

Staying Socially Connected with Online Video Communications: A Case Study

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ABSTRACT *Video communication conducted online—online videos, video calls, and video-conferencing—is quickly becoming a fixture in the everyday lives of many Canadians. We conducted a case study of residents of a small Canadian city, exploring their use of video communication to maintain social relationships. Our study indicates high levels of acceptance for communicating using video with others at a geographical distance, especially where there is a cost savings, a close personal relationship between participants, and a need to “show” objects or expressions. Concern about privacy restrains more frequent use. The discussion considers these findings in the context of public sphere theory and the potential for online video communications to be a special kind of place for people to meet and socialize with others.*

KEYWORDS *Electronic culture (Internet based); Video; Visual communication*

RÉSUMÉ *La communication vidéo en ligne –appels vidéo, visioconférences, vidéos affichés en ligne – est rapidement en train de devenir une habitude dans la vie quotidienne de nombreux Canadiens. Nous avons mené une étude de cas sur les résidents d'une petite ville canadienne, explorant leur recours à la communication vidéo pour entretenir leurs relations sociales. Notre étude indique une acceptation enthousiaste de la communication vidéo pour rejoindre les personnes géographiquement éloignées, surtout quand les participants peuvent faire des économies, quand ils ont un rapport étroit avec leurs interlocuteurs et quand ils ont besoin de montrer des objets ou des expressions. Un souci de protéger leur intimité empêche une utilisation encore plus fréquente. La discussion considère ces observations dans le cadre de la théorie de l'espace public et du potentiel des communications vidéo en ligne d'être un lieu spécial permettant au gens de se rencontrer et se fréquenter plus souvent.*

MOTS CLÉS *Culture électronique (sur Internet); Vidéo; Communication visuelle*

Introduction

Video communication has rapidly become a fixture in the everyday lives of many Internet users. Given the increased availability and affordability of video-making hardware and software, user-generated video content has been online for some time

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now (Molyneaux, O'Donnell, Gibson & Singer, 2008). Video-sharing websites like YouTube, the integration of video capabilities into social networking sites, and video call software such as Skype are now readily available in most regions of the developed world (Stefanone & Lackaff, 2009; Molyneaux, O'Donnell & Milliken, 2011). Most recently, the merger between Skype and Microsoft in 2011, and Skype's ongoing close relationship with Facebook will undoubtedly result in further increases in this mode of communication.

This case study explores online video communication in a social context. To date, there has been little research on video communication for social connection, and almost no research on this topic in Canada. Yet the technology offers obvious benefits to Canadians because of the country's geography and population distribution. For several decades, video communication has been widely used for applications such as distance education (Harrington, 1987), as well as for many telehealth and other health applications (O'Donnell, Molyneaux, Gorman, Milliken, Chong, Gibson, Oakley, & Maitland, 2010; Molyneaux, O'Donnell & Daniels, 2011). It could be argued that communication tools like online video are critical within the Canadian context.

Until recently, the bandwidth requirements for video communications meant that many Canadians living in low-bandwidth situations, found in rural and remote communities, had limited access to it. Indeed, inequities and a digital divide between urban and rural Internet users persist in spite of government broadband initiatives. While 88% of Canadian homes have a high-speed connection, new users were less likely to use the Internet for communication than experienced users (73% compared to 96%), and rural users performed fewer activities online than those living in urban centers (Middleton, Veenhof & Leith, 2010). Adoption rates of the Internet overall by older, less educated, and lower income Canadians trails behind the national average (Middleton & Sorensen, 2005; Middleton, Veenhof & Leith, 2010).

This study considers how a group of residents in a small Canadian city use and perceive online video for communication, particularly for social connection. It suggests high levels of acceptance for communicating using video with others at a geographical distance, especially when there is a cost saving, a close personal relationship between participants, and a need to "show" objects or demonstrate something. We situate these findings within theories of the public sphere. If indeed video communication creates a unique place for personal interactions, people using this new form of communication could be shaping their opinions in new ways, leading to wider social implications.

Online communication for social connection

The Internet is often discussed as either separate from or an obstacle to peoples' everyday social activities. Such debates presume there is a real difference between virtual and real-life communities (Bakardjieva, 2003). Benedict Anderson (1991), in *Imagined Communities*, writes that all communities are mediated and imagined, but Bakardjieva (2003) sees community as a possible form of togetherness; in all forms of "virtual togetherness," users produce content, relationships or culture.

Wellman and Haythornthwaite (2002) challenge that assumption: is Internet use a "stand-alone activity, or does it become no more separate than picking up the phone is separate from talking to family" (p. 31)? Experienced Internet users incorporate the

technology into their everyday lives and use it for communicating with close and distant friends and relatives. Those highly comfortable with the technology engage in higher rates of “social capital building activities.” In this case, the Internet actually enhances social relationships (Wellman & Haythornthwaite, 2002).

Online communication is a means for people to stay in contact with their own “personal communities”—the set of relationships with others that encourage socialization, foster support, and create a sense of belonging. A personal community does not necessarily have a geographical component; there is no need for people to actually physically live next to each other to be a part of a personal community (Hampton & Wellman, 2002). Other research shows how video can allow people to stay connected when they live far apart. As Patricia Lange (2008) states, online video can constitute a media circuit, that is, a means of “facilitating and technically mediating social interactions among people within a network” (p. 363). Within a media circuit, members of a group can engage in meaningful ways.

Video can aid communication by adding social presence, a term originally coined by Short, Williams, and Christie (1976) and defined as the quality of being present when a communication medium is used. Social presence theory suggests that increased richness of the communication medium leads to increased social presence (Lowenthal, 2010), and different communication media have varying degrees of social presence. For example, video, with its greater ability to support visual cues such as body language and facial expressions, generates a greater sense of social presence than audio alone (Roussel & Gueddana, 2007).

Communications researchers in the mid-1990s applied Short’s theory to online communication and argued that perception matters more than the medium itself (Lowenthal, 2010). Social presence theory continues to be investigated and redefined. Current definitions of social presence include notions of shared space (physical space) and the experience of psychological involvement and engagement between participants (Biocca et al., 2001 as cited in Rettie, 2003).

Text-based communication, like email, is not as effective as the telephone and in-person communication for maintaining personal relations (Cummings, Butler & Kraut, 2002). Video-based communication allows for greater social presence than email or the telephone because the audio and visual elements combined increase communication richness. Users benefit because video channels allow them to communicate in a more natural way resembling in-person communication (Bruce, 1996). Video also facilitates the process of personal identification, allows for the reading of emotional expressions, aids with speech perception, and enables viewers to read gazes, that is, signals that express intimacy and power (Bruce, 1996). Video also allows people to visually share the same objects in a virtual space (Kraut, Gergle & Fussell, 2002; Whittaker, 2003).

Communication richness developed through video technologies could contribute to better (stronger and quicker) development of trust, although more research would be required to support this (Bekkering & Shim, 2006). Research on YouTube videos suggests that the addition of the visual does not necessarily reduce antagonism (Lange, 2008). Practical and social barriers also exist, including costs and effort as well as privacy issues and concerns about personal issues (O’Hara, Black & Lipson, 2006).

Researchers have recently begun to investigate young peoples' use of video communication (Molyneaux, Fournier & Simms, 2009). Canadian researchers have found that older teens are more likely than younger teens to use cellphones and webcams, and are twice as likely to use the camera and video functions of their cellphones as adults (Media Awareness Network, 2005; Zamaria & Fletcher, 2007). University-aged Canadians are also interested in online video. In a recent study of 60 YouTube users from a university in Atlantic Canada, researchers found that 55% were frequent visitors, 26.7% had posted comments to videos on YouTube, and 11.7% had posted videos to the site (Molyneaux, Gibson, O'Donnell & Singer, 2008). Young people are also showing growing interest in using synchronous video. The Canada Online! report states that new Internet applications like Skype video are gaining popularity among Internet users, especially younger ones. Young Canadians are also expressing growing interest in posting photographs and video (Zamaria & Fletcher, 2007).

Older users, those over 35 years of age, are less likely to engage in online activities as often as younger users (Middleton & Leith, 2007); however, researchers argue that younger people's use of computer technology is an important factor for Internet penetration into Canadian households, and subsequently, computer use by adults as they attempt to make sense of their children's relationship to computers (Bakardjieva, 2003). More recent scholarship has suggested that social contact can be an important motivating factor in computer and video use by older adults (Harley & Fitzpatrick, 2009; Milliken, O'Donnell, Gibson, & Daniels, 2012).

Few studies, however, examine the maintenance of ongoing relationships using online communication technologies (Cummings, Butler & Kraut, 2002) and little is written on the use of video communication in the home (Judge & Neustaedter, 2010). In a 2006 study of mobile video phone use, researchers found that the most common reason for using video on mobile phones was for "small talk," that is, conversations where the motivation for calling was social and emotional. These calls were characterized by the close relationship between the participants. For example, couples that were temporarily geographically separated used the video to remain connected. Video was also most often used when calling family members with children, as children communicate more visually than adults. Just under a third of the calls were to "show and talk" where participants used the video function of the mobile phone to show someone else potential purchases while shopping. The video function of the phones was also used, to a lesser extent, to accomplish functional goals; for example, to schedule meetings or lunches, both for work and within social contexts (O'Hara, Black & Lipson, 2006). Similarly, in their studies on videoconferencing in the home, Judge and Neustaedter (2010) and Ames, Go, Kaye, and Spasojevie (2010) noted the importance of video for communicating visually, as well as to share activities and engage in visual play.

Researchers have postulated that in video communication, the emotional, relational content of the message is more important than the informational content (Ijsselstein, van Baren, Romero & Markopoulos, 2003). Ames and colleagues (2010) note that video communication by family members acts to "reinforce their identity as a family and reinforce their family values" (p. 145). Studies have also examined the extent to which people can build social capital while watching videos, focusing on social or interactive

video-sharing (Agamanolis, 2008; Guha, 2008; Oumard, Mirza, Kroy, & Chorianopoulos, 2008; Weisz, 2008; Weisz & Kiesler, 2008). Scholars have suggested that most people share online videos with their families and friends (Guha, 2008; Oumard et al., 2008) by forwarding the link, discussing a video they have seen, or watching it with others (Weisz, 2008). A 2008 study found that participants were multitasking while watching online videos, such as instant messaging, emailing, or talking on the phone or in person (Weisz, 2008). Such activities, as well as recommending videos, could aid in maintaining or building relationships (Weisz & Kiesler, 2008).

In the current study, researchers were interested in the frequency of video communications, perceptions of the medium as a means for maintaining ties within their personal communities, and perceived constraints or barriers to using video for communication. These themes were explored through a Canadian case study of a group of people who use online video, video calls and videoconferencing. We situate the findings within the concept of the public sphere, which has been central to contemporary understandings of the media and opinion-formation in liberal democratic states.

The public sphere

Much of the theoretical work on the public sphere in communications research has focused on political communications, notably for social movements and alternative media (Mitra, 2001; O'Donnell, 2001; Papacharissi, 2002). Equally important, but under-researched, is the public sphere as a place for people to communicate about events in their daily lives. These everyday conversations form their opinions about many things. New media and information and communication technologies (ICT) offer numerous opportunities for people from many backgrounds and all walks of life to engage in discussions.

Why is it useful to understand how people form their opinions? Commentators have pointed out that in a liberal democracy, public opinion acts as “the ultimate source of authority for broadly setting a legislative agenda” (Zarat, 1996, p. 1500) and that “the stability of modern governments is especially dependent on opinion” (Koivisto & Valiveronen, 1996, p. 19).

The concept of the public sphere is associated primarily with the work of Jürgen Habermas (1989), who believes that the growth of capitalism in the 18th and 19th centuries allowed a public sphere to emerge. The public sphere is an arena, independent of government and partisan economic forces, dedicated to rational debate and opinion-formation among citizens. Habermas gave a clear definition of the public sphere in 1964, quoted at length below:

By ‘the public sphere’ we mean first of all a realm of our social life in which something approaching public opinion can be formed. Access is guaranteed to all citizens. A portion of the public sphere comes into being in every conversation in which private individuals assemble to form a public body. They then behave neither like business or professional people transacting private affairs, nor like members of a constitutional order subject to the legal constraints of a state bureaucracy. Citizens behave as a public body when they confer in an unrestricted fashion—that is, with the guarantee of freedom of

assembly and association and the freedom to express and publish their opinions—about matters of general interest. (Habermas, 1964, as cited in Sparks, 1998, p. 110)

Habermas' treatise on the public sphere, published in German in 1962, found an immediate and receptive audience. Ten years later, its first substantive critical analysis was published, also in German, by Oskar Negt and Alexander Kluge (1993). They argue that the bourgeois public sphere described by Habermas cannot be conceived as a singular sphere; rather, they distinguish three overlapping types of public sphere: the classical bourgeois public sphere, the public spheres of production, and the proletarian public spheres.

The Internet has been conceptualized by many theorists as a public sphere. Aurigi and Graham (1998), and Calabrese and Borchert (1996), see three distinct groups emerging regarding relationships to the Internet public sphere. First, a highly mobile transnational corporate class, relying upon interactive global computer networks to operate, uses the Internet to live where they chose while remaining connected to the economic mainstream. The second distinct group is the less mobile and less affluent workers using the Internet largely for passive consumption. The third distinct group is comprised of the marginalized, structurally unemployed groups living in poverty who are excluded altogether from Internet public spaces.

Similar to the research on the public sphere, studies of the Internet as a public sphere have focused on political communications. An online public sphere can enhance democratic politics (Bimber, 1998). Numerous studies of text exchanges on the Internet, in public and private emails lists, blogs, and websites have explored the extent to which the online spaces are themselves public spheres and whether the Internet contributes to an expanded public sphere in the offline world. The most widely cited author on the Internet and the public sphere (Papacharissi, 2002) believes that although ICT hold the promise of reviving the public sphere, aspects of these new technologies simultaneously restrain that potential. For example, given the patterns of global capitalism, it is possible that ICT will adapt to the current political culture, rather than create a new one.

To date, there has been very little research exploring the link between video communication and the public sphere. Milliken, Gibson and O'Donnell (2008) investigated the extent to which user-generated online videos could contribute to an expanded public sphere and freedom of expression in Atlantic Canada. The study concluded that videos act more as catalysts than mechanisms for discourse in both an on- and offline public sphere. Video sites like YouTube site do offer a new opportunity for public discussion and debate. Online videos can act as a tool for expression of views about issues of public concern and stimulate discourse in both on- and offline spaces (Milliken, Gibson & O'Donnell, 2008).

Study focus and methodology

The literature review generated several research questions that became the focus of this study:

- 1) How frequently are people using online video and video calls?

- 2) With whom are they communicating?
- 3) To what extent does this communication increase social connection?
- 4) Is anything restraining more frequent video communications?
- 5) What are the implications of these findings for the public sphere?

Communication researchers have underlined that we need to go beyond the quantitative method of counting Internet usage and examine what the Internet actually means for people through qualitative methods (Bakardjieva, 2003). Our mixed-methods study incorporated both quantitative and qualitative methods.

The study was administered from June to September 2009 in Fredericton, New Brunswick, a small city in Atlantic Canada. To be eligible for the study, participants had to have previously used online videos and videoconferencing or video calls. They were recruited through posters around the city and on a university campus, an article in the local newspaper, a university e-newsletter, and networks of acquaintance.

Researchers achieved their goal of attracting a broad socio-demographic spectrum of Fredericton adults. The 62 participants aged 18 plus were 50% female and 50% male. The age ranges were: 43% aged 18-34; 31% aged 35-54; and, 26% aged 55 plus. A higher percentage of study participants had a post-secondary education than the average for the population of Fredericton.

Participants were invited to take part in two phases of the study: a survey with multimedia content (62 participants) and a structured interview (30 of the survey participants). The research protocols were reviewed by the research ethics board of the researchers' home institution.

In the first phase—the survey—participants completed a 90-item questionnaire, which assessed their current technology use using both closed (e.g., Likert scale responses) and open field response formats. Participants were provided with a \$15 honorarium. Quantitative data were analyzed using SPSS statistical software. Qualitative data from the survey were used anecdotally to explain trends and specific responses.

Participants in the second phase of the study were interviewed for an average of one hour and received a \$15 honorarium. The structured interview guide had 90 items, a mixture of both open and closed questions. Questions covered experience and attitudes toward video calls, videoconferencing, watching online videos, and making and posting online videos. Interviews were audio recorded, transcribed, and analyzed using NVIVO qualitative software and coded using themes related to the research questions.

Study findings

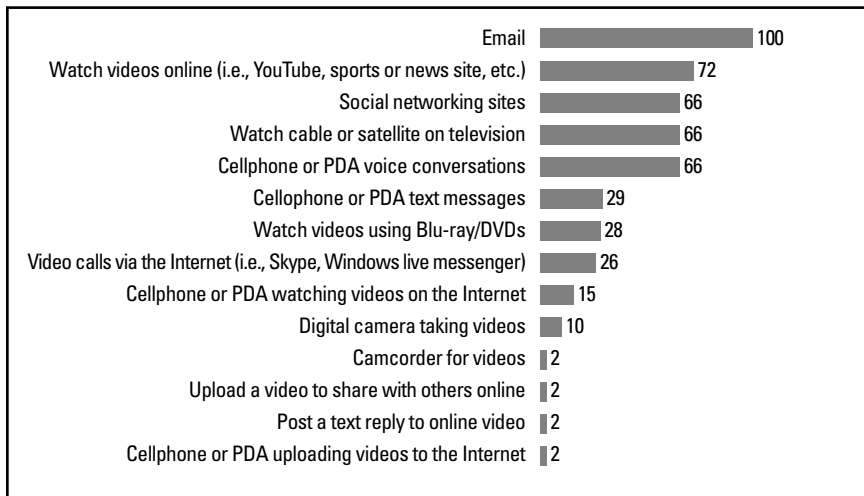
Frequency of video communication use

In the survey, participants were asked how frequently they used various types of information and communication technologies, illustrated in Figure 1. Regular use is defined as using the technology every day or several times a week. Figure 1 shows that 72% of participants watched online videos regularly and 26% made video calls regularly.

All participants reported using email on a regular basis and 66% regularly used social networking sites, viewed television, and had voice conversations on cellphones. Many participants also regularly used voice or text messaging on cellphones. Fewer

participants reported taking videos on digital cameras (10%) or camcorders (2%) on a regular basis. Uploading videos or posting text responses to online videos were also uncommon activities, with only 2% of participants reporting regular use (see Figure 1).

Figure 1 : Regular ICT use (n=62)



Online video use

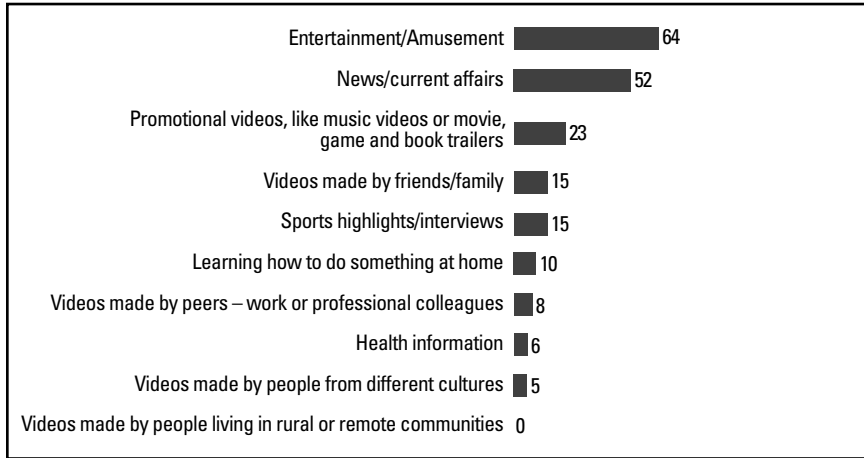
Online video is asynchronous, pre-recorded audio and video shared online. Figure 2 shows that 15% of participants in our case study regularly watched online videos made by friends and family. Again, regular use is defined as using it everyday or several times a week. Entertainment videos were the most frequently viewed, with 64% percent watching them regularly. News or current affairs clips were also popular, with 52% of participants viewing these videos regularly, and 23% regularly viewing promotional videos, such as music videos, movie trailers, et cetera.

In the interviews, participants discussed the importance of viewing videos posted by friends and family living at a distance. They stated that online videos of private family events, like graduations and birthdays allow them to stay connected to their friends and family members' lives even if they are unable to attend in person (Female, 27; Male, 21). One participant stated:

I've been able to like share in friends' lives and their happy moments and stuff through online videos, watch some people's graduations, seen weddings, seen birthdays online, so stuff I've missed out on, I can like relive it through the videos. (Male, 21 years old)

Another participant discussed how her girlfriends used online videos, uploaded through Facebook, to stay connected. In particular she said:

we really want the videos that we share with each other to show aspects of our lives that we're missing out on, and we use video a lot more to stay connected as friends and share our lives together. (Female, 27 years old)

Figure 2 : Regular online video use (n=62)

While the emotional benefits of seeing familiar people in online video were mentioned by several participants, one participant discussed how viewing videos sent by friends and relatives could be a means of connecting with others, even if the videos were not created by people they know:

I think emotional content would be the most powerful thing ... I'm getting videos that people have emotionally connected with ... And then as I watch the video, I'm thinking a little bit about who sent it to me and again, they wouldn't have sent it unless they thought it was important, right? So, it's a bit of a connection to that person because they're showing ... It's like, you know, you show your picture of your children to somebody else. You know there's a connection to the other person through what they've sent to you. (Male, 51)

Video call use

Video calls and videoconferencing refers to synchronous, live, audio-visual exchange. The survey asked participants how often they communicated with friends or family using video calls, video chat, or videoconference. Only 8% did so on a regular basis with others in the Fredericton area, while 31% used it regularly to communicate with friends and family outside of Fredericton. Regular use is everyday or several times a week. In the interview, participants also discussed how they and their friends and family use video chat to converse with those living at a distance; indeed, the geographic distance between participants and their friends and family played a key role in their decisions to use, or not to use, video calling.

Participants reporting very frequent use of video calls with friends and family located the furthest distances away. One participant discussed using video for chatting on a weekly basis because his family

live in Europe, so I have to communicate with them [over video] because I haven't seen them in a while, since I left and came to Canada, so it's kind of good to talk with them almost every week, I'd say. (Male, 21 years old)

Another participant used video calling to stay in touch with her sister in Whitehorse, a city on the other side of the country, but did not use the technology to communicate with family members or friends who live locally (Female, 39 years old). Another participant mentioned she only used video calls when she was “very far apart” (Female, 39 years old) from her friends and family, and otherwise she used instant messaging and Facebook.

Distance seemed to be relative for the participants in the study. One participant (Female, 27 years old) considers her family, living in the adjacent province of Nova Scotia, as too close for regular video communication. Another participant (Female, 21 years old) mentioned her friend in Bathurst, New Brunswick, which is closer than Nova Scotia, as one of the top three people she frequently communicates with by video calls, calling her about once a week over the summer.

Both distance and the closeness of the relationship between the participants were important considerations when making a video call. One participant stated, “for me personally, it comes down to when if it’s somebody that I’m really close to that I can’t see for a long period of time, ... I would opt for a video” (Male, 27 years old).

Wanting to maintain a close relationship with children and between families motivated video calls. Even children who can verbally communicate sometimes forget how to interact during a telephone conversation and use facial expressions and gestures to communicate (Ballagas, Kaye, Ames, Go, & Raffle, 2009). A 39 year-old female participant discussed using Skype while apart from her family and finding it a better communication medium than telephone because “they get to see me and I get to see them” (Female, 39 years old). A 71 year-old male participant explained his experience teaching for several months in China, and how the ability to “talk to the grandchildren and talk to the children and see what they looked like in real time” (Male, 71 years old) prompted him and his wife to use video calls.

The clear advantage of video calls over other means of ICT like telephone calls or email is the real-time visual aspect. One participant stated,

with video you feel closer. There’s closer contact with them and you don’t think: Well, I haven’t seen that person for three years. I mean, you say: Well, I saw them yesterday. So I guess your ongoing relationship is closer because of the video. (Male, 58 years old)

While describing recent hardships in the family, another participant mentioned the beneficial visual impact of video calls: “talking to someone on the phone is not the same as talking to them through video calling. It’s a much more personal, better communication” (Male, 44 years old). A third participant who used video calls to connect with friends and family members also stated that video calls allowed a greater feeling of “a closer connection than if you don’t see them for two or three or four years” (Male, 58 years old). Another participant stated: “When it’s been my initiative, it has been simply to provide imagery of family. Otherwise it’s never been my idea to have a videoconference conversation” (Male, 71 years old).

A change in physical appearance was a motivating factor for video call use. One participant said it becomes necessary to use video calls when talking with family members or friends that he has not seen in awhile, especially when he wanted to show

them something, like a change in his appearance—a new haircut, for example (Male, 55 years old).

Video calls can also give people a sense of shared space, as well as an opportunity to interact in real time, something that other visual means, like digital photographs, cannot accommodate. As one of the participants described:

I have a friend in New Mexico who's an artist, so when she's finished getting some works ready to do in an exhibition, she can take me out to her studio and show me her stuff. Whereas before, she'd take a digital picture and we'd put it up, but she's there taking about it, which many times, she wouldn't think to put in an email message or wouldn't ... Because it's not live, I can't ask her a question, so ... live time, helps." (Female, 71 years old)

During the interviews many participants discussed the importance of video calls for seeing objects and gave general examples of how they would use video calls for this purpose. One 51 year-old female mentioned using video calls "when I have a lot of time and we just want to sit and talk and look at each other or show somebody something over the thing, then we do that" (Female, 51 years old). Another noted a video call conversation with his sister where she discussed buying something, and the video call enabled her to hold the object up for her brother to view (Male, 44 years old). Similarly, another participant discussed how the difficulty of describing an object was overcome by using a webcam to show it (Male, 35 years old).

The idea of "showing" over video can refer to more than physical objects, but also to emotion. Many participants discussed how video calls and videoconferencing could potentially clear up misunderstandings that could occur over other forms of communication (Male, 24 years old; Female, 40 years old; Male, 44 years old). This, in addition to the synchronous nature of video calls, can help create a feeling of greater involvement:

It's immediate. Over email, if you think about video calling as opposed to email or writing a snail mail letter, it's immediate. You don't have to sit there and compose and read and as we all know, written communication, while wonderful, there's nothing that beats getting a letter in the mail and opening it up. Love that. But it's prone to miscommunication, lack of clarity, so much of communicating is visual. Seeing the look on the person's face, seeing the delight in their eyes when they're talking about something that might not come through clearly in their voice, seeing the animation or the somberness or ... You've likely been involved in conversations, as has everybody else where you're talking to the person and they grow quieter and quieter, and you're on the other end of the phone going: I wonder what's going on. Are they just fascinated by my voice or ... And on Skype, you see that they're actually crying because what you're talking about has upset them. (Male, 44 years old)

Several participants stated that they used video calls over other means of communication because it allows them to more easily communicate since they can see other people's reactions and body language instead of guessing or relying on emoticons when communicating using non-visual means (Female, 21 years old; Male, 24 years old; Female, 51 years old; Male, 21 years old). One participant gave examples of how

the visual makes her feel more connected with others during work conference calls and in her own personal life:

People forget that they're videoconferencing, and they just start having conversations amongst themselves and the person, if you're just dangling on a telephone conference, you don't know. Have I been cut off or am I out of the conversation, what's happened? Having that visual cue, that okay, people have naturally broken into discussion, or the coffee came in the room, and people completely get distracted or what ... Or in my husband's case, the dog has come through the picture, so I know what's going on. So it just makes you feel like you're there and part of the ... more part of the conversation than just having the audio. (Female, 40 years old)

It is important to note that cost also was a factor in the decision to video chat instead of use the telephone. One participant stated that he really never communicated with friends and family using video calls because his parents and family live in Montréal. He prefers to communicate with them using the telephone. He did state that if he had friends and family further away, for example, in Australia, that he would value video calls instead of telephone calls because it would be less expensive (Male, 46 years old). Several others noted that video calls are inexpensive when compared to long distance telephone calls, especially when calling many people and talking for long periods of time (Female, 21 years old; Male, 49 years old). One participant stated that he does not have a long distance phone plan so he communicates with friends and family "over MSN, and when I get bored of that, we want to talk face-to-face, we'll go on Skype" (Male, 24 years old).

Another participant whose wife was living overseas found telephone conversations far too costly "when I was talking to my wife ... I used to spend like \$200 a month on telephones. So it was costly" (Male, 27 years old). Comparing video calls to telephone calls and email, this participant noted:

I think if the other person is online, I think video call is much easier than a phone call or email because, I mean, at least I talk to my peers in India. My wife, she's in India, and we talk every day, and I think it's much cheaper. Yeah, it's much cheaper. It's much easier to talk and I think ... I mean phone calls or emails, I think are much cumbersome than video call, given they have the Internet. If they don't have the Internet at the same time, I think the email is the best method than phone call. (Male, 27 years old)

Constraints to using video for communication

Concern about privacy was the constraint or barrier to video call use most often reported by our participants. Some participants, although they have participated in video calls or videoconferencing in the past, were reluctant users because of privacy concerns. When asked if she communicated using video calls in her daily life, one participant stated that she was going to, in order to communicate with her daughter in Scotland, but is still reluctant to try it: "I must admit it, it's probably an age thing, but there are just some things about putting myself visually on ... I'm aware of once you're image is on the net, it's there" (Female, 54 years old).

Another participant expressed concerns that the video call software could compromise the privacy of users. For example:

Skype lets people know when you're on Skype. If you don't want to talk to that person, they know you've rejected their call. Like the little chat thing at the bottom of Facebook, or Gmail. They know you're there. It's not like you can act like you're in the shower or you're away and let the phone ring. That has some negatives. (Male, 44 years old)

Similarly, another participant stated:

Most of the people who are members of my family and who would be part of our friendship group would have the technology and the financial wherewithal, and would be in a community where it would be accessible and there for them. What I find the barrier is, is attitude. I think they're worried that if I call them on Skype, I'll be seeing them before they know. It's like, I'll pop up on the computer and be watching them come to the computer and they'll have to make sure they're properly clothed or not. (Male, 44 years old)

Privacy issues were of even more concern to participants when they discussed online videos. Most of the participants interviewed stated they did not create videos and post them online. When further asked about video uploading as well as friends' and family's use of online video, some mentioned uploaded personal videos and viewing videos created by friends and family, but only in the context of social networking sites, such as Facebook (Female, 27 years old; Male-a, 27 years old; Male-b, 27 years old; Male, 35 years old). Participants perceived social networking sites as having a higher level of privacy control than video sites such as YouTube.

Another restraint to using video calls is the perception that it is not worth the trouble, compared to communicating by telephone. One participant who does not use video calls stated that her two sister-in-laws, who live in Canada, but are originally from Mexico, use video calls to stay in touch with their family members. She recognizes that video calls are a "great way to keep in touch with family when you're far from home"; however, she has not managed to video call others because of time constraints and her perception that "it's still easier to pick up the phone somehow" (Female, 49 years old).

Others felt that the visual aspect of video calls was not enough of a motivator for them to use the technology for everyday communication. One participant said that while he used video calls because long distance telephone calls were too expensive, the video was not as important as the audio. In fact, he mentioned that when others did not have access to webcams they would simply make online audio calls. He said that while it is nice to see the other people he is communicating with, it is not that important (Male, 46 years old).

Discussion

Our case study explored how a group of residents of a small city in Atlantic Canada are using video communication to maintain social relationships, as well as their motivations for and constraints to using such technologies. Everyone in the study group had used online videos and video calls or videoconferencing before participating in

the study. We found that 26% used video calls and 15% used online video everyday or several times a week to maintain ties to their personal communities.

Geography—the distance between those communicating—was a primary motivator for using video to stay socially connected. Study participants used video calls to communicate with people living in different countries or living in other regions of Canada. Although 8% of participants surveyed reported using video calls with others in the same city, nobody in the interviews mentioned using video calls to communicate with others in the same city. Viewing online videos of family events in distant locations also allowed people to feel like they were taking part in activities they could not attend in person.

Participants reported feeling connected through video to others in their social circles and this feeling of connection was important to them due to the nature of their relationship with the other people. They considered the visual aspect of video to be of great value when keeping in touch with a close circle of friends living in dispersed locations, as well as with significant others. In particular, participants discussed the importance of the visual when communicating with children and family members as they aged and changed in looks.

Another motivator to use video is the ability to “show.” Participants liked being able to show others not only physical objects and appearance over video but also to show emotion and body language in order to achieve a greater personal connection with others and to clear up any misunderstandings that could arise from single sensory means of communication (such as email, telephone, et cetera).

Cost was closely related to geographic location as a motivating factor for using video. Participants used video calls because they are less expensive than long-distance telephone calls, especially for friends and family in other countries.

Interestingly, even in our study group, consisting of all regular users of ICT, some participants were cautious users of video. Several expressed concerns about privacy issues on Skype video, in particular the idea that others know when they are online and might be affronted if they do not answer the video call, as well as the fear that they could be caught off-guard on a video call (for example, by dressing inappropriately, or by offending others if they are seen to be multi-tasking—an activity they might do during non-visual communication). Participants were also hesitant to put their own videos online, for fear of them being viewed by people other than the intended audience. Social networking sites, like Facebook, were considered by participants to be a more private place to post personal videos than video sites like YouTube (even though such sites allow users to set privacy settings).

What do these findings mean in the context of the public sphere? Earlier we discussed how most of the research to date on the public sphere and the Internet has focused on political discussions; however, an equally interesting focus is the everyday discussions among and between people. These interactions are the basis for forming opinions, and public opinion is central to the stability of modern liberal democracies. Given that no previous research exists on how online video communication supports everyday communication and social connection, our study is an initial contribution to this aspect of the public sphere.

First, it is clear that using online video to communicate is firmly established as a communication process. Women and men of all ages and backgrounds had used video communications prior to our study, while a core group use online video and video calls several times a week or everyday. Other studies indicate that use of video communications continues to grow. We expect that the core number of people from all backgrounds using video communications regularly will likewise continue to grow. Where the networks exist to support these bandwidth-heavy activities, particularly in urban centres and their hinterlands, they could become a very common means of communication within in the next decade. Any common means of communication mediated by technology and networks is of interest in the context of the public sphere.

The frequency of communications is an important finding from this study. This group is well-informed, with more than 50% of participants watching video clips of news/current affairs regularly. The core group using video communications everyday or several times a week would have numerous opportunities to discuss or comment on events of the day as part of regular conversations and online exchanges. We believe that these everyday conversations and casual exchanges about “what’s new” on video calls, and exchanging emails about online videos shared online, have the greatest relevance for the public sphere. Given the current frequency of use and the challenges of providing the necessary bandwidth, it will be many years, if ever, before video becomes the primary means of everyday communications for most people in Canada. Even now, however, its use is significant. Clearly, online video communications is currently one notable way that Canadians have conversations of all kinds, on many different topics. We believe that online video communications therefore contribute to how Canadians form opinions on many subjects and are worthy of much further study.

The most significant finding of this study is that video communication is used rarely—and for most people never—for communicating locally. Few participants in our study share videos and none have regular video calls with people living in the same small city. Some use the technology for sharing with others in the same province, but most use it to link with others across the country or internationally. This finding is interesting for two reasons. First, the richness of the video medium allows for face-to-face conversations and detailed video exchanges, the closest thing online to being there in person. Clearly video communication is being used to draw others who live some distance away into a shared local space; however, people appear to use this form of communication rarely with locals and the opinions being formed are not based on geographically-located communities. This will no doubt have an impact on small culturally-cohesive communities—like the small city in our study—as new opinions and ideas will be entering the local discourse in new ways. Second, these video communications will support conversations that encompass the global events shaking our world. Clearly, communicating across vast distances is the primary means of using this powerful new tool. Many use it to communicate with people living on other continents. Conversations are happening, and opinions are being formed, on local events far across the globe. Again, the richness of the visual material—the online videos, the close-ups in video calls—gives the immediacy that makes video such a powerful means of communicating. We believe that the public sphere will be enriched with opinions informed

through everyday communications by video with local communities in other parts of the world.

Another, and related, significant finding is the kinds of relationships between and among people interacting by video communications. Video calls are made among people who feel close to each other. This includes family members living in distant countries who may never meet in person, but remain close to through family ties. Children call parents, and grandparents visit with the little ones, partners and spouses call each other by video when apart. The conversations are familiar, intimate, friendly. These are people who trust each other, and they use the online means of communication that are most able to support feelings of trust. There is no doubt that video calls in particular feel close. Participants in our study spoke continually of feeling connected and close with those they communicated with by video. What they say to each other in these settings is trusted information. We believe that the kinds of trusted conversations supported by video communication are shaping public opinion of national and international events. The tumultuous events of our times are no doubt being discussed by friends, family members, and close confidants living far apart, and, in some cases, living in the same communities where the world events are unfolding. The ability of video communications to make these global events seem local is an important and interesting contribution to the public sphere across Canada and the world. At the same time, this powerful medium is bringing the perspectives of Canadians into the homes of family and loved ones in communities on the other side of the globe. This combination of close relationships, distance, rich video and audio, and trusted communications is unique.

A full analysis of the cost of video was outside the scope of our study. Most online video use is currently free; most Canadians pay no extra charges on top of their Internet service to use free video calling services or watch freely-available videos online. The cost structure of the network is supporting the high use of video calls. Would most people currently using video communications continue to use it if they had to pay for it? Our study did not answer this question; however, as with many online services, people who have the money will pay if they want it. So there are two broad possibilities. If video calls and watching online videos remains free, then their use will continue to grow as the networks and bandwidth grow to support this usage. People from many diverse backgrounds will use this communication medium. The second possibility is that video calls and watching online videos will become costly activities. If so, only the people who have money to pay for these services will continue to use them. In this latter case, video communications will be largely the preserve of the elite, and these rich visual spaces will be among the places where the elite form their opinions. For this reason, researchers will want to watch the future development of these online services in an almost exclusively commercialized environment, including any future innovations from companies such as Microsoft, and Skype and Facebook. From this perspective, Papachairissi (2002) may be correct that global capitalism will shape ICT use to the current political culture, rather than create something new. If video communication does become largely the preserve of the elite, then the predictions of more than a decade ago by theorists, including Aurigi and Graham (1998) and Calabrese and Borchert (1996), will become a reality: Internet users will include a highly mobile

transnational class using video communications extensively, and people living in marginalized communities and in poverty who may be online but cannot afford to use online video. This situation would have obvious implications for the role of video communications in forming public opinion in the context of the public sphere.

Whether or not the video communication services themselves remain free to use, people now may be willing to pay for private video communications. For example, for obvious reasons we did not discuss the use of pornography with our study participants; however, it is widely known that online video pornography is a hugely significant use of the Internet and a major—possibly the biggest and most profitable—online service industry. Our study found that privacy was a primary concern when using video communications. It stands to reason that now and in future, people who have the means will be willing to pay to keep their online video viewing and personal video calls private, supporting video communications increasingly becoming the domain of the elite.

Conclusions

Given that video communication using broadband networks is still a young medium of communication, research remains sparse on how people are using it to stay socially connected. The findings of our case study are limited to the study group and cannot be generalized to the wider Canadian population; however, our work could serve as a basis for future investigation into how Canadians in different regions use video technologies. We believe our findings contribute strong evidence that the key motivators for Canadians to use video communication for social connection are bridging large geographic distances, lowering costs, having a visual connection to others, and having the ability to show objects and emotions. A key constraint to using the technology is users' concerns about privacy. Addressing privacy concerns by offering more secure and trustworthy video communication software options would likely encourage more frequent use.

The interest of our study for Canadians lies in the ongoing need in this country for inexpensive and effective ways to maintain social connection with friends and family living in distant locations. Video communication online clearly offers two distinct options: sharing online videos of events with friends and family, and using inexpensive video calls for virtual visits. Our research demonstrates that Canadians using these options have found that they do help to maintain their social relationships over a distance.

Our research suggests that in the Canadian context, the use of video communication will continue to grow if it becomes more available and continues to be affordable. The current low cost of video communication (such as free calling sites like Skype and video-sharing sites like YouTube) is clearly a factor that motivates many people to use it. This finding points to the need for a political economy analysis of video communication in order to more accurately gauge its potential future in the Canadian digital communication landscape. Recent and ongoing developments in the video communication technology marketplace make it difficult to predict the long-term future of video communications for connecting socially in Canada. Our study is an early contribution to understanding these developments; clearly more research is needed to fully explore the broader context of how Canadians are using video communications to connect socially.

The study and discussion suggested many implications for the public sphere. To fully understand the broader implications of video communications for the public sphere, more studies are needed. We suggested two potential avenues for the future. One is that video communications will become more democratic and increase the avenues of social communication and opinion-formation used by people across Canada from all backgrounds and walks of life. The other is that only a smaller core group of elite Canadians will use video communications regularly. When thinking about this situation, the wider social and economic relations in Canada have a bearing. Canada, like many other countries, is becoming increasingly divided by wealth, and the disparities are significant. Concerns about the democratic process are raised continuously. The use of video communications will no doubt both shape and be shaped by wider social, political, and economic developments in society. Future research could study these developments and explore how this powerful new medium is supporting personal interactions that not only shape opinions by Canadians here but also influence opinions of people around the world.

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