and considered only what is visible on the screen. In this chapter, I turn my attention to the more elusive aspects of VC interactions, to spaces that are not necessarily visible to the participants, but nevertheless shape the ongoing interaction (sections 7.1, 7.2, and 7.3). The discussion of the different kinds of spaces is followed by analyses of two video extracts (7.4), in which I discuss the use of space and language. The video extracts analysed in this section also appear in publications (Cserző, 2016, in press).

The structure of this chapter is guided by Jones' (2005a) chapter on sites of engagement in CMC. Jones' chapter is particularly relevant for the present research because it provides an analysis of CMC using the framework of nexus analysis. In the following sections, I explore the spaces he identifies as central in CMC:

In computer mediated communication, there are at least five kinds of space towards which users can orient their attention:

1 The physical spaces in which they are operating their computers (such as offices, homes, cybercafés), both in terms of the immediate built environments and the geographical coordinates of these spaces;

2 Virtual spaces created by the interfaces they are using to communicate (chat rooms, ICQ contact lists, web pages);

3 Relational space created by the 'state of talk' between participants;

*4	Screen space – the actual space of users' screens upon which they arrange various elements (windows, toolbars, writing spaces, video screens);*

*5	Third spaces – spaces inhabited by neither participant but rather referred to in the course of interaction (bars, saunas, classrooms, shopping centers).*

These spaces represent negotiated social orientations that are not totally independent, but instead overlap and affect one another. What is happening in virtual spaces helps shape the actions and identities that are possible in physical spaces and vice versa. (Jones 2005 p. 144)

First, I examine the physical spaces that are most often used for VCs, and the way in which they shape the interactions (7.1). For my participants, the physical spaces play a different role than in Jones' research. Firstly, unlike in the IM exchanges studied by Jones, the physical environment of my participants is partially visible during the interaction. Secondly, Jones' participants display a strong orientation to organising physical meetings in physical spaces. In contrast, my participants engage in VC because they are unable to visit each other as often as they would like.

In the next section, I consider the screen space and the virtual space together (7.2). The reason for merging these two spaces is that all the examples of virtual spaces listed by Jones (chat rooms, ICQ contact lists, web pages) appear in practice on the screen in the form of windows, although they of course exist as digital code even when they are not visible. In Jones' research multitasking was the norm, and the interconnectedness of the web pages, contact lists, and chat rooms together with their unstable make-up was highly relevant for the analysis. However, as reported in Chapter 6, my participants rarely opened up other windows during the VC. Therefore, in this chapter I discuss these two types of space together.

I also consider relational space (7.3), which is only space in a metaphorical sense, but it is nonetheless a space that participants orient to during the interaction. In this section, I examine fundamental assumptions in VC research: what kind of relationships are conducive to the use of VC? What is it about this medium that makes it appropriate to

use in some relationships, but not others? Furthermore, I examine how my participants construct relational space in their VCs.

In this thesis, I do not discuss 'third spaces', because these fall outside the focus of the study. There are certainly examples where participants discuss third spaces on the video recordings (for example when they report the events of the day), but as visual communication did not play an important role in these sequences, they were not chosen for further analysis (the process of selecting video extracts for detailed analysis was described in 4.5).

 After the discussion of the spaces, I examine the practice of *virtual tours*, during which VC users show their physical space to their interlocutors (7.4). I analyse two video extracts containing virtual tours (7.4.1, 7.4.2), and finish by considering the functions of virtual tours within VC interactions (7.4.3), arguing that virtual tours are crucial resources for constructing intimacy over VC. I conclude the chapter by reflecting on my participants' use of the mediational means (7.5), and I explore the (lack of) alignment between the uses and affordances of VC.

7.1   Physical spaces

In this section, I reflect on the locations occupied by VC users, and the way these locations shape the interactions. I start with the position of the locations in relation to each other, as this is the main reason for using VC. I then discuss the immediate environment and the degree to which my participants exploited the mobile affordances of the devices they used. I also consider what privacy means in the context of VC, and how the desire for privacy can restrict movement during a VC.

7.1.1   Distance

For my participants, the main purpose of using VC was to maintain a relationship with someone in a distant location. In line with previous studies (Brubaker et al., 2012; Licoppe, 2004), the relocation of the participant or a loved one of the participant was often the reason to start using or increase the use of VC. The crossing of national borders appears particularly relevant to my participants, as seven of them stated that they only use VC if they want to talk to someone in a different country. By creating a link between distant locations, VC can create a sense space (and time) compression (Arminen & Weilenmann, 2009; Lo Iacono, Symonds, & Brown, 2016; McCarthy, 2001). The

compression of space and time is vividly illustrated by Extract 25 below. When I asked Burt if he could remember his first video chat, he described how the great distance between the USA and Scotland was reduced to 'a half second time delay' by the VC software.

<div align="center">**Extract 25**</div>

*Burt: I was living in **Scotland**, it was my first time living **away from home**, and I set up times each week where I was gonna call my family and talk to them. First week I called mom and dad. We kinda kept to our weekly Sunday chats that we set up. We were very intrigued the first time. We kept exclaiming about how this was free, how it was amazing. How **forty five hundred miles is only a half second time delay now**. So it was very very interesting and good for us because it's like **there wasn't that much distance**.*

Despite the link between the locations, distance manifests itself in VCs as difference. The participants may be experiencing different weather conditions, which is often topicalized in conversation (for example during the opening in Paul and Ray's VC, analysed in Chapter 5). More importantly, living in different time zones makes it more complicated to arrange VCs, as indicated by six of my interviewees and previous research (D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012). Therefore, although VC can create a sense of closeness, differences in place and time remind VC users of the distance separating them.

7.1.2   Mobility and privacy

One of the biggest changes for domestic VC is the increased mobility of the devices used. In the early days, desktop computers were the cheapest available VC device (Rintel, 2007). These machines were heavy, clunky, and connected to power outlets, the internet, and other devices (such as printers) with various cables, which meant that they were rarely moved. Over time, laptops became the more popular choice for VC (Brubaker et al., 2012; Neustaedter & Greenberg, 2012). This has made it possible for VC users to move the camera during the interaction, which they exploit by participating in virtual tours (discussed in section 7.4 below). It is also possible to take a laptop to a public place such as a café, and conduct a VC there. However, as reported in chapter 5, participants noted that laptops are too large and heavy to comfortably carry around, some need to be plugged in quasi permanently due to a weak battery charge, and they rely on Wi-Fi for internet connection. Therefore, the spread of smartphones and cheap mobile internet has opened up new possibilities for VC users: in addition to moving within the home and

using VC from a variety of locations with greater ease, smartphones also allow users to make VC calls while on the move outside of the home (O'Hara et al., 2006).

However, it appears that despite this potential for mobility, the ideal location for VC is still the home. This is supported by previous studies (Ames et al., 2010; Buhler et al., 2013; Kirk et al., 2010; Neustaedter & Greenberg, 2012; Neustaedter et al., 2015) as well as my participants. My interviews and surveys indicate that the most common location for VC is the bedroom or living room (for a summary of the survey answers see the appendix p. 258). 14 interviewees referred to privacy and control over distractions as a reason for choosing these locations. Using VC in a public space was mentioned by 17 participants, but only two of them said that they were comfortable with such practices.

Previous research has highlighted that problems arise when there is a mismatch between the locations of the VC. In Longhurst's (2017, p. 124) words, VC can 'destabilize the distinction between private and public spaces' by connecting different types of locations. This has been discussed mainly in the context of working from home, or conducting work-related VCs from the home (Brubaker et al., 2012; Harper, Watson, & Licoppe, 2017). In such situations, casual colleagues who would not be invited into the home may make a virtual appearance (Kirk et al., 2010) and may catch a glimpse of our 'backstage areas' (Goffman, 1971, p. 97). This experience has been described as a 'transgression of the boundary of the home' (Kirk et al., 2010, p. 143) and an 'intrusion into the territory of the self' (de Fornel & Libbrecht, 1996, p. 66). These intrusions encourage VC users to not only work on presenting themselves in a particular way, but also their surroundings (de Fornel & Libbrecht, 1996; D. Miller & Sinanan, 2014, pp. 36–37). These findings suggest that the main problem with using VC in public is that strangers can look into private areas.

The analysis of the interviews indicates that my participants also have other concerns related to using VC in public places. Privacy was discussed in 23 interviews, 17 of which also discussed public spaces. All discussions of public spaces were coded in NVivo for 'privacy', but 'privacy' was used without 'public' in cases where the participants were referring to using VC within the home. In these cases 'privacy' referred to the desire not to be overheard or interrupted by other people living in the same accommodation. As highlighted by Extract 26, for those living in student accommodation, the only such area is the bedroom.

Extract 26

Dorottya: You say that you mostly talk from your bedroom, what would be the reason for that?

Kayleigh: Just privacy, really. Obviously living in a student house, lots of people always walking around, and…so yeah, the privacy of my bedroom usually.

In terms of using VC in public places, the main concern was being overheard. This concern also applies to phone conversations, and many participants referred to phone practices when discussing these issues. However, the difference is that on VC, both ends of the conversation are hearable to bystanders by default (O'Hara et al., 2006). As indicated by Extract 27, this can encourage users to avoid using video in public places:

Extract 27

Dorottya: All right, so would you consider using a different devic- oh you said you have used your phone right?

Ben: Yeah, the phone is quite convenient, because if you're abroad and you've got Wi-Fi, cause all these hostels have Wi-Fi, then you can Skype call someone, that's free obviously. Cause they have front facing cameras and stuff, it's really quite convenient (…) but then I would probably just use Skype without the video. Because then you can use it like a normal phone, so it's just your ear, so only you can hear them.

April and Burt stated that they avoid having private conversations in public spaces, both on VC and on the phone. For five other participants, making phone calls was more acceptable than using VC in public, even though they could not always justify why this should be the case (for example see Extract 28).

Extract 28

Johan: I don't feel very comfortobale doing it at university because it's public space and it feels strange sitting somewehre with your laptop in front of you and just talking there. I don't know why, it's a different thing when I use my mobile phone.

Holly, Lucy, and Rachel expressed concerns about looking 'silly' or 'a bit of an idiot' to the surrounding strangers when using VC in public. While previous studies have focused on what bystanders might see on the screen, it appears that my participants were more worried about their public image. The only participant who displayed uneasiness in

relation people looking at the screen was Saara, a young mother from Finland. During our discussion of her regular VC locations, I asked her about using VC in public. In response, she recounted an incident where she saw someone else using VC at an airport, and how that made her reflect on whether she would use VC in public.

<div align="center">**Extract 29**</div>

Dorottya: Actually one thing that stands out for me is that all of these places are pretty private? So they're not really public. So would you be concerned about doing it somewhere where other people would overhear you?

*Saara: Um, do you mean in **public places, where people would hear** what...?*

Dorottya: Yeah like a cafe or a park or something.

*Saara: Interesting actually because...I took the children to Finland over the half term, and it was- we were at the airport and there was um a mother there. The children were playing at the play area, and there was a mother there who had the laptop on the table at the coffee shop at the airport. And she was skyping who I assumed was the uh- her husband or partner. And the children sort of came to her. I think they were speaking in Swedish but- and I thought **"I'm not sure if I would do that".** So yes, that is actually an interesting question because, it almost feels like, **it is your private**- then you would bring that- **people would overlook, they would look at the video you've got on your screen** and...so um I probably would if I needed to, or if I wanted to speak to- but- I- especially speaking in Finnish in public, that would draw the attention, so whether I would actually be happy to speak to mum and dad...yeah, that, that is a very good question. **Probably not as happy as doing it any place otherwise in the house where it's private**.*

In her story, Saara uses an expression that is not standard English, but sums up her concern very well: in public places, people can 'overlook', that is, they can look at your screen and catch a glimpse of your private interaction. This expression seems to be related to 'overhearing', which as mentioned above appeared to be a central concern for my participants. This is understandable, as the limited field of view and microphone range means that it is easy for someone to be in the vicinity of a participant without appearing on camera or being heard by participants in other locations. April and Matt mentioned that they avoid personal or 'serious' topics if they detect other people moving about at the other location. For Piotr, being overheard by his parents is an ongoing concern when

he talks to his sister on VC (as shown in Extract 30). Sometimes, he can see that there are people in the background, but other times his sister warns him that they cannot speak freely.

<div style="text-align:center">

Extract 30

</div>

*Piotr: With my sister, because **I know that the laptop is always in the living room**. So you could s- **you can definitely see someone in the background** and that's always a bit mmm. "Who is it there? What can I say?" Yeah, and then I think sometimes **"Oh. I don't want other people to overhear what I'm saying."***

Dorottya: Okay. So would she then tell you who is there?

*Piotr: Oh yeah, yeah she will she will, yeah she definitely will**. If I can see them normally I think she wouldn't even mention it, you could probably hear or see people you know, if my parents were chatting in the background you could hear it.** But sometimes uh she's like **"oh I can't really uh I can't say everything, you know, people are listening, walls have ears"** and things like that. And I'm like "okay".*

The problem of being overheard is of course not unique to VC, but the affordances of VC compound the issues in ways that do not apply to face to face or phone interactions. The case of face to face encounters was described in Goffman's participation framework (1981a), which is still used to understand participant roles in a variety of interactions, including CMC (Gerhardt et al., 2014). In this framework, participants are categorised as ratified participant, bystander, overhearer, or eavesdropper (Goffman, 1981a, pp. 131–133). These roles are defined primarily by their relationship to the current speaker. *Ratified participants* have a social role in the encounter, and are expected to listen to the speaker. *Bystanders* are people in the vicinity who are perceivable by ratified participants (and the speaker), but not considered part of the encounter. A *bystander* may become an *overhearer* if she unintentionally follows a part of the conversation. Alternatively, she may become an *eavesdropper* if she exploits the situation in order to listen to the conversation. This framework is built on the assumption that the speaker and the ratified participants share an understanding of who has a social role in the encounter and are equally capable of perceiving people in the vicinity. However, this is a problematic assumption to make, especially in the case of VC where participants only see a part of their interlocutor's environment (Rosenbaun et al., 2016a). In VC interactions,

participants have unequal access to information about who occupies the physical space surrounding them.

The extract from Piotr's interview highlights that during VC, he orients to the potential of being overheard by his parents. He knows that they could easily be in the vicinity, and pays attention to signals of their presence. In such cases the concern is not being overheard by strangers, but by other known people who have every right to be in the room. In the case of VC, the participation framework is dynamic and can quickly change as people move in and out of the room and become perceivable to participants in distant locations. In the semi-private areas of the home (the living room and the kitchen) the participation framework is constantly negotiated during a VC.

Overall, it is clear that the physical spaces VC users occupy during the interaction have an impact on the conversation. VC users are aware of this, and they make efforts to choose suitable locations wherever possible. There is a sense that this is more important for VC than on the phone: as Dina explains, VC needs the right place and time, while the phone is more flexible.

<center>**Extract 31**</center>

Dina: The phone is different I think because you can be more mobile with it. You can phone someone on the way back from lectures and walking down the street it's very flexible. Whereas with like video conferencing you have to be in the right setting in the right time and place.

The right place and time may look different depending on personal preferences and the available options, but for most users it is in the home, during free time. Using VC in public is seen as unusual, and more problematic than using the phone. In contrast to previous findings, this is not primarily because users are worried about strangers glimpsing the screen, but rather for fear of being overheard and concerns about public self-image. Nevertheless, participants do report engaging in VC in less than ideal circumstances due to factors outside of their control (for example restricted access to private locations or choices made by the VC partner). In the next section, I consider the way participants utilise the spaces they do have complete control over: the mediating screens and the virtual spaces accessed through it.

7.2   Screen space and virtual space

The screen displays different kinds of virtual spaces which can be manipulated by the participants: under the current Skype configuration there is a window with the distant video feed (always visible, although the size can be changed) overlaid with the local video feed, which can be hidden. The default view is shown in Figure 13 below.

Figure 13 - default Skype view

In addition users can also open a range of software such as internet browsers, video games, word editors, or movie players. During a Skype session opening another program (for example a web browser, as in Figure 14) will make the local video feed disappear and the distant video feed be reduced in size.
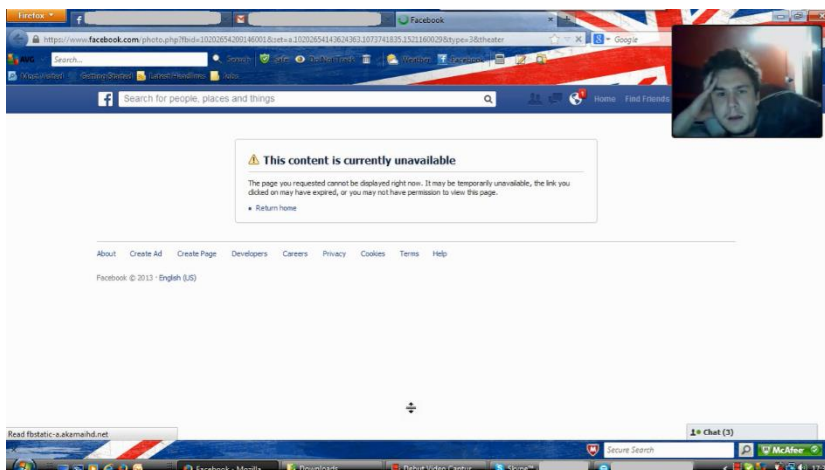
Figure 14 – browsing Facebook during a Skype session

It is also possible to arrange the windows so that both video feeds remain on display together with other software. Such an example is shown in Figure 15, which combines a

tracing from Sian and Tracy's VC with a screenshot of the other half of the screen. This arrangement facilitates the completion of the interview task, as the interview schedule and the VC window both remain on the screen for the remainder of the interview.
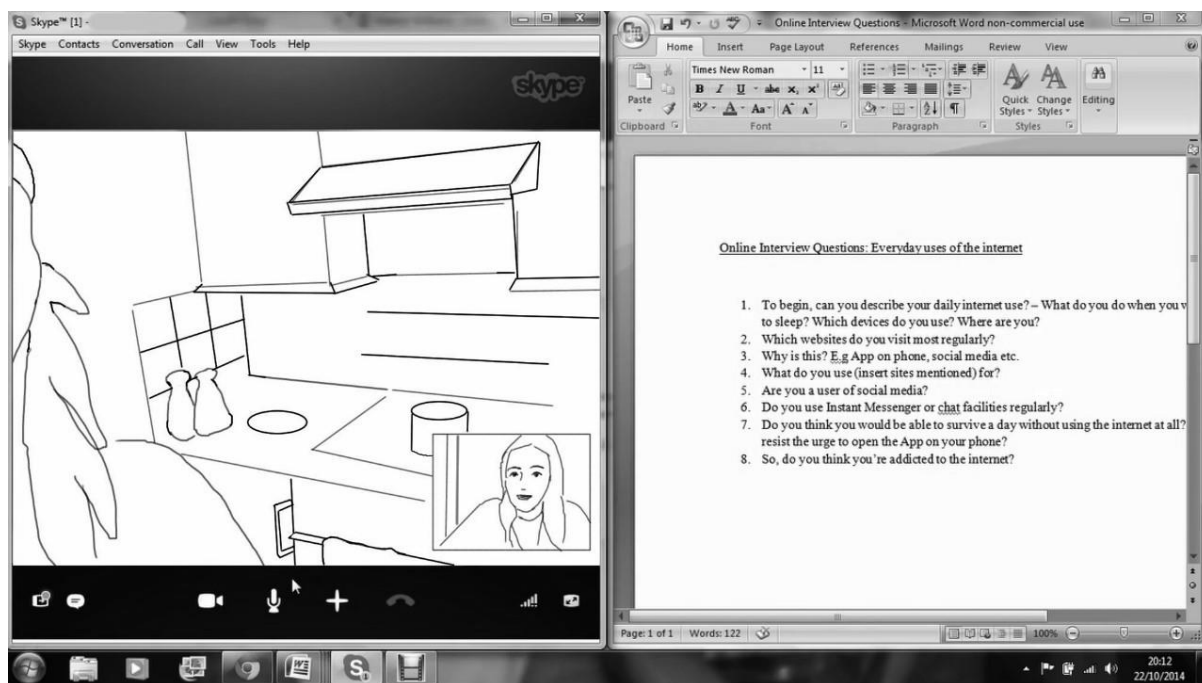
Figure 15 – Screen space arranged to show distant video, local video, and word editor

The screen space is the only space that participants can fully control. In contrast with the physical space, the screen space is not part of the users' conscious self-representation, that is, the layout of the screen space is not meant to give cues. However, VC users still give off cues (Goffman, 1971) about what they are looking at on the screen, and some users have little tolerance if they feel the other person is looking at themselves or is surfing the internet during their VC. As discussed in section 6.2, the gaze of the participants can give away a shift in the focus of attention. I have also noted that in my data there were few instances where participants opened up other software to carry out activities unrelated to the VC interaction.

The analysis of the videos confirms that what I have called the 'default view' above is rarely altered, and not without purpose. In three of the domestic videos, the default view is not changed at all during the VC. The other three videos contain interactional sequences which centre around digital objects displayed on the screen, as well as

examples where the screen is used to carry out a side activity (see section 6.2). One of these central digital objects is the photo that Charlie sent to Kate at the end of the interaction analysed in 6.6. The other is the word document containing the paper that Paul and Ray are working on – the recording shows Paul's version of the document and the discussion indicates that Ray is looking at his own copy of the same document at the same time. Finally, in one of their VCs Bryn opens a browser to write a review for a restaurant they recently visited with Dan, at Dan's request. Outside of these instances, my participants leave the default layout undisturbed.

7.3   Relational space

The mere act of starting or accepting a VC session makes a statement about the relationship between the participants, because not everyone is contacted via VC. As reported in section 5.3, participants make efforts to control their contact lists for VC. This is in line with previous research, which has found that VC is a 'niche' communication tool in the sense that it is reserved for special occasions, and/or close relationships (O'Hara et al., 2006). The association of VC with intimate relationships is also implicit in other studies, which focus on the use of VC in long distance relationships (e.g.: Longhurst, 2017; Neustaedter & Greenberg, 2012; Rintel, 2013b) or parents, children, and grandparents (e.g.: Follmer et al., 2010; Judge et al., 2011; Kirk et al., 2010; Longhurst, 2016).

The analysis of the interviews indicates that VC is still very much a 'niche' communication tool. My fourth survey question (Who do you talk to via video chat?) presupposes that there is a finite list of people who are contacted via VC, and this assumption was not problematized in the survey answers (see appendix p. 258) or the interviews. Participants described regular VC sessions with specific people and exceptional VC sessions which were memorable because of the people or circumstances involved. The overall impression is that there are relationships where VC is unremarkable and maybe even expected, and others where a VC is an extra-ordinary interaction. Although smartphones make it possible to easily initiate a VC with anyone linked to our many social media and communication apps, in practice the number of people who are contacted via VC does not seem to have changed much since the days of desktop PCs.

In relationships where VC is expected, it can be said that the participants have the right to see each other and the surroundings even at a distance. This has been referred to as the

'right to see' or 'right to look', and has only been discussed in the context of a parent's rights to see their child via VC (Harper, Rintel, et al., 2017; Kirk et al., 2010; Longhurst, 2013). However, I suggest that accepting a VC request is always an act that recognises the other's right to look in that particular moment, and the fact that not everyone has that right is exactly what gives meaning to this act.

The right to look encompasses the right to look at the physical space, which is often a 'backstage area' (Goffman, 1971, p. 97), and the most expressive part of our selves: the face. VC is the most revealing form of distance communication, as it provides the least opportunity for users to control their given off cues during an interaction (R. H. Jones, 2008, p. 464). In comparison, texting or IMing allows the user to 'restrict information only to that which is voluntarily given' (ibid.). Phone calls allow less control than written communication, because interlocutors can make inferences based on the tone of voice and paralinguistic cues (Rettie, 2007, 2009). However, as illustrated in the extract below, cues given off in a phone conversation can seem insignificant compared to those that can be observed via VC.

<div align="center">**Extract 32**</div>

Shanice: When you're talking to someone [on VC] **it changes the conversation when you can see how people react to what you are saying**. *What their facial expressions are. It's closer to talking to someone in person and that can change a conversation. If you're on the phone with someone and you tell them something and they say 'oh okay' that's all you really get, you have to base it off of what they say but* **if their face is all scrunched up or they have a big smile on their face it changes the connotation of what they're saying** *and how they're saying it.*

Visual affordances are also used for building relational space during the VC. In chapter 5, I argued that noticings play a crucial role in VC by showing the prevalence of noticings as an interactional sequence in my recordings. I have also suggested that they are a way of 'doing intimacy' by showing that mundane details are important in the relationship and that participants have sufficient knowledge about each other's lives to make correct inferences. However, the interviews indicate that sometimes there is little to notice, as the location is predictable and there is not much change to be noticed between two VC sessions. Change is always noticeable, but familiarity can provide comfort if the physical space feels like home – whether that is a childhood home (mentioned by six students) or

the shared home of two partners, as in the extract from Bryn (this supports the findings of Longhurst, 2016; D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012).

Extract 33

*Bryn: Where his camera is, was kind of **looking out onto our flat** and also then you could see patio doors and the balcony and stuff going on outside (…) so uh yeah **that always would catch my eye** because I'd sort of be speaking to him the window the curtain would be open and **you could see if there was something going on** outside or whatever so that was quite nice in a way because **it kind of anchored the conversation as being at home**.*

In this extract, Bryn highlights that the camera's field of view allowed him to see the patio doors. This made it possible to see if 'something was going on' outside, but it also gave a sense of familiarity, as he could see part of their shared home during the VC sessions. Thus, the video adds meaning to the interaction by transmitting images of objects and spaces that have emotional value within the relationship.

Relational space is not fixed, but fluid. My participants certainly had pre-existing relationships with each other, including rich relational histories. However, as noted above, relational space is also constructed during the VC. Firstly, regular VC sessions can keep a relationship going when physical meetings are not possible. A great deal of relational work is done in the openings, where participants can report noteworthy developments or confirm that nothing has changed through how-are-yous and noticings. Furthermore, showings and virtual tours are produced with the relationship in mind: what we show our mothers may be very different from what we show our partners or our friends. The virtual tours analysed in the section below will illustrate how different virtual tours can be, depending on the type of the relationship.

7.4   Virtual tours

With the spread of laptops, VC users found that they could give each other 'virtual tours' by moving the camera around to show their physical surroundings. Giving virtual tours quickly became common practice (Brubaker et al., 2012; Buhler et al., 2013; Kirk et al., 2010; Licoppe & Morel, 2012, 2014; Longhurst, 2017; Zouinar & Velkovska, 2017), despite the technical difficulties raised by equipment that was optimised for different purposes. In this section I build on emerging studies of showing practices in VC and draw on

discussions around other relevant practices such as pointing and tourist videos. I introduce the structural features of virtual tours, analyse two virtual tours which were captured in the videos, and discuss the functions of virtual tours in domestic VCs.

Although there were only two virtual tours in the recorded VC interactions, my research echoes the findings of previous studies in that virtual tours are common practice. Almost half of the interviewees (14) mentioned participating in a virtual tour, usually after moving somewhere new or while travelling. As most of the video participants were using VC from their usual location, there was little reason for them to engage in a virtual tour, which explains the relatively low number of virtual tours captured in the recordings. In one of the virtual tours, it is precisely the new accommodation that makes the virtual tour relevant (this will be discussed in more detail below).

Virtual tours are a 'negotiated use' (Shaw, 2017) of VC in that they are not explicitly encouraged by the software or the hardware, both of which were developed to focus on fairly static images of the head of the user. Therefore, the quality of the images shown is often very poor when the camera is in motion or when larger areas are shown. The practical difficulties involved in producing virtual tours were also mentioned in the interviews. For example, in Extract 34 Shanice recounted the difficulties she faced when giving virtual tours of her room after arriving to Cardiff in 2011.

Extract 34

Shanice: I remember trying to- like the first time I used Skype over here I tried showing people my room so I would rotate the screen and let people see, and the picture was so delayed or would be choppy that people wouldn't actually see parts of the room while I'm rotating the computer, or sometimes they wouldn't hear things that I said because the audio cut out.

In my analysis I will demonstrate that the poor image quality is addressed by a juxtaposition of recognisable shots and an accompanying narrative. The other issue that my participants face is that laptops with a single camera on the back are difficult to manoeuvre around – the participants in the two examples use different techniques to overcome this problem.

Any virtual tour requires at least two people, who occupy the roles of *show-er* and *viewer*. Similarly to *caller/called* or *guide/guided*, the roles of show-er and viewer are associated

with specific rights and obligations (De Stefani & Mondada, 2014; Licoppe & Morel, 2012, 2014). The show-er claims the right to take an extended multimodal turn in a similar manner to how story tellers claim the right to produce a narrative, and she is required to produce a video sequence that is intelligible, relevant, coherent, and interesting (Licoppe & Morel, 2012, 2014; Zouinar & Velkovska, 2017). The viewer is required to pay attention and produce appropriate reactions (primarily verbally as the show-er may not always be able to see non-verbal reactions during virtual tours). As the show-er adjusts the tour based on the responses of the viewer, the tour is jointly produced moment by moment (Licoppe & Morel, 2012, 2014). However, unlike the static roles of *caller/called* or *guide/guided*, *show-er* and *viewer* are transient roles which can change multiple times during a VC comparable to *speaker/listener* or *narrator/audience*.

Virtual tours are similar to narratives in that they both require the suspension of standard turn-taking rules to accommodate a relatively long sequence (Licoppe & Morel, 2014). Therefore, the relevance of a virtual tour must be established through an offer (from the show-er) or a request (from the viewer). This step signals to the viewer that unintelligible images may occur as the camera is moved into the starting position, and provides clues about when the tour will start and what kind of camera movement to expect (Licoppe & Morel, 2012, 2014). In addition, the preface of the tour also indicates to the viewer how the images should be evaluated (Licoppe, 2017a; Licoppe et al., 2017).

Studies on virtual tours and showing practices in VC (Licoppe et al., 2017; Licoppe & Morel, 2014; Zouinar & Velkovska, 2017) have identified some of the key structural features of virtual tours. I build on these studies by presenting a systematic account of camera motions used in the recorded virtual tours. In my analysis I show how these camera motions are intertwined with the show-er's verbal narration and the viewer's reaction. I also examine how the materiality of the device (using a laptop rather than a smartphone) impacts the virtual tour.

The two main resources at the disposal of the show-er for the production of the virtual tour are camera movement and oral narration. These two modes work together to create meaning, and so neither is *fully* intelligible without the other for participants and analysts alike (Jewitt, 2016; Norris, 2016). In the following analysis of the video extract, I will show how these modes work together. However, camera motions in VCs are also meaningful in their own rights (Licoppe, 2015, p. 118), because the movement of the camera reveals the

show-er's real time analysis of the ongoing interaction while at the same time shaping it (Broth, Laurier, & Mondada, 2014, p. 17). Thus, camera motions indicate the show-er's interpretation of the environment – what is showable, what is literally glided over, and what is a coherent sequence for presenting the showables.

The cameras used for domestic VCs are currently quite limited in what they can do compared to professional video cameras. As there is no zoom, show-ers must rely on moving the camera by physically moving themselves and the device around the room, pointing the camera in different directions, and juxtaposing movement and steady shots. In addition, the virtual tour is live and unedited, which means that it necessarily includes some video sequences that are the by-product of moving the camera into place rather than something the show-er intends to focus on. Such 'by-product' sequences are especially common at the beginning of a virtual tour if the show-er needs to turn the device (and thus the camera) around (Licoppe & Morel, 2012, 2014). Although the camera is moved strategically and purposefully by the show-er, the viewer may 'misinterpret' some motions, especially when there is ambiguity in whether a given shot is the end in itself or just the means to arrive at another shot. This is why the accompanying commentary is a crucial part of the tour, as stated above.

Pointing with the camera can be done by moving the camera, as in the videos analysed below, or by bringing small objects to the camera (Licoppe, 2017a). Whichever method is chosen, pointing with a camera is more powerful than a pointing gesture because short of looking away from the screen, the viewer cannot help but look at what the camera focuses on. In contrast, a successful pointing gesture requires active co-operation on the part of the viewer (Kendon, 1990; Luff et al., 2003; Mondada, 2014a).

7.4.1   Charlie's room

The following extract is a transcription of a virtual tour occurring 8 minutes into a VC between Kate (the caller) and her brother, Charlie. Kate is in her own home and Charlie is spending a year in Thailand at the time of the call. The conversation preceding the tour reveals that Charlie has only recently arrived in Thailand, and is currently in temporary accommodation, but he has found a place to stay for the rest of his trip and will be moving in one week. Just before the start of the transcript, Charlie tries and fails to share a website with Kate. As Kate is waiting for something to show up in the chat box below the video feed she seems to notice the colour of Charlie's room for the first time, which

prompts Charlie to launch a virtual tour. Thus, within the sequence of the entire VC, this tour is filling a silence when the turn taking and other planned activity is temporarily suspended: Kate's noticing about the colour of the room comes as she is waiting for Charlie to send something.

The transcript contains five images which are all screen shots from the video recordings. The positioning of the images in the transcript indicates where they are in relation to the surrounding utterances, so image 1 is taken just before Kate's first turn, image 2 is between turns 4 and 5, and so on. These images were chosen as they represent key points in the virtual tour: the starting point, and four steady shots produced by Charlie.

Image 1 shows that Charlie is lying on his bed, and it is clear from the video that he does not get up or leave his bed during the tour but shows his room by turning the laptop/camera and angling it in different directions. The shots featured in images 2-5 stand out as Charlie holds the laptop/camera steady to show them for an extended time, which delineates them from the blurred footage visible while he is rotating the camera into position between them. This type of shot allows the show-er to frame or focus on a showable, and is the equivalent of stopping during a guided visit (Mondada, 2014b). The importance of these shots is also underlined by the accompanying narrative, as he explains to Kate not only what she sees, but also the 'right way' to see it (Licoppe et al., 2017). Kate's video is shown in image 1 to provide more context, but it has been omitted from the later images as the analysis focuses on the virtual tour.

Virtual tour of the red room

image 1 – the starting point

1. Kate: is your room red?

2. Charlie: yeah it's horrible it's like a sex dungeon

3. Kate: ((laughs))

4. Charlie: honestly it's so gross I have two mirrors look at this ((starts turning laptop to show room)) it's so weird look (.) I have a mirror (.) at bed length

image 2 – the first mirror

5. Kate: ey

6. Charlie: and then there's another mirror (.) at bed length

image 3 – the second mirror

7. Kate: that is so weird

8. Charlie: there's my there's my telly

image 4 – the television

9.   Charlie: and there's my bathroom [(it's untidy   )] ((starts turning laptop back towards himself))

image 5 – the bathroom door

10. Kate: [that's real bizarre][why have you got two mirrors]

11. Charlie: [yeah it's ( )]ha? ((laptop is now back in the original position))

12. Kate: why have you got two mirrors that's so pervy

13. Charlie: I really don't know

14. Kate: oh [no]

15. Charlie: [right] how do I send um how do I send you a picture on Skype

The transcript shows that the virtual tour is motivated by a *noticing* from Kate, which turns the room into a *stance object* (Du Bois, 2007) to be jointly evaluated by the two of them throughout the tour. In chapter 5, I discussed noticings on the basis of Schegloff's (2014, p. 219) definition: an action that 'makes relevant some feature(s) of the setting, including prior talk, which may not have been previously taken as relevant'. Such actions have social significance because not every feature or prior turn is singled out for being noticed (Keisanen, 2012, p. 201); for example the colour of Kate's room is not discussed. In this case (and also the case of the second virtual tour discussed below) the virtual tour is motivated by a noticing, but Licoppe and Morel (2014) have found that noticings can also influence what is shown and how the camera moves during a virtual tour. Therefore, noticings are tools that viewers can use to compel the distant interlocutor to change what is shown.

The virtual tour is introduced gradually in the first four turns. It is made relevant by Kate's noticing in turn 1, but the immediate response is a verbal evaluation of the room (turn 2) which elicits laughter from Kate (turn 3) and is then expanded into a multimodal evaluation sequence beginning in turn 4. It is difficult to pinpoint the exact beginning of the virtual tour, as Charlie only starts moving the camera after saying 'look at this'. He then produces blurry images which are difficult to interpret, providing the first steady shot (as in image 2) after the second 'look' (still in turn 4). This shot is held steady while he provides a gloss ('I have a mirror at bed length') and until Kate produces a reaction (turn 5).

The showing of the next object of interest (the second mirror, featured in image 3) follows the same structure with a steady shot coinciding with the description of what is shown (in turn 6) and held until a response is produced (turn 7). At this point the virtual tour could finish as the two objects projected in turn 4 have been shown and acknowledged. However, Charlie continues the tour showing some features that are quite

mundane (an old-fashioned television shown in image 4 and a closed door shown in image 5) and at odds with the previous features and the evaluation. When he shows these features (turns 8 and 9) he still produces a steady shot of the objects he is naming, but he does not wait for a reaction from Kate between the two. After showing the bathroom door, he starts turning the laptop back towards himself, projecting the end of the virtual tour. At the same time, Kate produces another evaluation of the mirrors (turn 10), ignoring the ordinary features of the room shown in the last two steady shots. After a short repair sequence (turns 10-12), they finish discussing the room (turns 13-14) and Charlie introduces a new topic with a framing move (Sinclair & Coulthard, 1992) in turn 15 ('right').

Throughout the extract shown Kate and Charlie express alignment with each other by jointly evaluating the stance object (Du Bois, 2007): Charlie's room. The evaluation of the room starts in turn 1 with Kate's noticing ('is your room red?') with a prosody indicating surprise. In a literal sense, this is merely a question about the colour of Charlie's room. However, there is an undeniable implication that a red room is surprising, potentially even sinister or in poor taste. Charlie's immediate response ('yeah it's horrible, it's like a sex dungeon') indicates that he takes Kate's noticing as a criticism. It is possible that this interpretation draws on British stereotypes about Bangkok as a destination for sex-tourism in addition to Kate's tone of voice. Furthermore, Charlie's comment also reveals that he has no problem with evaluating his room in such a negative way.

There is a stark contrast between Kate's implied judgment in turn 1 and Charlie's explicit evaluation in turn 2. In the analysis below, I will demonstrate that this contrast is characteristic of the exchange as a whole in addition to the opening phase quoted here. Kate points out an unusual feature without overtly committing to an evaluation, exploiting the potential ambiguity of noticings and stance taking (M. H. Goodwin & Goodwin, 2012; Jaffe, 2009; Thurlow & Jaworski, 2011). Depending on Charlie's reaction, the colour of the room could be framed as amusing, puzzling, strange, or exotic. It transpires that her caution is unwarranted, as Charlie immediately launches into a series of harsh comments, evidenced by pointing the camera at the 'offending' objects in turn. It is also notable that although the virtual tour reveals that Kate's initial assessment is inaccurate (only the wall behind the bed is red, the other walls are white as seen in images 2-5), this is not discussed at any point. This (together with the lack of reaction to

the mundane features of the room) indicates that the focus of this interaction is relational rather than factual as features that do not support the joint stance are not elaborated.

The negative evaluation of the room serves a positive relational goal by allowing Kate and Charlie to bond over their shared stance. Even though some of the comments are quite harsh and would be viewed as insults in other contexts, here they contribute to signalling and creating intimacy and solidarity as they are accompanied with laughter and are exchanged in a relaxed conversation (Bernal, 2008; Culpeper, 2011). Furthermore, it appears that transgressive sexual topic (which is even more of a taboo between siblings) is used as a means to construct intimacy, similarly to the rude stories analysed by Coupland and Jaworski (2003). All of this is possible because the participants exploit the ambiguity of the situation: although Charlie is accountable to some degree for the design of the room as he is occupying it, the accountability is limited because he is staying in the room for only a brief period and may have had little choice or control over the room. Therefore, any criticism that is made can be interpreted as disapproval of the unknown designer of the room rather than Charlie. This is observable in the specific lexical choices as shown in the analysis below.

In the analysis of Table 1 I show how the language used by both Charlie and Kate contributes to a favourable interpretation of the impolite expressions. For the analysis, all the turns presented in the transcript are separated into clauses. Although three of Kate's contributions (4, 11, and 23) are not clauses, they are included in this table for the sake of completeness. Each clause was assigned a value (neutral, contextual, or negative) and an expression of ownership (unexpressed, possessive determiner, or possessive process) as appropriate. The two final clauses (22 and 23) did not relate directly to the room, and were thus excluded from this categorization along with clause 19 which is unfortunately unintelligible. The classification (first according to value then ownership) and interpretation is discussed below. The colour of the line indicates the speaker.

Table 1 – value and ownership analysis

	Speaker	clause	value	ownership
1	Kate	is your room red	neutral	possessive determiner
2	Charlie	it's horrible	negative	unexpressed
3	Charlie	it's like a sex dungeon	negative	unexpressed
4	Kate	((laugh))	contextual	
5	Charlie	honestly it's so gross	negative	unexpressed

6	Charlie	I have two mirrors	contextual	possessive process
7	Charlie	look at this	contextual	unexpressed
8	Charlie	it's so weird	negative	unexpressed
9	Charlie	look	contextual	
10	Charlie	I have a mirror at bed length	contextual	possessive process
11	Kate	ey	contextual	
12	Charlie	and then there's another mirror at bed length	contextual	unexpressed
13	Kate	that is so weird	negative	unexpressed
14	Charlie	there's my there's my telly	neutral	possessive determiner
15	Charlie	and there's my bathroom	neutral	possessive determiner
16	Charlie	(it's untidy)	negative	unexpressed
17	Kate	that's real bizarre	negative	unexpressed
18	Kate	why have you got two mirrors	contextual	possessive process
19	Charlie	yeah it's ( ) ha?		
20	Kate	why have you got two mirrors	contextual	possessive process
21	Kate	that's so pervy	negative	unexpressed
22	Charlie	I really don't know		
23	Kate	oh no		

The clauses are assigned one of three values: neutral, contextual, or negative. The clauses labelled 'neutral' express no negative (or indeed positive) judgement, whether implicit or explicit. Clause 1 is classed as 'neutral' rather than 'contextual' because as argued above, the ambiguity of this opening turn is an important feature in this interaction. Although in light of the later interaction this clause can be heard as an implicit judgement, more favourable interpretations are also possible at the time it is uttered. Furthermore, as this is the first turn relating to the room, the context is yet to be established. The other neutral clauses relate to the ordinary features of the room (the TV and the bathroom).

In contrast, the clauses grouped into the 'contextual' category are not inherently negative, but carry a negative evaluation within the context of the interaction. This is mostly achieved by referring to objects that have been explicitly linked to negative evaluations in the previous clauses (such as the mirrors). In addition, Kate's non-committal laughter and ejective (4 and 11) indicate alignment with Charlie without furthering the evaluation. This is the category with the most clauses, nine in total.

Finally, eight of the clauses were classed as 'negative' because they contain expressions that signal an explicitly negative evaluation. These clauses have a very similar grammatical structure ('[object] is [adjective]'), but they are not all equally harsh. The negative evaluations range from 'it's so weird' and 'it's untidy' to 'it's so gross' and 'that's so pervy'. In terms of the overall pattern, Kate does not commit to an explicitly negative evaluation until clause 13, and even then she chooses relatively mild words ('weird' in clause 13 and 'bizarre' in clause 17) until clause 21, where she finally evaluates the room as 'pervy'. Contrastingly, Charlie starts off by using harsh evaluative language, which is toned down over the course of the tour.

The distribution of evaluation and ownership expressions is systematic if not strategic, and it contributes to the positive interpretation of the impolite expressions. Firstly, most of the clauses are in the 'unexpressed' ownership category, which means that they refer to the room or a part of the room without expressing Charlie's ownership. Instead of using a possessive determiner (your/my room), they use deictic terms (it/this/that), which obscure the owner of the object. Similarly, in clause 12 Charlie uses the construction 'there's another mirror' instead of 'I have another mirror', which would mark him as the owner of the mirror explicitly. In fact, possessive determiners are only used in three clauses, all of which have been assigned the 'neutral' value category. The third ownership category contains four clauses (two of them identical) which are variations of 'Charlie has mirrors'. This category was labelled 'possessive process' following the classification of the systemic functional approach (Halliday & Matthiessen 2004). The clauses in the 'possessive process' and 'possessive determiner' all highlight Charlie's ownership of the room, although with different linguistic constructions. As with the value categorization, some clauses could not be placed in any of the categories.

Thus, a close analysis of the language used shows that the negative evaluation of the room is led by Charlie. Kate's opening noticing implies that there is something remarkable about the room, but she does not say anything explicitly negative until clause 13 ('that is so weird'), which is quite mild in comparison with the other evaluations. In contrast, Charlie starts with a negative evaluation ('it's horrible') and continues with negative or contextually negative evaluation until clause 14 ('there's my telly').

As noted above, the participants only use possessive determiners in neutral value statements. In addition, all the negative value statements leave the ownership

unexpressed. The contextual statements are spread across the 'unexpressed', 'possessive process', and unclassified categories. The overall effect is that Charlie can distance himself from his room by using impersonal constructions, especially when discussing negative aspects of the room. This allows him to align himself with Kate as a viewer of the room, rather than its owner. They can both express their negative judgement of the room, as this is never attributed to Charlie personally on the linguistic level. In fact, Kate is encouraged to make a negative evaluation of the room by Charlie's numerous negative comments. These evaluations are balanced out by the ordinary elements of the room (the TV and the bathroom), which Charlie does claim ownership for. Thus, the linguistics choices are the mediational means used to construct the relational space during this virtual tour.

In terms of camera use, this virtual tour is built from only two types of shots: quick blurry movements and steady shots. By alternating between the two, Charlie can show Kate which parts of the room are interesting and worthy of evaluation. The steady shots show objects of interest, and his commentary provides description and evaluation of what is shown. These shots together with the commentary function as the first part of an adjacency pair, the second part being the response from the viewer, Kate.

7.4.2 Tracy's place

The second virtual tour is part of the DLL videos, which means that the main reason-for-calling is to conduct an interview to fulfil the assessment requirements of a module. In this VC Sian is calling her friend Tracy to conduct the interview, but before Sian can begin asking her prepared questions, Tracy takes Sian on an unexpected tour of her kitchen and living room. In this case the tour serves as a preliminary to the main task (the interview), while in other instances it may be the reason-for-calling (Zouinar & Velkovska, 2017).

This virtual tour differs from the previous one in several ways. Firstly, the purpose of the call and the relationship between the participants is different, which means that the tour has a different function within the interaction (this will be addressed after the analysis). In addition, Tracy picks up her laptop and carries it around, showing two rooms and not just one. There are signs that this is not done without difficulty, as the shots she produces while holding the laptop are slightly crooked and partially obscured by her shoulder, which appears in the bottom left corner of the video feed. Similarly to Charlie, she uses

steady shots and quick movement resulting in blurry images, but she also uses a 'slow pan' which allows her to show a larger area.

The virtual tour is presented in four segments for ease of reading (preface, kitchen, living room, and end). The extracts follow each other without any omissions. The illustrations feature tracings rather than screenshots in order to protect the anonymity of the participants at their request. As for the previous tour, the illustrations represent key moments in the interaction: the starting point (Figure 16), steady shots (Figures 15-17), the end of the tour (Figure 18) and the new set-up (Figure 19).

Extract 35 – Preface to Tracy's tour

turn	participant		verbal	non-verbal
1.	Sian:			Sian initiates the call
2.	Tracy:	hi		Tracy picks up, looks at the screen while saying hi, then turns to her cooking
3.	Sian:	hello (.) ooh where are you		
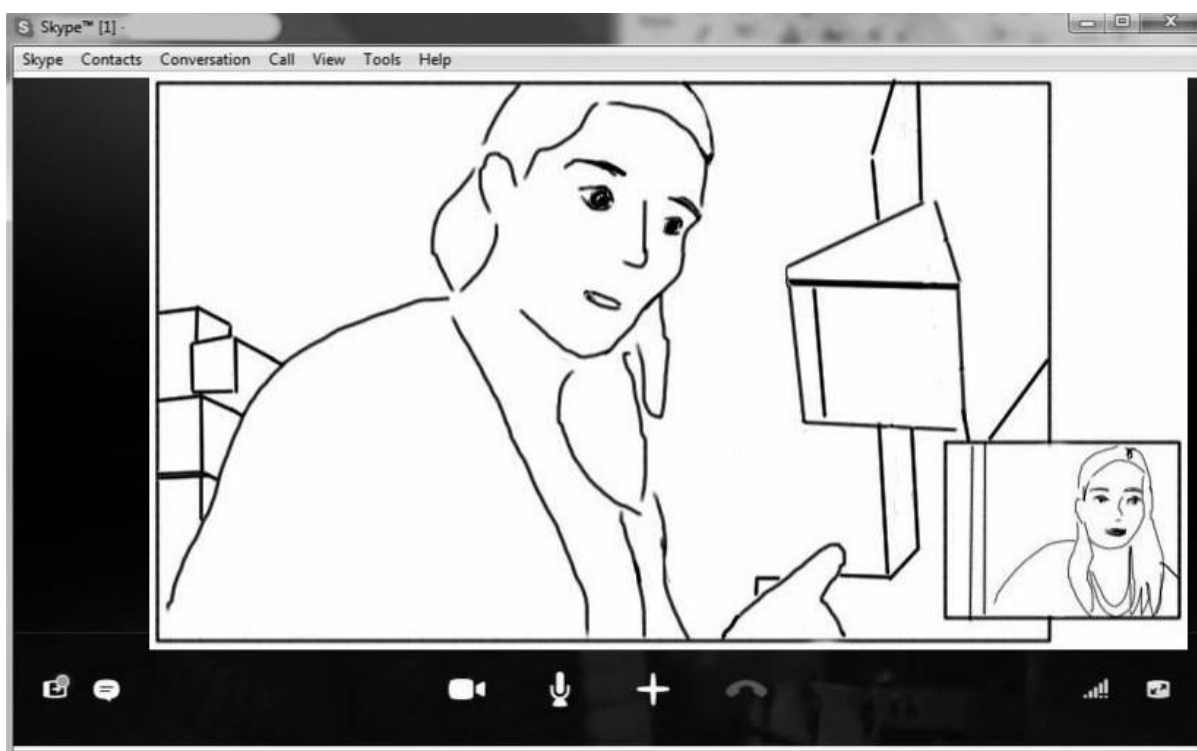
Figure 16

4.	Tracy:	(here)	still cooking

5.	Sian:	is that your kitchen	
6.	Tracy:	yeah	still cooking
7.	Sian:	ooh ni:ce (.) you look nice (.)	

Extract 35 starts at the beginning of the VC with conventional greetings (turns 2-3). However, turn 3 also contains a change-of-state token 'ooh' (Heritage, 1984) and a query about Tracy's location. The label 'change-of-state token' is justified because Sian is clearly surprised at Tracy's location. Out of the 22 DLL videos, this is the only one where a participant is not in her bedroom. In addition, the interviews also indicate that the bedroom is the default VC location for students. Therefore, we can safely assume that Sian expected Tracy to be in her bedroom and her 'ooh' indicates that she has noticed Tracy is somewhere else.

As turn 4 does not provide a satisfactory answer to Sian's query about Tracy's location, Sian volunteers a guess herself in turn 5, which is confirmed correct in turn 6. As there are no audible sounds apart from speech on the recording, the only information Sian has about Tracy's location is what is visible in her background – some cupboards and an extractor fan (on the right side of Figure 16). Although turn 5 could be a recognition of the place, the following tour indicates that Sian has not seen Tracy's kitchen or living room before. Extract 36 shows that Sian's comment of Tracy's location has made a virtual tour a relevant next action – at least from Tracy's perspective.

Extract 36 – Tracy's kitchen

8.	Tracy:		[picks up the laptop, showing more of the kitchen behind her]

Figure 17

9. Sian: [right let's kick off with some uh]

        ooh it's a nice kitchen

10. Tracy: yeah   only her shoulder is visible

11. Sian: lush oh my God it's huge (for   she wrinkles up her face

        two of you)

The first half of turn 9 indicates that for Sian the relevant next action would be to start the interview, which she attempts but abandons. Tracy starts moving the laptop just as Sian tries to start the interview, but initially she produces unintelligible images, so Sian continues talking. However, when Tracy stops moving the camera and produces a steady shot (shown in Figure 17) it becomes clear that the shot is intentional and not just the result of a repositioning. In addition, Tracy's face is no longer visible, which is in contrast with the maxim of VC (discussed in detail in Chapter 5). Thus, the steady shot provided in Figure 16 can be understood as a non-verbal answer to Sian's question in turn 3 (where are you) rephrased in turn 5 (is that your kitchen?), elaborating Tracy's verbal confirmation in turn 6. Unlike the steady shots in Charlie's virtual tour (and the later ones produced in this tour), this one is not accompanied by a description or evaluation from the show-er.

At this point, it is clear that Tracy has initiated a virtual tour, and Sian produces an appropriate response (*ooh it's a nice kitchen*). After Sian's response, Tracy continues to show the kitchen by slowly panning across the counter. Sian responds with another assessment (turn 11), which focuses on the feature that was highlighted by the slow

movement of the camera: the spaciousness of the kitchen. At this point in the interaction Tracy has completed the tour of the kitchen; however, the virtual tour continues as in the next turn she moves into the living room.

Extract 37 – Tracy's living room

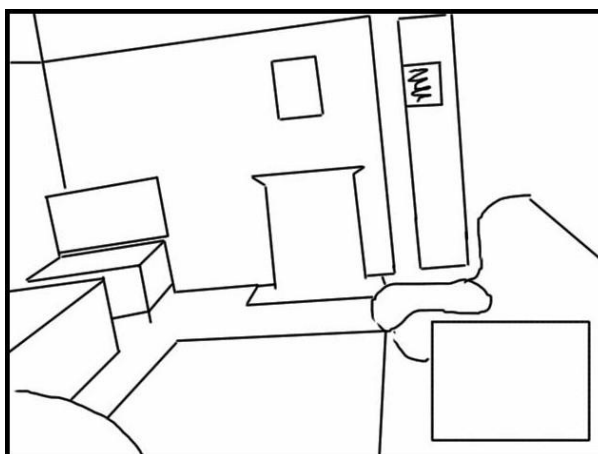| 12. | Tracy: | not really you know I guess (.) um (.) and this is the living room | her face appears partially as she moves from the kitchen to the living room |

Figure 18

| 13. | Sian: | ni:ce | Sian begins to adjust her hair, she continues this throughout the tour |

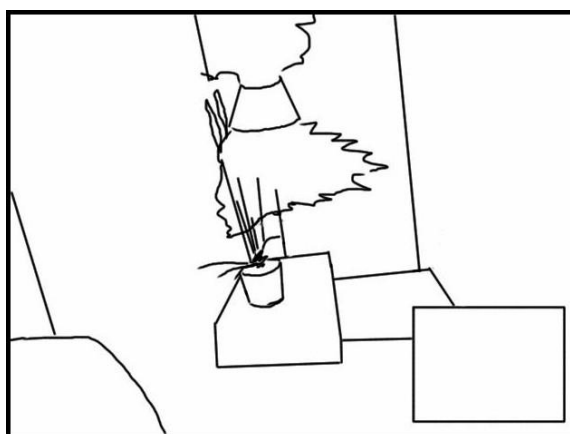| 14. | Tracy: | and got like a little table and stuff | she moves the camera around accompanying her commentary |

Figure 19

| 15. | Sian: | oh (.) cute | still adjusting hair |

As Tracy expands the tour to include the adjoining living room, Sian appears to become disengaged: she starts adjusting her hair (turn 13) and her assessments (turns 13 and 15) are minimal compared to her previous ones (turns 9 and 11). Sian's shoulder remains visible in the bottom left corner throughout this extract. She produces two steady shots in this extract, both of which coincide with a description of what is shown (turns 12 and 14). The first one (Figure 18) shows most of the living room as seen from the doorway into the kitchen, and the second one (Figure 19) shows the corner that is not visible in the first shot. It is difficult to see details in the second steady shot, because there is a bright lamp in the centre of the screen. These steady shots together with the accompanying commentary function as the first part of an adjacency pair, the second part being an appropriate assessment from Sian in turns 13 and 15.

Extract 38 – Ending Tracy's tour

16.	Tracy:	yeah	moves the camera back to the area shown in Figure 18
17.	Sian:	nice	finishes adjusting her hair and tosses it back
18.	Tracy:	mhm	her face appears again

Figure 20

19.	Sian:	right	
20.	Tracy:	I'm gonna make dinner while you're while you're talking to me	she moves back to the kitchen, placing the laptop so that she is within view (see

figure below), but she is attending to her cooking

Figure 21

In turn 16, Tracy starts to rotate the camera again. Rather than introducing new showables, she makes closing moves (Button, 1987; Schegloff & Sacks, 1973) in turns 16 and 18, signalling the end of the tour. This is also reinforced by the production of a standard talking heads shot (Figure 20), even though it is temporary, as Tracy is still making her way back to the kitchen. Sian is quick to react to the end of the tour, and attempts to steer the interaction towards the interview in turn 19 with a *framing move* (Sinclair & Coulthard, 1992). As discussed in Chapter 6, the final set-up (shown in Figure 21) is not a standard talking heads shot, but one where Tracy can attend to the cooking and the VC interview simultaneously.

In this tour, Tracy's physical space is virtually recreated for Sian through a juxtaposition of steady shots focusing on privileged areas, quick movements jumping between these, and a slow pan giving an overview of the kitchen with commentary running throughout. During the tour Sian and Tracy jointly label some areas (especially the kitchen) as showable, that is interesting and relevant, while others (like the way from the kitchen to the living room or the unmentioned room in the background of Figure 18) are classed as unimportant. In contrast to Charlie, who produces the tour by rotating his laptop without getting up from his bed, Tracy picks up the laptop and carries it around. This allows her to show two rooms, although the images are crooked and partially obscured by her shoulder. The other major difference between the two tours is that while Charlie's virtual tour included mock insults and taboo topics, Sian's evaluation of Tracy's room is

conventionally polite. Thus, the 'rudeness' of Charlie's virtual tour appears to index the closeness of his relationship with his sister. In contrast, the superficial introduction to Tracy's backstage surroundings (Goffman, 1971) reflects and constructs a relationship of acquaintances.

7.4.3 The functions of virtual tours

I suggest that virtual tours can be viewed as the multimodal equivalent of small talk, both in terms of their content and sequential placement within the interaction. Firstly, content-wise location is a prime candidate for small talk (Drew & Chilton, 2000), which is what virtual tours focus on. It can also be said that Tracy's tour as well as the ones discussed by Licoppe & Morel (2012, 2014) show something that is intrinsically uninteresting (an unremarkable kitchen and living room), an evaluation which is also typical for small talk (Jaworski, 2000). The only reason these tours become relevant is that they focus on the proximate, which is one of Drew and Chilton's (2000) criteria for small talk. Although the same cannot be said of Charlie's red room, it still fulfils a common small talk function. Within the sequence of the entire VC this tour is filling a silence (N. Coupland & Ylänne-McEwen, 2000): Kate's noticing about the colour of the room comes as she is waiting for Charlie to send her an image. In Tracy's case the tour happens during the opening and provides a way to transition into the main task, which is also typical of small talk (J. Coupland, 2000a).

During a VC, virtual tours can become relevant at any time due to the unique spatial configuration. In face to face interaction the environment is shared and can always be relied on as a source of small talk (N. Coupland & Ylänne, 2006). In distance communication technologies there are two (or more) separate environments, and depending on the affordances of the technology they impact the interaction in different ways. In calls between landlines, the locations are given. Sometimes there can be noises heard from the surroundings which can occasion discussion about the environment (Drew & Chilton, 2000). In calls to mobile phones location is a central concern as it impacts on availability (Weilenmann, 2003). During a VC, the 'where' is revealed visually by default. Therefore, the question is not just 'where are you?' but 'how is it where you are?' and the novelty of VC compared to the phone is that the answer can be *shown* rather than *described*.

In section 7.3 above, I have argued that VC is seen as an intimate medium because it is typically used in close relationships. By analysing these virtual tours, we gain further insight into why VC can be so intimate: although participants use the camera in strategic ways, there is always a potential that the camera will also reveal something else in addition to what is intended. In close relationships, this is a welcome affordance because it creates an opportunity for discussing incidental details, topics that perhaps do not warrant telling but are nevertheless meaningful in the context of the particular relationship (Sacks, 1995; Tannen, 2006; Zouinar & Velkovska, 2017). By noticing such details, VC users can show each other that they care, maintaining intimacy at a distance.

Finally, virtual tours are also a good way of demonstrating joint attention, which is crucial during a VC. In the previous chapter, I argued that VC users need to make concerted efforts to show each other that they are paying attention during the interaction. This is necessary because due to the affordances of VC, monitoring and showing attention is more difficult than in face to face encounters, and the joint attentional frame is more fragile (de Fornel & Libbrecht, 1996; Licoppe, 2017b; Rosenbaun et al., 2016a). During virtual tours participants jointly evaluate a series of shots, maintaining a common focus of attention throughout. In this regard, they are similar to guided visits (Mondada, 2014b), which also involve discussions of series of stance objects (Du Bois, 2007, p. 159).

7.5   Conclusion

In this chapter I have explored the mediational means used by my participants during their VC sessions, with a particular focus on the use of different kinds of space and movement. I have considered how the movements of people and digital devices shape VC interactions and how participants use language to evaluate spaces and align with each other. I showed that although the mediational means available at the time of data generation made it possible to use VC in public spaces, my participants overwhelmingly preferred to conduct VC sessions in private or semi-private spaces. Previous research suggested that the reason for avoiding VC in public spaces is that users do not want strangers to catch a glimpse of intimate conversations or locations on their screen. However, I found that most of my participants were more concerned about being overheard or their public image. It appears that using VC in public was seen as more problematic than using the phone, although users could not always justify the difference.

In light of the concerns of being overheard, I suggest that Goffman's participation framework needs to be revised to account for the dynamically shifting nature of participant roles in VC and the asymmetrical information distribution about other people in the vicinity. On VC, we cannot take for granted that all participants share the same knowledge about potential overhearers, or that other people will not walk into hearing distance during the interaction. In contrast to phone calls, VC is usually conducted via speakers, which makes the problem of being overheard more acute.

In mapping out the relational space, I examined an implicit assumption that has been at the core of research on VC, that VC is reserved for special relationships. It is remarkable that this assumption still holds true even when the integration of various apps with our contact lists on our smartphones makes it possible to contact more people than ever before via VC. I suggest that this is not merely due to force of habit, but a consequence of the affordances of VC. The transmission of live unedited video makes VC the most revealing of all the distance communication tools. Therefore, it is not surprising that VC is most often used with those who already know us intimately: partners, immediate family members, and close friends. The analysis of the virtual tour of Charlie's room in particular demonstrates how the camera can be used to maintain intimacy between loved ones living at a distance. With careful coordination of camera movement and language, Charlie can position himself as the viewer of his room rather the owner. By aligning himself with Kate in this way, he makes it safe to discuss a transgressive topic, reaffirming his relationship with his sister.

In the final section, I expanded the study of virtual tours by carrying out a systematic analysis of camera movements in virtual tours shot with laptops. I identified three types of movement across the two tours: quick blurry movement (by-product shots), steady shots, and slow pan. Slow pan was only used in one of the two tours, and like the steady shot, it also provided relatively clear images that appeared to be deliberate. The steady shots represented key moments in these tours, and were accompanied with a description or evaluation in all but one instance. In the case where the shot was produced without an explanation (the first steady shot in Tracy's tour) the viewer was slower in providing an appropriate response. Thus, I have created a template for the analysis of virtual tours in general.

The virtual tours presented in this chapter and reported in other publications (Licoppe et al., 2017; Licoppe & Morel, 2014; Zouinar & Velkovska, 2017) fulfil a range of functions within the interaction. I observed that these functions are very similar to those fulfilled by what has been called 'small talk' in studies of face to face interactions. Furthermore, both small talk and virtual tours focus on what is proximate in space and time. Therefore, research into virtual tours would benefit from further integration of insights into small talk. Finally, I identified noticings as a fundamental device for managing virtual tours. By making the environment relevant, noticings enable a smooth transition into an extended multimodal turn. When produced during the tour, noticings make it possible for the viewer to change the course of the multimodal narrative.

8   Concluding discussion

In this thesis, I have provided a systematic account of the use of VC in the domestic sphere. Building on Hutchby's definition of affordances (2001b), I incorporated the role of affect and encouraged and negotiated uses (Shaw, 2017). I proposed a list of affordances for VC based on a critical review of the literature (section 2.5) and I compared how VC relates to other modes of communication, chiefly phone calls, instant messaging (IMing), and face to face interactions. I have explored these similarities and differences by reviewing the history and development of VC, analysing interviews, and carrying out a conversation analysis of recorded VC sessions. The research presented here is unique in the field of VC studies because it combines findings from micro analyses and interview data under the framework of nexus analysis (Norris & Jones, 2005b). The micro analysis of videos allowed me to observe how participants carry out common interactional tasks (such as openings, closings, suspensions, resumptions, and multitasking) in a VC. I also analysed examples of innovative VC use: virtual tours and digital showings. The interviews complemented the micro analyses of the videos by providing a longitudinal perspective and insight into conscious attitudes. The interview analysis suggested that attention is a central concern for VC communication; therefore, in the video analyses I reflected on the participants' orientation to attention. In this chapter I summarise my findings by answering the research questions, starting with the three sub-questions (in sections 8.1, 8.2, and 8.3). I then answer the main research question (8.4: How are the affordances of VC used in domestic video calls?) and reflect on the theoretical contributions of the thesis (8.5) in relation to the framework of nexus analysis (8.5.1) and Goffman's theories of social interaction (8.5.2). Finally, I discuss the limitations of my study and avenues for further research (8.6).

8.1   What chains of lower-level actions can be identified in VCs, and how do they structure VCs?

The chains of lower-level actions studied in this thesis can be grouped into two main categories. Firstly, I discussed chains of actions that were used in transitioning between the VC and other activities. This included a close examination of the openings, closings, suspensions, resumptions, and multitasking in domestic VCs. The second group of chained actions exploited the visual affordances of the medium to construct joint attentional

frames via noticings, virtual tours, and digital showings. In this section, I summarise the key features of these actions and their relevance for VC interactions in general.

8.1.1   Openings

Openings and closings are essential sequences in video calls. While openings and closing of face to face interactions are gradual (Broth & Mondada, 2013; LeBaron & Jones, 2002; Schegloff, 1986, 2004; Schegloff & Sacks, 1973), phone calls and video calls are clearly bounded. These sequences are present in every VC at the moment, but they are not inherent in the technology: always-on video systems have been implemented in the workplace (Harrison, 2013; Luff et al., 2016; Rosenbaun et al., 2016b), experimental domestic VC systems (Judge et al., 2011; Neustaedter, 2013; Neustaedter et al., 2015), CCTV surveillance, and reality TV.

The analysis of the openings revealed that VC is closely intertwined with text-based communication (section 5.3). This was supported in the interviews, where participants claimed it would be rude to start a VC without sending an IM first. This practice is not entirely new, as it appears that domestic VC users have been arranging their VC sessions through other media from the early days of VC (Ames et al., 2010; Kirk et al., 2010; Licoppe, 2017b; D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012). However, the integration of IMing and VC into the same platform has made switching between these modes increasingly seamless. I observed that together with the default 'always-on' policy of smartphone-based apps, these integrated platforms are making it increasingly difficult for smartphone owners to make themselves unavailable to each other. The instant messaging exchanges preceding the VC also mean that before the cameras are even switched on, both participants know who is on the other end and often also what the topic is going to be. Therefore, in section 5.4 I have argued that in contrast to phone calls (Hutchby, 2001a; Schegloff, 1968, 2004), in VC interactions the roles of *caller* and *called* have no implications for topic management in the openings.

8.1.2   Closings

The videos contained examples of closings initiated by the called party as well as callers. This may indicate that in contrast to phone calls (Volume II, Sacks, 1995, pp. 360–366), on VCs there is no link between these roles and the responsibility of closing the interaction. However, the number of closings that were recorded was too low to make such general claims with confidence, especially since closings are known to be more variable than

openings (Button, 1987; Schegloff, 2014). Nevertheless, it appears that the roles of caller and called have little significance in VC closings, especially since the interaction can begin before the start of the call (typically via instant messaging) and can also continue after the VC is terminated. In addition, I also noted that for my participants successful closing moves included explicit references to terminating the interaction, or in one case to arranging the next interaction. In comparison, face to face interactions can be bought to a close with more subtle moves (Button, 1987), including non-verbal actions (Broth & Mondada, 2013). Therefore, I suggested that the need to use explicit closing moves may be linked to the affordances of the technology, and that this could explain the 'awkwardness' of closings reported in previous studies of VC (Kirk et al., 2010) and phone calls (Rettie, 2007).

8.1.3   Suspensions, resumptions, and multitasking

During the VCs, participants were seen to engage in a range of other activities. In cases where these activities were incompatible with the VC (for example when Bryn takes a phone call in section 5.7) the VC was briefly suspended. When the two activities drew on different resources (for example when Tracy was cooking during her VC with Sian in section 6.5), participants engaged in what they called *multitasking*. In the videos there were relatively few examples of suspensions and multitasking. However, the analyses of these examples showed that the participants were able to shift their focus between the VC and other activities smoothly and without causing observable interactional trouble. This indicates that they are practised not only in VC, but also in incorporating other activities. Furthermore, I have shown in Chapter 6 that the incorporation or exclusion of other activities is a central concern for participants. Therefore, multitasking is discussed further in section 8.2 below.

8.1.4   Noticings

In conversation, participants made use of the visual affordances by topicalizing each other's appearance, environment, or physical and digital objects that they had access to. Such sequences were often introduced through *noticings*, actions that make relevant some feature of the environment that is visible (Schegloff, 2014, p. 219). In section 5.5 I argued that noticings are a key feature of domestic VCs, particularly in the openings, because they can be used to build intimacy and establish common footing. This is because they allow participants to display an interest in seemingly mundane details (for example

the colour of the walls, as in the tour of Charlie's room analysed in section 7.4.1) by drawing on intimate knowledge to understand the significance of those details. Thus, noticings play a vital role in relationship maintenance through VC.

8.1.5 Virtual tours

In two of the videos analysed in chapter 7, *noticings* led to *virtual tours*, video sequences where the *show-er* moves the camera around to give the *viewer* a tour of the physical environment (Brubaker et al., 2012; Buhler et al., 2013; Kirk et al., 2010; Licoppe & Morel, 2012, 2014; Longhurst, 2017; Zouinar & Velkovska, 2017). In my discussion of virtual tours (section 7.4) I have shown that the movements of the camera are carefully co-ordinated with narratives to create meaningful live footage for the viewer. Producing an intelligible and coherent virtual tour is a notable interactional accomplishment, since the cameras in use today are designed to transmit fairly static images of the head of the user (the 'talking heads arrangement'), rather than moving images of larger areas. During the tour, viewers indicate their understanding of what is being shown and take up evaluative stances in relation to the objects being shown (Licoppe & Morel, 2012, 2014). Thus, virtual tours, like noticings, are resources for expressing alignment and constructing a joint attentional frame.

8.1.6 Digital showings

Similarly, *digital showings* allow participants to jointly evaluate digital objects (Rosenbaun & Licoppe, 2017). However, sharing the stance object poses a unique challenge, as without access to each other's screens, it is much more difficult to establish what the other person sees. In my analysis of a digital showing (chapter 6, section 6.6), I demonstrate the efforts involved in sending and opening a photo through Skype.

8.2 What are the intersecting practices in VC, and how do they shape the interactions?

In our discussions of my participants' VC habits, we inevitably referred to other forms of mediated conversations, most importantly phone calls, text-based messages, and face to face interactions. Face to face interactions belong on this list because they have been argued to be mediated through for example language (Goffman, 1971, 1974a; Longhurst, 2016; D. Miller & Sinanan, 2014; Norris, 2004b; Thurlow & Mroczek, 2011), and because participants refer to them as one of the many modes of communication available to them. Face to face interaction is an important reference point for VC because it is the

only other form of synchronous communication in which people can see each other. Phone calls are historically linked to VC: the first VC device was a modified telephone plugged into a phone line (Harrison, 2013; Neustaedter et al., 2015), and the steps required to begin a VC still resemble those involved in making a phone call. As discussed above, text-based communication is intertwined with VC. Furthermore, the first VC devices (PCs) were used for text-based communication long before they could be used for VC. In this section, I summarise how practices developed through using other media have merged with new practices since the development of VC.

In chapter 6, I argued that the dominant way of using VC is currently to create focused encounters (Goffman, 1963). This means that VC users tend to stay close to their screens and work to maintain a joint focus of attention for the duration of the VC. This way of using VC aligns with the origins and intended purpose of the medium, which was to allow two people talking on the phone to see each other's face (Harrison, 2013; Neustaedter et al., 2015). The orientation towards keeping the faces visible during a VC was expressed in the form of a maxim based on Grice's (1989) maxims of communication: *put the face of the current speaker on the screen* (Licoppe & Morel, 2012).

In chapter 6, I suggested that this maxim is not sufficient to describe VC interactions by itself. In the analysis of a digital showing between Charlie and Kate (section 6.6), I showed that in addition to maintaining the face on screen, VC users also need to participate in the interaction or account for their silence. Attention is a central concern for participants because unlike the original Picturephone, the devices used for VC today are multi-functional and provide numerous opportunities for distraction (R. H. Jones et al., 2001). Therefore, I have formulated the second maxim of VC: *focus your attention on the VC interaction*. This maxim does not preclude interlocutors from engaging in other activities that are not deemed to require too much attention, such as eating or tidying. However, the interviews suggest that it is problematic to engage in extended communication with others (online or offline) or to conduct other activities that are incompatible with continuing a conversation, for example reading or watching a movie (as discussed in sections 6.1 and 6.3). This contrasts with text-based digital communication, where multitasking is the norm, and people rarely focus their attention on a single activity (Baron, 2008a, 2013; Buhler et al., 2013; R. H. Jones et al., 2001; R. Scollon et al., 1999). Phone calls are also seen as focused encounters, but since the participants cannot see

each other there is more scope for covert multitasking (Brubaker et al., 2012; Kirk et al., 2010; Rettie, 2009).

Thus, VC requires an investment of attention unlike any other form of communication (Ames et al., 2010; Brubaker et al., 2012; Buhler et al., 2013; Kirk et al., 2010; D. Miller & Sinanan, 2014, p. 154). However, I have found that some users mitigate the intensity of the VC by relaxing the requirement of keeping the face on the screen and engaging in other parallel activities, for example when Tracy is cooking a meal while talking to Sian on VC (discussed in chapter 6). In this case Tracy is still visible on camera, but she is further away and not always facing the screen. The analysis of the interviews (presented in section 6.1) suggests that some participants enjoy incorporating other activities into the VC because it contributes to creating an informal and relaxed atmosphere, while others find it rude and take it as a sign of inattention.

In the section 8.1.3, I noted that on occasion the VCs were suspended for short periods of time when participants left the room or engaged in conversation with other people. In these instances, participants oriented to the maxim of attention by giving an account of the reason for suspension and negotiating the projected resumption (explored in section 5.7). In the interviews, seven participants talked about using VC in a way that completely disregards both maxims of VC (section 6.2). These participants would start a VC, and then leave the VC window open and go about their day (for example to watch TV, do housework, or study). Although such behaviour did not occur in the videos, similar practices have been reported in previous studies of VC (Brubaker et al., 2012; Buhler et al., 2013; Kirk et al., 2010; Longhurst, 2017; D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012), which suggests that this is an uncommon but not entirely new way of using VC. Borrowing another of Goffman's terms (1963), I refer to these practices as *lapsed encounters*, highlighting the bounded nature of these interactions: the VCs which contain lapsed encounters always begin and end with focused interaction.

Miller and Sinanan (2014) predicted that lapsed encounters (in their terms 'always-on webcam') would eventually become the dominant way of using VC. This is not yet the case, and I suggest that there are both social and technical reasons for this. Socially, there are few relationships in which lapsed encounters are meaningful and desirable. In addition, experiments with always-on VC systems have highlighted that such usage requires a dedicated VC device, which is at odds with the multifunctional purpose of the

devices used for VC today (Judge et al., 2011; Neustaedter, 2013; Neustaedter et al., 2015). Cheaper purpose built VC only devices may bring about change in attitudes towards lapsed encounters, but at the moment this mode of VC use is still the exception and not the rule. It is also somewhat of a negotiated use (Shaw, 2017), as unlike the experimental designs, domestic lapsed encounters still require users to initiate a call. Thus, the VC is not truly 'always-on' but rather a long video call in which participants move from focused interaction to a lapsed encounter.

8.3   What mediational means are used in VC, and how are they used?

In nexus analysis, a mediational means is any cultural tool that can be used to create meaning. This broad definition includes everything from material objects to grammar (Norris & Jones, 2005e; R. Scollon, 2001a). The benefit of the broadness of this concept is that it encourages the investigation of different aspects, leading to a more nuanced understanding of interaction. However, the challenge of using such a broad concept is that the list of mediational means is potentially endless. In this section, I focus on VC devices, physical spaces, and internet access, all of which are directly involved in VC interaction. While sections 8.1 and 8.2 focused on what is visible to both participants on the screen, in this section I address aspects of the interaction that are less apparent to distant interlocutors.

The interviews revealed that most of my participants (23 out of 29) conducted VC sessions using more than one device (section 5.2). While all participants used laptops, most of them also used smartphones and/or tablets. Some preferred laptops for their bigger screens, which allow participants to see each other better. They also noted that holding a smartphone for the duration of a VC can be uncomfortable. However, it appears that laptops are only practical to use at home: despite being portable, participants noted that they are too heavy to comfortably carry around, and often they do not work unless they are plugged in to a power socket. Those who favoured smartphones highlighted that these devices were better suited to spontaneous interactions due to their wearable size. Tablets fell somewhere in between; they can be set down, similarly to laptops, and have bigger screens than phones, but it appears that participants did not carry them on their person as often as mobile phones. Devices also varied in the type of internet connection they could access (Wi-Fi, mobile data, or both), which is discussed in detail at the end of this section.

In terms of the physical spaces, one of the main reasons for initiating VCs was the distance between participants (section 7.1.1). Even though VC could be used instead of most phone calls, it appears that VC is overwhelmingly used to maintain relationships where participants are not able to meet in person as often as they would like. In our discussions of VC, my interview participants often referred to their loved ones living in different cities, countries, or continents, or to VC sessions conducted while travelling. This contrasts with the way teenagers use VC, as they tend to use VC to talk to their school friends who live close by (Buhler et al., 2013).

The discussion of the VC locations indicated that most VCs are conducted from home or from temporary accommodations, despite the potential mobility of the VC devices (section 7.1.2). When discussing the choice of location, participants highlighted their need for privacy and avoidance of interruptions and distractions. These concerns also suggest that VC is indeed conceptualised as a focused encounter. One participant expressed this concisely by saying that in contrast to the phone, for VC 'you have to be in the right time and place'. Therefore, although there is a *potential* for mobility during VCs, this was not fully exploited. Participants reported moving around within private spaces, but using VC in public spaces was seen as an exceptional practice which could draw unwanted attention.

My findings about attitudes towards using VC in public need to be interpreted in the social and technological landscape of Cardiff in late 2014 and early 2015. Smartphones with front facing cameras were widespread, certainly among the university students who make up the majority of my participants (Quito, 2017; Statista, 2018). Therefore, the devices owned by my participants were perfectly suited for conducting VCs on the go. Yet, as discussed above, such uses were framed as exceptional in the interviews. The interview analysis suggests that in addition to the previously outlined social restrictions, movement was also limited by the range of Wi-Fi networks to which my participants had access. For example, two participants said that they were able to show their gardens as part of the virtual tours because the Wi-Fi signal was strong enough, but two others complained that the Wi-Fi connection is lost as soon as they leave their bedrooms. Overall, Wi-Fi connections were mentioned in nine interviews, while mobile data was only mentioned twice. Therefore, it appears that my participants conducted VCs predominantly through Wi-Fi networks rather than using mobile data. This is also

supported by surveys on the use of media and communication services in the UK, which show a substantial decrease in the cost of mobile data packages and an increase in the use of mobile data since 2014 (Ofcom, 2015, 2017, 2018).

8.4   How are the affordances of VC used in domestic video calls?

The main research question explores the concept of *affordances*, which was my starting point for the exploration of domestic VC use in the literature review. In section 2.4, affordances were defined as 'functional and relational aspects which frame, while not determining, the possibilities for agentic action in relation to an object' (Hutchby, 2001b, p. 444). This concept has been influential in studies of digital communication (for example R. H. Jones, 2005b; Kelly, 2015; Meredith, 2017; Rettie, 2009; Rintel, 2013a, 2014, Sindoni, 2011a, 2011b) because it recognises that while technology shapes communication (and thus society), it is also created by society – not only in the physical sense but also through establishing norms of use that are attached to technologies. For instance, when we use VC, the technology makes it possible to see someone who is in a different country. However, it does not determine where we put the camera, where we are in relation to the camera, how we dress, how well-lit the room is, and so on. In this section, I summarise the affordances that my participants oriented to in the course of the interviews and in the recorded VC sessions. Furthermore, I consider the extent to which specific practices of use were encouraged or discouraged by the technology.

The main novelty of VC is clearly the addition of a camera to a set of familiar affordances. When Bell Labs developed the first 'Picturephone' in 1962, the camera was designed to show the face of each user to the other in what was essentially an enhanced phone call (Harrison, 2013; Neustaedter et al., 2015). The video analyses, in line with previous research (Licoppe & Morel, 2012, 2014), indicate that my participants orient to keeping their face visible during the VC, especially when co-presence needs to be established or re-established. In addition, some interview participants also highlighted the emotional value of seeing the face of a loved one (section 5.2). However, it appears that maintaining the face on screen for the entire duration of the VC feels uncomfortably restrictive for some participants (section 6.1). Instead of remaining seated in front of the VC device, these participants prefer to move about and intertwine other activities, such as tidying, painting nails, or cooking, with the VC. The analysis of a video where one participant was cooking during the VC showed that she oriented to keeping her body on the screen, while

her face was not always visible (section 6.5). Thus, although there remains a tendency to focus visually on faces in VC, it appears that this expectation is relaxed in some situations.

In addition to the faces of the users, cameras also display a portion of the environment. This affordance was of little significance in the early systems which ran through fixed cameras in purpose-built videoconference rooms. However, my participants use portable devices (laptops, tablets, and smart phones), which allows them to easily change what portion of the environment is visible. Furthermore, they are often surrounded by personal objects which are meaningful to the people they contact on VC. Therefore, participating in virtual tours was a common practice for my interviewees, despite the low quality of the transmitted images (section 7.4).

Echoing the findings of previous research (Licoppe, 2017b; Longhurst, 2017; D. Miller & Sinanan, 2014; Neustaedter & Greenberg, 2012), I found that for my participants VC was just one of the many communication media they used. I have argued that in VC research we take for granted the assumption that VC is used with a relatively low number of people in comparison with the number of people contacted through text messages, phone calls, emails, or instant messaging (5.3 and 7.3). This was certainly the case for my participants, who listed the few people they regularly use VC with on pre-interview questionnaires (see appendix p. 258). At first, the status of VC as a niche communication tool was supported by the affordances of the technology: on Skype for PCs, users need to create an account and add contacts manually. However, with the convergence of platforms it is now possible to initiate a VC with most people listed in our smartphones – whether we have their phone number, email address, or 'friend' status on social media. Therefore, reserving VC for a select group of people makes the act of participating in a VC meaningful in itself. By accepting a VC request, participants acknowledge each other's 'right to look' (Harper, Rintel, et al., 2017; Kirk et al., 2010; Longhurst, 2013).

In focused VC encounters, participants give each other their attention at the same time as acknowledging each other's right to look. In lapsed encounters participants withdraw from the joint attentional frame, but they continue to allow themselves and their environment to be observed and they can be summoned to shift their focus back to the VC partner (section 6.2). Only a small group of my participants (six out of 29) reported habitually using VC in this way, and their accounts indicate that lapsed encounters occur only with a few specific people (sisters, partners, or a group of friends). These lapsed

encounters are the clearest examples of VC as a self-contained meaningful act: in the absence of words, gestures, or images, all that is exchanged is the live video feed, without the pressure to communicate.

Participants do not experience VC as an abstract medium, but as a specific application running on their familiar digital devices. In this thesis, I have focused on the affordances that are shared among the different applications used by my participants (Skype, FaceTime, Google Hangouts, the Tinychat platform, Viber, Snapchat, WhatsApp, and Facebook Messenger): synchronous or quasi synchronous audio and video transmission, the 'digital mirror' effect of the local video feed, integrated text-based messaging, and contact lists. In addition, I have also analysed the process of sending a photo file through Skype during a VC interaction (section 6.6), which includes the analysis of the specific interface as it appeared to my primary participant at the time of the recording.

Throughout the thesis I have touched upon many of the possibilities and limitations of VC, and I have demonstrated that overwhelmingly affordances cannot simply be classed as one or the other but are context dependent. Therefore, a thorough analysis must take into account the mediational means (bodies, objects, and the environment), the mediated actions, and the relational histories of the participants. For example, the potential of VC to reveal the location is welcomed in some cases and a reason to avoid using the medium in others. Students may appreciate the opportunity to see their best friend's living space in a location they are unable to visit, but at the same time feel resentful about requests from parents to show their rooms. What is playful and enjoyable in one context can quickly turn into surveillance in a relationship with a different power dynamic. Therefore, assigning an affordance to the category of 'limitation' or 'possibility' can only be done in relation to specific contexts of use.

8.5   Theoretical contribution

In addition to the findings summarised in the previous sections, this thesis also makes a contribution to theories of mediated interaction. First, I discuss insights into the practical application of the framework of nexus analysis. Following that, I consider the relevance of Goffman's theories of social interaction in the context of digital communication.

8.5.1 Nexus analysis

I chose the framework of nexus analysis for this research project because it aligned with my interest in affordances, mediated communication, non-verbal communication, and the use of different types of data (video recordings, interviews, and questionnaires). Using nexus analysis has allowed me to carry out a nuanced analysis of VC within the context that it is commonly used for personal purposes. I considered what it means to initiate a VC when there are so many other options available for communication and I found that VCs often incorporate other activities.

However, the flexibility of the approach has also been a challenge in that it was difficult to find practical advice on conducting research using nexus analysis. Most texts on nexus analysis direct novice researchers to publications detailing the use of the specific methodological approaches (in my case conversation analysis and interview analysis) for practical guidance. Such guidance is appropriate for the early stages of data analysis, but it does not clarify how the findings of the various analyses can be brought together in a systematic way. An exception is a chapter written by Scollon (2001a) which provides a detailed list of questions to address and suggestions for types of data to collect.

Scollons' chapter (2001a) includes a total of 20 questions which are grouped around five key concepts of nexus analysis: actions, practices, mediational means, nexus of practice, and community of practice. In chapters 5-7, I have used the questions relating to actions, practices, and mediational means to guide my analysis. In this chapter, I have elaborated the connections between these concepts, thus examining the *nexus of practice*, which is defined as 'the intersection or linkage of multiple practices such that some group comes to recognize "the same" set of actions' (R. Scollon, 2001a, p. 150).

I have also examined VC on the level of *community of practice* in the sense that it is used in nexus analysis: we can talk about a community of practice if the membership is 'technologized' (R. Scollon, 2001a, p. 151) and we can examine the identities produced through the practices (R. Scollon, 2001a, p. 180). In VC, technologization is literal: my participants all had individual accounts with various VC providers which allowed them to use the software running on their laptops, tablets, and smartphones. In regards to the social identities, I have discussed the types of relationships between my participants, whether they are partners, friends, siblings, or child and parent. These identities are referred to throughout the thesis, and they are centralised in section 7.3, where I analyse

relational space in VC, and 7.4, where I show how the relationships between participants are expressed in virtual tours. The interview extracts and video transcripts provide a variety of examples of how VC can be used to enact certain identities (for example friend, partner, mother, or child).

This thesis demonstrates how nexus analysis can be operationalised to examine a new topic. The example used to illustrate the principles of nexus analysis in Scollon's chapter (2001a) is a research project on 'having a cup of coffee in a coffee shop'. Scollon's example revolves around interactions in public places involving multiple people with different social roles in the encounter (e.g.: customer, cashier, waiter). In contrast, this project focused on dyadic interactions unfolding in private and personal spaces between people who have pre-established relationships. Therefore, I have shown how nexus analysis can be adapted to study interaction in this context.

8.5.2   Goffman's theories: applying models of face to face interaction to VC

Each analytical chapter in this thesis builds on some of Goffman's theories to make sense of what happens during VC interactions. As highlighted in the literature review (section 2.3), this is in line with other studies in the field of CMC. Goffman is also a central figure in nexus analysis in particular, as he argued that all human interaction, including face to face interaction, is mediated in some form (Goffman, 1971, 1974a). This idea is fundamental for nexus analysis, which was first known as *mediated* discourse analysis (Norris & Jones, 2005e; R. Scollon, 2001a). In the context of VC, I have found that many of the issues highlighted in Goffman's work are relevant. However, Goffman's models need to be adapted in order to be applicable for VC interactions. In this section, I summarise the proposed changes to the models.

Firstly, I have reconsidered what 'co-presence' (Goffman, 1963) means in the context of VC (section 5.1). VC is not the first technology that makes it possible to have a conversation with someone who is in a physically distant location, but it is the first one that makes it possible to see the other person during the conversation. This means that unlike on the phone, VC users do not necessarily have to *talk* to indicate their involvement in the interaction. In some cases they need not even appear on the screen, as merely leaving the VC software running is a meaningful action, especially if the devices are located in private spaces. This minimal co-presence is exploited during lapsed encounters and suspensions to keep the interaction going in the absence of the

participants. However, in a focused encounter (Goffman, 1963) participants also need to display their attention to the interaction through embodied actions: talking to each other, remaining in the field of view of the camera, or manipulating the camera to focus on other showables (people, body parts, pets, objects of interest, and the environment).

In chapter 7 I examined the impact of non-ratified participants in VC. This discussion builds on Goffman's participation framework (1981b, pp. 131–133), and more recent work on participation frameworks in the context of new media (Gerhardt et al., 2014). Unlike face to face situations, VC interactions are built on asymmetrical access to each other's location. Therefore, it is easy for someone to be in the vicinity of the VC device (and so hear and see the interaction) without being perceivable on the other end. Thus Goffman's participation framework, which implies that ratified participants share an understanding of the roles of the surrounding people, needs to be refined to take into account the possibility of asymmetrical distribution of roles. When discussing participant roles, it is necessary to specify which participants' perspective is taken. Furthermore, a shared understanding of participant roles cannot be presumed, but must be evidenced based on the interaction.

The interviews indicate that the possibility of being overheard is an important issue for my participants (section 7.1.2). This is more of a concern than during phone conversations, because the default for VC interaction is to use the speakers of the VC device, which means that both ends of the conversation can be heard by bystanders. In the semi-private areas of the home (the living room and the kitchen) the participation framework is constantly negotiated during a VC as participants orient to the possibility of others entering the space. This is one of the reasons why my participants claimed that VC, unlike phone calls, needs the 'right time and place'.

8.6   Limitations and further questions

This research focuses on domestic use of VC in 2014 and 2015 in Cardiff. Most of the participants in the study were university students living in Cardiff. These participants were recruited because they have access to technology and are motivated to use distance communication, as most of them moved to Cardiff specifically for their course. Living in university accommodation or shared houses, the only private space available to these students is often their bedrooms. As shown in the previous chapters, this has an impact on their VC habits which are different to the parents with young children and

grandparents interviewed in this study and in previous studies (Longhurst, 2017; D. Miller & Sinanan, 2014). Therefore, this study is unique not only in the time and location of the data generation, but also its focus on young adults living independently without childcare responsibilities.

My findings have also highlighted issues that merit further examination. The most creative use of VC was the participation in lapsed encounters, which was greatly valued by the small group of participants who regularly conducted such VCs. Although lapsed encounters were discussed in the interviews and they also appear in the literature (Buhler et al., 2013; Kirk et al., 2010; D. Miller & Sinanan, 2014; Neustaedter, 2013; Neustaedter & Greenberg, 2012; Neustaedter et al., 2015; Rosenbaun et al., 2016a), the videos did not feature such interactions. Furthermore, lapsed VC encounters have not yet been studied outside of an experimental or work related context. Therefore, collecting and analysing videos of naturally occurring lapsed encounters in domestic settings would no doubt lead to fascinating insights into relationship maintenance, attention, and meaningful interaction.

The digital mediational means of 2014 and 2015 analysed in this thesis have already become out-dated. Smartphones are equipped with better cameras, and are more widely used (Quito, 2017; Statista, 2018). Furthermore, mobile data package prices have dropped low enough to allow most users to use VC on the go, outside of the range of Wi-Fi connections (Ofcom, 2018). This means that VC devices have become truly portable for the first time. The new affordances make it possible to use VC in public spaces, and the always-on apps installed on our smartphones make it increasingly difficult to make ourselves unavailable. To date, no research has been published on the use of VC in public spaces. Therefore, a timely exploration of public VC use would shed further light on changing communication practices and understandings of the public-private boundary.

8.7 Closing thoughts

In the first chapters of the thesis, I defined *video chat* as the use of specific software and hardware. This was possible because these apps and technological tools are so wide spread that it is safe to assume that any reader will have at least heard of them, even if they have not used them personally. Thus, it was relatively straight forward to make a distinction between interactions that can be labelled as VC and others that cannot. However, this thesis has illustrated that 'doing VC' can refer to range of different kinds of

interactions, from something resembling an augmented phone call to a live video stream that has more in common with CCTV than anything else. These findings support the idea that the affordances of a technology shape, but do not determine its use.

I demonstrated that VC is indeed used as part of a constellation of media, and that the most unique affordance is the live video feed. Therefore, the affordance of visibility is either the most valued aspect or a reason to avoid using VC, depending on the context of the interaction. In terms of limits and possibilities, I focused on the role of the environment in the interaction and the intertwining of other activities with VC. In relation to the habitual ways of using VC, I distinguished focused encounters and lapsed encounters, which approach the issue of creating co-presence at a distance in different ways. Within focused encounters, I found two further models of use: in one model there is a preference for focusing on the VC to the exclusion of other activities, while in the other there is an orientation to integrating additional activities.

In terms of the domestication process, it appears that for my participants using VC feels 'normal'. This is not surprising, since they have all been using VC for at least two years at the time of the interviews. Some could still recall the initial excitement they felt when they first used VC, but for others the memory has faded away. However, it appears that the practice of using VC has also been transformed since it first entered the domestic sphere a decade ago. At first, VC devices resided at a dedicated station. With the spread of laptops, it became possible to move the VC device, but only as far as the Wi-Fi would reach. Now, using VC in the home is unremarkable, and the combination of smartphones and cheap mobile data packages are making it possible for VC to leave the domestic sphere and enter the public sphere. This project was carried out just at the cusp of this transition, representing a milestone in the development of VC.

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Appendices

Transcription conventions for video recordings

[simultaneous or overlapping utterances or actions

=   contiguous utterances

-                 halting or abrupt cut-offs

?   questioning intonation

!	excited intonation
(.)	untimed short pause
(2.0)	pause timed in seconds
((cough))	non-verbal or paralinguistic features
(data)	transcriber uncertainty
ni:ce	lengthening of syllables

Transcription conventions for interview extracts

The interview extracts use conventional orthographic representations of talk. For ease of reading, repetitions, hesitations, fillers and false starts were omitted from these extracts. Ellipses within the text indicate incomplete phrases and trailing off intonation. For example: *"Obviously living in a student house, lots of people always walking around, and…so yeah, the privacy of my bedroom usually".* Ellipses enclosed in parentheses indicate omitted phrases. For example: *"On text-based mediums you kind of expect people to be talking to other people at the same time but with phone or Skype (…) you should give the other person your full attention if possible."* **Bold text** is used to highlight phrases that are particularly illustrative of the phenomenon under discussion. For details of the interview transcription process see section 4.6.3.

Consent Form (primary participants)

PhD dissertation on videoconferencing

- I understand that my participation in this project will involve the digital audio and video recording of some of my videoconferencing sessions and the disclosure of some details relating to these sessions including but not limited to my relationship with my conversational partner and arrangements regarding the session.

- I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

- I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Dorottya C. Cserző.

- I understand that the information provided by me will be held confidentially and stored securely, such that only the researcher can trace this information back to me individually. I understand that I can ask for the information I provide to be deleted/destroyed at any time and, in accordance with the Data Protection Act, I can have access to the information at any time.

- I understand that information provided by me for this study, including my own words, may be used in the research report, publications, or presentations, but that all such information and/or quotes will be anonymised.

- I also understand that at the end of the study I will be provided with additional information and feedback.

It is common practice for researchers to show data extracts (in my case short sections of video) in academic contexts such as conference presentations. Please indicate which options you are comfortable with using the tickboxes below:

- ☐ I agree for short video extracts to be used for academic purposes in future presentations.
- ☐ I agree for short video extracts to be used for academic purposes in future publications.
- ☐ I agree for still pictures taken from the videos to be used for academic purposes in future publications.

I,＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿(PRINT NAME) consent to participate in the study conducted by Dorottya Csenge Cserző, School of English, Communication and Philosophy, Cardiff University under the supervision of Dr. Virpi Ylänne.

Signed:

Date:

Consent Form (secondary participants)

PhD dissertation on videoconferencing

- I understand that my participation in this project will involve the digital audio and video recording of some of my videoconferencing sessions with _____ (PRINT NAME).

- I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

- I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Dorottya C. Cserző.

- I understand that the information provided by me will be held confidentially and stored securely, such that only the researcher can trace this information back to me individually. I understand that I can ask for the information I provide to be deleted/destroyed at any time and, in accordance with the Data Protection Act, I can have access to the information at any time.

- I understand that information provided by me for this study, including my own words, may be used in the research report, publications, or presentations, but that all such information and/or quotes will be anonymised.

- I also understand that at the end of the study I will be provided with additional information and feedback.

It is common practice for researchers to show data extracts (in my case short sections of video) in academic contexts such as conference presentations. Please indicate which options you are comfortable with using the tickboxes below:

☐   I agree for short video extracts to be used for academic purposes in future presentations.

☐   I agree for short video extracts to be used for academic purposes in future publications.

☐   I agree for still pictures taken from the videos to be used for academic purposes in future publications.

I,_____(PRINT NAME) consent to participate in the study conducted by Dorottya Csenge Cserző, School of English, Communication and Philosophy, Cardiff University under the supervision of Dr. Virpi Ylänne.

Signed:

Date:

Consent Form (DLL participants)

- I understand that my participation in this project will involve logging online and answering a set of questions about people's everyday uses of internet and that it will require approximately 15 minutes of my time.
- I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.
- I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with [*your name*].
- I understand that the information provided by me will be held confidentially,
(tick as appropriate)
  - ☐ such that only the Researcher and their Module Tutor (Dr Tereza Spilioti) can trace this information back to me individually. The information will be retained for up to September 2015 when it will be deleted. I understand that I can ask for the information I provide to be deleted at any time.
  - ☐ such that only the Researcher, their Module Tutor (Dr Tereza Spilioti), PhD candidate Ms Dorottya Cserző and her supervisory team can trace this information back to me individually. I understand that I can ask for the information I provide to be deleted at any time.
- I understand that information provided by me for this study, including my own words, may be used in
(tick as appropriate)
  - ☐ the research report of [your name], but that all such information and/or quotes will be anonymised.
  - ☐ Ms Dorottya Cserző's research report, publications, or presentations, but that all such information and/or quotes will be anonymised.
- I also understand that at the end of the study I will be provided with additional information and feedback.

I, _____(PRINT NAME) consent to participate in the study conducted by
(tick as appropriate)
  - ☐ [*your name*], School of English, Communication & Philosophy, Cardiff University under the supervision of Dr Tereza Spilioti.
  - ☐ Dorottya Csenge Cserző, School of English, Communication and Philosophy, Cardiff University under the supervision of Dr. Virpi Ylänne.

Signed:

Date:

This section provides a summary of the results of the survey on the VC habits of the students enrolled in the DLL module in 2013 and 2014. Participation in the survey was optional. The total number of responses in 2013 was 21 for questions 1 – 4 and 20 for questions 5 – 7. In 2014 the full survey was completed by 50 students.

1. Have you ever used some sort of videochat? (e.g: Skype, Google Hangouts, Facetime, etc.

All of the respondents have used VC with the exception of 1 respondent in the 2014 cohort.

2. Which software(s) have you used (if any)?

3. How often do you use videochat?

Frequency of use

A bar chart titled "Frequency of use" comparing the 2013 cohort and 2014 cohort across categories. Values:
- More than once a week: 2013 cohort = 1, 2014 cohort = 2
- About once a week: 2013 cohort = 3, 2014 cohort = 11
- 1-3 times a month: 2013 cohort = 8, 2014 cohort = 12
- Less than once a month: 2013 cohort = 9, 2014 cohort = 24
- Never: 2013 cohort = 0, 2014 cohort = 1
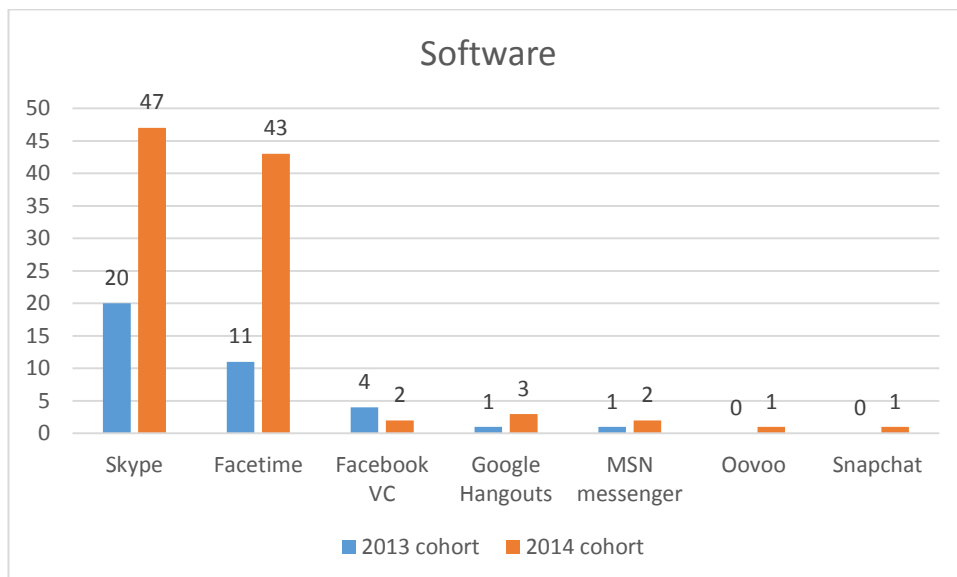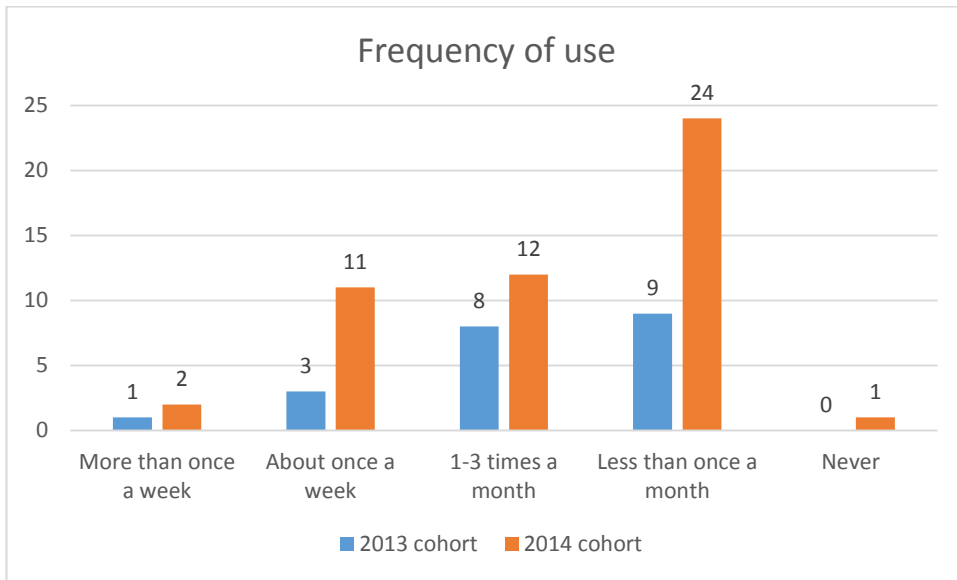
4. When did you first use videochat?

In 2013, nearly all the respondents said they had been using VC for at least 2 years (since the start of their university degrees), with the earliest start date given as 2005 (8 years before). One respondent wrote 'When I first got an iPhone 5 with Facetime', which indicates that have been using VC for no longer than one year at the time of the survey (Savov, 2012). The 2014 cohort gave very similar responses, with 2 respondents using VC for 1 year, and 45 for 2 years or more, the longest time of use estimated at 8 years. As indicated above, one respondent had never used VC, and two respondents gave answers that were nor quantifiable ('a while back', and 'when I got an iPhone').

5. Who do you talk to via videochat?

VC partners

A bar chart titled "VC partners" comparing the 2013 cohort and 2014 cohort across categories. Values:
- Family: 2013 cohort = 18, 2014 cohort = 41
- Friends: 2013 cohort = 16, 2014 cohort = 44
- Partner: 2013 cohort = 10, 2014 cohort = 22
- Nobody: 2013 cohort = 0, 2014 cohort = 1

6. What locations have you videochatted from?

Locations

Location	2013 cohort	2014 cohort
My bedroom	20	47
My living room	13	38
My kitchen	8	27
A Café	2	3
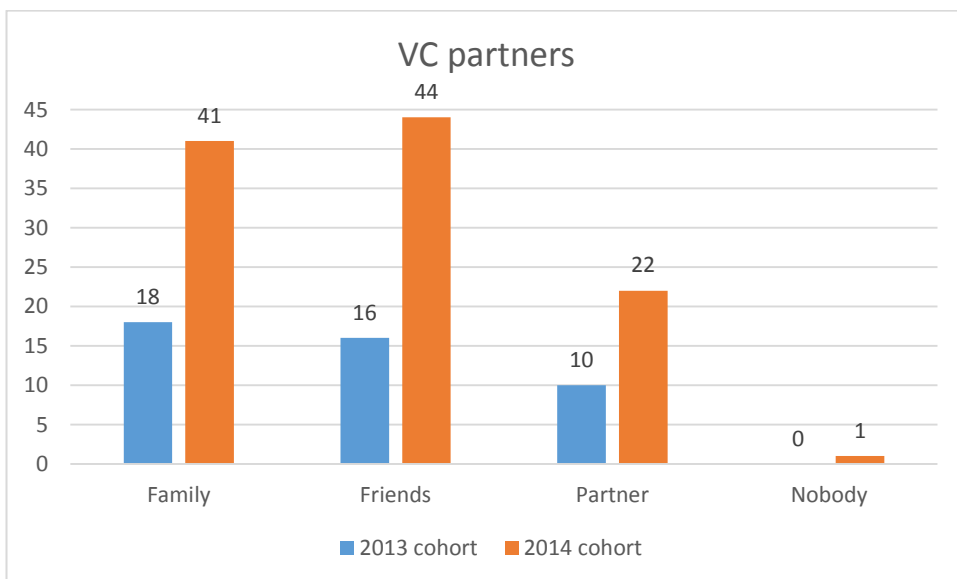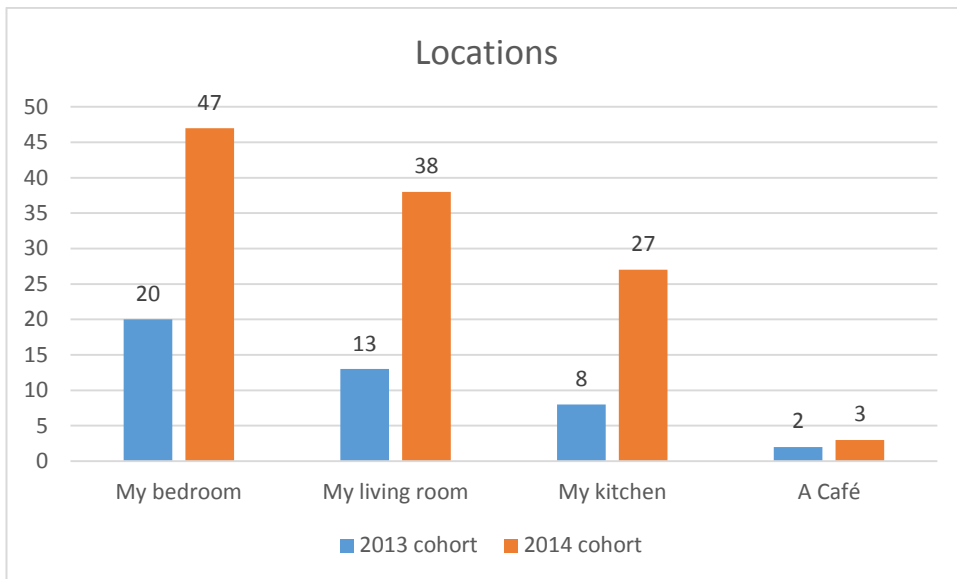
7. Are these videochat sessions usually pre-arranged or spontaneous?

Arrangements

Arrangement	2013 cohort	2014 cohort
Mostly pre-arranged	14	35
Mostly spontaneous	3	5
About the same	3	9
I don't videochat	0	1
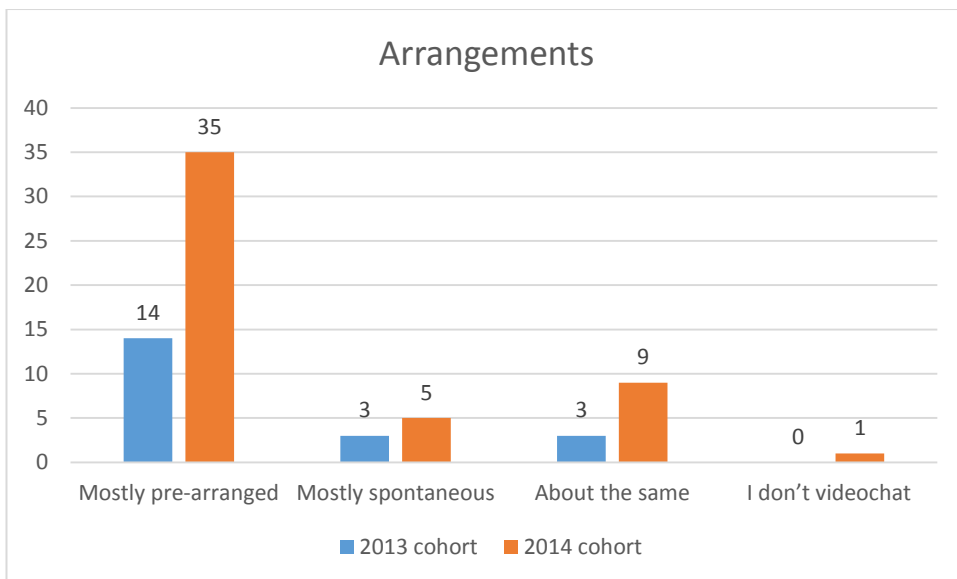
Dear students,

I am doing my PhD research on the ways people use videoconferencing (for example Skype, Facetime, or Google Hangout), and I am recruiting participants for interviews. If you are a videoconference user and would like to earn £5 for a half hour chat please contact me at cserzodc@cardiff.ac.uk. The interviews are conducted face-to-face in a seminar room in the John Percival building (times arranged individually) and they are audio recorded. You can find more information including a copy of the consent form and a short pre-interview questionnaire at
http://www.cardiff.ac.uk/encap/cserzodc/phdproject/

Best,

Dorottya Cserzo

Centre for Language and Communication Research, ENCAP

Consent form (interviewees)

PhD dissertation on videoconferencing

- I understand that my participation in this project will involve filling out a questionnaire and answering interview questions about my habits of using videoconferencing. I understand that the interview will be audio recorded and last around 30 minutes.

- I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

- I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Dorottya C. Cserző.

- I understand that the information provided by me will be held confidentially, such that only the researcher can trace this information back to me individually. I understand that I can ask for the information I provide to be deleted/destroyed at any time and, in accordance with the Data Protection Act, I can have access to the information at any time.

- I understand that information provided by me for this study, including my own words, may be used in the research report, publications, or presentations, but that all such information and/or quotes will be anonymised in transcripts.

  ☐ I agree for short extracts of the recordings to be used in presentations unaltered, so long as they don't include identifiable content (for example names, locations etc.).

  ☐ I agree for short extracts of the recordings to be used in presentations, but only if my voice is digitally anonymised.

  ☐ I don't agree for the recordings to be used in presentation at all.

- I also understand that at the end of the study I will be provided with additional information and feedback.

I,_____(PRINT NAME) consent to participate in the study conducted by Dorottya Csenge Cserző, School of English, Communication and Philosophy, Cardiff University under the supervision of Dr. Virpi Ylänne.

Signed: Date:

The table below contains an alphabetical list of all the codes that were created in NVivo during the inductive thematic analysis of the interviews. The second column (number of sources) indicates the number of interviews indicates the number of interviews in which the topic is discussed. Although there were 29 interviewees, the maximum number of sources is 30 because the two parts of April's interview are in two separate files, and thus count as two individual sources. The third column (number of items) refers to the total number of questions and answers related to the code. This is followed by a description of the code and an example from the interviews. Each item could be coded for multiple codes. Where two codes were closely linked, this is noted in the code description.

code	Number of sources (out of 30)	Number of items	code description
attention	30	350	This code was used for extracts referring to paying attention, distractions and multitasking. It became the most commonly used code. The patterns within the extracts coded for attention are explored in detail in chapter 6.

Chris: When I phone somebody and when I skype someone I kind of- I prefer face to face interaction and I find even with Skype it's got that artificiality about it. And after a little while I start to struggle for things to say. And my mind starts to wander as well so I think "Mmmm need to end this call now, yeah we've had our interaction". Go make a cup of tea or something. So yeah I do struggle a bit for things to say after a while. But I'm the same for telephone call so I'm fine face to face.

audio only	24	81	Using VC software without the video feed.

Sean: I think it's important to have the video if possible because it can also include many different people in the conversation (…) then everyone can join in the conversation everyone knows what's going on, it's not just one person speaking to another one one-on-one. You can obviously have it where it's like it's a phone call over the internet and it's like on loudspeaker so everyone can get involved but it's not as good as seeing. I think it's important to have the visual aspect as well.

babies	3	17	Reports of babies/young children interacting with VC.

Matt: We will sit down [with my parents] to Skype pretty much exclusively if I want to give them some face time with the little one. And then it's less about seeing me as seeing her and I will just bring them up to speed on what she's been doing that day or the last few days. And you know they'll comment on how she's grown and how she's developed and all the new little idiosyncrasies that she's picking up and how her personality is developing while the little one tries to drool on the keyboard and press all the buttons.

background	30	106	Discussions about what is (not) visible in the interlocutor's background. When participants talked about their own background I applied the code *self-image*. *background* appears in every interview because it relates to one of my interview questions.

Dorottya: Do you pay attention to what's in the background on the other side?

Lucy: Yeah I do I mean if - especially if my dad's away I'll probably be like "Oh what's that, what's this". But if it's a scene I'm used to, like my boyfriend is usually in his bedroom cause he lives in a student house as well, so I don't really- everything's the same. (...) I don't usually pick up if things are messy cause I guess I'm used to how his mess is (laugh)

camera space	29	168	This code was used when my participants demonstrated an awareness of how objects (including the self) appear in relation to the camera.

I included discussions about lighting, camera angles, and being 'off screen'.

Dorottya: You said that you want to be presentable, but do you think about the background being presentable or is that not so important?

Camille: Yeah I dunno (…) if I'm at home I'm not the uh tidiest of people so if I'm looking around I will do this: I'll look around quickly and think "oh my God it's such a mess", so perhaps I'll go and sit on the sofa with my back to the wall, so that all that can be seen is me and the sofa and the wall, rather than the mess that I haven't cleaned up for two days. So yes I do consider that sort of - yeah if I'm thinking you know "ooh I haven't tidied in a while" and it's looking a bit horrendous, yeah.

| compare | 30 | 264 | Comparing VC with other modes of communication including phone, face to face, email, text messaging, and instant messaging. If participants did not make comparisons unprompted, I asked them to do so in one of my interview questions. |

Lana: I do find sort of Skype or FaceTime is more of an event and something that I would concentrate on, whereas a call would be like sort of just to kill time. So I'll call mum on the way to uni, Five minutes. "Hey how are you? Just to know that you're okay." I would never FaceTime her for five minutes. It would be more of a "right now I'm gonna dedicate some time to this conversation".

| competency | 29 | 170 | Under this code, I collected accounts of how my participants and their VC partners have developed their competence with using VC over time. There are also a small number of counter-narratives which depict certain people as incapable of learning. Often these narratives refer explicitly to the age of the participants, invoking and resisting stereotypes of 'digital natives' and 'hopeless old people'. This code relates to one of my interview questions: Are there |

things that you do differently now than in the beginning?

Lana: I guess also now I would use it more than what I had before, I think. Just because not everyone had Skype. And not everyone had their phone that you could skype off, so it's now more available to everyone. And for example my grandparents now have Skype, which 4 years ago, they didn't know what it was.

| device | 28 | 182 | Talk about specific devices (laptops, phones, tablets) and their distinguishing features. This code relates to one of my interview questions. |

Dorottya: Do you usually use a phone or a laptop or what sort of device?

Thomas: I always use my laptop for Skype.

| digital native | 9 | 12 | Accounts which rely on or contribute to the stereotype that the digital native generation are inherently 'tach savvy', especially compared to 'old users'. |

Anna: Úgy emlékszem az első beszélgetéseimre a barátaimmal akik kint tanultak, de nem tűnt olyan nagy csodának valószínű azért mert úgy már ebben nőttem fel, az a generació vagyok (laughs)

Anna: I kind of remember the first conversations we had [via VC] with my friends who moved abroad to study, but it didn't seem like such a big deal probably because I grew up with this, I'm part of that generation (laughs).

| distance | 27 | 165 | References to the distance between the locations of the users (and resulting differences between the locations). Typically includes a specific place name or talk of travelling. Often the distance is the justification for using VC. |

Dorottya: *You've talked a lot about facetime so do you that on your phone or iPad or...?*

Mark: Yeah I mean I rarely use it but in the sense that I have- it's easy to use. I think the only time I used it I can't remember why I think me and my friends went to Amsterdam this time last year. And we had Wi-Fi in the hostel. And I think I ended up facetiming my girlfriend for like two hours, which I never do.

face	21	80	Explicit references to seeing people's faces or facial expressions during VC. Discussion of 'face to face' interaction were excluded from this code.

Laurence: What she'll do as well, if she's lying in bed, I can't see her face so I say to her "[NAME] I don't particularly want to talk to a pillow." I like to see- you know I like to see *her*.

intruding via VC	13	36	Mentions of the intrusivity of VC. This can be a result of demands on the participants' attention or the capacity of VC to reveal appearance and the physical environment.

Ben: There's some friends that I would just ring like out of the blue but then I ring them quite often. I I've got no friends that I would just like Skype out of the blue um partly cause I don't know why. I wouldn't just call them um I dunno Skype always seems more intrusive than just a normal phone call.

location	28	180	Where are participants and their VC partners physically located during a VC? What makes these places (un)fit for purpose?

Holly: I always sort of say like "can you sit in your room rather than sit in the kitchen because you're just always distracted" so she'll go and sit in her study instead.

multi-party	16	107	VCs with more than two participants (either at 3 or more locations or with 2 or more people at the same location). Code was used when the group aspect was topicalized, not just mentions of talking to 'mum and dad' for example.

Robert: Group calls can be quite fun but they can be quite - like you have to concentrate quite a lot and it's probably easier to talk to say one person if you're- if it's like a one on one call, whereas a group chat, although it is quite fun, you kind of don't really get to talk to someone as close as you would otherwise.

novelty	8	20	Highlighting the 'newness' of the medium of VC, or the newness of a specific feature. Sometime this happens when it is used in a new context (new device, new location etc.).

Johan: When I was younger probably I was really fascinated by this new technology in the early days, but now I have the feeling it cannot replace this direct experience.

old user	14	44	Relying on or building (and more rarely resisting) the stereotype that 'old' users are incompetent when using technology.

Ben: [my parents] got very confused by the phone and the camera and everything so they very rarely saw us across that conversation

pets	8	22	Seeing pets via VC.

Rachel: It was a lot easier coming to uni to have kind of a link with home, and if I needed it just to have a chat and actually see people, and see like my cat and stuff rather than um you know just kinda talking to them. Cause it feels quite distant when you just talk on the phone.

playfulness	9	27	Using the affordances in a playful way, either by playing actual games or using it 'just for fun'. Often contrasted with 'serious' use.

Saara: My daughter likes it, so you can put these funny faces on, or these hats on, and she loves showing that to my parents, to her grandparents.

privacy	23	46	Users ensuring that they are not interrupted or overheard by other people present in the physical space who are not ratified listeners. This is different than *intruding via VC*, because while that refers to the VC partner intruding on the participant, this is

about protecting the conversation from other people at either end.

Matt: I'm not so worried about the physical environment but if it's noisy, say, that's like you know "can you go somewhere- a quieter room, can you go upstairs?" or um people are coming in and saying hello when I'm having a chat about something more important more than just shooting the breeze I might ask for a bit more privacy. I guess that's the key, it's privacy rather than uh "oh I don't like the camera pointing at that photo on the wall".

problems	29	165	Dealing with technical difficulties while using VC.

Yasmin: Sometimes it can freeze and disconnect and sometimes we can't acutally- she'll be calling me but it won't come through to me and vice versa? So that's quite annoying yeah.

professional	12	54	Using VC for professional purposes.

Yasmin: If I was to skype like for an interview for something then I definitely would pay attention to what I was wearing and how I presented myself.

public	17	71	Using VC in a public space

Robert: Um they might be out in public and might not be able to facetime with you they might be in a shop or something like that. Or they might be having a meal. So I just want to make sure first really, that they're say at home and not really up to much.

screen	24	80	Explicit talk about the screens used (either the participants' or their partners').

Jessica: If I can I do it at home cause then I can use my laptop. It's got like a bigger screen and less internet problems (laugh).

self-image	30	320	Discussion about (the lack of) attempts to manage the impression created by for dressing up, applying make-up, "fixing" hair, tidying up, and so on. This code is related to one of the interview questions. There is large amount of overlap between this code and "camera space" but the two are distinct: "camera space" focuses on the manipulation of objects to achieve a certain effect during the VC, it is effectively a response to the digital mirror; "self-image" was primarily used for preparations made before the VC to create a more favourable impression and refers to actions that would also be made before meeting a friend in person or hosting guests.

Dorottya: Do you pay special attention to what you wear or where you are when you have your videochat sessions?

Thomas: Um not particularly. No. This um this seems quite inconsequential really. What my background is or um if- I may fix my hair up, I dunno.

shows	18	51	Showing objects, spaces, pets, or how to do something (for example how to fix something). Also includes discussions about screen sharing.

Sally: Sometimes I- if I do have something to show yeah I'll like um move my laptop if I'm on my phone I'll just switch the camera on the other side and I'll show something but um if I'm gonna go make tea I'm usually like "wait" and then I'll go and make it and then come back.

software	20	84	Explicit comparisons between different brands of VC software and explanations about VC platforms previously unknown to me.

Madeline: [Tinychat is] an online forum space where everyone- it's a bit like a Google Hangout but just less well known. And then you just kind of log on to a specific server and then you can talk to specific people.

unease	10	37	Describing VC as 'awkward' 'strange' 'weird' or expressing discomfort/unease in other ways.

Holly: It was a bit awkward also cause I was in like a public area whereas usually I do it at home on my own. And I felt a bit silly as I was just holding my phone in front and talking to it.

virtual tour	14	49	Showing a place unknown to the viewer (typically after a move or on holiday). These extracts are analysed in detail in chapter 7.

Lana: So on holiday I'll show where I am um or like if I'm on a balcony the views of it. And certainly when I moved to Spain for my year abroad the first Skype conversations I had to show the whole house sort of and the view from my window and whatnot.

Sample interview transcript: Interview with Ben

1 Dorottya *right okay so I'm gonna start um at the beginning so how often do you use video conferencing software you said twice a year*

2 Ben yeah maybe not even that often but probably over about five years I've probably used it about ten times

3 Dorottya *okay so um can you remember the first time you used it*

4 Ben yes I think my parents had gone away without us so I was at home and they were in America and so they decided that a phone call wouldn't do it needed to be a video phone call uh so that was the first time it must be about five years ago

5 Dorottya *and why do you think they might have insisted on it being a video call*

6 Ben I think they were just excited because dad had got a phone that could do it I don't I don't know um I mean they don't worry about us being looking gaunt and drawn having not eaten for weeks cause they had only been away for like two days um I don't know (I s'pose) it's nice to see us but they got very confused by the phone and the camera and everything so they very rarely saw us across that conversation

7 Dorottya *so that was your parents on the other side and you and*

8 Ben my brothers in the kitchen at home

9 Dorottya *how many of you*

10 Ben there's three of us

11 Dorottya *okay so was it- how- how did that work in terms of*

12 Ben we just sat near or all in front of the computer and uh we all talked but you know a bit like if you're sitting in a lounge really you don't all talk at once same on Skype

13 Dorottya *did you uh was it hard to get everybody in the picture*

14 Ben no it was pretty all right I dunno we just pushed the computer away from us and then uh I suppose we all fit in the picture somehow I dunno it seemed to be all right

15 Dorottya *and you're saying your parents had trouble on the other side and they didn't see much of you or [what happened]*

16 Ben [yeah but they're] very old over fifty years old now

17 Dorottya *oh right okay that's very old sure so how did so what happened on the*

other side

18   Ben   cause- well they they were getting confused with like the front camera the front facing cameras they could see us at the same time as seeing the phone but I don't think they entirely realized that was there cause they kept turning the camera around so that we could see them but then we just got pictures of the floor so that was that was their issue

19   Dorottya   *right okay and have you had other Skype calls with them since then*

20   Ben   yeah but mainly they've used the computer so when I've been at uni and things um they decided it would be better to use Skype because that's free cause it- you do it on the internet rather than like phone calls on mobile phones which there's their opinion I mean well if it's included in the contract it doesn't make any difference how much you use of your mobile minutes um but that's when that's when we've done it uh I think I prefer talking on the phone though

21   Dorottya   *okay um so did- when you said that you did it kind of instead of a phone call did you use the video as well or [is it]*

22   Ben   [yeah]

23   Dorottya   *you did okay*

24   Ben   some of the times not always

25   Dorottya   *and why do you prefer a phone call*

26   Ben   I dunno it's just easier like um when you've got a phone it's kind of really good at phone calls whereas a computer is good at other stuff but not necessarily amazing at phone calls and like so when you get a like bit of bad internet in the house or somebody like I dunno turns the TV on it all goes funny for a bit you don't really get that with a just a mobile phone if you- if you're using like a laptop with the internet then you lose the picture and you don't hear each other for a while it's just not as good

27   Dorottya   *right*

28   Ben   so that's why I prefer the phone

29   Dorottya   *okay is that the only reason*

30   Ben   I dunno I'm more used to it I suppose it's new and it's different when you can see them cause like if I   drift off and not really listen to mum when she's telling me about what [NAME] did on her day off um which turned into two days off which then takes a sort of forty-eight hours to recount including she snored then she stopped snoring then I could like you know make a sandwich or something just put the phone down for a while and then pick it up again and say oh yeah mum thanks for that

31	Dorottya	*right*
32	Ben	which you don't get as much on Skype
33	Dorottya	*okay so when you talk to somebody on Skype or Google Hangouts or Facebook um what do you do usually*
34	Ben	you know just talk about normal- the same sort of things I'd always talk about on the phone apart from you have to stay like sit- seated when you're on Skype whereas when you're on the phone you can just like wander around the house whereas like laptop's more more inconvenient but I have used Facebook call thing on my phone so that one I could sort of wander around
35	Dorottya	*and does that include video as well*
36	Ben	that one didn't invo- include video
37	Dorottya	*okay*
38	Ben	um but still I suppose when you use it- when it's actually on your phone it is more easy to just sort of wander around and do your daily activities rather than sort of more intrusive on the laptop you can't just w- if you wander off it's really quite obvious
39	Dorottya	*((snigger)) okay well some people I've heard that they like to for example cook while they have a Skype conversation and obviously then you don't move the laptop cause you put it down and you're kind of within range most of the time but you do something else can you imagine doing something like that*
40	Ben	oh that'd be quite clever but then I dunno if you'd be able to hear properly and that sort of thing like I'd I probably wouldn't have a phone call while I was cooking either not like a proper phone call
41	Dorottya	*but you said you would make a sandwich while you were [on the phone]*
42	Ben	[oh yeah] yeah on the- but that's a sandwich innit just like bread cheese bread done
43	Dorottya	*okay*
44	Ben	whereas like proper cooking you know you got like pasta boiling away and like chopping things uh I don't know like frying something uh it gets it's gets noisy whereas like just a sandwich no one- the other end won't hear that
45	Dorottya	*okay all right so you say almost exclusively pre-arranged calls*

46	Ben	yeah like when it has happened I'll have an email probably from my mum saying d'you want to Skype later and I'll be like yes mum that sounds like a good idea and then um cause she doesn't like it when I say no mum that's silly why don't we just call so um she'll then ring like probably exactly two hours later or something um and I'll pick it up and oh hey mum fancy hearing from you uh so yeah like very- it's never happened that- cause I usually don't have Skype just running in the background usually I close it down as soon as the computer starts so it has to be sort of prearranged otherwise I wouldn't pick it up
47	Dorottya	*okay so why almost exclusively prearranged*
48	Ben	once or twice like I've just had the laptop on and then somebody's called but I mean like over probably my ten Skype conversations no o- once or twice that I've used it because if someone's away then you can call them and that's what it is yeah and so then you know they're away they tell you they're around and then you Skype call them um but obviously if you'd ring them up on phone that's like quite expensive like foreign minutes and [stuff]
49	Dorottya	*[mmm] right*
50	Ben	so then that's still sort of prearranged I'm not just ringing them on the off-chance they're free but then it's more like sort of it is less prearranged because I wasn't really planning on doing it all day it was just like it turns out they're free they're a bit of a loose end I can see a chance
51	Dorottya	*okay so how you be logged in cause you say you log out*
52	Ben	oh yeah just I f- like I'll be talking to them on like Facebook or something I send them a WhatsApp something like that
53	Dorottya	*oh all right okay*
54	Ben	then they actually reply and I'm like I you around for a chat then I'll
55	Dorottya	*so then I guess it still is prearranged because you contact them on another*
56	Ben	yeah
57	Dorottya	*first okay so you wouldn't just log in on Skype and just hit the video call button without anything*
58	Ben	absolutely not
59	Dorottya	*okay why not*
60	Ben	I dunno it seems like I I'd re- there's some friends that I would just ring like out of the blue but then I s- talk to- I ring them quite often I I've got no friends that I would just like Skype out of the blue um partly cause I don't

know why I wouldn't just call them um I dunno Skype always seems more intrusive than just a normal phone call

61 Dorottya *okay okay and on that note do you pay special attention to what you wear or where you are how you arrange the room when you do have a call coming up*

62 Ben no not really I uh well it depends if mum's on the phone I'll uh make sure there's no dirty washing actually like on me but I mean generally no it's not a big deal

63 Dorottya *so what device do you usually use is it always the laptop*

64 Ben yeah pretty much

65 Dorottya *and how come I mean I'm surprised that you've put down kitchen bedroom and lounge even though you've only you say you only've you've only had like ten because usually I get um people saying they've tried different places the more times they've had calls*

66 Ben well I remember the first one was kitchen at home then in university in halls did it in a lounge in my bedroom and then I feel like I must've had one in the lounge like I spend most of my time in the lounge I'm sure it must have happened at some point

67 Dorottya *okay [d'you]*

68 Ben [but]

69 Dorottya *okay*

70 Ben but never like out the house I wouldn't go to like an internet cafe and like look at these other people who are just sitting at computers as well here's the back of lots of people's heads

71 Dorottya *have you ever um had somebody you talk to bring up as a discussion point something that's in the background on your end or what you're wearing or something like that*

72 Ben well obviously I mainly talk to my mum on Skype so she probably picks u- she probably picks at me like oh Ben don't you think you could've put something on your wall oh Ben don't you think you could've done the washing up or something you know but I mean yeah but she would do that if I was on the phone as well she'd just assume I hadn't done the washing up or had dirty washing lying around

73 Dorottya *((laughing)) okay all right and what about the other way around have you ever noticed something interesting in the background on the other end*

74 Ben no I uh I I'm pretty blind like that like very oblivious to like sometimes I

notice when people change the colour of their hair but

75   Dorottya   *((laughing)) okay*

76   Ben   I'm pretty sure people must change every day or they'd get really smelly but

77   Dorottya   *all right um so would you consider using a different device- oh you you you said you have used your phone [right]*

78   Ben   [yeah] the phone is like quiet convenient because if you're like especially if you're abroad and you've got Wi-Fi cause like all these hostels have Wi-Fi then you can like Skype call someone that's free obviously um and like cause I got like a front facing cameras and stuff it's really quite convenient

79   Dorottya   *and you do on your phone*

80   Ben   yeah but then I would probably just use Skype without the v- video because then you can use it like a normal phone and so it's just your ear so you- only you can hear them um

81   Dorottya   *well headphones*

82   Ben   witchcraft

83   Dorottya   *((laugh))*

84   Ben   uh yeah that's that's probably quite sensible um yeah but for me like Skype is really just like another way of making a phone call the video stuff is like completely irrelevant

85   Dorottya   *okay*

86   Ben   it's quite nice I suppose if you live like far from people and you'd like to see their faces

87   Dorottya   *yeah um um oh sorry uh what did I wanna ask right so have you ever actually tried skyping somebody from a hostel*

88   Ben   that's a good question I- I haven't no um

89   Dorottya   *and okay so have you it the other way around talking [to somebody at a hostel]*

90   Ben   [I've received I've re]cieved hostel Skype calls yeah like [my brother did it]

91   Dorottya   *[and what was that like]*

92   Ben   uh it must have been all right um trying to think oh no he was in an internet cafe he went to a cafe to do it but I mean it's relatively similar um

it was fine I suppose it's weirder for him because he's having like a one way he's having a conversation where everybody around him can hear and see but the other person's reaction would just isn't getting the isn't getting the noise whereas for me like it's just pretty much the same as anywhere like if (what does the) person receiving the call

93 Dorottya *yeah but I mean I've- I tried to do that and the Wi-Fi signal was not strong enough to have video call so that's kind of why I was wondering cause you said oh yeah you can just Skype them and I was thinking yeah then internet connection is probably actually not that great*

94 Ben it depends how lucky you get I suppose depends where you are like some-some of the big cities in like Asia and stuff have got better internet then uh this university

95 Dorottya *oh now you're talking from experience*

96 Ben uhuh ((laugh))

97 Dorottya *all right okay um okay so on that note have you experienced difficulties when using video conferencing*

98 Ben well sometimes like you know especially in halls where everybody used the internet like all the time because there's nothing better to do than just watch youtube you wouldn't wanna chat to each other um so like the internet is quite slow so then it means you get like either loads of lag or like it's all really fuzzy and stuff so then you just go to the call you just go to like the no video bit just the voice cause that uses less of the internet

99 Dorottya *so it's mostly problems with the visual part*

100 Ben yeah the visual bit

101 Dorottya *and you find that annoying*

102 Ben yeah it's like why didn't I just call this person

103 Dorottya *and why don't you*

104 Ben because uh trying to use reason and logic against my mother is like using I dunno gas to put out a fire

105 Dorottya *((laugh)) okay I probably won't quote that okay ((laugh)) okay um right so you've compared this a lot to phoning and you've made it quite clear that you prefer phoning um so I won- I won't ask you anymore about that um*

106 Ben oh definitely loads of things would be really useful though like if someone's gonna show you how to do something oh yeah just do that yellow bit over the blue bit on the phone does make no sense at all but if you do it on Skype like you don- you don't wanna have like someone with

a cutthroat razor like so you just need to have it on the left side you put the face it's quite useful to have that sort of thing on Skype [like prep-]

107 Dorottya *[mhm and you you] imagine you would learn that over Skype*

108 Ben well you know practical activities you could Skype or you could like watch a film together or something you know

109 Dorottya *yeah I've tried that and it's really hard to get the films to sync up*

110 Ben but like just a normal phone ca- just a normal conversation there is no need to see their face

111 Dorottya *okay all right um okay uh d- d'you feel that you've learned like how to do video conferencing over these ten occasions that you've done it you feel you're ge- you're getting better at it*

112 Ben oh yeah I mean it's not very difficult is it just press like start call and then if you wanna add more people to it add more people [it's]

113 Dorottya *[have] you done that too*

114 Ben mhm=

115 Dorottya *=d'you wanna=*

116 Ben =I'm very adept=

117 Dorottya *=tell me about that*

118 Ben well like dad wanted to join in

119 Dorottya *okay*

120 Ben so we put him in

121 Dorottya *but wasn't he in the same place as your mum*

122 Ben yeah but he wanted to play with his phone again

123 Dorottya *all right*

124 Ben well usually it is there's some pretty central themes ((chuckle))

125 Dorottya *okay*

126 Ben but that time he managed to get it all working so he was looking at me rather than the floor or me looking at the floor

127 Dorottya *okay*

128	Ben	and him just looking at the back of his phone or something I don't really I don't know why they do what they do
129	Dorottya	*okay so do you feel that you do it like the same way as in the beginning*
130	Ben	well Skype's changed a bit but yeah I mean it is pretty much the same thing just click on the person and then you click on call or video [call]
131	Dorottya	*[yeah] but I'm also talking maybe about where you are or*
132	Ben	well yeah I mean like uh I still just do it in the home and wherever I sort of spend most of my time
133	Dorottya	*okay all right and what about your parents d'you feel they've uh learned anything they've [gotten better at it]*
134	Ben	[oh I think they've got better] they've got better
135	Dorottya	*okay so obviously they figured out how to use the front facing camera*
136	Ben	big deal yeah [um]
137	Dorottya	*[anything] else*
138	Ben	they stopped shouting they stopped shouting as much they used to just scream down the well the phone everyth- anything where you like some sort of like you know distance communication device um i- they'd just scream at it as though like they could only hear you if they could have heard you without the mobile phone but these days they're a lot better like they don't you don't like have complaints from you know the next town on they like talk at a r- slightly louder than they would normally talk but only slightly which is quite good
139	Dorottya	*((chuckle)) okay mmm and mm would you ever use Skype to like did your mum ever ask you to show your- her your room for example*
140	Ben	yeah she did that um yeah that's quite nice isn't it I suppose seeing like other stuff
141	Dorottya	*but you've- so then- [you wouldn't]*
142	Ben	[yeah so] then I picked it up and like wandered around a bit
143	Dorottya	*yeah and have you ever been on a taken on a virtual tour by somebody else*
144	Ben	yeah
145	Dorottya	*[yeah]*

146 Ben   [trying to] think when that was or where that was maybe Alexander my older brother at uni like showing us his room

147 Dorottya *oh okay*

148 Ben   um yeah but it'd be it'd be that sort of thing

149 Dorottya *did you enjoy that then*

150 Ben   yeah it was all right like I j- it's just you can't really- you don't get much of a feel for these things like it's the same if when you go to like 2let2 and they show you a picture of a beautiful property which then turns out to be inhabited by like five mice and six like patches of mould um you can't you can't most of all you can't really tell things very well from a laptop camera

151 Dorottya *why do you think that is*

152 Ben   I dunno it's just better to see it in person

153 Dorottya *could you think why*

154 Ben   don't know cameras aren't very good laptop cameras aren't [very good the internet isn't great]

155 Dorottya *[okay all right so it's technical] it's just technical stuff*

156 Ben   yeah but then you don't get the same feel for things like unless you're a very good photographer in like a picture as you do when you're actually there

157 Dorottya *mhm*

158 Ben   a picture's just like to jog your memory of when you actually where there

159 Dorottya *okay would you describe yourself as a Skype user*

160 Ben   no

161 Dorottya *((laugh)) good thing we're doing this interview then*

162 Ben   oh no like I use it but I wouldn't like be like oh yeah what should I do now go on Skype and [communicate rather than a myriad]

163 Dorottya *[yeah yeah no no fair enough]*

164 Ben   of other

165 Dorottya *fair enough um can you think of a time when you were particularly glad you could use video chat to talk to someone*

166 Ben yeah you c- there's a quite cool th- they used to be anyway I dunno if they have it anymore you used to be able to like show someone else your screen on your computer and that was quite cool cause I showed my little brother who hasn't (???) that makes no sense um I showed my little brother how to do something on the computer but I I showed him my screen rather than just describing it like so press the F button and then the other button and then cause that would've made no sense so that was quite cool that is really useful

167 Dorottya *mhm useful so it's very task oriented for you then*

168 Ben yeah

169 Dorottya *okay good 'd'you like to add anything*

170 Ben well it's been fun

171 Dorottya *((laugh))oh thank you thank you very much*

172 Ben yeah good interview

173 Dorottya *all right thanks*

	software	frequency	First use	VC partners	locations	pre-arranged/ spontaneous
Anna	Skype, Facetime	I tend to use videochat on a daily basis, as I am living far away from my family and friends. There are days when I use Skype more than once or twice a day, and lately I also started using Facetime.	I first installed Skype around the age of 15-16, when my two friends moved to Denmark, and that was the only way we could keep in touch. Since then I never stopped using it. I only installed Facetime when I moved to Wales, away from my home country, Hungary, 6 months ago.	I talk with my parents almost every day and with friends every other day. I could also convince my grandmother to install Skype, but only in the last couple of months - but since then we talk on a weekly basis.	Mostly from my bedroom, or from the University Libraries, because of the faster and free WIFI.	They are almost always spontaneous. It highly depends on how many people are participating in the chat. If it is only me and my parents, or my grandmother, then we usually just start talking spontaneously, when both of us are available. Whereas, when it comes to my friends, we usually talk in bigger groups of 3-5, so we have to agree on an appointment. But

						all in all, my videochats are mostly spontaneous.
April	Skype, facetime, google hangouts, rabb.it, msn instant messaging or icq had that option once too I think, though it's been a very very long time …	At least 5 times a week, at times daily	First time skype in 2007, google hangouts in 2012 and facetime only recently	I used videochat for private chats with family and friends as well as professional reasons for job interviews and project work with people based in other countries.	Pretty much all rooms that are in your regular house. Outside in the garden (though the sun glare usually prevents me from doing that), on vacation in hotels/hostels, internet cafes, regular cafes, school and library….	So and so. They are usually arranged as to happen sometime during the day and then depending on the time schedule that day they can be very planned to an exact time. I would say they are usually pre-arranged as I know they are going to happen sometime in the near future.
Ben	Google hangouts skype Facebook	About twice a year max	About 5 years ago	Parents and girlfriends	Kitchen bedroom lounge	Almost exclusively pre arranged

Bryn						
Burt	Skype, rabb.it, facetime	Daily	2011	Girlfriend, family, distant friends	All rooms of house, form rooms, office at work	Mostly pre-arranged, though some are spontaneous.
Camille	Skype and FaceTime	Weekly	2/3 years ago	Dates or friends who live far off	Bedroom or lounge	Both
Chris	SKYPE ONLY	4 TIMES A WEEK	3 YEARS AGO WHEN MY DAUGHTER WAS WORKING IN FRANCE	MY PARTNER/DAUGHTER / FRIEND IN SCOTLAND	BEDROOM AND LIVING ROOM	PRE ARRANGED. I OCCASIONAL REQUEST A CHAT IF I SEE A FRIEND ONLINE AT SKYPE
David	Skype (using laptop or phone)	About once a week. Sometimes twice.	I know for sure that I was using Skype from summer 2011 onwards. I must have used it before that too, but I'm not sure when.	My friends and family back home in Switzerland, or, at the moment also with a friend who is staying in the US. While I was back home in Switzerland, I also skyped with my friends in the UK.	Bedroom, living room, kitchen, military barracks (outside in the dark, leaning against the fence of the enclosure),	They are always pre-arranged. Sometimes someone spontaneously sends me a text message asking whether I can skype righty now and then we do, but I guess that still counts as pre-arranged.
Dina	Skype, Facetime, snapchat, msn	Once a week	5 years ago	Family and friends that live in different places to me	Bedroom, living room, hostels	Mainly pre-arranged if it is with family but sometimes spontaneous with friends.

Gemma	Skype, FaceTime	Quite often. I would say I use it around 3-4 times a week on average	Mainly when I first came to university (September 2012) to keep in contact with home. I used Skype then I used FaceTime when I got an iPhone. I may have used it briefly before university but not properly or regularly.	Mainly my mum, sisters and boyfriend. I will also talk to family friends on videochat on the odd occasion too.	kitchen, living room, bedroom, friends room, in a club on a night out, in the street, hotel, friend's bedrooms/communal areas in their student house.	They are usually pre-arranged with my family to ensure that we are free when we do get to chat. But sometimes they can be spontaneous, especially when my friends tend to FaceTime me. But overall I would say they are mainly pre-arranged.
Holly	Skype, Facetime	1-2 times per week	5 years ago	Mother, Sister, Boyfriend, Friends	bedroom, hotel	
Jessica	Skype	Twice a week	2012ish	Boyfriend, friends and my parents	Most often from my bedroom + Living room, Kitchen	usually pre-arranged
Johan	Skype, MSN Messenger, Miranda IM (add-on)	Once a week	Around 2005	Friends, Family, occasionally potential new flatmates (interviews for rooms), occasionally lecturers or fellow students	Normally at home in my bedroom or in the living room. Sometimes also in the uni.	Normally pre-arranged
Kayleigh	Facetime, Skype, google hangouts	Once or twice a week	I was about 11 years old.	Family, friends and my boyfriend.	Just from my house, mainly my bedroom.	Usually spontaneous.

Lana	Skype, Facetime, Viber	4 times a week	4 years ago	parents, relatives, friends, boyfriend	All of the above, hotel, holiday home	Both.
Laurence	SKYPE	EVERY 3 DAYS	3/4 years ago	Now only personal	Living room/kitchen	Spontaneous and sometimes pre-arranged
Lucy	Skype, facetime	Once every two weeks	When I got an iPhone and Mac computer. 4 years ago.	Parents, mainly my dad due to him travelling. My boyfriend who lives in [CITY]	Bedroom, living room, hotel lobby, kitchen	Pre-arranged.
Madeline	Skype, Facetime, Tinychat	Around 3 times a week	When I was 14, so 2011	My family, friends who are abroad or long distance, other writers	Bedroom, Kitchen, Costa, Parks	With friends, it is more spontaneous, but with family and writers it's usually pre-arranged
Mark	Skype, FaceTime, MSN via external webcam	Very infrequently. In my current general environment, I use Skype perhaps once every 3 months or more. I do not use any other videochat software. The only time I ever used videochat frequently was when I was travelling overseas for 5 months in 2012. In this instance, I probably used videochat	Technically, when I was about 13 – 14, using a webcam to communicate through MSN Messenger. I first used Skype when I was about 18 – 19.	Primarily friends, but occasionally also family. I have so far never used Skype to talk to a work colleague or employer (as I believe is fairly common these days for interviews etc.)	Bedrooms, living rooms, kitchens, hostels, internet café's, other people's houses (mainly in a private room).	Usually pre-arranged. This is usually due to the fact that you need somewhere reasonably quiet and with a good connection / signal to have a worthwhile chat, especially when overseas. Very occasionally I have used FaceTime spontaneously, usually in a very casual, almost

		about twice a month.				playful manner. When I used to sometimes use webcam on MSN, it might be organised in the sense of 5 minutes before hand, i.e. 'are you free to webcam?' > 'yeah I'm just waiting for this TV programme to finish', but in general was spontaneous.
Matt	Skype, Facetime, maybe others but only very occasionally.	Approximately weekly, but sometimes more.	2006/7?	Family, friends very occasionally.	Hostels, Airports, Cafes, Living room, Bedroom, Study, Desk at work	Spontaneously arranged'. We'll usually text/email each other and ask ' Skype?'. If the other party is available we will both sign in to chat. I, and most of my contacts, don't stay signed in as a matter of course.
Piotr	Skype, Google hangouts	2-3 times per week	Around 2007	Family, Partner	Mostly bedroom, but on a couple occasions also living room	Most often spontaneous

Rachel	Skype, Facetime, Snapchat (video option), Facebook (vid. option)	1-4 times per week	2009 via Skype	Friends and family	Bedroom, Living room, Kitchen, Outside - walking to/from places, The Lounge (Cardiff Students Union)	Dependent on person - if they have a full time job/commitments usually pre-arranged. If using Skype usually pre-arranged (used on laptop).
Robert	Facetime, Skype and MSN messenger	4 times a week	5 years ago	Parents and friends	Bedroom, hostel, park, kitchen, living room, garden	Spontaneous
Saara	Skype, WebEx and used to use MSN about 10 years ago	4-5 times a week	Around 2002 - 2003	Mainly my parents in Finland	All the rooms in the house, including bathroom (while bathing my daughter) and kitchen (while cooking), garden, hotels, at work and on the road...	Usually spontaneous, except WebEx for work normally arranged meetings
Sally	Skype, FaceTime, Viber	Not really	When I was in high school (14+)	Mostly family rather than friends	All around the house- bedroom, living room, front garden	My viedochats are usually always planned, sometimes spontaneous but only when I am in my home they are spontaneous. I do not spontaneously videochat outside
Sean	Skype, FaceTime,	Every two weeks or so	10/11 years ago	Family + Friends	bedroom, hotels, living room, hostels	More often pre-arranged, also

	Facebook video					sometimes spontaneous
Shanice						
Thomas	Skype.	Perhaps once every week or two.	3 years ago.	Primarily my girlfriend though I have spoken to some of friends occasionally.	In my bedroom, and if not there, I would do only at home.	Always pre-arranged.
Yasmin	Skype	Once a week	5 years ago	A friend who is working abroad	Bedroom, living room	Both

1. Bryn: yeah well I've put my stuff and it goes it's all fine (.) but I can't take anything
             else, d'you know what I mean like I'm gonna have to do some[work on the
             Monday aren't I] ((Bryn's phone rings))

2. Bryn: oh hang on it's Jane (.) hello (.) it's alright (.) oh right what d'you need? (.) the
             expiry date hang on a sec I'll have a look now (.) shall I ring you back or are you
             alright to wait a second

3. Dan: just wait I'll just go wash up (   )

4. Bryn: ok ((zipper noise))((returns into camera view))sorry love ((opens a soda)) I was
             just thinking what should I bring my extra stuff in ((drinks soda)) should I bring
             it in a few little cloth bags? or something (.) hmmm (.) we'll sort it out (.) umm
             (.) when's the expiry just the expiry yeah? (.) um (EXPIERY DATE) (.) yeah (.)
             (BIRTH DATE) (.) anything else? (.) (DATE) yeah (.) I dunno I think so when I
             went on um I tried to add a bag (.) for Rachel's wedding just to see how much it
             was (.) and um it was a tenner (.) each way (.) yeah (.) is it up for- up to twenty
             kilograms (.) ((sniffs)) maybe cause it's international I dunno (.) yeah
             ((laughing)) yeah (.)

5. Dan: ((returns to screen))

6. Bryn: okiedoke alright then my love I'll speak to you- yeah see you later (.) bye: (.)
             ooh hello? ((looks at phone screen)) what you eating?

7. Dan: ((moves food closer to screen)) kay

8. Bryn: a what?

9. Dan: Special K bar

10. Bryn: oh (.) mmm (.) she just wanted to (.) check in

31. Burt: there was an accident last night the- they left my house and an hour
            later when I took the dog out the lights were still (.) going down the
            road (.) so there was a really serious accident last night

32.   (1.8)

33. Burt: I've gotta eat dinner (.) I'm starving

34. April: okay

35. Burt: I'm gonna make I'm gonna make hot dogs

36.   (pause)

37. April: ((giggle))

38. Burt: Damn (.) this stupid road (.) can't have the windows open because
            there's so much sound=

39. April: =I didn't even hear that

40. Burt: you didn't hear the motorcycle

41. April: no I just saw your face all wierd ((giggles))

42. Burt: yeah I got I got agitated (.) uh I'm making hot dogs tonight and I gotta
            get some some veg going

43. April: okay

44.   (pause)

45. Burt: cause I'm really hungry the jogging I need to adapt my diet to eat more ((giggles)) cause I was so hungry today

46. April: yeah y- well you do eat tiny portions

47. Burt: that's true

48.   (pause)

49. Burt: I make up for it by constantly eating once I get home from work

50. April: [in tiny portions]

51. Burt: [I think I probably eat every] hour

52. April: ((smiles))

53. Burt: Pretzels (.) then dinner (.) then pretzels (.) then cereal (.) then bed

54. April: then pretzels ((giggles))

55. Burt: then pretzels (.) eating in my sleep (.) their salt smeared all over my face

56.   (pause)

57. Burt::   alright so I'm gonna go eat

58. April: okay

59.   (pause)

60. April: okay d'you wanna play a game after that

61. Burt: yeah we can

62. April: yeah

63. Burt: it'll probably be like half an hour cause I gotta grill (.) and cook is that okay?

64. April: u::m what's the time now

65. Burt: it's uh elven your time

66. April: yeah that's fine

67. Burt: yep

68. April: yep (woop woop)=

69. Burt: =cool

70. April: okay

71. Burt: alright

72. April: okay

73. Burt: thanks for skyping

74. April: mhm

75. Burt: uh good bye to you and Dorottya ((waves))

76. April: ((laughs)) yay you made it weird okay=

77. Burt: =yay

78. April: ((laughs))

79. Burt: we're thirty minutes in and I finally went awkward

80. April: oh (.) yeah

81. Burt: ((laughs))

82. April: okay bye

83. Burt: good bye

84. April: ((hangs up)) ((turns off recording))

20. Kate: oh [no]

21. Charlie: [right] how do I send um how do I send you a picture on Skype

22. Kate: it's like [save]=

23. Charlie: [oh]=

24. Kate: =the picture and then (.) oh I {don't know} actually

{she moves the mouse and a menu appears at the bottom of Charlie's

video}

Figure 22

25.   (1.0)

{Kate moves her mouse over the '+' icon, a label appears with the text

Figure 23

26. Kate: oh yeah save the picture and then (.) {like put your mouse just over

my}

{as she is giving the instructions she moves the mouse as described}

27. Kate: face and {a little} (.) bar will come up at the bottom and you can put

{she moves the mouse back over the '+' icon}

28. Kate: [add send and share]

29. Charlie: [oh yeah send]

30. Kate: that's it

31. Charlie: {got it} got it got it got it got it [got it]

{Kate moves her mouse away from the bar}

32. Kate: [got it]

{singing} {the menu disappears}

33.   (4.2)

34. Charlie: here we {go}

{Kate receives a file transfer request}

35. PC   {makes a notification noise}

36. Kate: whoa {purp purp}

                {she imitates incoming picture notification noise}

37. Kate: do I have to save as

                {she clicks on 'save as'}

38. PC   {pop-up appears with the following warning: 'Files can contain

                viruses. We strongly recommend you use anti-virus software to scan

                files you receive, even if you know the sender. Are you sure you want

                to accept this file?'}
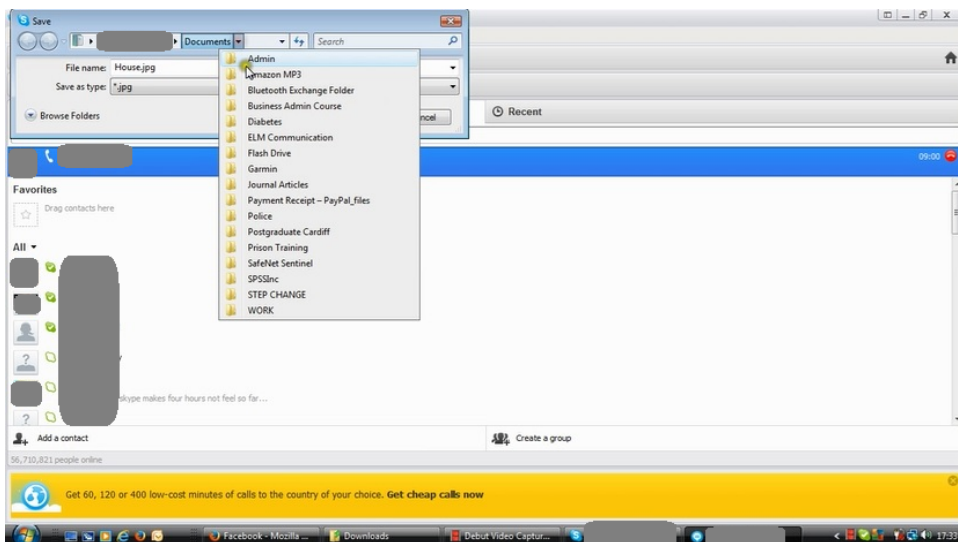

39. Charlie: uh you could save it {or} open it whatever

                {Kate clicks on 'OK'}

40. Kate: it just says save as or cancel=

41. PC   {file browser opens}
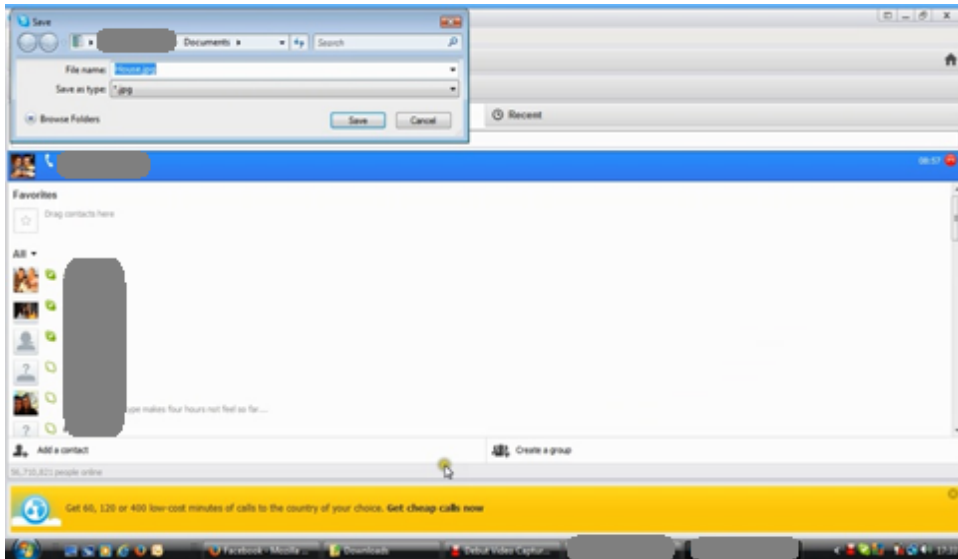
42. Kate: =I've got it

43. Charlie: s- save as

44. Kate: {um: }

               {she tries to choose a location to save}


45.   (1.1)

46. Kate: flippin 'eck

47.   {(3.2)}

            {Kate presses a key and the location field goes blank}

48. Kate: oh no

49.   {(2.1)}

            {Kate tries to find a location in the drop-down menu again}

50. Kate: {right um:}

            {Kate continues look for a location in the drop-down menu}

51. Charlie: {save it somewhere}

            {Kate continues look for a location in the drop-down menu}

52. Kate: {I don't know- }

            {Kate continues look for a location in the drop-down menu}

53. Kate: it's not like- {(0.8)} hang on let me try that again

            {she presses 'cancel' and the pop-up disappears}

54. Kate: cause I've like totally {mashed it}

            {she clicks on 'save as' again, like the image in turn 19}

55. Kate: save as {okay} (1.3) {documents} okay

            {she click on 'okay'}{she clicks on 'save' and the pop-up closes}

56. Kate: and {now} if I go in documents it should be in there right

            {she opens the file browser}

57. Charlie: it should come up in the conversation I think

            {Kate navigates to the documents folder}

58.   (1.4)

            {Kate scrolls down in the documents folder, there are a lot of files}

59. Kate: uh (.) right

60.   (1.3)

56. PC   {there is a notification noise}

57. Kate: {she closes the file browser, there is a link to the file in the chat
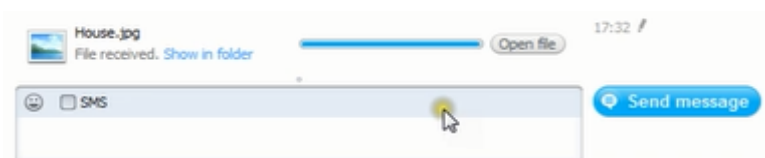
                                window}

58. Kate: {oh yes} (.) you are right

            {she clicks on 'Show in folder' but nothing seems to happen}

59.   (3.0)

60. Kate: {she clicks on 'open file' but again nothing seems to happen}

61.   {7.3}

62. Charlie: {this is my house}

            {Kate opens a file browser window}

63. PC   {a second file browser opens}

64.   (4.0)

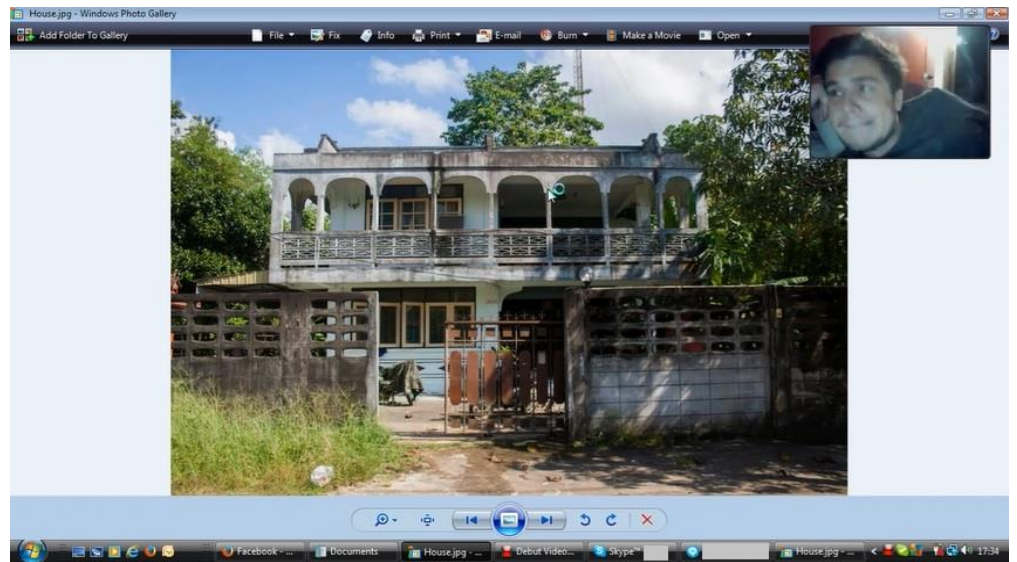65. Kate: {hang} on a minute {it's not it's not happy}

            {she closes the second file browser} {she moves her mouse over the

            file}

66. Kate: {she clicks on the file}

67.   (3.8)

68. PC   {the photo appears}

69. Kate: whoa (2.4) it's a bit mashed