

CMC and friendship: a strong match or an inferior surrogate?

M.Liebregt

(s0021229)

Master Thesis,

Philosophy of Science, Technology and Society

University Twente

Master Thesis

Maurice Liebrecht

CMC and friendship: a strong match or an inferior surrogate?

July 2009

Committee:

Dr. A.R. Briggles,

Prof. dr. P.A.E. Brey,

Dr. P.A.M. Kommers

Preface

This thesis is the end result of my studies into the role of Computer Mediated Communication (CMC) in friendship as part of the master's programme Philosophy of Technology and Society. The impact of computer technology and its increased use on our society and individual lives have fascinated me from an early age on. During my studies within the PSTS programme this developed (among other things) into a particular interest in the role of CMC in the establishment and maintenance of personal relationships inspired both by technological developments at the time and my own and other people's experiences with using such technologies. Discussing these things with other people sparked questions about the evaluation of computer mediated relating in particular with regard to friendship. Questions such as: can these relationships be considered to be real friendships and how does increased CMC use impact on the value of such relationships and the place such relationships have within our lives. These questions seemed to be present among a large audience, but many of the answers that had been given so far failed to satisfy me. In the process of writing this thesis I've tried to identify the shortcomings of current work in this direction and develop ways in which we can start to provide better answers to these questions.

This has been a very interesting and rewarding process for me that has involved the reading of many interesting works on such things as friendship, communication and Internet technologies as well as talking about these things with a collection of interesting persons and applying the things I had learned within PSTS. It was however also not without its difficulties: working on such a big project for the first time can be quite an effort, especially in trying not to get sidetracked by all the interesting literature one comes across. In addition combining such a project with other study and work activities, a deteriorating health condition and a busy social life has been quite a challenge. There are several people who I owe thanks to for their support in facing this challenge. First of all I would like to thank Adam Briggles for the many inspiring discussions we have had over the past couple of years, which have helped form my thinking about friendship and many of interesting issues related to computer use within (and outside) the context of this thesis. In addition I would like to thank Philip Brey and Piet Kommers for their insightful feedback on earlier versions of this thesis that have helped improve its structure, focus and clarity. Third I would like to thank my parents and sister for their encouragement and support during my education and their support during these last few months. Last but definitely not least I owe thanks to my friends (past and present) who have inspired me in my thinking on friendship and have provided me with valuable support, encouragement and a much needed beacon of rest in some of the hectic times that have preceded the finalizing of this thesis.

Abstract

Over the past couple of decades computer networks have been increasingly used for social practices. Especially the past decade has seen a rapid growth in popularity of applications aimed at developing and maintaining social relationships online. The increasing use of computer mediated communication (CMC) for the development and maintenance of social relationships has sparked important, and philosophically interesting, questions around the possibility, nature and value of friendships online. It is however not uncommon that rather hasty conclusions are drawn in relation to such questions. This has inspired the following research question:

How can well-informed evaluations of the role of CMC in friendship be developed?

To answer this question several sub-questions have been addressed:

What is CMC?

In the first part of the thesis the meaning of CMC has been analyzed and surveys of studies on CMC technology and their use have been used to provide:

1. A definition of CMC as:
a process involving two or more people participating in a two-way or multi-way exchange or development of information through networked computer systems.
2. An overview of the different popular types of CMC and their affordances.

CMC platforms have been shown to differ quite extensively in the forms of communication they provide: synchronous vs. asynchronous, one-to-one vs. one-to-many, text-based vs. speech vs. video-based, private vs. public. In addition there are significant differences in interfaces, user and relationship representation and forms of moderation.

Studies of CMC friendship practices have also been surveyed with the aim of answering the questions:

Which roles does CMC typically play in friendship relationships? Who is participating in computer mediated friendships and with which motives?

It has become clear that worldwide a large and varied group of people is using CMC to develop and maintaining friendships online. Five popular motivation categories for computer mediated friendships have been identified. The surveyed data suggests that a large part of friending behavior online is motivated by offline relationships and CMC use is often supplemented with use of other media and face-to-face communication. Computer mediated friendships are mostly considered as important by their participants and in many cases (nearly) as important as their offline friendships.

The second part of this thesis focuses particularly on friendship and has aimed to answer the question

How can we understand friendship and its value?

To achieve this goal an elaborate analysis of different philosophical accounts of friendship has been performed resulting in an overview of the history of thinking about friendship and its value. Furthermore synthesizing insights from this overview and some additional insights from works on friendship from social sciences has led to a framework for thinking about friendship and its value.

How has the role of CMC been studied and evaluated so far? On the basis of which theories has this happened?

These questions have been approached by analyzing and critiquing the methods, assumptions and arguments underlying current evaluations of the role of CMC in friendship and some of the influential theories which have provided the basis for a number of these evaluations. This has resulted in an overview of problem areas, the most important of which are lack of clear/good definitions of friendship, lack of convincing ways of evaluating the value of friendship, questionable generalizations over CMC platforms, different user groups and different relationships and the adoption of rather one-sided and/or deterministic views of CMC.

In which ways can current research and the evaluations resulting from that research be improved?

Based on the identified weaknesses of current research a structured approach has been developed that among other things involves the application of the developed framework for thinking on friendship. Several important areas for further research have been identified, most importantly: the application of the approach to actual research and the further development of theories of mediation of communication.

Contents

Preface.....	3
Abstract	4
Introduction.....	11

Part I: The tangled web:

The complex realities of friendship on the screen

1 CMC: an explanation of the different forms	17
<i>1.1 Introduction.....</i>	<i>17</i>
<i>1.2 History of CMC.....</i>	<i>18</i>
1.2.1 Chat & Instant Messaging	20
1.2.2 Videoconferencing	21
1.2.3 E-mail.....	22
1.2.4 Bulletin boards/message boards/forums.....	23
1.2.5 Virtual worlds.....	24
1.2.6 Social networking sites	25
<i>1.3 Interaction through different types of CMC.....</i>	<i>26</i>
1.3.1 Communication	27
1.3.2 Chat, Instant Messaging and Videoconferencing	30
1.3.3 E-mail.....	32
1.3.4 Message boards/forums/bulletin boards.....	34
1.3.5 Virtual worlds.....	35
1.3.6 Social networking sites	36
<i>1.4 Conclusions.....</i>	<i>37</i>

2. Online friendships in practice	38
2.1 <i>Introduction</i>	38
2.2 <i>Friendships, CMC and motivations</i>	39
2.2.1 Friendship for the sake of maintaining and/or enhancing existing offline friendships.....	40
2.2.2 Friendship for the sake of broadening one's social environment	41
2.2.3 Friendship for the sake of self-expression	43
2.2.4 Friendship for the sake of achieving status.....	43
2.2.5 Friendship for the sake of saving face	44
2.2.6 Friendship online as a by-product of other activities	45
2.3 <i>Participants: social categories and bounds</i>	46
2.3.1 Bounds and restrictions	46
2.3.2 Age and living situation.....	47
2.3.3 Ethnicity and nationality	48
2.3.4 Gender.....	48
2.3.5 Frequent CMC users	49
2.4 <i>On- and offline social contexts and their influences</i>	50
2.4.1 Differences between social contexts	51
2.4.2 Contextual influences.....	52
2.5 <i>Importance and depth of CMC friendships</i>	53
2.5.1 User evaluations and expectations.....	53
2.5.2 Scientific evaluations of CMC friendships	55
2.6 <i>Conclusions</i>	56

Part II:

On friendship: Assembling a framework for evaluating friendship in the tangled web

3 Thinking about the nature and value of friendship:

A historical overview	59
<i>3.1 Introduction.....</i>	<i>59</i>
<i>3.2 Historical overview</i>	<i>60</i>
3.2.1 Plato	60
3.2.2 Aristotle.....	62
3.2.3 Cicero.....	64
3.2.4 Seneca.....	66
3.2.5 Aelred	68
3.2.6 Montaigne	69
3.2.7 Bacon.....	70
3.2.8 Kant.....	72
3.2.9 Emerson.....	73
3.2.10 Telfer.....	75
3.2.11 LaFollette	77
<i>3.3 Conclusions.....</i>	<i>79</i>

4 Towards a framework for reasoning about friendship..... 82

<i>4.1 Introduction.....</i>	<i>82</i>
<i>4.2 Important properties of Friendship.....</i>	<i>84</i>
4.2.1 Friendship's diverse nature.....	84
4.2.2 Personal	85
4.2.3 Voluntary, reciprocal and equal.....	86

4.2.4	Dynamic and free	87
4.2.5	Partially exclusive	88
4.2.6	Shared activity.....	89
4.2.7	Connectedness.....	90
4.2.8	Character and identity shaping.....	91
4.3	<i>Reasons for friendship</i>	92
4.4	<i>Conditions for or beneficial to friendship</i>	96
4.4.1	Character	96
4.4.2	Physical.....	97
4.4.3	Economical	97
4.4.4	Political.....	99
4.4.5	Social.....	99
4.5	<i>Value of friendship</i>	100
4.6	<i>Conclusions</i>	104

Part III: Demonstrating the value of the framework: towards better grounded evaluations

5	Theories on CMC and evaluations of CMC use in friendship.....	111
5.1	<i>Introduction</i>	111
5.2	<i>Theories applied to CMC</i>	112
5.2.1	Social Presence Theory	112
5.2.2	Media Richness Theory	113
5.2.3	Deindividuation and Social Identity Deindividuation Theory	114
5.2.4	Social Information Processing Theory (SIP).....	115
5.2.5	Hyperpersonal Model of CMC.....	116
5.2.6	Uncertainty Reduction Theory	117

5.3	<i>Evaluations of CMC friendship</i>	118
5.3.1	Negative evaluations and Cues Filtered Out	118
5.3.1.1	Social Presence Theory	119
5.3.1.2	Media Richness	119
5.3.1.3	Deindividuation Theory	120
5.3.1.4	Social Identity Deindividuation	121
5.3.1.5	Philosophical evaluation: Unreal friends	121
5.3.2	Making up for cues filtered out	123
5.3.2.1	Social Information Processing Theory (SIP)	123
5.3.2.2	Hyperpersonal Model of CMC	124
5.3.2.3	Relationships liberated	124
5.3.3	Beyond loss of cues	126
5.3.3.1	Uncertainty Reduction Theory based evaluations	126
5.3.3.2	Social bonding activities	128
5.4	<i>Internal critique of theoretical work on CMC</i>	129
5.4.1	Negative views	129
5.4.2	Positive views	131
5.4.3	General critique	133
6	Evaluating the role of CMC in friendship	135
6.1	<i>Introduction</i>	135
6.2	<i>Criticism from a philosophical perspective</i>	135
6.2.1	Nature of friendship	135
6.2.2	Grounds for evaluations	136
6.2.3	Generalization	139
6.2.4	Context sensitivity	141

6.2.5	Determinism	142
6.2.6	Summary of issues	144
6.3	<i>The way forward: An approach to evaluating CMC friendships</i>	<i>145</i>
Conclusions.....		154
Discussion and recommendations		160
References.....		161

Introduction

Motivation and relevance

Social life in a networked world is increasingly mediated through keypads, cameras, and screens. The past decade has seen an enormous rise in popularity of applications aimed at socializing online, among them platforms such as MySpace, Second Life and FaceBook. An increasing audience is connecting through computer networks to maintain existing and build new relationships. The frequent use of computer mediation for the development and maintenance of personal relationships and the increasing possibilities available for such uses have gotten quite some attention in both popular as well as academic press (including such fields as psychology, communication sciences, computer science and to a lesser extent philosophy). The current situation raises many interesting questions among a broad audience regarding the influence of computer use on the relationships we have. This has sparked debate about what computer mediation does to the possibility, nature and value of relationships and quality of life in a networked world. An important part of these questions center around friendship relationships. Some examples of these are questions regarding the possibility of developing friendships online, the nature of such friendships (for example: can such relationships be considered to be real friendships? and to which extent are they similar to offline friendships?), and the value of such relationships (for example: can such relationships be a valuable addition to our lives and if so in which way?) . In this thesis questions relating to friendship take a central place. This focus was chosen for the following reasons:

1. Such questions frequently receive attention among a wide audience (both popular and academic), which might be partly because friendship is generally held in high regard and forms an important part of the lives of many people.
2. Friend, friendship and similar terms have become integrated parts of several successful platforms for Computer-Mediated Communication (CMC), which seems to indicate that this is held to be an important (or at least popular) subject among both technology developers and suppliers as well as users. In addition such use fuels discussion and confusion about the status of relationships tagged as “friend” online.
3. A lot of the questions raised in relationship to computer mediated friendship are philosophically interesting as they relate to the nature and value of friendship (both of

which are subjects which have been actively researched in philosophy throughout history and which seem to have regained attention in the past couple of decades).

4. At the starting point of my thesis there was little philosophical research done into the interplay between CMC and friendship and there seemed to be several ways in which philosophical insights could be beneficial to current research going on in other research fields.

To summarize this focus seemed socially relevant, philosophically interesting and provided interesting opportunities to contribute to interdisciplinary research.

At present it is not uncommon that (in both popular as well as academic sources) rather hasty conclusions are drawn in relation to questions regarding the possibility, nature, quality and value of friendships that are developed and/or maintained through CMC. In many cases there seems to be a lack of sufficient clearness and understanding of friendship and its value as well as a lack of sufficient insight or attention to actual practice in CMC. This has inspired the following research question:

How can well-informed evaluations of the role of CMC in friendship be developed?

To answer this question several other questions need to be addressed (both to provide sufficient clarity regarding parts of the main question as well as to help provide the insights required to answer this question):

What is CMC?

Which roles does CMC typically play in friendship relationships?

Who is participating in computer mediated friendships and with which motives?

How can we understand friendship and its value?

How has the role of CMC been studied and evaluated so far? On the basis of which theories has this happened?

In which ways can current research and the evaluations resulting from that research be improved?

Thesis aim

In approaching these questions the goal of this thesis, broadly, is to contribute to the debate on CMC friendship by: (1) providing an empirically nuanced picture of the realities of computer mediated friendship; (2) assembling a flexible philosophical framework for and approach to assessing those realities; and (3) demonstrating why this approach is superior to most existing theoretical evaluations of computer mediated friendship.

Thesis overview and methods

This thesis consists of three parts. In part I, titled “The tangled web: The complex realities of friendship on the screen”¹, Computer Mediated Communication(CMC) and the practice of computer mediation in friendship is investigated. This is done on the basis of two chapters. In the first chapter my aim is to provide insight into Computer Mediated Communication (CMC). For this purpose a descriptive approach is taken, which in this case mainly involves the surveying and summarizing of research into CMC technology. At the start of the chapter the meaning of CMC is discussed and I provide a working definition of CMC that will be used throughout the thesis. Next I dedicate a section to the discussion of the history of CMC, in which I identify the development and rise in popularity of different types of CMC and the technological climate in which these developments have taken place. This is followed by a discussion of the different possibilities for communication provided by different popular CMC applications. At the end of chapter one, the reader should have insight into what is meant by CMC, how CMC has developed, which popular CMC applications there are and which kinds of communication are possible through different popular CMC applications. This serves as a basic empirical background for the rest of this thesis.

Chapter two delves into the actual practice of CMC friendship, bracketing for the moment the question of what friendship is. Again this chapter takes a mainly descriptive approach based around the surveying of studies of the practice of CMC friendship with the aim of providing a broader overview of this practice by combining the insights developed in these studies. In this chapter, I discuss the participants in CMC friendship, paying attention to user characteristics and identifying technical constraints to user participation by looking at the requirements for use of CMC applications. In addition this chapter looks at the different motivations that play a role in developing CMC friendships among different users. These can

¹ Inspired by Sherry Turkle’s “Life on the Screen” (Turkle, 1995)

relate both to the establishment of new friendship as well as the maintenance of existing friendships as both these practices seem present online and both lead to interesting questions (for example can real friendship be established online? and how does the interaction through CMC affect the flourishing and value of already established relationships). In addition this chapter pays attention to expectations and evaluations among users concerning these relationships and gives an initial view of some of the evaluations given by researchers. All this should present us with some idea of who is having CMC friendships, what kind of CMC friendships they are having (for example do they frequently interact, do they interact purely online or also offline, etc.) for which reasons and how valuable do they judge such relationships to be. This background information can serve us in deciding whether CMC friendships can be considered to be actual friendships by providing information on the nature and underlying motivations of such friendships. This approach should also help in differentiating between different kinds of CMC friendship rather than generalizing over all CMC friendship. In addition the information reviewed in this chapter might be used to evaluate the presuppositions that underlie current evaluations of CMC.

In the second part of this thesis, titled “On friendship: Assembling a framework for evaluating friendship in the tangled web” a flexible philosophical framework for thinking about the nature and value of friendship is created. As a first step towards this framework chapter three surveys philosophical theories surrounding the nature and value of friendship. While chapter one clarifies what is meant by the CMC part of CMC friendship, chapter three provides insight into the meaning of friendship by investigating the different types and conceptions of friendship developed through the ages. Starting with Plato, I discuss influential Western philosophers from different historical periods and summarize their ideas about friendship and its value. I focus on the different types of friendship they identify and why they argue these to be friendship as well as why they are valuable. In addition, I compare different conceptions of friendship from different philosophers and evaluate how they match up to intuitive notions of friendship. Not only should this process help to build an understanding of what friendship means it also provides a basis for comparing CMC friendship to different types of friendship. In addition it provides a background to evaluate which values might be promoted by different types of friendship and to investigate whether and how these values may be promoted by CMC friendships.

In chapter four, I develop a framework for thinking about friendship. In approaching the nature of friendship an analytic approach to friendship is taken in which analysis of the concept friendship is combined with the analysis and synthesis of more empirically informed

theories from social sciences. In general friendship is approached as a concept that involves different instances that are not necessarily very similar but bear family resemblances (an approach developed by Wittgenstein (1953/1967)). Based on the literature discussed in chapter three as well as some additional work by other philosophers, social scientists and psychologists I investigate important characteristics of friendship. In addition this chapter looks into conditions that are necessary or beneficial to the development of friendship as well as reasons people might have for friendship and the justification of these reasons. At the end of this chapter a framework is presented that incorporates all these elements that should help in identifying the boundaries within which different types of friendship can be conceived. In addition it provides an overview of different ways in which friendships can be valuable. The resulting framework is meant to promote the development of better-grounded evaluations of instances of computer mediated friendship by addressing some of the problem areas in current studies.

In the third part, titled “Demonstrating the value of the framework: towards better grounded evaluations”, the first chapter (chapter five) will look at current theories surrounding CMC and different evaluations of the role of CMC in friendship. First different theories that are prominent in literature on CMC and social relationships (such as Media Richness Theory and Social Information Processing Theory) are discussed and their major claims are summarized with the aim of giving an overview of the work on which many current evaluations of CMC are based. In the second part of this chapter an overview of both positive and negative evaluations of CMC use in the establishment and maintenance of friendship is given. This is made up out of evaluations that are based on the theories discussed in the first part as well as a few evaluations that take a somewhat different approach. At the end of the chapter several critiques of both the positive and negative evaluations of CMC use in friendship and such studies in general are discussed. After this chapter one should have ample insight into current evaluations of CMC and the theories they are based on as well as some of the critiques that have been developed in relation to them.

Chapter six critiques current evaluations of CMC on the basis of insights gained from the previous chapters. Criticism is directed both to individual theories and certain trends in research. This is done by analyzing the arguments and methods of current researchers and using critical thinking to reflect on these. After this an overview of the problems with current studies is given followed by the presentation of a more structured approach to future evaluations that tries to address these problems by combining the insights gained in the previous chapter and making use of the developed framework for thinking about friendship.

Part I:

The tangled web:

**The complex realities of friendship on the
screen**

1 CMC: an explanation of the different forms

1.1 Introduction

Scholars in many fields increasingly use Computer Mediated Communication (CMC) as a term of art. Definitions and uses of the term vary. As a result it is not always clear what is meant when the term is used. When initially defined it referred to text-based communication through electronic media (Miura & Shinohara, 2005). However, with the advances in computer and network technologies new forms (and mixes of existing forms) of interaction have developed. Computer mediated communication can now take many forms and perform many functions. Furthermore the technologies involved in computer mediated communication are the subject of both rapid technological development and constantly shifting patterns of use and cultural practices.

Definitions of CMC can be either broad or narrow. The broadest definitions include almost every imaginable use of computers (Santoro, 1995). The rationale for this broad definition is that in almost all uses computer systems ultimately receive data from humans which at some time (in original or processed/manipulated form) is returned to some other human. Somewhat narrower definitions of CMC such as the influential definition by December (n.d.) emphasize the creation, interpretation and exchange of information through telecommunication systems. This can include various uses of desktop computers, mainframes (large powerful computers designed for multiple simultaneous users) and laptops but can also refer to practices involving mobile computing devices, for example texting on a mobile phone. Ferris(1997) has argued that CMC covers a wide range of applications and functions. In this thesis I will adopt what may be considered a very narrow understanding of CMC as:

a process involving two or more people participating in a two-way or multi-way exchange or development of information through networked computer systems

The types of CMC that will be the focus of this chapter and this thesis in general are those directed towards socializing and informal communication. The choice for such a narrow focus has been made because the broader notions of CMC allow for all kinds of uses of computers that are largely irrelevant when looking at the formation and maintenance of friendship and would therefore make things unnecessarily complicated. Furthermore such broad notions in general run the risk of being so broad that they lose focus and meaning.

CMC is involved in many different applications, for example e-mail, instant messaging and virtual worlds, and it can involve many different forms of interaction, for example synchronous, asynchronous, text-based and/or graphics-based. In this chapter I present an overview of popular CMC applications and the forms of interaction possible through them. These will be the focus of the following chapters. However before going deeper into the different CMC applications, their characteristics and the similarities and differences between them, I survey the history of CMC to see how these applications and their underlying technologies have developed and evolved. This provides additional background for understanding the development of CMC and how different notions of CMC have come about.

1.2 History of CMC

The history of Computer Mediated Communication is part of a larger history of technologically mediated communication. The human capacity for communication through speech and gestures is limited in the sense that we can only communicate with those who are present at the same place at the same time. The reason for this is that speech and gestures are only visible/audible to our senses up to a certain distance and both speech and gestures are situated in a moment of time. Throughout history mankind has found ways to overcome this limitation by means of technologies that allow us to communicate over larger distances (for example telephone and radio communication) and/or allow for communication with persons not present at the same time (for example through written letters or faxes). For centuries such technologically mediated communication has played important roles in the constitution and maintenance of people's friendships. Computer Mediated Communication as one of the newer developments in technologically mediated communication is bound up with computer networks and in particular with the Internet. Therefore a good starting point for discussing the history of computer mediated communication is the birth of the Internet, which starts with ARPANET during the late 1960's.

ARPANET (Advanced Research Projects Agency Network) was one of the projects of the Defense Advanced Research Project Agency (DARPA) which was formed at the end of the 1950s with the goal of promoting research in the U.S. so as to achieve technological superiority over the Soviet Union. Although DARPA had a military background the researchers involved in its different projects enjoyed a lot of freedom in their research. From the early 1970s, ARPANET connected different computers to form one large network.

Initially it was only available for U.S. based universities and research institutes that were subsidized by the military. As a result ARPANET focused primarily on research. In 1972 after ARPANET had been successful in connecting different U.S. universities, steps were made towards a next level of development: connections with other computer networks. By mid 1973 traffic had increased significantly and the network expanded to include Norway and England.

The next step for ARPANET was provided by the implementation of the TCP/IP protocol (which still provides the standard for operation of the Internet today) as a replacement of the Network Communications Protocol (NCP) that was used within ARPANET up to that point. This change was made to allow for broader communication within the US and worldwide. TCP (Transmission Control Protocol)/IP (Internet Protocol) is software that allows users to exchange data, thus providing a mechanism for the use of the physical infrastructure that connects different nodes in the network. It works by sending data in small individual packets that are put back together at the receiving side. In this process the IP deals with the forwarding of packets on the basis of their destination address, which is called an IP number or IP address. TCP deals with the verification of the data delivered and involves functionality for detecting lost and erroneous packets. Acknowledgements are sent when packets are correctly received. If such acknowledgements are not received after a certain time period the sender will resend the packet. Conceived in 1978 and adopted in 1982, TCP/IP leads to the first definitions of an “Internet” as a network of networks.

1984 saw the establishment of NSFNET a network set up by the US National Science Foundation (NSF) that was initially meant to provide a computer network for researchers working in institutes and universities that were not sponsored by the department of defense. Throughout the eighties more and more research institutes connected to NSFNET and connections were made with the European computer network EUNET. At this time NSFNET was still firmly focused on supporting research in the US and communication with foreign institutes was only allowed when these were open to American researchers. In the meantime ARPANET's military branch split off in the form of MILNET and in 1990 a switch was made to the faster physical network of NSFNET. ARPANET was decommissioned and the responsibility for the network infrastructure was for a short-while transferred to NSF. In the 1990s the network was slowly opened for commercial use and during the mid nineties NSF started transferring responsibilities to private and commercial nodes in the network. NSFNET shut down in 1995.

Throughout the 1980s and 1990s networking capabilities of computers increased and

many countries, and later on Internet Service Providers (ISPs), started their own networks. Many of these at some time connected to the Internet. With the growth of the network from the 1970s onwards a shift of focus occurred from research towards communication. A development that triggered further growth came in 1992 with the development of the World Wide Web (WWW) that provided the possibility for graphical representation of content in the form of websites based on hypertext markup language (HTML) that could be opened in specialized software called (web) browsers. In 1995 dial up connections through services such as CompuServe, America Online and Prodigy provided Internet access to a larger public. By 1997 most countries were connected to the Internet. Today access has become widely spread. Internet users make up 61,4% (Internet World Stats, 2009b) of the European Union's population and 82,9 % of the Dutch population (Internet World Stats, 2009a).

Through the history of networked computing and the development of the Internet different types of CMC platforms have become popular. Many of these are widely used today. The most popular and most studied include: chat, videoconferencing, e-mail, bulletin boards/forums, virtual worlds and social networking sites. In the next couple of sections I will review the origins, development and availability of these CMC applications.

1.2.1 Chat & Instant Messaging

Chat dates back to the earliest time-shared computers (computers that are used by multiple simultaneous independent users) of the 1960s and might be the oldest form of CMC. Early forms were used to deliver typed messages to other users that were also logged on to the same system. In 1980, Compuserve launched the first real-time online chat service, allowing people to synchronously exchange text messages in real-time through the Internet. One of the most successful pieces of software for chatting became available in 1988 in the form of IRC (Internet Relay Chat). This software enabled users to communicate in a synchronous multi-user environment, meaning that multiple users can in real time send and receive messages to and from other users that are online at that moment, thus creating possibilities for online discussions. IRC is organized around channels which the user logs on to after which he or she can communicate with other users logged on to the channel. Channels are often centered on interests. IRC became very popular by the early 1990s, with hundreds of dedicated channels providing means of communication between thousands of users.

The latter part of the 1980s also saw the development of a way for Commodore 64 (a popular computer system at the time) users to exchange text-messages with other users

currently online. This developed into what later became America Online AOL Instant Messenger, the start of a form of chat applications now called instant messaging. The more modern forms of which (which include graphical user interfaces for editing and sending messages and over time a host of other options) started to become popular in the mid 1990s. First among these were ICQ and AOL Instant Messenger. Later followed by other applications such as Yahoo and MSN messenger. Each of these different messengers operated on the basis of their own protocol and client program, which meant that if one wanted to use multiple of these networks one had to run multiple applications. The solution to this issue came in 2000 with the development of clients that supported multiple protocols and thus provided a way of logging on to multiple services at the same time. Instant messaging differs from IRC in that it does not revolve around channels but rather around personal contact lists that individual users can add and remove contacts to and from. It has become one of the most popular CMC platforms present today. Research by Symantec (2009) among Internet users from twelve countries around the world indicated that 70% used it to communicate with friends and family, which makes it an important CMC platform for research related to CMC and friendship.

1.2.2 Videoconferencing

A CMC platform that is somewhat related to chat and Instant Messaging is videoconferencing. Early forms (dating back to the 1930s) of videoconferencing included connected closed-circuit television systems which allowed users to interact through receiving images from the connected locations while sending images from their own locations. Later versions used two radio frequency links and later satellite links to exchange video data between two locations. Such early systems were mainly used for television broadcasting purposes and high tech applications such as communication with astronauts.

It took until the 1980s for videoconferencing to become available to a somewhat larger public. With the development and spread of ISDN² dedicated videoconferencing systems started to appear. These early systems were highly expensive, but throughout the 1990s video conferencing developed to a level that PC-based videoconferencing systems became possible making it much more accessible to the general public. This became especially the case with the development of and integration with software such as NetMeeting, MSN Messenger,

² Integrated Services Digital Network: a telephone network system that allows for digital transmission of data over a telephone line

Yahoo Messenger, Skype and the availability of cheap webcams and computer microphones. Dedicated systems for videoconferencing have also gone through extended development and often allow for higher quality of video and audio and remote control over video cameras. Because of their higher costs and complexity the use of such systems is still not very widespread and is most often limited to professional use contexts. This makes it unlikely that they play a major role in the establishment and maintenance of friendship online. The use of webcams has however found its place in popular CMC. Symantec (2009) indicates that 42% of the Internet users in their study used webcams to stay in contact with friends and family. In some countries this percentage was much higher, for example in China (74%) and India (68%).

1.2.3 E-mail

The history of electronic mail or e-mail started with multiple users of a single mainframe³ sending each other messages. In the 1960s users of time-shared systems could store files online on the same disk so as to share information. In 1965 researchers for example used this to exchange comments. By 1966 it became possible to send messages between different computers. This could for example be done through the use of connection lines between different computers and a mainframe that formed the center of the network. With the increase of connectivity between computers and the development of ARPANET electronic messages could be sent to locations across the U.S. quickly and easily. To the surprise of ARPANET researchers, e-mail, from its introduction in ARPANET in 1972, grew to become the most popular and well-used social media available on the computer. By 1979 Compuserve started to offer e-mail and related technical support to PC users, opening up its possibilities to a larger public.

That same year gave rise to an idea that would result in a related development: the formation of USENET. USENET works through news servers, which are pieces of software that allow for the reading and posting of messages and the exchange of messages with other servers. In this way USENET allows users to send messages to local news servers that broadcast these messages to other USENET news servers. Usenet allowed sites to become connected that had fewer resources available than were required in ARPANET. As a result more organizations were able to participate in the network. In 1984 almost a thousand sites

³ A large powerful computer that allows for multiple users at the same time and often involves a high amount of in- and output options as well as high reliability

where connected.

1975 saw another e-mail related development in the form of mailing lists. These provide an easy way for users to send messages to all users that are a member of the list. The first mailing lists on ARPANET were based on the first e-mail program SNDMSG. In contrast to ARPANET's more serious character, one of the first big mailing-lists centered on science fiction and hosted discussion amongst SF fans. The first mailing list server software in Europe was created in 1984 for the BITNET network and aimed at enabling scientists throughout Europe to share research in a quick way. This software which was called LISTSERV became one of the key services of the network.

Mailing list servers are useful because no one needs to memorize all the e-mail addresses of a group. One only needs to send a message to the mailing list address and all those subscribed to it would receive it. Early mailing list servers required the manual addition and removal of users to the list while later such functionality was largely automated.

E-mail is not only immensely popular it is also one of the most used CMC platforms for communication with friends and family. Research by Symantec (2009) has for example indicated that as much as 92% of the Internet users in their study used it for such purposes.

1.2.4 Bulletin boards/message boards/forums

In 1978, a new form of computer mediated communication was launched in the form of the first computer bulletin board system (CBBS). Such systems enable users to connect to a central server on which they have access to a database of messages and computer programs. Connections are in most cases made through phone lines or telnet and allow for both uploading and downloading data. In the early 1980s, bulletin board systems were primarily used for the distribution of software and related information. However their use as a medium for discussion became popular once users started to post text messages to bulletin board systems which resulted in interactive discussions between its members.

When home computers became available to a wider audience, the initial orientation of BBSs towards the interests of computer enthusiasts slowly shifted into wider uses and topics. BBSs formed around interests such as sports, education, music, gaming, writing, academic discussions etc. BBSs thus became forums for discussion on many topics. Some BBSs also became directly connected to the Internet, removing the requirement of establishing a dial-up connection with the BBS server. With the development and the increasing popularity of the World Wide Web BBSs quickly declined.

The rise of the World Wide Web brought with it web-based forums. These drew from the developments of Usenet and bulletin board systems to host online discussion in most cases related to a general topic. Connections were no longer made directly to some central server via dial up connection but instead users just surfed to the forum's web address to post and read messages. In general no other software than a web browser is needed to access such online message boards making them easily accessible to a large audience. Such web-based forums should be distinguished from Wikipedia and other collaborative knowledge projects, because they have a different structure, are more focused towards communication between members and often serve different purposes. Internet forums are still strongly present on the Internet today and seem to provide enduring gathering places for people with shared interests.

1.2.5 Virtual worlds

The term virtual worlds is used by many researchers as well as software developers to describe computer simulated environments of different kinds. Bell (2008) has argued that there is no generally accepted definition of virtual worlds. Different scholars and developers use different definitions. He has reviewed existing definitions of virtual worlds with the aim of building a definition of virtual worlds based on the common ground among these different definitions. Bell defines a virtual world as “A synchronous, persistent network of people, represented by avatars, facilitated by networked computers.”(Bell, 2008, p. 2). In all cases virtual worlds offer users the sense of being present in a surrounding with its own geography. In addition the user is a participant in a dynamic environment that exists and evolves even when he or she isn't present or isn't paying attention.

The late 1970s saw the arrival of Multi-User Dungeons (MUDs) which can be considered among the first online virtual worlds. The first MUD was developed as a way to extend the role playing game “Dungeons and Dragons” to the online world and as a result many of its follow-ups used mechanisms from the game. Many of the early (and later) MUDs involved textual descriptions of an environment, with objects and characters controlled by different users. They are therefore sometimes referred to as “text-based virtual realities”.

One of the first graphics-based virtual online worlds was Habitat, which was developed during the mid 1980s. It was a great success with user numbers in the ten thousands. Part of its success came from the fact that it ran on a very inexpensive home computer (the commodore 64) and used an inexpensive connection, thus making it accessible to a wide audience. In fact one of the initial reasons why the corporate leaders at Commodore

supported the development of what would become Habitat was their interest in trying to sell simple modems to commodore users. The representations in Habitat were based on simple 2D cartoon-like graphics unlike the more advanced 3D graphical worlds that followed. Habitat, however, featured many of the defining properties of virtual worlds: a graphical representation of the environment in which the users interact, the use of avatars to represent users, the possibility to interact with multiple users at the same time through a shared environment and the use of external objects that users can collect and make use of in their interaction with each other. In addition it was envisioned and designed as an open-ended environment unlike, for example, some of the multiplayer games that were available at the time.

Habitat set a trend that throughout the years was followed by many other online worlds. Some of these were particularly meant as gaming environments such as Doom and World of Warcraft, while others took a focus on socializing such as Second Life and There. From the text descriptions of MUDs and the relatively simple graphics of Habitat many virtual worlds have developed into sophisticated 3D graphical representations sometimes combined with sound and streaming video. Virtual worlds have become quite popular over the years, Kzero research (2008) for example indicated that in 2008 Second Life had 12 million registered users. In July 2009 more than 1 million of these had logged in over the past month (Linden Lab, 2009). In December 2008 World of Warcraft reached 11.5 million users (Dobra, 2008). Research has indicated that friendships and other personal relationships develop quite frequently in such environments (Cole and Griffiths (2007), “Men form strong bonds of friendship via online games”(2006) and Nottingham Trent University (2007)).

1.2.6 Social networking sites

The mid 1990s saw the rise of the World Wide Web. One new application of CMC started in 1995 with Classmates.com, the first social networking website. Social networking sites are in most cases web-based. They have been defined by Donath and Boyd (2004) as “on-line environments in which people create a self-descriptive profile and then make links to other people they know on the site, creating a network of personal connections” (p.72). Profiles often take shape in the form of web pages that include demographics, interests, photographs, pictures, blogs and testimonials about people or events, links to other profiles and sites of interest. Outside their profile users can often be identified by their username and avatar and some sort of link toward their profile.

Classmates was advertised as a way of getting in touch with old classmates from kindergarten through college and enjoyed some popularity (particularly in the U.S.). Soon other websites followed such as SixDegrees.com. The roots of social networking sites might, however, be traced back even further than the development of classmates. As early as 1988 AOL already involved public buddy profiles that were classified by interest. It however took until 2002 before social networking sites really started to take off. Friendster (developed in 2002) became very popular in 2003 and was soon followed by MySpace in 2003 and Facebook in 2004, which all grew to become very popular. Facebook differs from the other two social networking sites in that it was initially particularly aimed at college students whereas other social networks had a more open character. Other specific social networks have also developed such as LinkedIn.com, which is targeted particularly to business professionals

Of these social networking sites, MySpace has for some time been the most popular (but is now being surpassed by Facebook) and has played a large role in influencing popular culture, especially among youth. MySpace has been advertised as a way to promote independent music and provides special functionality for this purpose. This led it to become quite popular among bands and music lovers. Beginning in 2006, MySpace incorporated a video sharing service, in part to compete with YouTube, which was quickly becoming a new kind of social networking experience, based almost entirely on video sharing. By this time social networking sites had become very popular. Nielsen/NetRatings (Bausch & Han, 2006) reported that the 10 biggest social networking sites had grown by 47% between 2005 and 2006 and that currently 45% of the active web users are involved in them. More recent data from Symantec (2009) indicates that half of the adult Internet users use social networking to communicate with friends and family.

1.3 Interaction through different types of CMC

In section 1.2 it has become clear that several different types of CMC platforms have developed over the years. For the evaluation of the role of computer mediation in friendship it is important to have an understanding of how these applications work and what kind of communication takes place through them. Such knowledge will allow us to identify and evaluate the affordances and limitations of different CMC applications. This is important because these affordances and limitations play an important role in several evaluations of the

role of CMC in friendship that are discussed in chapter five and six. The next couple of sections therefore delve deeper into the workings of each type of CMC platform discussed in 1.2. First it is however important to develop some understanding of the meaning of communication

1.3.1 Communication

The next couple of paragraphs strive to provide some clarity on what I understand by communication and which different types of communication can be identified. This is important as a starting point for the identification of differences in the affordances and limitations of different CMC platforms and face-to-face interaction. These differences form the basis of many existing evaluation of CMC choice and CMC use.

Communication is important because large parts of our time is spent in situations where we have to deal with other people, either in our jobs and education or in our private life. We are dependent on other people for a lot of our everyday needs as well as long term plans and developments. Communication is essential to receive and spread information, to make other people aware of our thoughts and feelings, and to become informed about other people's thoughts, feelings and needs.

Communication can be formal or informal. Formal communication is dictated by certain rules or guidelines. Such communication can for example be identified in corporate meetings or official documents of both government and commercial institutes. Informal communication unlike formal communication does not take place within the boundaries of some formal structure. Such communication is often more open to changes in subject and is often less bound by time constraints. Informal communication is an important part of friendship as will become clear in chapters three and four.

In relation to this thesis interpersonal communication is particularly important. DeVito (1992) has argued that interpersonal communication is something active. It is something we do, an activity that takes place in a changing environment and involves changing subjects. For communication to be interpersonal at least two persons need to take part in it. Communication can be one-on-one, meaning that it involves just two people or it could be one-to-many where one addresses multiple persons during the process.

Most communication discussed in this thesis is interactional. It involves a sending and receiving party that exchange messages over one or multiple channels. Interactional communication according to the sender-receiver model follows 5 steps:

1. Sender forms the message
2. The message is encoded
3. The message is transmitted
4. Receiver receives the message
5. Receiver decodes the message.

In interactional communication the roles of sender and receiver shift during the communication process. A person might at one moment be sender and at the next moment receiver, thus a conversation takes shape. During this process the sender constructs messages that are sent over one or more communication channels, which provides the means to convey (part of) the message to the receiver. A channel can be a telephone line, a frequency bandwidth for radio communication, the mail system, a messenger, etc.

Communication can be verbal or nonverbal. Verbal communication can be divided into oral and written communication. Oral communication happens when people communicate through spoken word. This thus requires either face-to-face interaction or the use of a channel that allows for the transmitting and receiving of audio. Written communication is possible through all media that allow for the physical or virtual exchange of written messages, for example through telegraph or e-mail. Oral communication differs from written communication in that it is influenced by characteristics of the speaker such as the pitch, volume and speed with which he or she talks. In written communication these influences are absent but other influences such as: writing style, writing speed and handwriting (in the case of handwritten letters) play a role.

Non-verbal communication includes such things as body posture and language, facial expressions, paralinguistics (tone of voice, pitch, loudness, etc.), gaze, proximity, touch and gestures. In addition graphical information such as icons, drawings, 3d graphics and photographs can also be considered as nonverbal communication. Non-verbal communication thus makes up an important part of our everyday interaction with other people.

Channels differ in their capability to deal with these different types of communication. The capability of a channel is determined by the messages that can be sent through it, for example the physical mail system allows for the sending and receiving of text messages and printed/drawn images, but its capability does not include the real-time exchange of audio messages. Telephone lines however do have this capability. Different media can provide different numbers of channels for example a telephone typically only provides one channel

that enables the exchange of sound and thus allows for oral communication. A video conferencing system provides more channels often having both a channel for audio information and a channel for visual information thus allowing for oral, written, and different types of nonverbal communication.

Many evaluations of media take face-to-face interaction as the standard. This in many cases seems to be based on the (implicit) conclusion that this is our most natural or most elaborate form of communication. Face-to-face interaction involves many different channels. In general a separation can be made between vocal/aural and visiospatial information that is communicated in Face-to-Face interaction (see Stivers & Sidnell (2005) and Enfield (2005)). Often these two are combined; either supporting or extending one another. For example, when I point to something, the visual information I communicate (by putting my body in a certain position) supports the oral message I try to convey. Similarly when making a sarcastic remark I can use air quotes to indicate my sarcasm. In this case visual information (a certain finger/hand movement) is used to extend the oral message and to indicate what I mean. Not all media are able to provide the same form of communication as Face-to-Face interaction. Some media however offer capabilities that allow forms of communication that are hard to achieve in Face-to-Face interaction. For example by allowing communication across large distances (examples of this are telephone communication and Internet chat) or by allowing for communication where the participants are not available at the same time (examples include (e-)mail and such things as virtual and physical message boards) .

Communication through a channel can be synchronous or asynchronous. In the case of synchronous communication, messages are exchanged between sender and receiver in real-time with the sender often waiting for response of the receiver before continuing. This thus requires that sender and receiver are connected through one or more channels at the same moment in time. In asynchronous communication this is not the case, here the sender sends a message at one moment and in most cases will not wait for a response. The receiver can choose to receive and respond to this message at a later time.

When a receiver does receive a message through one or more channels, he or she generally starts decoding and building an understanding of the message. Different messages differ in the kind and extent of decoding they require. Compare for example a telegraph message with a spoken instruction. The first generally requires an extra step of decoding to natural language before the process of interpreting the message can begin. In CMC part of the encoding and decoding is in most cases done by computers. To make this clear an e-mail is at the lowest level nothing more than a string of binary data (ones and zeros), which through a

series of protocols is interpreted as having a sender and an addressee and is presented as the content we see on our screen including text, text mark up, images and links to Internet sites.

So far the types of communication I've discussed have mostly been conscious and intentional. Communication can however also be (partly) unintentional and/or unconscious. For example nonverbal communication often happens unconsciously and in many cases unintentionally. When for example I am upset by something I might have a facial expression that shows that I am distressed or my gestures and posture might indicate that I am angry. In such cases it is likely that one is not consciously and intentionally encoding a message and sending it through a channel hoping the receiver will understand what one means.

In addition the process of encoding, sending and decoding is influenced by many external influences that one cannot ignore. One of those influences is noise. Noises are all those things that distort or interfere with the messages sent between sender and receiver. Examples are loud background sounds when trying to convey an oral message, lack or overabundance of light when trying to read a written message and other sources that compete for the attention of the receiver thus distracting him/her and making it very difficult to communicate with this person. Another important form of influence on the communication process is feedback. Two types of feedback are common in communication. Feedback one receives when speaking out an idea or writing something down and feedback one gets as a response to the message one has send out from a receiving party. Feedback can thus originate from others as well as oneself. Feedback is an important mechanism for becoming aware of our own and others opinions, ideas and feelings.

Different media have different capabilities for supporting different aspects of communication. The insight gained in this section should help differentiate and evaluate these capabilities of different media. The following five sections will do this for some of the most popular forms of CMC.

1.3.2 Chat, Instant Messaging and Videoconferencing

Chat is a type of CMC that is synchronous, meaning that communication takes place through the real time exchange of messages between two or more users present online at the same time. Messages are displayed on the user's screen in a multi-line box. New messages are added to the bottom of the text already present in the box. Because the size of these text boxes is limited, parts of the conversation scroll out of direct sight as more text is added. Messages are in most cases preceded by the name of the user who typed them. In so called "chat rooms"

messages can be typed that are visible to everyone logged on to the chat room. Some chat facilities also allow for more private communication in which messages are only visible for one or a restricted number of users. It is in most cases possible to participate in multiple (private) chats at the same time. This allows users to hold several conversations at the same time without all the people they are conversing with being aware of the other conversations that he or she is involved in.

To make use of a chat facility users log on to an appropriate service. This might happen either through a website or through the use of dedicated software that is installed on the user's computer as is the case with IRC. Some chat facilities only require users to provide a username that is displayed when they type a message, while others require users to register through filling in personal data and selecting a username and password. Representation of users happens through usernames (pseudonyms), which are in many cases supplemented with avatars (often 2d images such as photographs or cartoon/computer graphics). Usernames in many cases do not correspond with the offline identity of the user allowing users to enjoy a certain amount of anonymity. Apart from the average users some chat facilities also incorporate moderators who try to maintain order within the chat environment. This can be done by intervening into conversations that go against the rules of the chat environment, warning users who are breaching the rules and/or banning certain users or IP addresses.

Chat conversations can in most cases be saved for future reference. Some chat services provide functionality explicitly meant for such purposes while others might require the user to copy and paste large amounts of text if they want to keep a log of the conversation. Sometimes chat conversations are also stored by moderators of the chat medium.

Real-time chat communication such as instant messaging is a very popular online activity. MSN/Windows Live Messenger, AIM and Yahoo! Messenger are the most popular instant messaging applications worldwide (Shiu & Lenhart, 2004). Instant messaging applications generally provide a more personalized experience than chat rooms. One part of Instant Messaging software that sets it apart from chat rooms is that it allows users to decide who they add to their list of users they can chat with. This thus gives users greater control over who might start a conversation with them. Certain people might try to add you to their list of contacts, but to complete this process you generally have to accept their invitation. Furthermore it is often possible to block users in your list. This means that they will no longer be able to start a conversation with you and/or know whether you have logged on to the service. Chat rooms in most cases do not allow individual users such control and are often more open.

Instant messenger programs are often mutually exclusive. Thus a user of one particular program can only communicate with other users of the particular network that program is designed for. This issue has in the last couple of years been solved by the development of programs that can connect to different services such as Trillian and Miranda IM, however many people still use programs dedicated to one typical instant messaging network. Another difference between Instant Messaging and chat rooms is that Instant Messaging's default method of communication is one-on-one while chat rooms in most cases are by default many-to-many. Instant messaging and other forms of chat often involve other tools for interaction with other users, such as sending private asynchronous messages such as e-mails, displaying user information and file transfer mechanisms for sending documents. Several Instant Messaging applications also include video conferencing capabilities (for example MSN Messenger).

The type of videoconferencing that has become popular among a larger public is generally PC based and like chat it is synchronous. The main difference is of course that communication happens mainly through synchronous two-way video and audio transmissions, which allows for verbal and nonverbal communication. Although initially meant for supporting professional meetings between people from different physical sites, this type of CMC can be used for any type of conversation between two or more people across two or more physical sights. Often video conferencing software also allows the sharing of digital documents (for example text and images) and sometimes drawing boards and other tools for collaborative work.

1.3.3 E-mail

Electronic mail is, unlike chat, an asynchronous form of communication. E-mail involves the writing, sending, receiving and storing of electronic text messages. These messages can take the form of plain text or HTML. The latter allows users to deliver messages that involve more elaborate layouts and can involve images and links to web pages. E-mail is used to refer both to the sending of electronic messages through the Internet, based on SMTP (Simple Mail Transfer Protocol), and to intranet based systems which create the possibility to send e-mail within a smaller network. Apart from sending new messages e-mail allows for the replying to and the forwarding of received messages. In addition other files can be attached to an e-mail such as text documents, digital images, sound files and/or digital presentations. Messages can be sent to one or multiple addressees at the same time. Multiple addresses can be brought

together through the use of e-mail lists, allowing for easier sending of messages to larger collectives of people. To partake in an e-mail list one has to subscribe to the list, which is done by sending a message to the administrative address of the list. Subscription results in one's e-mail address being added to the list. If a subscriber no longer wishes to receive messages from an e-mail list unsubscribing is often available through similar mechanisms. Messages that are to be sent to all subscribers of a list are sent to the general address of the list.

In general two types of e-mail lists can be identified. First, announce lists are mainly used for one way announcements of the owner to those subscribed to the list. Individual users are able to reply to the owner but cannot reply to the rest of the list. Second, discuss lists have a more interactive character. They are based on the idea that the subscribers will discuss issues through subsequent messages sent to the entire list. There are different free and commercial services available for the creation and management of mailing lists.

E-mail addressees are identified by means of their e-mail address. Such addresses are composed of a local part before the “@” sign which identifies the “mailbox” of that user and often also serves as that user's login name when he or she wants to access his or her mailbox. The characters on the right side of the “@” indicate the domain where the mailbox is located. In most cases mailboxes are private but they can be shared, for example allowing different employees of a company to access each other's mailbox.

It is not uncommon that there is a link between the parts of one's e-mail address and one's offline identity. Companies, government and educational institutes in many cases have mail addresses of which the local part refers to the person's name and the domain part of the address refers in some way to the institute that person is a member of. Many people however also maintain private e-mail addresses which are not directly related to their offline identity. In these cases pseudonyms are often used as usernames for e-mail.

E-mail can be downloaded and composed by use of specialized software such as MS outlook, Mozilla Thunderbird, Apple's Mail and Eudora, but there are also web-based interfaces that allow one to view and compose e-mail, such as Windows Live Hotmail, Gmail and Yahoo! Mail. E-mails that are sent and received can be stored on a server and/or locally on the client's machine. E-mail messages are in most cases not encrypted and therefore allow for interception and reading of messages on route to their destination. Furthermore addresses of sender and receiver are often not encrypted either and can thus be easily identified. There

are solutions to these privacy hazards of e-mail in the form of both encryption software and services such as anonymous re-mailers. E-mail conversations are normally not moderated, although filtering of e-mail is possible by for example excluding e-mail from certain addresses or by means of algorithms that identify potential spam/advertisement e-mail.

1.3.4 Message boards/forums/bulletin boards

Various names are used to refer to message boards: Internet forums, discussion boards, discussion groups, bulletin boards, etc. Message boards allow users to post and read messages in a central place asynchronously. This allows for the construction and exchange of content between a group of people. Many message boards can be accessed through the World Wide Web. Bulletin Board systems however differ from these in that they often work through other mechanisms such as Telnet.

Message boards are in most cases focused on interests, for example, philosophy, computers, religion or sports. Structure is provided through the use of sub-forums and topics or threads. Topics are a string of messages related to a specific topic. Related topics are sometimes placed within a sub-forum. For example, a philosophy message board might have a sub-forum related to continental philosophy and within that sub-forum there could be topics on existentialism, hermeneutics, etc. In addition to such information-oriented and structured topics, many message boards also have a part specifically designed for socializing.

Messages are primarily text but many boards also provide functionality for posting images and videos. Most also support HTML including the display of hyperlinks. Unlike most other forms of CMC, messages on a message board can often be edited and/or deleted after they have been posted. On most message boards old messages and topics are archived so that it is possible to go back and access old information. Furthermore some message boards also incorporate functionality for chat and/or e-mail.

Users are usually required to register and log in to post messages. Reading messages, however, is often possible for everyone visiting the message board. Some message boards do not require registration and allow users to directly make post. Users are in most cases represented by user names combined with avatars (these can be any type of image file). Sometimes the message board also allows the user to provide a signature that is appended to their posts.

Most message boards are maintained by an administrator and moderators. The administrator typically has the possibility to modify, move or delete topics or entire sub-

forums, change the representation of the forum, as well as ban, delete or create members. Moderators often have a select number of the capabilities that the administrator has. The task of moderators is in most cases to make sure the discussion stays on topic and within the regulations of the message board by, for example, deleting offensive or illegal content and warning members who post such content or purposefully seek to offend other users.

1.3.5 Virtual worlds

Virtual worlds provide a computer mediated environment in which different users can interact with each other. The character of these environments varies widely. Many virtual worlds are meant for game playing, but there are also virtual worlds that are aimed at education/training, conferencing and/or socializing. In gaming or training environments users often share goals that can serve as a focus of communication. Virtual worlds designed for socializing are often free of such goals.

Some text-based virtual worlds still exist. Similarly some popular virtual worlds use mainly 2D representations such as Club Penguin and Habbo, although these mostly target children/teens. Many currently popular worlds such as World of Warcraft and Second life however use 3D graphics.

Most virtual worlds appear to be similar to the real world in that they mimic (parts of) the laws of nature, certain real-world institutions and social environments and sometimes also the physical make up and topography of the offline world. Although often visually attractive the downside of many such 3D worlds is that they require users to have more powerful computers to be able to interact within the world.

Users are represented by avatars. In 3D virtual worlds, these are often elaborate 3D models that in most cases have humanoid appearance and can move around in and interact with the world. Often virtual worlds include software to edit a user's avatar's appearance. Users can move through the virtual world and often have multiple options for interacting with both objects in the world and other users. Communication in most cases happens through text messages (including chat, asynchronous e-mail and/or bulletin board like functionality). Real-time voice communication has also become a possibility.

1.3.6 Social networking sites

Several different forms of communication are commonly available to social networking site users. Most common are message boards, asynchronous private messages (internal e-mail) and chat (text-, voice- and/or video-based). In addition some social networking sites have incorporated functionality for sharing music or video. Lately micro-blogging, which involves the posting of very short text messages, photos or audio clips that often resolve about what a person is doing has become a popular element of social networking sites, which is likely influenced by the rapid growth of micro-blogging services such as Twitter (Ostrow, 2009). Users are often identifiable by means of their username and avatar. Although usernames are often fixed once chosen, other parts of a user's representation/profile can in most cases be adapted at any time through a web interface. Different social networking sites additionally provide different options for different levels of privacy, which might for example mean that one can choose that one's profile is only visible for people that also have a profile on the site or for users that have been linked to the profile.

Social networking sites advertise with their suitability for finding old acquaintances, lovers and/or friends one has lost contact with and/or developing new relationships. One of the important elements of social networking sites especially for the research undertaken in this thesis is the functionality social networking provide for listing/linking to friends. Most social networking site profiles have a special section in which other users that the profile owner has defined as his friends are displayed. Many social networking sites require users to publicly state their relationship in such a manner. In most cases, the mechanisms used for this do not allow for any nuance, instead they offer the binary choice of friend or non-friend. New friends are commonly added to this list by sending an invitation to a user to register as friends. When the invited user accepts this invitation both users are listed as friends on each other's profile. There is sometimes a limit to the amount of friends one can link to one's profile. MySpace allows users to define top friends, who are displayed at the top of the list. Some social networking sites such as Hyves (very popular in the Netherlands) allow for a specification of the relationship one has with one's friends, thus allowing more nuance. One can specify one's relationships with one's friends by making a choice out of several categories such as: "you lived together", "worked together", "you are family", "you know one another through friends", etc. Fields for adding more specific text are also available. These tags are however not strongly emphasized on the site and it remains the question how much these are actually used.

1.4 Conclusions

This chapter has addressed the question of what Computer Mediated Communication is. A question that is highly important to this thesis as it provides boundaries to questions relating to computer mediated communication use in friendships. The following understanding of CMC is adopted in this thesis:

a process involving two or more people participating in a two-way or multi-way exchange or development of information through networked computer systems.

On the basis of this notion of CMC this chapter has described the development and functioning of different popular CMC applications to provide an understanding of what is involved in the practice of Computer Mediated Communication and how it is developing. Particular attention has been given to chat, videoconferencing, e-mail, message boards, virtual worlds and social networking sites. These different systems provide (combinations of) different forms of communication: synchronous vs. asynchronous, one-to-one vs. one-to-many, text-based vs. speech vs. video-based, private vs. Public and different kinds of interfaces, different forms of user representation and different forms of moderation. In addition some of these systems, in particular social networking sites, feature mechanisms for public articulation of personal relationships.

Through the different sections of this chapter it has become clear that CMC is a dynamic field involving different kinds of interaction through different systems. A central point in many forms of CMC is however taken up by the Internet. A discussion of its development to its current form has made clear that the Internet's development brought with it the development and rise in popularity of different applications that involve computer mediated communication and possibilities for communication through increased bandwidth. Today Internet access is widely spread, high speed connections have become available to an ever increasing public and Internet users make up a large part of the Western world. Many Internet users make use of different CMC platforms for communication with friends and family. Instant Messaging, E-mail and social networking sites seem to be especially popular for such purposes (Symantec, 2009) Extrapolating from the observations made on the history of the Internet and CMC it is likely that the future will bring further possibilities in the forms of even more and higher bandwidth connections and new (combinations of) forms of interaction and representation.

2. Online friendships in practice

2.1 Introduction

This chapter presents an empirical investigation of CMC mediated friendship, with the intention of grounding the analysis of chapters to come in actual practices. In the upcoming sections I discuss the participants in CMC friendship, paying attention to user characteristics and identifying technical constraints to user participation by looking at the requirements for use of CMC applications. In addition this chapter looks at the different motivations users have for developing CMC friendships, the kinds of friendship they develop online and their own expectations and evaluations concerning these relationships. In addition attention is given to the situatedness of friendships and the differences between the on- and offline context in which they play out. All this should present us with some idea of who is having CMC friendships, what kind of computer mediated relating they engage in (for example do they frequently interact, do they interact purely online or also offline, etc.) for which reasons and how valuable they judge such relationships to be. This background information can serve us in deciding whether such CMC friendships can be considered to be actual friendships by providing information on the nature and underlying motivations of such friendships. This approach should furthermore help in differentiating between different kinds of CMC friendship rather than generalizing over all CMC friendship and provide some insight in how valuable these relationships seem to be. In addition the information reviewed in this chapter can be used to evaluate the presuppositions that underlie current evaluations of CMC.

There are several difficulties in surveying the empirical literature in this area of research. Most importantly, there seems to be hardly any extensive recent empirical research with strong emphasis on participants in online friendships especially with regard to their motives, perspectives and evaluations. Most research seems to focus on analysis of the quality of communication instead. Therefore this chapter has for the most part required the collecting of data from various smaller studies which often did not have user analysis as their main goal. This means that data often come from different kinds of research done in different countries and focusing on different CMC applications. Although this can be positive in the sense that it allows for a quite broad picture of CMC influenced friendship, it does make it difficult to generalize over observations made. There are several reasons for this. For one there is a large

chance that there are different assumptions underlying the idea of what friendship is and why it is valuable in different research and even different participant replies. Two participants might for example have very different conceptions of what friendship means, and when the research is missing any clear conceptual structure as a guideline it is likely that their answers might be about quite different types of relationships and/or relationship practices. Apart from these differences in individual understandings of the meaning of friendship, understandings of friendship also differ in relation to context and culture, as has been observed by Boyd (2006). This has to be taken into account when evaluating the different observations in this chapter. Indeed, the central weakness of the literature on CMC friendship is a lack of conceptual clarity about the nature and value of friendship. Section II of this thesis seeks to redress this shortcoming.

2.2 Friendships, CMC and motivations

One of the first things that becomes clear when one looks at the available studies of friendship and CMC is that different users have very different motives for using CMC in establishing and maintaining friendships. This diversity has not gone unnoticed by other researchers (see for example Boyd (2006) and Fono and Raynes-Goldie (2006)). In general there seems to be a distinction between CMC users who are mainly motivated by wanting to maintain or further enhance relationships already established offline and on the other hand those who are (additionally) interested in developing new relationships through CMC.

From the literature surveyed common motives for online friendships among research participants seem to fall into five categories. These are indicative of the different degrees of deeper vs. shallower friendships developing online. The five major categories I have identified are:

- Friendship for the sake of maintaining and/or enhancing existing offline friendships
- Friendship for the sake of broadening one's social environment
- Friendship for the sake of self-expression
- Friendship for the sake of achieving status
- Friendship for the sake of saving face

Although it is hard to say which of these motives is most prominent in CMC friending behavior, the last three are more specific to forms of CMC where relationships are explicitly displayed through the medium. In addition research by Rubicon Consulting (Mace, 2008) has indicated that among older users there is a tendency to want to know someone more

thoroughly before accepting a friendship connection. While more than half of the users under 18 would accept connections to any person they have heard of, this percentage is less than 20% among users in the over 50 age category. This seems to make it less likely for them to regularly act on the basis of the fourth category and to some extent also the third category. The first two motives seem to be present among large groups of CMC users of different age. Research by Lenhart and Madden (2007) shows that these two kinds of motives are very prominent in the use of social network sites by teens, with 91% indicating that they use such media to stay in touch with friends they see frequently, 81% indicating using such media to stay in touch with friends they rarely see in person and 49% indicating that they use such media to make new friends.

In the following subsections I pay attention to each of these common categories and the types of friendships that are related to them. Note however that the categorization of motives I give here is neither exclusive nor should be thought of as very strict. Examples from practice are likely to show that the boundaries are fuzzy and in many cases one will see combinations of categories playing a role in users' motivation. Nevertheless, this categorization does provide a useful way of getting some grip on the diversity of friendships online.

2.2.1 Friendship for the sake of maintaining and/or enhancing existing offline friendships

Research such as that of Matei and Ball-Rokeach (2001) and Boase, Horrigan, Wellman, and Rainie (2006) shows that CMC is used by many people to stay in contact with offline friends. Friending activities online are seen by many participants as a way to maintain and enhance existing friendships in the offline world. Boase et al(2006) in their research focusing on American adults found that among their participants e-mail users send messages to 25% of their core ties (very close relationships) and 15% of their significant ties (somewhat close relationships) on a weekly basis. They found that, different from some of the early fears expressed in relation to CMC, e-mail does not replace in-person and phone contact. In fact they found that the more contact people had by e-mail, the more face-to-face and telephone contact they also enjoyed. Instant message users were found to exchange instant messages with 14% of their core ties and 8% of their significant ties on a weekly basis. Research by PIP (Lenhart & Madden, 2007) among teenagers also shows that much of their online communication is motivated by a wish to stay in touch and plan activities with offline friends.

CMC is in fact used most to communicate with people they see regularly. When looking at social networking sites, studies by Antheunis, Valkenburg and Peter (2008b), Hendra (2006) and Donath and Boyd (2004) show similar user motivations. Both identify an important type of user who uses such sites as a way to stay in touch with their offline friends and acquaintances. Hendra (2006) for example found that among southeast Asian women more than 76,1% of her research respondents indicated that they used such sites to stay in contact with old friends. Wellman, Quan Haase, Witte and Hampton (2001) also found that e-mail is used three times more often to contact friends that live nearby than friends that live farther away.

Wellman et al.'s research further indicates that in many cases such friendly online activities are supplementing face-to-face contact and contact through other media instead of replacing such contact. Matei and Ball-Rokeach (2001) cite research by Howard, Rainie, & Jones that also indicates that online experiences are complementing and extending other forms of social interaction instead of replacing them. When looking at long distance relationships Wellman et al.'s (2001) research indicates that CMC is taking a larger portion of the total amount of interaction. This however does not seem to be very surprising as interaction was found to be less in such relationships and face-to-face contact is of course a lot more difficult when there is a large distance between partners.

Although some people might have feared that computers and the Internet are making people antisocial and are destroying existing relationships, this seems to be far from true. Instead Boase et al. 's (2006) research shows that the time spent on CMC is in many cases taken from time first spent on unsocial activities such as watching television or sleeping. Not only do people often use CMC to interact with friends they are frequently in contact with, research by Symantec (2009) indicates that 56% of the Internet users in their study used it to reconnect with old friends.

2.2.2 Friendship for the sake of broadening one's social environment

Apart from those using CMC friending as a way to maintain offline friendships, an important part of CMC users are (also) interested in broadening their social environment through CMC. As an example of this Fono and Raynes-Goldie (2006) report that many of the friends, users of Live Journal listed, were only interacted with through computer mediated communication and were never met offline. Lenhart and Madden (2007)'s research indicated that making new friends provides motivation for 49% of the teens who use social networking sites. This motive

is especially common among older boys.

A large diversity of possible online relationships can be identified, ranging from short online chats to love affairs and long lasting friendships. One might however question how common friendships formed online are. Parks and Floyd (1996) asked a similar question in 1996 when they looked at personal relationships in Internet newsgroups. They found that among the participants of the 24 newsgroups they examined relationships were quite common, with 60,7% of the participants indicating that they had formed a personal relationship with people they got to know via an Internet newsgroup. The likelihood of developing such a relationship was found not to differ between the different types of newsgroups. A study by Rubicon consulting (Mace, 2008) indicated that among their study participants more than half indicated that they hadn't made new friends through social sites. This however still seems to suggest that a rather significant part had developed new friendship. A study by Symantec (2008) of Internet users in general indicated that up to half of the adults online had developed friendships through CMC. In general research suggests that online personal relationships are becoming more common and sometimes progress into offline relationships. (see Anderson (2005), Papadakis (2003) and Parks and Floyd (1996)).

Online friendships can be more than a way of broadening one's social sphere directly by the addition of new friends to it. In her research of Friendster, Boyd (2006) for example also saw online friending motivated by the fact that this lets users access the profiles of more people in the network (through friends of friends, which goes on to the fourth degree in Friendster). Although it seems rather questionable whether wanting to be friends so that one can get into contact with the friend's relations is a sufficient motivation for friendship, the fact that initial contact is based on such rather shallow motives does not mean that such relationships can not develop into deeper relationships. Identifying these as friendship from the start however indicates what I argue to be either a lack of understanding of the meaning of friendship or a confusing broadening of the notion of friendship that does not do the relationships we have so far called friendship justice. In any case creating friendship links and developing actual friendships through CMC can bring users into contact with new people This is also the case when this is not a direct technological affordance as in the case of Friendster. Such contact can lead to new friendships between friends of friends. Thus CMC friendship can clearly both directly and indirectly lead to a broadening of one's social sphere.

2.2.3 Friendship for the sake of self-expression

Self-expression can also provide motivation for friending activities online. Boyd has for example identified the following two common motives for friendships on social networking sites:

“It's a way of indicating that you are a fan (of that person, band, product, etc)”

“Your list of friends reveals who you are.”(Boyd, 2006, ¶ 21)

Donath and Boyd (2004) have identified that a very interesting profile can motivate people to friend someone on social networking sites. Friends constitute a part of one's identity and their characteristics reflect back upon you. Therefore developing and displaying friendship bonds online can be seen as a form of self-expression. It is however questionable in how many cases such public displays of friendships are matched with actual friendly feelings and behavior. It seems likely that in many cases this is just a way of making use of the technological affordances in a new way not indicative of actual friendship but rather taste, respect or admiration.

However CMC possibilities for self-expression can be motivating for using it in relationships that are very much serious. Research indicates that some people feel they can better express their “true selves” (whatever this might mean) online. Lenhart, Rainie and Lewis (2001) in their research on teenage life online for example found that some teens have this feeling and this makes it easier for them to make friends. A similar observation has been made in a study by the Nottingham Trent University in 2007. Their research found that three quarters of online role playing gamers (out of a sample of almost 1000 people from around the world) develop friendships with people they meet in the virtual worlds they participate in. Almost half of these result in meeting face-to-face. Of those interviewed, about a third indicated that they could be more themselves in the game environment than in real life.

2.2.4 Friendship for the sake of achieving status

Friendships online can also function as a status symbol. One of the trends related to this is the attempt by some to amass as many online friends as possible. This trend is particularly strong on social networking sites where some users have links to hundreds, thousands or sometimes even as much as millions of “friends”. The term “collector” has become popular for such individuals. One of the reasons for this collecting behavior might be the fact that “Having lots of friends makes you look popular” (Boyd, 2006, ¶ 21), one of the important motives for

online friending identified by Boyd (2006). Related to this point people might also get involved in online friending because they feel uncomfortable with the size of their current social network (especially when this is displayed on a social networking site). Research by Marlow (The Economist, 2009) has however indicated that although people might have hundreds of friends on Facebook, they often only actively interact with a very small selection of those. So this motive might in fact mainly play a role in the establishment of new relationships which are often not or only too a small extent maintained or further developed to a scale that one would identify them as friendship in another setting.

Online friendship is sometimes also motivated by other status related motives such as the fact that being recognized as a friend of a certain person who has a certain status can increase your own status. Boyd (2006) has for example identified one of the common motives for friending on Friendster and MySpace to be “Their profile is cool so being Friends makes you look cool.” Even the practice of using a certain CMC applications might be status related. Leung (2001) for example has found that light users of the Instant Messaging software ICQ were often motivated in their use by fashion.

2.2.5 Friendship for the sake of saving face

Many of the relationships designated as friendships online are not actually friendships but rather other relationships. In fact a problem with social networking sites is that although they require users to publicly articulate personal relationships they often do not provide sufficient possibilities for categorization, thus all kinds of relationships, family, classmates, acquaintances, lovers, etc. are all put under the title “friend.” This problem receives attention in Boyd's article on social networking sites (Boyd, 2006). She argues that friending is a performative action. Apart from being used to make the performer look important (as in the case of friendship for the sake of status), it can be used to save face when there are no actual feelings of friendship. Fono and Raynes-Goldie (2006)'s research for example indicates that friending or defriending is reciprocate by default, because those friended feel it is expected from them. People may accept friending invitations for similar reasons. Boyd's research for example showed that “It would be inappropriate to say no because you know them”; similar face-saving motives seem to be common online. Thus such “friendships” online are not necessarily friendships or motivated by feelings of friendship, but might rather indicate there is some other (often more superficial) relationship going on that at least demands respect of both parties.

2.2.6 Friendship online as a by-product of other activities

Not all friendships online come about among people that are actively motivated to find new friends for one reason or another or maintaining and/or developing offline relationships. Not unlike what one sees in friendship development offline, CMC platforms also see the development of friendships as a by-product of activities guided towards other goals. An example of this can be found in Bakardjieva's research (2003) where a woman who was interacting online as a way of getting away from her abusive marriage. Through the interaction online, she developed friendships that eventually helped her get out of the marriage. Less dramatic examples can also be found in the form of those who are (initially) interested in finding information, jobs or dates in their online activities (Bakardjieva, 2003) (Donath & Boyd, 2004), but along the way find friendship.

Bakardjieva identifies two main ideals that play a role in CMC, the rationalist ideal and the social ideal. Those who adhere to the rationalist ideal see CMC mainly as a way of exchanging information. The supporters of the social ideal see CMC mainly as a means for meeting other people and developing relationships. Among supporters of the rationalist ideal of CMC it is more likely that relationships are the by-product of other practices. Internet forums are for example often used as a way to exchange information about certain subjects and can for this reason be interesting for those supporting the rationalist ideal of CMC. Through extended participation in such an Internet forum it is not uncommon that people meet other people with similar interest and through what started as primarily an exchange of information develop a more personal relationship.

There is one area in which the development of friendships is pretty common that I have thus far not discussed extensively. This is the world of online gaming. Cole and Griffiths (2007) for example investigated MMORPG's (large online role playing game environments) and found that among the 912 players from 45 countries they examined positive social interaction was of great importance because many of the MMORPG's require groups of players to cooperate to be able to get further in the game. They found that no less than 76.2% of the males and 74.7% of the females indicated that they had made good friends through playing such games. On average participant made about seven good friends through MMORPGs. These sometimes evolved into real-life friendships. A pole conducted by AP-AOL Games ("Men form strong bonds of friendship via online games", 2006) found that a quarter of the men who play games online have through game playing with people they did

not know before, formed ongoing friendships or relationships. Among females this number was 13%. In 2007 Nottingham Trent University research found that three quarters of online role playing gamers (out of a sample of almost 1000 people from around the world) developed friendships with people they met in the virtual worlds they participate in. Almost half of these resulted in a face-to-face meeting.

2.3 Participants: social categories and bounds

Not only are there diverse motivations at play among CMC participants, research also suggests differences related social categories such as age, race, ethnicity, class, gender, and nationality. After investigating some of the bounds on participation in computer mediated friendship, this section takes a specific look at differences found on the basis of age, ethnicity, sex, living situation and frequency of use.

2.3.1 Bounds and restrictions

By examining the character of CMC as I have done in chapter 1 some general bounds can be identified which will put some restrictions on who can participate in CMC friending and who cannot. One of the bounds on using CMC is placed by the frequent focus on textual messages and interfaces. Literacy is therefore in almost all cases a requirement. Furthermore some technological knowledge is often necessary to operate the hard- and software that is required for CMC.

In addition there are several material bounds on the use of CMC. Not only does it require computer hardware that is powerful enough to guarantee stable operation of programs used for communication it also requires access to a communication infrastructure, either the Internet or a smaller network. This infrastructure and hardware is not available to everyone around the world and requires investments that are outside the possibilities of part of the world population. In this way reducing possibilities for some people to develop online friendship.

2.3.2 Age and living situation

When one looks at age, studies such as Wolak, Mitchell, and Finkelhor (2003) and Lenhart and Madden (2007) show that friending online is common among teenagers. Lenhart and Madden's research indicates that many youths are involved in social networking sites. Wolak et al argue that online relationships might be especially interesting for youth because on the one hand their interest in forming relationships and on the other hand the fact that CMC frees them from some of the constraints of adolescence. It was found that in particular older youth (14-17) were likely to have close online relationships.

It is however not just teenagers who are involved in computer mediated relating. Antheunis, Valkenburg and Peter (2008a) have indicated that over 25% of the Dutch population is a member of the social networking site Hyves and their average age is 23. In addition Antheunis et al(2008b) cite research by Kohut from 2008 that has indicated that in that year 67% of the US Americans between 18 and 30 were a member of a social networking site, as well as 22% of the Americans between 30 and 40 and 9% of those over 40. Abell (2009) has reported that on Facebook women over 55 even constitute the fastest growing user group and that there are slightly more members in the age group 45 to 65 than there are in the group of 13 to 17 year-olds. It is highly likely that at least part of each of these age groups uses these platforms for friendship purposes. Research such as that of Parks and Floyd (1996), and McKenna, Green and Gleason (2002) and the research survey by Hardie and Buzwel (2006) in fact indicate that online friendships are not uncommon among adults of different ages. In addition Parks and Floyd's (1996) research indicated that age did not seem to be related with the likelihood of developing a personal relationship through the Internet.

McKenna et al. (2002) found that full time students were most likely to engage in interactions online. Those not involved in stable romantic relationship or marriage were also found more likely to be involved in online social interaction. Parks and Floyd (1996) however found that marital status was not related to the likelihood of starting personal relationships in online newsgroups.

2.3.3 Ethnicity and nationality

Boyd (2006) has found that most early adopters of Friendster and MySpace were Americans, the population has however become more broad through the years. When looking at social networking sites market research by Synovate (2008) indicates that the use of these is clearly not just centered in the US but enjoys worldwide popularity. Largest social network site membership numbers were registered in the Netherlands with 49%, United Arab Emirates (UAE) with 46%, Canada with 44% and the US with 40% of the population being a member.

Although the claim is often made that the Internet connects people to the world and provides a way to escape from local communities Matei and Ball-Rokeach (2001) in their study of different ethnic neighborhoods in Los Angeles found that many of their participants connected with people and institutions of the same ethnicity online. Ethnicity seemed an important issue, especially for the Asian part of their participants. They also found that the likeliness of making friends online varied across the different ethnic groups. 44% of the Koreans and 31% of the Chinese they interviewed had made friends online, among African Americans, Hispanics and Whites this percentage was much lower being somewhere between 10 and 20 %, with the exception of East Los Angeles Hispanics which only scored 7%. Wolak et al. (2003) however found that non-Hispanic whites were most likely to be involved in online social relationships. They have however only looked at American youths. In both these studies it is questionable whether their observations can be generalized, because of their focus on a particular area and age group.

One possible reason for the fact that different ethnic groups score very high on friendship development online might be the differences in the popularity of CMC for social purposes. Hendra (2006) has for example found that Friendster and other social networking websites are particularly popular among Southeast Asian women.

2.3.4 Gender

Parks and Floyd (1996) found that gender was a significant factor in developing personal relationships online. Women were found to be more likely than men to develop such relationships. 72,2% of the women versus 54,5% of the men in their research had developed personal relationships online. Wolak et al. (2003)'s research on youths involved in online relationships also indicated that girls were slightly more likely than boys to have close online relationships. Leung found that among college students in Hong Kong females often used

ICQ for longer period of time and primarily to socialize and express affection while males used it mostly to fill idle time. McKenna et al (2002) found that males and females were equally involved in CMC but women tended to characterize the relationships they formed through CMC as more intimate and deeper. Cole and Griffiths (2007) found in their investigation of social interaction in online role playing games that while both men and women formed friendships with fellow players, women generally build emotionally stronger friendships. Hardie and Buzwel (2006) in their investigation of Australian Internet users however found that men and women were equally likely to develop friendships with people online.

Parks and Floyd (1996) have argued that there might be a difference in motivations that might explain why they encountered higher levels of relationship development among women in their research. One reason is that women are more motivated to find friends online. Another reason might be that people are more interested in developing an online relationship with women because the majority of users are male. This can also explain their finding that opposite-sex relationships were slightly more common than same-sex relationships online. It is however questionable whether this is still valid today as many social networking sites and Internet communities seem to involve a higher population of women. Even in the male dominated gaming culture there is a notable increase in females participating in online game environments (Cole & Griffiths, 2007)

To summarize I think it will be safe to conclude that both men and women are involved in online relationships including friendships and there seems to be a slight tendency for women to be more involved in deeper relationships.

2.3.5 Frequent CMC users

In their 1996 study Parks and Floyd argued that the duration and frequency of participation in newsgroups seemed to be the best predictors of whether an individual had developed a personal relationship online. Parks and Floyd's research (1996) of regular users of Usenet newsgroups showed that many (two thirds) of the participants had developed relationships with people they had met online. A later study by Parks and Roberts (1998) on MOO participants found that 93,6% had formed ongoing personal relationships with other players, showing that relationship formation in such environments is rather the norm than the exception. In the same year McKenna and Bargh (as cited in Hardie and Buzwell, 2006) found that among 600 random newsgroup participants 51% had formed close friendships

online. In 2001 Baym found that many friendships emerged through a Usenet group. Users actually described the group as a bunch of friends. In 2007 Nottingham Trent University research found that three quarters of online role playing gamers develop friendships with people they meet in the virtual worlds they participate in. Almost half of these result in meeting face-to-face. On average participants spent 22,85 hours a week playing online role playing games. World of Warcraft was the most popular game among participants. From these different studies it seems that one can conclude that frequent use of the Internet and especially involvement in online groups/communities increases chances of the emerging of friendships. This makes sense as it allows participants to get to know each other, to discover and/or develop common interests and goals that strengthen the bonds between them.

2.4 On- and offline social contexts and their influences

Social contexts can take an important role in personal relationships in general and friendships in particular. In the offline world one interacts within the context of a certain environment. Often there is a group of friends, family and acquaintances that one interacts with frequently. In most cases one is also involved in work or study practices as well as all kinds of associations and groups through which one interacts with other people and which place certain bounds upon us. Furthermore our offline relationships are often bound up with certain physical surroundings. In online relationships these elements are not necessarily present. Physical surroundings fade to the background online, people can interact outside of work/study related contexts and interaction can happen entirely outside the view and knowledge of our social environment. Authors such as Wellman et al (2001) have argued that the Internet provides an interesting domain for the maintenance of friendship because this kind of relating unlike kinship and neighborhood relationships are less tied up with densely knit social networks. The extra freedom online might have a significant impact on how friendships develop. It is however very much the question whether people interact in such a free way online. Offline environments may play a role in online interaction and online communities might exert new influences on users. For this reason the next two subsections discuss the differences and influences of on- and offline social contexts.

2.4.1 Differences between social contexts

One area where possible differences between social contexts can be noted is the activeness of communities. Cummings, Butler and Kraut (2002) have questioned whether online communities are actually as strong as they are sometimes portrayed. They observed that although existing studies of electronic communities give insight into the kind of social activities that can develop online they might not give a representation of what typically happens. The image of online groups which are characterized by large amounts of activity, closeness, the development of personal relationships and a sense of belonging might not be the norm but rather the a result of the focus of research on interesting cases. Their research into listservs in fact gives quite a different picture. The 204 listservs that were investigated proved to be more like voluntary organizations with fluctuating members and only a small portion of actually active participants. In general actual communication was rather sporadic.

It is however very much the question whether this observation can be generalized to other forms of CMC as well. It has already become clear that online friendships often develop within online communities and research such as done by Papadakis (2003) indicates that a large part of Internet users are taking part in groups/communities online that from their research do not seem to be as inactive as the listservs Cummings et al (2002) have studied. Papadakis' survey found that 84 percent of the participants indicated that they interacted with a group online and more then three quarters of the population stayed in regular contact with such a group. A quarter communicated actively with their group several times a week.

One of the other ways in which online communities often differ from offline ones are the norms and rules involved in the community. Papadakis (2003) found that norms and rules regarding conduct are pretty much standard online. Such rules might be decided upon through explicit dialog among users or they may be one-sidedly formulated and or imposed by a moderator and/or system operators. Rules of conduct are often spread to users through FAQ, sticky posts (posts that stay at the top on message boards) and update messages when rules are changed. Such rules often relate to both behavior that is not tolerated in the particular community and behavior that conflicts with law.

Apart from these differences it remains the question how separated life online and offline are. Bakardjieva (2003) has observed that participants' (inter)actions in online forums were closely knit up with their offline pursuits. The split between virtual and real therefore seems to be rather artificial. When looking at the motives behind friending activities online it already becomes clear that many people interact online with friends they already know from

their offline environment. Furthermore many studies indicate online relationships that develop to include offline elements. Papadakis (2003) has argued that it is quite possible that technology makes little difference at all when looking at social networks. Although radical technological changes in communication possibilities have evolved in the form of the telephone and the Internet, social lives remain more or less the same. This claim might however be too strong in the opposite direction as the research discussed in 2.2.2 seems to indicate that development of new relationships through CMC is something quite common, which would indicate that CMC does have an impact on our social life. Parks and Floyd (1996) research on newsgroups however has pointed to a dimension where there seems to be a somewhat stronger separation between the on- and offline world going on, namely network convergence. Their study indicated that network convergence was not extensive in online personal relationships. Participants often believed that the convergence between online contacts was higher than between contacts from the offline and online world, thus indicating somewhat of a separation between the on- and offline world.

2.4.2 Contextual influences

The differences in on- and offline social contexts discussed in the previous section are likely to have an impact on the friendships arising in them. Chan and Cheng (2004) for example argued that in general cross-sex offline friendships are believed to be more difficult to develop because they are subjected to all kinds of constraints of structural and normative character. These can be reduced opportunities for meeting people of the other sex and social disapproval of intimate relationships between people of different sex of which one or both parties are involved in marriage. Gender inequality and the issue of sexuality often lay at the basis of such problems. Chan and Cheng's research has shown that online cross-sex friendships seem to be easier to develop since many of the constraints in the offline setting are removed on the Internet. Similarly a Taiwanese managing director of Synovate has argued that online friendships provide an escape from cultural and social constraint for Taiwanese youth, who in many cases live at home until they marry (Synovate, 2008).

It is however very much the question whether people interact in a free way in relation to all aspects of their social and cultural background online. Matei and Ball-Rokeach (2001) for example report that many people argued that they connected online with people and institutions of the same ethnicity. Instead of becoming detached from their offline communities once online, many seemed to be firmly anchored in those.

In the previous subsection it has become clear that there is often an overlap between

people's on- and offline life. Therefore offline social environments might have an impact on online friendships. Anderson (2005) indicates negative attitudes towards online relationships are common among non-participants. These negative attitudes can have a serious impact on the social support that people involved in online relationships receive. Anderson found that people tend to express such negative views in strong and explicit ways to people in their social environment who may be or have been involved in online relationships. In many cases such expressions refer to negative stereotypes. Anderson argues that the relationship between Internet use and affinity and the perceptions of online romantic relationships might indicate that when Internet and computer use continues to grow perceptions of online romantic relationships may become more positive

2.5 Importance and depth of CMC friendships

It has become clear that a variety of people participate in a variety of friendships through CMC, based on different motivations. What has however to some extent remained unclear is how serious these relationships are. This seems important to be able to evaluate whether CMC friendships can actually be considered to be friendships and whether they improve or diminish quality of life. In the next two subsections I discuss the expectations and evaluations of both users and researchers to give some idea of the seriousness of CMC friending.

2.5.1 User evaluations and expectations

User evaluations and expectations provide important insight into how serious online relationships are and how important they are to the people who have them. In this way it also gives one an indication of how serious one should take them. In their 1996 article Parks and Floyd cite different sources where participants in online relationships argue that online friendships are very important to them and even seem to be of higher quality than their offline relationships. Parks and Roberts (1998) conclude from their survey on literature on online relationships that some participants in past research indicated that their online relationships were of equal or higher quality and depth than their offline relationships, while others viewed them as intrinsically shallow. Their own research involving respondents rating online and offline relationships, indicated that people generally rated offline relationships higher when looking at the quality of friendship based on aspects such as interdependence, understanding, commitment and network convergence. However the absolute differences were not very big

and respondents often did not make a strong division between virtual and real relationships. One of the responses they cited to underline this was: "MOO friendships are real friendships because they're with real people." (Parks and Roberts, 1998, p. 535). Peris et al. (2002) also found that most Internet users (70,6 %), describe online friendship relationships as just as important as face-to-face relationships and saw those as reality and not fantasy. In their research on online gamers Cole and Griffiths (2007) found that 45,6% percent believed that their online friends were comparable to their real-life friends, while 16,8% was not sure. The majority (53,3%) did however consider their real-life friends to be more trustworthy, while only 4,8% considered their online friends to be more trustworthy and 36,7 % considered online and offline friends to be equally trustworthy. Research by Synovate (2008) indicated that worldwide 14% of those who are a member of social networking sites enjoy their online friendships more than their offline friendships. In some countries this percentage was however much larger (UAE, Indonesia and India all showed scores above 30%). Furthermore among Internet users in the UK 43 percent of the adults enjoyed their online relationships as much or more than their offline relationships. On the negative side Matei and Ball-Rokeach (2001) report that some respondents found relationships with people randomly met online to be shallow. Reasons include their lack of seriousness and their tendency to focus solely on fun things.

From the above it seems reasonable to conclude that a large part of those involved in CMC friendships consider such friendships as important and in many cases (nearly) as important as their offline friendships. This enthusiasm might however be mainly present among those involved in CMC friendships. Research by Anderson (2005) for example has suggested a positive link between on the one hand Internet affinity and use and on the other hand perception of online romantic relationships. She has also found that negative views about online relationships are common among non-participants. Similar conceptions might be present in relation to online friendships. In relation to social networking sites Boyd (2006) has found clear differences between user and non-user expectations. She argues that it is mostly non-participants that expect friending on social networking sites to be the same as listing one's closest friends.

2.5.2 Scientific evaluations of CMC friendships

Apart from user perspectives and evaluations, a large part of the research discussed in the sections above feature further analysis and reasoning on the basis of the empirical data gathered. Although I will give a more elaborate account of different evaluations and their theoretical background in the third part of this thesis, this section provides a short overview of some research findings. Parks and Floyd (1996) for example concluded that 60 percent of the participants had developed personal relationships online of which 30% could be legitimately considered to be highly developed relationships. A later study by Parks and Roberts (1998) using the same methodology to evaluate relationships on MOOs found that these were even stronger than those uncovered in Usenet. To relate their findings to offline relationships. Participants were asked to report on an offline relationship of the same type as the online relationship they had reported on. The biggest differences between MOO relationships and offline relationships seemed to be the average time spent on the relationship, which was significantly higher in real-life relationships and the time the relationship had been in existence: real-life relationships were significantly longer standing. Offline relationships also showed significantly greater interdependence, predictability/understanding, commitment and off-line network convergence. The difference was however not very large in the absolute sense.

Not all evaluations of online relationships do however show such positive results. Peris et al. (2002) report (after reviewing different research on online relationships) that studies show that most relationships developed online are weak in comparison to face-to-face relationships. Their own research however suggests that depth and intensity of feelings do not differ very much from offline relationships.

Chan and Cheng (2004) did come up with less positive results in their own research on the quality of online friendships based on the same methodology as Parks and Floyd(1996). Their research indicated that the quality of offline friendships was rated higher than that of online friendships among their test subjects. The difference in quality between the different relationships was however found to diminish over time.

Cummings et al (2002) did research involving comparing data respondents provided on the person they communicated most with through electronic mail and the person the participants indicated that they most frequently communicated with through any modality. On the basis of this comparison they concluded that online relationships are generally weaker than offline relationships, involve less communication and scored lower on predicted

psychological closeness.

Chapter 5 and 6 provide more information on several evaluations of CMC friendships and how valid their conclusions are. For now one can at least conclude that although the results from different studies vary, overall researchers found that developed CMC relationships occur in a significant amount of cases but in almost all cases these seem to be of lower quality according to their standards.

2.6 Conclusions

This chapter has delved into the actual practice of CMC friendships with the aim of providing one with the necessary background information to decide whether CMC friendships can be considered to be actual friendships, to help differentiate between different kinds of CMC friendship and to evaluate the presuppositions that underlie current evaluations of CMC. During the survey of the many smaller studies that have made up the bulk of this chapter it has become clear that worldwide a large and varied group of people is developing and maintaining friendships online. Although teenagers and young adults were initially far out most frequently involved in online social activities, there has been a growth in the number of people from older age groups that participate in such activities. Both men and women develop and maintain friendships online although the majority of research seems to suggest that women develop relationships more frequently and often of somewhat greater depth. CMC in most cases requires literacy, a certain amount of technical knowledge and access to some computer infrastructure. These resources are getting more widely available in many places around the globe. In most developed countries a large part of the population has access to an Internet connection and many people use CMC for social purposes. As a result participants in computer-mediated friendships come from all over the world and include different ethnic groups.

Motivations for participating in friending behavior online differ between individuals. In this chapter I identified five popular motivation categories that are indicative of the different degrees of deeper vs. shallower friendships developing online. These five categories are:

- Friendship for the sake of maintaining and/or enhancing existing offline friendships
- Friendship for the sake of broadening one's social environment
- Friendship for the sake of self-expression
- Friendship for the sake of achieving status
- Friendship for the sake of saving face

An important part of friending behavior online seems to be motivated by offline relationships. In addition in many cases use of CMC is supplemented with use of other media and face-to-face communication. This leads to the question whether the distinction between on- and offline social relationships and in particular friendships that is made in many studies of CMC is actually justified.

Part of the friendships that develop online do not develop between people who are actively motivated by any of the above mentioned motives but develop rather spontaneously as a by-product of other computer mediated activities. Especially among active online communities, such as online gaming environments, such relationships seem common. In general online friendships develop frequently among people who spend a large amount of their time on online interaction.

From the research discussed in this paper it seems that CMC provides a way to overcome some of the bounds in offline life, for example making it easier to establish and maintain cross-sex friendships. Although CMC does seem to increase people's freedom in interacting, social, cultural and ethnical background do still play an important role for at least a portion of the users.

Those participating in computer mediated friendships in most cases consider those friendships as important and in many cases (nearly) as important as their offline friendships. Some even consider them to be more important or enjoyable than their offline friendships. Part of this enthusiasm might be fueled by their enthusiasm for CMC in general. The evaluations by researchers of CMC generally tend to be less positive. Although many agree that developed relationships can and do occur through CMC, most hold these to be of lower quality.

Part II

On friendship:

**Assembling a framework for evaluating
friendship in the tangled web**

3 Thinking about the nature and value of friendship: A historical overview

3.1 Introduction

Although the empirical literature surveyed in chapter two provides some insight into the emerging realities of online friendship, it is insufficient for evaluating those realities. This is so because it does not provide the conceptual and normative resources necessary for understanding the nature and value of friendship. This understanding is, in turn, necessary for assessing the implications of computer mediation for the quality of friendship and, more broadly, the quality of life in a world where interpersonal interaction is increasingly technologically mediated. This part (chapters three and four) seeks to provide the needed framework for thinking critically about friendship in a networked age.

In the *Nicomachean Ethics*, Aristotle argued that “Friendship is a thing most necessary to life, since without friends no one would choose to live, though possessed of all other advantages.” (trans. 1985, book viii, 1155a5, p. 30) Indeed, friendship has been the subject of many philosophical inquiries. Throughout the ages different philosophers have tried to conceptualize friendship and its importance in both public and private life.

In this chapter I give an overview of historical conceptualizations of friendship. This is done for several reasons. First, a far-reaching historical survey helps in achieving insight into the breadth of relationships understood as friendship. Second, such an overview is likely to provide a broader insight into the different ways in which different friendships can be valuable—something that might be missed in a narrower investigation of friendship and will be of use when evaluating CMC friendships. Third, such an overview can give insight into the development of philosophy of friendship through the ages and which major theories and themes have been central in theorizing about the nature of friendship and its value. This can help identify central themes that have survived through the ages as well as changing views on friendship rather than treating friendship as a static concept. Such insights can also help clarify or question intuitive conceptions of friendship. The selection of authors presented in this chapter is based on several aspects: their prominence in literature on friendship and their importance in identifying certain aspects of friendship, their variance from other accounts of friendship (such that a broad picture of friendship can be developed) and whether they are at

least to some degree acceptable in the sense that they are not so far removed from common sense perceptions of friendship that it be would hard to persuade anyone that they were actually about friendship. Although this last choice leads to a somewhat colored representation of the history of thinking about friendship, some selection needs to be made because of the vast amount of literature on this subject and by using this criterion the overview remains relevant to the focus of this thesis.

The analysis presented in this chapter involves the identification of both similarities and differences between different theories. In addition some strong points and potential problems of the theories will be discussed based on an intuitive conception of friendship. This intuitive notion of friendship is based on a common sense understanding of friendship derived from real world friendships as they are practiced not some ideal account of the character friendship ought to have. The insights gained in this chapter are used in the next chapter as the raw material to build a framework for thinking about friendship and its value.

3.2 Historical overview

3.2.1 *Plato*

Plato presents an early philosophical account of friendship. In *Lysis* as in many of his works we find an account based around dealings involving Socrates. In this case the main part of Plato's account involves Socrates talking to two young friends Lysis and Menexenus. His account is partially propositional in nature, but because of its form of discussion and activity another way of interpreting it would be as primarily an enactment of friendship. The dialogue in itself and its conclusion in *aporia* can be seen as indication that friendship is the kind of thing that needs to be practiced in order to be known and is too complex and ambiguous to capture in a definition.

At the start of the dialogue Socrates questions the nature of being a friend. Interesting here is that he allows for one-way friendships. Friendship is thus not necessarily reciprocal and can involve relationships with material objects or animals. Most of the dialogue however focuses on how friendships are formed. Socrates reflects on and discards several different possible causes for friendship. He casts aside the idea that friendship comes about between those who are like, because this would mean that the bad would be friends with the bad, which he argues is impossible because they would make each other suffer injustice. Neither can the good befriend the good, because the good in Socrates conception are self-sufficient

and therefore have no need for friends. Socrates also refutes the idea that friendship is based on friends being unlike each other, because this would mean that friendships would have to arise between the good and the bad or the just and the unjust. A third idea is drawn up that friendship might form between the good and those that are neither good nor bad. These latter are presented as those that suffer from ignorance but are aware that they are ignorant. The good as presented by Plato thus seem to be those in possession of knowledge and wisdom. Friendship between the neither good nor bad and the good is the result of the neither good nor bad trying to avoid the bad. However in such cases friendship seems to be developed for the sake of something else. Furthermore this poses the question how friendship would sustain if we take away evil which functions as a motivating factor. Socrates seems to assume that it should and that it is something valuable regardless of the presence of evil. He therefore puts forth another idea that friendship is based on desire between two congenial things. This however brings us back to the problem of like having no reason to befriend like, which isn't solved by congeniality.

In the end Plato does not seem to be able to uphold a certain cause for friendship and his dialogue clearly shows the difficulty in developing a general theory of friendship. There are however several ideas that survive in the process of evaluating and discarding causes for friendship:

1. The impossibility of friendship with the bad, so friendship has to be based on a certain shared goodness, especially a shared desire for wisdom.
2. The need to display a certain amount of usefulness and wisdom to be a suitable object of love for potential friends.
3. Friendship aims at the good or wisdom and is thus teleological. It is a dynamic process of maturation, a shared quest for goodness/wisdom.

In other words the kind of friendship presented in *Lysis* seems to amount to Socratic philosophy, which Socrates sees as essential to the good life.

The strong point of this account is that it identifies friendship as a dynamic process that involves growth and that it recognizes the difficulty of theorizing about friendship. Furthermore in the reasoning about friendship's existence outside other motivating factors we can identify a certain sensibility of the intrinsic value friendship intuitively holds. On the other hand this seems to be at odds with the emphasis of friendship's aim towards wisdom/the good, which leads to the main problem with this account in that it claims that friendship always contributes to positive growth towards the good. This claim is upheld by the interpretation of friendship as Socratic philosophy, but this seems to be too narrow to be

plausible in any practical sense and makes it rather elitist. In addition this seems to clash with Socrates allowance for one-sided relationships: how can we entertain such friendship with wine or works of art for example?

3.2.2 Aristotle

In the *Nicomachean Ethics* Aristotle mainly focuses on voluntary friendships built on quality. Friendship is described as being reciprocated goodwill, awareness of this being the case and acting upon it. Goodwill in this case refers to wanting the good for one's friend for his own sake. One of the differences between Aristotle and Plato is that Aristotle does not allow for one-way relationships, friendships with objects are therefore out of the question. He distinguishes between three types of such friendship. Friendship of utility, friendship of pleasure and complete friendship. The first two are coincidental in that they are not based on the friend himself but on the pleasure or utility he brings. Such relationships are thus easily dissolved once the person no longer delivers pleasure or utility. The highest form of friendship, complete friendship, can also bring pleasure and utility but this is not the basis of the relationship. This indicates that Aristotle's conception of complete friendship versus lesser types of friendship is not built on a strict division between intrinsic and instrumental goods and/or altruistic and egoist motives. Complete friendship in Aristotle's view is motivated by virtue. It involves well-wishing for the person's own sake and develops between people of similarly virtuous character. Like in the case of Plato such a relationship cannot involve bad people because they will only like their friend in accordance with the benefits he or she brings. Indeed, Aristotle founds a long-running tradition of idealism in the philosophy of friendship in which good friendship requires exceptional people. Complete friendship is directed towards one person and it is impossible please multiple people in such a way according to Aristotle. Such friendship requires spending a lot of time together and promoting each other's interests, which is obviously not possible with a lot of people at the same time. Aristotle holds that friends must agree on the things they see as advantageous and this agreement should be their basis of action. Therefore friendship is not just good will, it must be displayed in mutual actions. It thus seems that friendship arises between contraries with common goals and values. Because complete friendships are built on virtue and Aristotle is convinced that virtue is enduring he argues that such relations will last.

Aristotle presents friendship as something that is both necessary and desirable. He argues "For no one would choose to live without friends even if he had all the other goods."

(trans. 1985, book viii, 1155a5, p. 30). Having and loving friends is generally seen as a good and praiseworthy thing. It provides a shelter when we suffer from misfortune and a way to increase understanding. Aristotle's conception of the good life is however built around self-sufficient contemplation by the virtuous, which does not seem to leave much room for friendship. But, because good people enjoy the same things and because they are pleasant to each other, he argues that they should give in to the desire to live together. One could argue that since we can add a lot of things to the solitary life that makes it better, the solitary life cannot be the good.

Aristotle compares the relationship one has with a friend to the relationship one has with oneself. A friend is depicted as a second self. One shouldn't easily break off such a relationship. Even in cases where one's friend is losing some of his/her goodness one should try to set them right.

Apart from the friendships of equality I have talked about Aristotle also identifies unequal friendships, such as the friendship between father and son and between rulers and those ruled. In such relationships love must be proportional; meaning that the superior person should be loved more in accordance with his worth. This might be proposed by Aristotle to provide compensation for the superior person missing out on the benefits he might have got when he would have made friends with equally superior people instead of living with inferiors.

Aristotle's conception of friendship has been very influential. One of its strong points is that it tries to deal with the complexity of friendship and the multitude of different relationships that people recognize as friendship by identifying different kinds of friendship. Although his division between different kinds of friendship is not based on a strict division between intrinsic and instrumental goods and/or altruistic and egoistic motives, it still seems to be too idealistic in its focus on virtue as a basis for complete friendship. Why would it not be possible to have well-wishing for a friend's own sake in relationships involving less virtuous and self-sufficient persons? As his division stands now such persons can only develop friendships of utility and/or pleasure. In addition we can question whether Aristotle's conception of friendship is actually taking the friend serious as another person that needs to be cared for for his own sake as there is such an emphasis of self-sufficiency and recognizing in one's friend one's own virtue. It sometimes seems that his friendship is closer to self-love or love of (one's own) virtue than actual love of the friend for his own sake.

Aristotle does put emphasis on friendship being a reciprocal relationship not only involving reciprocal goodwill but also mutual action and the awareness of this among both

friends, which seemed to be missing in Plato's theory and thus potentially making this theory too broad. This makes Aristotle's theory better compatible with contemporary intuitive notions of friendship.

3.2.3 Cicero

Cicero agrees with Aristotle on some points, for example, in distinguishing between ordinary and ideal friendships and claiming that the latter is only possible between good men. But he also seems to disagree on a key point, namely, that friendship is more a "this-worldly" ideal where the reward is immanent in the friendship itself rather than in some further goal such as the contemplative life.

In the process of his theorizing Cicero clearly struggles with the tension between his strong notion of self-sufficiency as a precondition for friendship and the need and care for friends that is part of friendship. He for example argues that his own friendship with his deceased friend Scipio would not have remained strong if the latter would have never needed his advice or help. In general he argues that friends don't need to be free of need for each other all the time.

Friendship in Cicero's case is grounded in our nature - Cicero holds that all men are by nature meant to have some sort of companionship with one another. "nature, abhors solitude." (trans. 1967, xxiii.86). This however does not mean that men necessarily always follow nature. It seems to be more like a guide in relation to which man still has the possibility to choose. Freewill and choice are emphasized more than they are in Aristotle's theory. Like Aristotle's complete friendship Cicero's friendship is not the kind of relationship between common people but rather the special kind of friendships that have gained a name for themselves. He does however argue that the goodness/virtue which provides the basis for friendship is certainly also found among common people. He thus allows much more realism and fallibilism in his conception of friendship than does Aristotle.

Yet, like Aristotle, Cicero stresses that agreement between friends is required in friendship, especially when looking at aims, ambitions and attitudes. In fact Cicero argues that friendship is nothing but "complete sympathy in all matters of importance plus goodwill and affect"(trans. 1967, vi.20). Not unlike Aristotle's notion of complete friendship Cicero argues that friends should be cared for for their nature not for benefits that will come from showing them affection and that friendship cannot exist without virtue. In fact he argues that friendship cannot exist between any other than truly good men. Two guiding principles can be identified

in relation to such a good man, or “true philosopher” as Cicero calls him:

- He refuses to partake in any form of deception or hypocrisy and will not hide his opinions behind a front. Cicero argues that instead we should share with our friend all our concerns, plans, and aims without any reservation. Such honesty is the basis of friendship, which is a joining of souls. This joining is impossible if one soul through hypocrisy becomes “not single and forever the same, but various, changeable kaleidoscopic?” (trans. 1967, xxv.91).
- He will not listen to accusations made against his friend or suspect his friends from having done wrong.

Cicero seems to be aware that friendship is not something completely rational but rather often arises spontaneously. He argues that friendships develop before we're able to judge people, we therefore have to reflect on how our friends and friendships are developing, which might involve testing one's friends character every so often. We must however not be too quick to bestow our affections or bestow them on people that are unworthy. It is best to first test and observe. Cicero further recognizes that friendship takes ripening to come to its full potential and he argues that those who have survived over longer time are often the best. This does not however mean that friendships have to be maintained at any cost. He is aware of the fact that as interests of friends change so friends can grow apart. Furthermore there might be pursuits in life that mean a lot to oneself that require one to take leave of one's friends. In such a case a true friend should not keep us from these pursuits, for otherwise they would be self-indulgent instead of showing real care for their friend for his own sake. Friends should position themselves in such a way in life that they share their good fortune and try to better the position of their friends in life. Friends should be ready to provide frank and free advice without holding back and without waiting to be asked. In addition we should take any such advice to heart when our friend offers it to us. We should however be careful not to ask things of a friend that we would not be able to do ourselves or ask him to be a kind of person we cannot be ourselves.

In Cicero's conception nature provides us a guide to the good life and it guides us to friendship. Friendship, which he argues, can mean more to our lives in both good and bad times than anything else. True joy in life comes from being able to share your good fortune with friends and misfortune is lightened when you have friends that care for you. Cicero argues that other things we desire have only limited utility while friendship is ever present to

us and provides us with many benefits. Only wisdom is a finer thing and friendship should therefore be put ahead of all other concerns. Friendship also offers material advantages but these should never be the aim of friendship.

Cicero's theory opens a route to friendship to those not necessarily living a philosopher's life. Furthermore it provides a conception of friendship as something truly intrinsically valuable that seems to be missing in the theories of Aristotle and Plato where friendship was always directed toward some greater goal. Both of these differences go well with intuitive notions of friendship, however Cicero's approach has some clear problems. One was probably clear to himself in writing his theory is how to combine the precondition of self-sufficiency with the need friends have for each other, without which friendship would not survive. Again as with Aristotle his focus on likeness and self-sufficiency makes his view of friendship susceptible to the idea that it is just self-love dressed up as friendship. In fact the bigger question might be how to combine such a strong claim to self-sufficiency and likeness with friendship at all, because his self-sufficient persons still seem to have a reason for wanting friends as we have seen Aristotle argue. In fact this seems to be a major contradiction in Cicero's theory. Friendship is a good precisely because we are not self-sufficient. Indeed, friendship necessitates care and worry, and Cicero argues this means that the good life is not one that is characterized by its "freedom from care". In addition his unity view does not seem to take into account the fact that people's character are often subject of reflection and change. It will therefore be very difficult to find this soul that is single and forever the same.

3.2.4 Seneca

Seneca is another representative of the stoic tradition and like Aristotle and Cicero before him he addresses the tension between self-sufficiency and friendship. With Seneca self-sufficiency means that the virtuous person does not necessarily need friends to remain happy, but this doesn't mean that he has to desire to be without friends. Seneca argues that although people need all kinds of help and friends for maintaining mere existence, for happy existence they only need themselves. Wise men can live happily without friends, however for their daily practice they need friends just like they need their hands and eyes. Friendship in his argument is not based on desire for friendship but rather practicing one's noble qualities. Qualities which otherwise might go unused. If in such cases friendship is sought for itself instead of some possible advantage it might bring, it becomes similar to virtue and is not incompatible with self-sufficiency. Our inclination to friendship is explained as being a result of our nature

and not so much our own needs. As long as one is able to use one's own judgment in his affairs, then that person can be considered self-sufficient.

For Seneca, the supreme good is a self-sufficient life led by “a soul beyond the realm of suffering.” (trans. 1917, p. 119) Things external to the self are not real goods. Maybe because of this he has given a lot of attention to lost friends. He argues that we should generously enjoy our friends since we do not know how long we will be able to dwell in their company. Since our friends are mortal and their mortality is not bound to any fixed laws, they can be taken from us at any time. Seneca argues that it is better to replace lost friends than to mourn over them. The spot of lost friends can in his view be filled by new friends as soon as we want. Therefore we never need to suffer from a lack of friends. Although old friends are no longer with us, Seneca seems to argue that they live on in our lives through our memories. For Seneca, it is adequate that the friend lives on in our minds, because this memory is something that cannot be taken from the self.

One of the things that is striking about Seneca is his focus on the chances of losing friends and how to deal with this and it is here that I think he adds most to the philosophical theories we have considered so far. What we see here is one of the first approaches on how to deal with the fact that friendship is dynamic and can be lost. It is in this sense that Seneca's theory carries some value even though it seems to be very much flawed. The main reason for this is that his philosophy of friendship is riddled by contradiction. On the one hand, he argues that the good results from following our natural promptings, one of which is our natural desire for friendship. Therefore, friendship is a good. On the other hand, he argues that anything that can be taken away from the self by fortune is not a good. Since one can lose one's friends, friendships would not be a good according to his definition. His solution to this problem holds that he argues one could live as if the friend were still with him/her, through the memories one has of one's friend. However this is clearly inadequate when looking at the actual loss one suffers when losing a friend; it is not so much the image of the friend that we lose or even his way of thinking or speaking to us it is also the loss of future shared activities which cannot be replaced by such memories. Neither can they be replaced by other friends as Seneca seems to suggest if we really want to maintain that we befriended our lost friend for his own unique character and not just for having certain characteristics or goods. From a contemporary intuitive notion of friendship his talk of the ease of replacing friends seems heartless and hardly an example of loving a friend for their own sake.

3.2.5 Aelred

Aelred was born in the twelfth century and spent most of his life in a monastery, his most famous work *spiritual friendship* not surprisingly deals with friendship. He presents one of the earliest Christianized understandings of friendship, in which Christ is taken as the model for friendship. He identifies three characteristics that friendships should display:

1. Friends should be willing to die for one another
2. The love between friends should be unconditional. Friendships are not transitory things but are eternal. Even if one is injured or betrayed by one's friend one should never lose his or her love for one's friend.
3. They should share their possessions.

Aelred defines friendship as “mutual harmony in affairs human and divine, coupled with benevolence and charity.” (1148/1991, p. 133). Intimacy is the main distinguishing feature of friendship. True friendship is based on the nature of the other person and the feelings of the human heart. It is built on similarity in life, morals and pursuits among the just. Aelred identifies friendship as a natural desire of man that is further increased by experience. He sees it as being very close to wisdom, even to such a point that it is hard to distinguish the two.

Aelred continues the tradition of idealizing true friendship, in which virtuous character plays a central role. Indeed, only Christ, due to his exceptional character, is capable of genuine friendship. But all humans, in their fallen state, naturally strive toward friendship, because in this ideal we approach a Christ-like existence. Loving one's own soul is in his conception a precondition for loving another soul and thus achieving friendship. He is also very strict in his idealization as he does not allow for any valuing of lesser friendships, such as for example friendship of utility as discussed by Aristotle. The two kinds of friendship he uses to distinguish true friendship from are portrayed as “harmony of vice” (1148/1991, p138) and thus sinful. These are worldly friendship, which is based on material gain and carnal friendship, which is based on pleasure. They are not based on love for one's fellow-man or even for one's friend.

With Aelred we can see a shift from the self-sufficient good living together of Aristotle, Seneca and Cicero to the good resulting from living together. Aelred's account hints towards the possibility of considering first a good relationship and then how this kind of relating may help form a good person. This can be seen as a foreshadow of latter understandings of identity as relationally co-constituted. In his focus on intimacy he argues

that friends are people with whom we share our secrets, thought and cares and through this process friends might learn from one another.

There are several benefits that can be derived from Aelred's account on the one hand it introduces friendship as a valuable even ideal thing in itself and it does not try to fit this in with a theory about good persons having to be self-sufficient, which leads to a lot of problems in earlier accounts. Also his emphasis on intimacy seems to highlight a point that has not gotten a lot of attention in earlier accounts and it introduces a kind of vulnerability that we intuitively associate with friendship.

Unfortunately there are also many downsides inherent to Aelred's approach. The most important is probably that it is overly idealistic and strict. It does not allow for any friendships that are not built on the model of Christ. As a result it asks so much of a friend that friendship can never become more than a goal never actually realized. In addition as a contemporary reader it is somewhat difficult to understand why complete harmony in affairs both human and divine is a necessary ground for friendship. Wouldn't this exclude the possibility of enjoying a friend's otherness and coming to know and in some cases empathize with other viewpoints?

3.2.6 Montaigne

Montaigne, who is often seen as a skeptic humanist, provides us with a 16th century interpretation of friendship that is more a collection of insights than a theory. His discussion of friendship is largely built upon his intimate friendship with Etienne de La Boetie, whose death had a big impact on his life and thinking. He argues that only those who have experienced such deep friendships as he can be judges of friendship. Friendships, therefore, are unique, offering no generalizable standards by which to judge their relative quality, and can only be truly known by those who experience them. There is a natural inclination towards society among men. However friendship in Montaigne's case is the most proper product of our will and is not based on any explicit foundations. Friendship unlike erotic love is explained as a general and universal warmth, that is moderate and constant. It doesn't have any bitter or stinging element about it but is all gentle and smooth. Friendship is only enjoyed according to our desire and it increases in enjoyment as it is practiced and through its spiritual practice the soul grows to become more refined.

Montaigne presents a very strong unity view of friendship in which the souls of friends blend and intermingle. In noble friendships the will of friends merges and therefore it does not

make sense to speak of duty, obligation, benefit, gratitude, request etc. They become like one soul in two bodies and therefore can't give or lend anything to the other. The ideal friendship is founded on an inexplicable depth of feeling and unity. In this we can see Montaigne as a precursor to Romantic thought.

Like Aristotle Montaigne argues that friendships that are directed towards needs and benefits instead of the friendship itself are less noble. Montaigne also continues the idealistic tradition in arguing that, although there are many friendships, true friendships are exceedingly rare, requiring just the right match of two souls. It requires that one acts from the heart and does not hold back. Friendship is rational and requires morally good characters in this model.

Friendships require communication to work and require a certain amount of equality to allow for the sharing of secrets and the admonition and correction by friends. When friends strive for the same thing there is a large chance they will clash with each other. Though feeling or intimacy is crucial for Montaigne, virtuous character also remains central. Indeed, friendship in Montaigne's sense does not allow for bad actions. Such actions show that someone is not a friend of one and not even a friend of themselves. True friends would never ask such actions from each other either.

Observing Montaigne's ideas from a contemporary perspective one of the most important things he adds to his precursors is the idea that the causes of friendship can be irrational. However because his account is so personal and is very much idealized, it does not give us any way of theorizing about many of the types of relationships we call friendship. Furthermore his unity view is quite extreme and the possibility of such unity is very doubtful.

3.2.7 Bacon

Francis Bacon was a leading figure in natural philosophy and scientific methodology at the end of the Renaissance. Bacon provides a picture of friendship as a multiplication or broadening of the self. He is also one of the first philosophers who presents the need for friendship as something amoral. Like many other philosophers Bacon argues that friends have to display a certain amount of equality. This is the reason why it is hard for those with high rank to enjoy real friendships.

In most of his theorizing Bacon doesn't so much as discuss the nature of friendship but rather takes time to discuss the three fruits of friendship. One of the fruits of friendship is that friends provide a way of releasing the pressure built up by affections. With our friends we can open our heart and share all of our joys and sorrows. This sharing doubles joy and halves

grief, similar as has been argued by Cicero.

In addition Bacon argues that interacting with a friend can benefit our self-knowledge and welfare in several ways. A friend through his knowledge and care for us can be a counselor that looks out for our welfare. They are especially suited for such a position because they are better able to judge us than we can ourselves since their viewpoint is freer and purer and does not involve any self-flattery. Therefore friendship works better than reading a good book or observing our own faults in others. A friend has a view on our entire state of being unlike other persons and this gives him or her a good position to counsel us because he is aware of our entire well-being and not just some part of it. Therefore friends can provide advice that furthers us in the general sense. On the other hand our interaction with a friend also involves one having to clarify one's thoughts and communicate them to another person. Through this clarification and communication one can get to know oneself better.

The third benefit friends provide lies in the many things they can do and one can do with them that one cannot do on one's own in all different aspects of life. In this way friends are not another self according to Bacon—in fact as I have tried to make clear above much of the value of friendship for Bacon lies in the friend's otherness. Friends can continue one's pursuits after one's death and make sure one's offspring is alright after one has gone. In this way Bacon argues friends almost have two lives. Furthermore the friend is no longer confined to the place where his body is at a certain time but also has the body of his friend at his disposal. Furthermore friends provide an escape from the specific role(s) one may have in interacting with others. Friends see one another whole and are not bound by the constraints of any specific role relationship such as parent-child or husband-wife.

Bacon's theory of friendship seems much more practical and less idealized than that of many of his precursors. It provides a nice description of the many ways in which friendship can be a good thing for people without putting strong emphasis on friends having to be good persons or self-sufficient. Furthermore it seems to go beyond conceiving the friend as another self or requiring a large amount of similarity between friends and truly seems to acknowledge the friend as another person. Therefore it is hard to accuse his kind of friendship of being self-love dressed up as friendship.

Bacon however does not provide anything near to a big developed theory of the nature of friendship and its causes. Thus for this purpose one will have to shift one's attention to other philosophers.

3.2.8 Kant

For Kant friendship provides the mean between self-love and love for humanity. He sees these last two as conflicting motives for human action, acting on one of them involves losing on the other. Giving priority to loving humanity results in neglecting one's own happiness and acting out of self-interest means losing moral merit. Things done out of self-interest in his view cannot increase one's social merit.

In friendship friends act out of love for the other and through this gain moral merit and the happiness of both friends is secured by the actions of their friend, so none of them has to fear that his love for others would put him in a position where his own happiness suffers. Friendship is however also particular. Someone who is friends with everyone has no particular friend, still Kant argues that men develops from particular to general and there are rare cases of men with such a disposition that they are able to form friendship with everybody.

Ideal friendship in Kant's case involves friends caring only for their friend and thus handing over the care for their happiness to their friend. Ideal friendships are friendships of disposition or sentiment, unlike lesser forms of friendship they do not involve conceptions of service or demand. Kant argues that every man needs such friendship in the sense that each one needs a friend whom we can trust with all our secrets and to whom we can disclose our complete self. He sees friendship as resulting from natural impulses. Kant however also argues that we should only be intimate in matters of disposition of sentiment and that some parts of our nature should be concealed out of decency.

Apart from Ideal friendship Kant also identifies other types of friendship. One of these is the friendship of need, which is centered around mutual activities meant to provide in the needs of life of friends. Kant identifies this as the original form of friendship that mainly comes about in crude social conditions. He argues that such relationships are promoted by the simplicity of the needs of the group. When a society achieves luxury such relationships tend to diminish as people are too absorbed by their own affairs. In addition as man becomes more civilized he starts to seek more universal pleasures and friendships. Friendship of need however is presupposed in other friendships according to Kant: one needs to be confident in one's true friends that they would care for one's affairs and promote one's needs.

Even ideal friendship is still something practical and inferior since moral perfection in his theory must be universal, something friendship is clearly not. According to Kant it develops the minor virtues of life. It is practical in the sense that according to Kant friendship provides us with a refuge from our distrust of our fellow man. In addition self-disclosure

oriented friendship is seen by Kant as a necessity to correct our judgments.

Kant however still sees a possible dilemma arising regarding whether one should choose friendship. He argues that while there are moral grounds for choosing friendship, there are practical grounds for choosing self-love, since he argues that no one could care more for his happiness than the person himself. Real friendships always involves friends striking a balance between their own needs and friendship with one's friend.

Kant argues that difference in thought is a strong foundation for friendship, however agreement is required on intellectual and moral principles to enable complete understanding between them and promote agreement. Kant argues that the character of the perfect friend involves: "Uprightness of disposition, sincerity, trustworthiness, conduct devoid of all falsehood and spite, and a sweet cheerful and happy temper" (trans. 1930, p. 216). Friendship of disposition requires us to maintain reverence to the friendship even when it ends. Friendship should be respected and for this reason one shouldn't speak ill of one's friends.

The account of friendship Kant present suffers from several problems. Most of these seem to be caused by the fact that it is difficult to combine the intuitive notion of friendship as something good with Kant's theories of universality. Friendship is inherently particular and most of Kant's work seems to be more focused on how to fit this seemingly partial relationship into his bigger theoretical framework of universality. Friendship is however at least to a certain extend about caring for the other person for the particular person that he is, which seems to be practically impossible to achieve on a universal level. As such friendship is left as the best practically achievable way of overcoming mankind's distrust of his fellow human. However even this refuge seems rather hollow as Kant argues that we should interact with a friend in such a way that we are not hurt would they become our enemies. This hardly seems to be a trusting disposition towards our friend.

3.2.9 Emerson

Emerson provides a kind of account of friendship as another self in which one can identify with the other as one relates to oneself. The joy in friendship comes from "the *not mine* is *mine*" (1840-41/1991, p. 228). He argues that friendship is unlike passionate love since it lasts longer and truly influences our actions. Friendship involves empathy in one's friend's accomplishments. Emerson sees it as a select and sacred relationship. Emerson identifies two important elements of friendship: truth and tenderness. Truth because he sees friendship built on friends being sincere and sharing even their deepest thoughts even when this goes beyond

courtesy. He describes their interaction as “the simplicity and wholeness with which one atom meets another” (1840-41/1991, p. 225). Such interacting requires that man takes a position of great sovereignty as if there is no one of higher rank above them they should answer/conform to. Friendship should never become something settled and usual, neither should it be a mere exchange of goods or a modish and worldly relationship. Friendship is the most strict relationship we know according to Emerson, it provides aid and comfort in all aspects of life, not in good times but also in bitter times. It involves our promoting each others daily needs, rationality, wisdom, fun and even a sense of religious trance. It should be an alliance of two strong natures not one man echoing another. Man should first be developed to be able to have friendship with another man. Friends need be able to speak on a equal footing. Friends are not chosen in Emerson's vision they are self elected. They should not be regarded as property and should be befriended for their thoughts. A friend should be seen as “a sort of beautiful enemy, untameable, devoutly revered, and not as a trivial convenience to be outgrown and cast aside.” (1840-41/1991, p. 229) This requires us to give our friends room to expand their thoughts and merits.

Emerson also argues that we idealize our friend and in doing so overestimate his nature and his form. He argues that there is an infinite remoteness between people that underlies this. Every man goes in search of friendship drawn by the idea of unity and greater self-acquaintance through friends and pushed back by a sense of insulation. The kind of friends we desire are often dreams that can hardly be realized in the flesh. However this often inspires in us a hope that somewhere such friends exist. Idealization is seen as a cause for doubt by Emerson. As we start to realize that what we ascribe to our friend might differ from his essence. The sides of idealization that might seem negative to us do not lead Emerson to argue that we should easily settle for lesser friends that can actually be found. Quite the opposite he argues that we should not be impatient or rash in making friendships and should stay out of reach of false relationships and “cheap persons”.

Emerson also argues that he has learned that it is possible to carry a rather one-sided relationship. He argues that this might provide a way for one's greatness to “educate the crude and cold companion.” and even when the friend shows to be unequal one is still enlarged by what one has given. One can only gain friends by being a friend himself. Emerson however also argues that although he likes to be able to know where to find his friends he interacts with them only seldom. Studying his friend's ideas and talking with them will make him lose his own ideas and although this will give him some joy it will also lead to an eternal loss he cannot afford.

According to Emerson friendship takes time to evolve to its full potential and requires religious treatment. Friendship is brought upon us by nature without being sought and this often happens multiple times in one's life. Friendship does however involve struggle with "Time, Want and Danger" (1840-41/1991, p. 225) among other things to preserve its beauty.

What is interesting about Emerson is his awareness of how friends influence each other and in his case this is interpreted as something negative: it presents a danger to what we might call one's authenticity. It can however in his interpretation of friendship also be something positive in providing a possibility for educating one's friend with one's goodness. Another interesting thing is that his view puts great value in the other person as an unique individual not some mirror image of the self but rather someone who one might not always agree with and be similar to. One of the issues with his view is however that because it so focused on distance and Emerson's personal preferences regarding friendship that it does not necessarily form an actual theory but rather a collection of interesting insights for looking at friendship from a certain perspective.

3.2.10 Telfer

With the rise of modern ethics of Kant and Mill philosophy of friendship went through a rather long dormant period. Elizabeth Telfer's 'Friendship' (1970/1991) article revived interest in the field. Telfer holds that friendship is to some extent something rational. Friends have reasons why they want to be friends with certain people. In part such reasons are rational because they are based on the beliefs one has of one's friend. Friendly feelings and their origins are however not completely rational since people sometimes have a very hard time making them explicit and one is sometimes unable to argue why they are present in certain case and not in others. Telfer argues that friends are nonetheless chosen, because friendship requires that one acts upon friendly feelings and it is in turning feeling into action that one has actual choice.

An important part of Telfer's work deals with activity in friendship. She discusses both the necessity of certain activities and the way in which friendship can influence our experience of different activities. She argues that generally three types of activity must be present if one wants to speak of friendship:

- The performance of different kinds of services for each other
- Communication through for example talking or letter-writing
- Participation in joint pursuits: these can be leisure activities, but also work.

The first of these three can be seen as activities that show one is engaged in the promotion of one's friend's interest. The second seems necessary to be able to get to know our friend and his or her interests. These and the participation in joint activities make up for the shared part of the friendship, they are the main ways in which one comes into contact with one's friend. Through these one becomes involved in the life of one's friend and in such a way shared interests are developed and maintained. The interesting thing about Telfer's account of friendship is that it takes activity as the center point of friendship and not a certain character of the friends as is the case with Aristotle and other ancient philosophers.

Telfer also argues that friendship enhances our experiences of the activities in which we partake and in this way enhances our life. In many cases friendship can make our life much more pleasurable. Her theorizing however also showcases awareness of the fact that friendship also brings with it new chances for being hurt. One can for example be hurt by things that happen to one's friend or one can experience being let down by friends. She however argues that there are some pleasures that friendship brings that do not have any corresponding pains. These pleasures come from sharing in activities with friends instead of doing them with other people or on our own. Through doing them with our friends unattractive activities can become nice to do. For example cleaning up after a party might normally not be something one would experience as pleasant but when one does this with a couple of friends while sharing impressions of the party it can become quite nice. To summarize Telfer holds that friendship enhances our lives through "increasing our stake in the world, and hence our capacity for emotions." (1970/1991, p. 266), friendship makes us feel more, in addition it enhances many of the activities that are part of our lives, by increasing both our absorption in them and the quality of taking part in them.

Although intuitively there is a lot to say for Telfer's account of friendship, there are however some questions one can draw up in relation to the necessity of each category of activities she sees as being essential to friendship. Especially the third category of activities does not seem to be required for the maintenance of friendship. As an example think of someone you have developed a strong friendship with who moves to a remote part of world where he or she can only communicate through occasional (physical) mail. It seems that in such a situation there is no opportunity to engage in mutual pursuits but I would not argue that in such a case one cannot speak of friendship. One could however argue that although join

pursuits might not be necessary for maintaining a friendship they are required to develop a friendship, in this way emphasizing the different requirements for friendship establishment compared to the continuing practice of relating that keeps a friendship alive. To return to the previous example one could argue that without such pursuits one would not have developed a strong relationship with the friend that moved away in the first place. This however is also not obvious. The form of friendship that makes this clear are so-called pen-pals. It is not uncommon that such friendships do not involve any joint pursuits in Telfer's regular sense. Activities are mostly limited to those that can be shared through writing and reading (which would seem to fall under the second category). Thus Telfer does point to some of the important building blocks of many friendships, but to me it seems questionable whether these are necessary conditions for friendship.

3.2.11 LaFollette

LaFollette's work "Personal Relationships: Love, Identity, and Morality" (1996) deals not only with friendship but as the title already indicates with personal relationships in general. A significant part of his work is however dedicated to friendship. One of the differentiations he makes in his work is between rigid and historical love. In the first of these the character of the person that is loved is not important. An example of such love is the relationship between siblings. Historical love differs from rigid love in that it is based on who it is we love, that is, what this person is like. Relationships with friends are typically historical according to LaFollette. Our perceptions of the character of our friend and the friendship that we share is much more important and related to this friendship is not unconditional. LaFollette (1996) has argued that relating is something that people do and is therefore active instead of passive. Simply shielding our relationships from possible negative external influences is not enough. This is certainly true of close friendships. If one truly wants to have and maintain some knowledge of one's friend and develop and maintain a close relationship with him or her there is no way around the frequent interaction. In LaFollette's words: "the sharing of activities, ideas, peeves, jokes, and, in deeper relationships, money and bodies"(1996, p. 63) are the fabric from which personal relationships are formed.

LaFollette further emphasizes the role of rational reasons in friendship. He recognizes that such reasons only play a minor role in the initiation of relationships, however he argues that they do and should play a major role in the deciding on the maintenance of relationships. In fact, so he argues, people want to be befriended for reasons. It promotes our self-esteem

when people want to befriend us for the those things that make us our unique self and traits that are considered to be our good qualities. LaFollette thus hooks on to the ancient idea of loving someone as a unique individual. He argues that this should mean that even if someone has the exact same traits and embodies and lives them out in the same way as a friend, one should still differentiate between that person and the friend based on the history of their experiences and people they have related with.

Likeness has been discussed by several of the philosophers in the previous sections. LaFollette has an interesting view on this. He argues that similarity is something that frequently is developed by close relationships, even if that is in no way the goal of the relationship. Likeness is thus not some requirement for friendship in his case but would more likely to be a result. This changing power of friendship is also present in his argument that friends should not want their friends to stand still but rather promote their growth. In this sense he is going against the popular conception that one should not aim at changing one's partners and friends. Instead he sees friends as an important source for promoting change.

LaFollette's focus on the active nature of relationships yields predications about the activities necessary to make deep relationships possible. These are activities that reveal significant information about oneself, and therefore trust, while remaining sensitive to the person one is relating with. This sensitivity entails taking into account the capabilities and background of the person one relates with, as well as his or her interests and desires. Intimate relationships are thus not sustained by merely intimate exchange, but such exchanges must showcase sensitivity, privacy and trust.

LaFollette argues that such regular detailed and honest sharing between intimates is important to get access to some of the fruits of friendship: increased self-knowledge and sense of self-worth. Self-knowledge is of great importance because without it one cannot make a sensible plan about what one wants to do with one's life. Long term friends can be of particular value for gaining self-knowledge according to LaFollette, as these have knowledge of our background and development. They can help achieve some sense of understanding of both the relatively fixed elements of our identity as well as those elements that are not firmly fixed. The increase in self-knowledge and the benefits this brings with it are partly the result of the intimacy in friendship which allows for truthfulness and the sharing of faults, which in combination with the interpretations of oneself given by one's friend allows for more informed self-development. In addition our friends also helps shape our identity through their care and reflections, which inform our sense of self-worth. As LaFollette argues, it is impossible to gain anything but a distorted sense of self-esteem and a notion of self-worth in a

vacuum. In addition to this increase in self-knowledge and sense of self-worth, LaFollette has also argued that friendship contributes to our happiness and that the practice of friendship helps develop character and moral traits.

From the above it might seem that LaFollette holds a rather idealistic view of friendship focusing solely on what seem to be very reflective deep relationships. That kind of criticism would however not be completely fair. He does give some thought to the kind of friendships defined by Aristotle as friendship of pleasure and friendship of utility. He argues that such friendships exist because of some purpose. When this purpose is achieved or becomes absent these kind of friendships in most cases end. This does not however mean that there is no well-wishing an/or caring for the friend involved in such relationships, which is essential to friendship.’

3.3 Conclusions

In this chapter I have given an overview of works on friendship by eleven different philosophers. This has been the first step towards a framework that provides the necessary conceptual and normative resources for thinking about the role of CMC in friendship. The historical overview given in the sections above has provided valuable portals into the philosophic literature on friendship as well as some critique on their strong points and weaknesses, which should prove helpful to future researchers of friendship in identifying relevant resources.

In the work of Plato we have seen the difficulty of defining friendship, the requirement of a certain good character to the establishment of friendship and the characterization of friendship as a dynamic process aimed at intellectual growth. In the work of Aristotle the multitude of relationships that can be seen as friendship has become clear, as well as the different fruits these can bring. In addition the importance of care for one’s friend and acting upon this have been emphasized. In Cicero’s work friendship starts to become somewhat more this-worldly with friendship providing immanent rewards instead of being mainly directed towards other goals such as the pursuit of knowledge and the contemplative life. In addition, though Cicero still emphasizes the requirement of virtuous character, he indicates that friendship can also develop among common people and its establishment is somewhat spontaneous and not completely rational. Seneca presented an account of friendship that for an important part revolved around the possibility of losing friends, emphasizing the dynamic nature of friendship. Although highly idealized the work of Aelred has provided an interesting

shift from the early theories that emphasized self-sufficiently good persons living together to the good being (partially) the result of living together. This seems to provide the first hints of thinking about friendship as shaping relationship that can promote the development of virtuous character. In addition Aelred provides an account that puts stronger emphasis on intimacy and vulnerability than most earlier accounts. Montaigne argued that friendships are hard to judge and it is difficult to generalize over them, again showing the difficulty in thinking about friendship as also present in Plato's work. In addition he has argued that ideal friendships are quite rare. Bacon's account of friendship for an important part focuses on the identification of the benefits of friendship, which resolve around the sharing of joy and sorrow, the benefits the views of one's friend might provide to self-knowledge and welfare, and the ways in which the life of one's friends expands that of oneself. Kant has provided a view on friendship that shows a struggle with the particular nature of friendship and has emphasized the role of friends as promoters of each other's welfare, providing a help in overcoming distrust of one's fellow man. Where Cicero and Montaigne have provided accounts of friendship that emphasized similarity and unity Emerson has focused on the importance of authenticity and individuality of friends, warning of the dangers of too frequent interaction and emphasizing equality between friends. The work of Telfer has provided one of the most influential contemporary views on friendship: emphasizing the active nature of friendship and its life enhancing qualities. LaFollette similarly focused on friendships active nature and provided a strong focus on the conditional nature of friendship and the role of reasons in both the establishment and maintenance of friendships.

The literature reviewed in this chapter seems to indicate several shifts in thinking about friendship. For one a shift from thinking about friendship as a relationship in which already formed excellent characters are required (for example in Aristotle), to a relationship that can also help shape virtuous character (for example LaFollette). In addition where early accounts of friendship provided emphasis on self-sufficiency, later accounts are more appreciative of friendship as having qualities that help us in our lack of self-sufficiency.

Both early and later accounts of friendship encountered in this chapter have provided valuable insights into particular areas related to friendship that will be further analyzed and expanded upon in the next chapter. For one this chapter has shown that there is a clear variety in relationships that are identified as friendship and many philosophers have had a hard time trying to define friendship. Several philosophers have indicated that there are in fact different relationships that can be called friendship that differ in their focus and depth. In addition different reasons have been identified that can provide the basis for different types of

friendship and which are indicative of whether something is actually acceptable as friendship. Furthermore many accounts of friendship have placed emphasis on conditions, mostly in the form of the required character traits that need to be present for friendship to develop. Friendship has also been shown to be a relationship that is generally held in high regard; often being idealized and seen as a contributor to the good life. Summarizing these constitute four important areas of friendship that should be further investigated in the next chapter to form a framework for thinking about friendship, namely:

1. The variety of friendship and characteristics shared by different types of friendship
2. The different reasons for friendship
3. The conditions required for friendship
4. The value of friendship.

The first two of these areas provide insight into the nature of friendship, which is evidently important if one wants to think about the role of CMC in friendship. The third is important because this area is indicative of what might be required for friendship to develop in CMC and the fourth is obviously important if one wants to provide an evaluation of the value of computer –mediated friendship practices.

4 Towards a framework for reasoning about friendship

4.1 Introduction

The purpose of this thesis is to contribute to the debate about how computer mediation influences the nature and value of friendship. The current debate, both in popular and scholarly forms, is often rich with empirical detail but poor in terms of a clear conceptualization of friendship. This is only to be expected, because, as became clear in the last chapter, friendship is complex and its nature and value are open to a wide variety of interpretations. But although it would be unwise if not impossible to rest comfortably with a tidy definition of friendship, the debate cannot advance without some further conceptual clarity. What is required is a framework to aid in the conceptualization and evaluation of computer mediated friendship. Such a framework could assist philosophers and the engaged public when they confront a particular context—say, a new application on a social networking site—and want to both make sense of and evaluate the situation.

In approaching such situations three elements are needed: (a) conceptual clarity on friendship; (b) insight into the value of friendship; and (c) suggestions on how to identify and evaluate the impact of mediation on friendship. The framework developed in present chapter aims to contribute to the first two elements on the basis of the literature discussed in chapter three as well as some additional work by other philosophers, social scientists and psychologists. The next chapter deals with mediation theories and their evaluations of the impact of mediation on friendship. In chapter six an approach to further research in this area will be presented that combines all three elements, thereby promoting more informed evaluations of friendship.

This chapter develops the first two elements into a framework, which can contribute to the study of computer mediation in friendship in the following ways:

- Characterizing friendship:
 - Demarcating friendship from other relationships.
 - Highlighting significant themes and questions at stake in practical friendship situations.
- Evaluating friendships:

- Identification of values that are generally promoted by friendship.
- Identification of specific values that are promoted by specific friendship relationships and activities. This can be used to draw parallels between different types of friendships (which can include different forms of mediations) and the likely impact this might have on the values that they promote.
- Identification of conditions that promote different types of friendship and influence the value of different friendships. This is combined with suggestions on how differences in conditions (that can be caused by various forms of mediation) can impact on the value of friendship.

In the process of developing this framework, this chapter (in combination with the previous one) aims to provide portals into the philosophic literature on friendship which should help future research in quickly identifying the relevant resources for a specific context. The chapter takes the following structure: Section 4.2 compiles a list of important characteristics of friendship that are present in all or almost all of the reviewed theory. Section 4.3 surveys reasons for having friendship and their justification. As such 4.2 and 4.3 contribute to the first goal of the framework: characterizing friendship. They provide a basis for arguing which relationships can be considered to be friendships by both making clear which elements are necessary to speak of friendship and by arguing which reasons are valid as a basis for friendship and/or friendly action. In addition 4.2 and to a lesser extend 4.3 highlight several important themes that play a role in friendship and are likely to be of importance in studying practical examples of friendship.

Section 4.4 looks into conditions that are necessary or beneficial to the development of friendship. This contributes to the evaluation part of the framework by providing insight into how different conditions can promote different types of friendship and how these impact on the value of friendship. Finally section 4.5 examines the values intrinsic to different types of friendships. This section contributes to the evaluation part of the framework by providing us with an overview of the values that are commonly associated with friendship as well as how specific values are promoted by specific friendships and/or friendship activities. The conclusion of the chapter lays out the basis of the conceptual and evaluative part of the framework on the basis of sections 4.2 to 4.5.

4.2 Important properties of Friendship

The first step in developing a framework for reasoning about friendship involves the identification of important properties of friendship. This contributes to our ability to later identify relationships that can be considered to be friendships. In this section I give an overview of the important properties identified during the historical overview presented in the previous chapter as well as some additional works on friendship. In each subsection one property is discussed and on the basis of different theories and authors I argue why this is an important property of friendship and which role this property plays in understanding and reasoning about friendship and distinguishing between friendship and other relationships.

4.2.1 *Friendship's diverse nature*

In Plato's *Lysis* Socrates was not able to arrive at one conclusive definition of friendship. Plato's account uncovers the difficulty of defining friendship that is still valid today. Although friendships seem to share characteristics, they are very diverse as is reflected in the different historical theories of friendship. From a practical point of view an easy way to see the diversity of friendship is to imagine all the different relationships commonly considered to be friendships. People develop and maintain different friendships at work, in their neighborhood, with old friends, with their partners, etc. Friendships often differ in kind, depth, development, longevity and amount of interaction. Through my own life I have for example enjoyed (and am still enjoying) friendships centered around one particular activity for example making music, playing games or sports. These are/were as a result quite narrowly focused and sometimes maybe shallow, while others were more broad in that they involved a whole group of friends with which I interacted on different levels of life. Other friendships had a more private character in that they involved largely one-on-one communication and more serious conversations, sharing of feelings and important activities.

In addition to this diversity of friendship there seems to be something about friendship that is ultimately not theoretical. To develop an understanding of friendship requires being involved in its practice. Montaigne might to a certain degree be right that friendship is something unique. Although in my view he goes too far by arguing that there are no generalizable standards for judging the quality of friendships. From our historical overview of the philosophy of friendship it at least rings true that there are no quick and easy theoretical accounts that can be applied to the whole spectrum of relationships we call friendship. This

difficulty in building a general theory about friendship is not something only encountered in philosophy. Sociologist Graham Allan (1989) argues that the ideal deep friendships that are the focus of many philosophical studies are scarce in practice. The majority of friendship relationships have a more shallow character. They are also more varied. His work shows that even if one takes a very common sense understanding of friendship as a voluntary, informal and personal relationship between two people there are several examples of relationships one can think of as friendships that would not completely match this definition. One of the reasons for this given by Allan is that social and physical limitations influence the freedom in friendship. Furthermore he argues that it is not uncommon for some friendships to continue because those involved in them to some degree find it easier to continue them than to end them. Thus friendships are not always completely voluntarily maintained in his view (I have some objections to this position which will be discussed in section 4.2.3). Secondly friendships develop in formal environments and while some develop to take place mainly outside these environments some continue to feature interaction mainly within the bounds of such a formal environment. In addition some friendships develop as group friendships which are thus not characterizable as a relationship between two people.

Although friendship is a diverse and difficult to define concept, I do believe that it is possible to gain a better understanding of what grounds and unifies different kinds of friendship. It is in this context that approaching friendship from Ludwig Wittgenstein (1953/1967)'s notion of family resemblances makes sense. From the investigation of different understandings of friendship so far it has become clear that there is not one essential form that is compatible with every notion of friendship but rather a web of similarities between the different conceptions. These similarities will be discussed in the subsections below.

4.2.2 Personal

Though friendships are diverse, they are nonetheless all species of personal relationships. Personal relationships are characterized by the fact that those involved care for each other as a unique individual rather than a party that merely fulfills some need or role. In impersonal relationships it is not important who the person is one relates with, this is for example the case in many of our business relationships, whereas in personal relationships the person one relates with is the center of the relationship. This kind of reasoning is seen both in classical accounts of friendship such as those of Aristotle and Cicero as well as contemporary accounts such as LaFollette (1996) and Telfer (1970). Friendships however do not need to be personal in the

sense that they are a relationship that is strictly formed between two persons, thus allowing for group friendships.

Although personal relationships involve concern and care for the other as a unique individual this does not have to mean that the relationship is very deep or intense. A friendship can still for example be based around rather shallow activities such as watching soccer together or individual goals such as gaining certain pleasure or support from his or her friend, without being deeply involved in the life of this friend, but while displaying care for the other as a unique individual.

4.2.3 Voluntary, reciprocal and equal

Friendship is commonly perceived as a voluntary relationship. It cannot be forced upon us, as for example family or working relationships can be. Friendship differs from these relationships in that they are chosen instead of being natural and/or unselectively occurring. Anthony Giddens (1991) has argued that modern friendship are maintained for nothing else than the rewards that such relationships bring. They can be examples of so called “pure relationships” that are not grounded in external conditions, which could for example be of social or economic nature such as arranged marriages or medieval political friendship based on status. Badhwar (1993) has argued they are not completely freely chosen since natural preferences and inclinations play a role in who one feels attracted to and can develop such relationships with. However even if, as Graham has made clear, one is somewhat limited in who one can develop and maintain friendships with and persons sometimes maintain friendships only because they want to avoid the drama of ending them, in the end one is always able to choose not to pursue or opt out of a friendship. In this sense there can in my view be no doubt that these are in fact voluntary relationships.

In addition friendship needs to be reciprocal to make sense. One cannot have one-sided friendship like one can for example speak of one-sided erotic love. Friendship is only friendship when it is returned. This characteristic has been an important requirement since Aristotle developed his notion of genuine friendship in which he included deliberate and conscious reciprocity of good will as the basis. In line with Allan’s comment on group friendship one should take into account that reciprocity does not necessarily have to be between just two people.

Equality is another characteristic that is attributed to friendship in almost all of the philosophical accounts I have reviewed. An early account of this was present in Aristotle’s

three main categories of friendship. Many later theories build on these categories and with Emerson it got exceptional attention in his focus on friendship as a relationship between equal and well developed characters that needed to be able to stand strong next to each other to keep their autonomy while also being able to reflect upon and have discussions with their friends. In the sociological work of Allan a large focus on friendship as essentially a relationship of equality is also present. One way in which he argues that this equality manifests itself is in the fact that friends are often hesitant to make too many claims on a friend in fear that they cannot repay them. In Kövecses' (1995) linguistic account of friendship a similar idea of friendship as equality is found in the conceptualization of friendship as an economic exchange. Friendship is characterized by reciprocal exchanges that are typically based on equality and the idea that relationships involve giving and taking. This focus on equality in friendship also makes sense from the understanding of friendship as a personal voluntary relationship as I have argued in the previous sections. It is evident that most people will not sustain such a relationship when they are the party that is constantly on the giving side of the relationship while they get very little in return. In addition for the kind of reflections that are often part of friendship to have any value, it requires that there is some equality in understanding as well as an understanding that one stands on at least a somewhat equal footing with one's friends. Otherwise it is likely that either our friends will be less open to us and/or that one does not take their reflections seriously.

4.2.4 Dynamic and free

One characteristic of friendships is their dynamic nature. Early signs of awareness of this aspect of friendship can be found in the work of Seneca, with his focus on the possibility of losing one's friend and how to deal with this. Emerson later made the observation that friendship involves struggle with "Time, Want and Danger" (1840-41/1991, p. 225) indicating that it is not a relationship that is inherently continuous or eternal as some classic philosophers have described it. Following contemporary understandings of friendship it makes sense to argue that in our present time friendship is always open ended. Although many people value long-lasting friendships (and there can be very good reasons for this as I will indicate later in this chapter), these are not necessarily the most frequent kind. In fact such continuity does not have to be a benefit. Friedrich Nietzsche has for example argued that although long-lived friendships are not necessarily bad, they do run the risk that dynamism is lost and the friendship's closeness is replaced by habit (Vernon, 2005) .

Now what are the reasons for the fact that friendship is such a dynamic relationship. One of the important reasons that has gotten more attention over time is the fact that friends are not rigid characters but continuously change as they undergo new experiences. In this way modern concepts of people and thus friends differ from those involved in some of the historical views discussed in the previous chapter. Dynamics are further increased by the fact that friendship is often situated in a changing web of relationships that influence each other. These dynamics of identity and relationships require people to commit in a way that takes into account the inevitable changes in the relationship and those that are bound up in them. On the one hand there is always more to learn and discover from our friends on the other hand changes may occur that make one or both of the friends decide to no longer maintain the relationship.

Although all personal relationships are typically active and dynamic there are differences in the degree of dynamism involved in different relationships. In LaFollette's work (1996) this becomes clear through the differentiation between rigid and historical love. In the first of these the character of the person one loves is not important, for example in the relationship between siblings. Friendships are however for the most part historical. This means that one's love is based on what the friend is like. Friendships differ in the amount of dynamics from for example marriage in that they are not institutionalized and involve a higher amount of open-endedness. This can be both a strong point in that it makes friends aware that friendship requires action and reflection to be maintained, but it can also become a weak point as Vernon (2005) has argued in that people can experience friendship as going nowhere or withering away. Yet this freedom is also part of the reason why friendships are appealing.

4.2.5 Partially exclusive

Another way in which friendships are different from several other personal relationships is that they are non-exclusive, thus a friend can have multiple friendship relationships with different people at the same time. In this sense friendship differs from romantic relationships and marriages, which are often completely exclusive. One can be friends with multiple people without this being thought of as adultery or otherwise morally reproachable behavior.

Note however that although friendships are in most cases not exclusive in the rigid sense of being a relationship with just one friend, some exclusivity is always present. This exclusivity is the direct result of the investments required in friendships and our own limitations. Kövecses (1995) discusses several metaphors in relation to friendship in his

linguistic work. The interesting thing about these metaphors for this study is that they make the nature of the investment in friendship clear. One of his metaphors pictures friendship as similar to building a house. It takes time and effort and is much harder to make than to break down, which can happen just by simple neglect. This combined with the fact that our available time to socialize with people is limited, as is our capacity to feel and show empathy and understanding, makes it difficult to develop friendships with large numbers of people. This relates to Aristotle's observation that the closest kinds of friendships can only be achieved with one or two friends. For these reasons I argue that it might be more accurate to argue that unlike forms of romantic love, friendships do not demand absolute commitment but they are nonetheless, as a result of the investments they require, somewhat exclusive. The fact that friendships are partial relationships that involve a certain amount of exclusivity is one of the reasons why universalist philosophers such as Kant and Kierkegaard had such a problem with integrating friendship into their moral theories.

4.2.6 Shared activity

Because of their dynamic nature personal relationships require activity to be maintained as for example became clear through Kövecses' house metaphor. For this reason Hugh LaFollette (1996) has argued that relating is something that people do and is therefore active instead of passive. Simply shielding our relationships from possible negative external influences is not enough. This is certainly true of close friendships. If one truly wants to have and keep some knowledge of one's friend and develop and maintain a close relationship with him or her there is no way around frequent interaction.

LaFollette's focus on the active nature of relationships yields predications about the activities necessary to make deep relationships possible. These are activities that reveal significant information about oneself, and therefore trust, while remaining sensitive to the person one is relating with. Cocking and Kennett (1998) have argued that friendship is not mainly about sharing secrets or providing a mirror for our friend. They argue that close friends are characterized by being "distinctively receptive to being directed and interpreted and so in these ways drawn by the other." (Cocking and Kennett, 1998, p. 503). It is through such receptivity that similarity in a companion is further increased. I think Cocking and Kennett are right in interpreting friends not as rigid beings but rather as being formed by friendship itself. LaFollette's activities seem to provide a basis for such forming. Interpretations require knowing something about a friend and thus observing or joining that

friend in activities or talking about things that give us information about him or her. Communication provides the basis for getting to know and staying informed about one's friend as well as being one of the main ways in which a friend might influence and provide advice in one's own life. Therefore the suspension of communication over a long period is likely to have a negative impact on friendship. In addition trust is essential to friendship as LaFollette argues, as friends will not join in activities or share intimate parts of their life if they do not trust their friend.

4.2.7 Connectedness

The connection between friends has been a recurring subject in writings about friendship. Extremes of this can be found in the many unity views encountered throughout the history of thinking about friendship. Examples of such accounts are Aristotle's idea of a friend being a single soul in two bodies, Cicero's idea of friendship as "a complete identity of feeling about all things in heaven and earth: an identity which is strengthened by mutual goodwill and affection." (trans. 1971, *Laelius* 5, 187). The connection between friends in such unity views is generally understood as a union of friend and self in which we relate with our friend as a part of ourselves or as another self.

These kind of views of friendship have to withstand a large amount of scrutiny nowadays, which is not very strange since it is hard to imagine how complete unity can be achieved. Although some people might still consider such accounts valuable as an ideal I argue that these have little to do with the actual practice of human relationships. Movements such as existentialism have tried to show that rather human beings are inherently separated by a distance that cannot be overcome. Many scholars in fact presume a kind of separateness between friends that conflicts with the ideas that those holding a union view of friendship ascribe to. In addition one of the main critiques facing such approaches is that it reduces relationships to self-love rather than genuine love for the other as a significant person with his own character in his or her own right.

Even though actual unity seems impossible to me and does not even qualify as a very desirable ideal, increased interaction with friends does make our lives more intermingled and creates a feeling of connectedness. For this reason ending a developed friendship can be very painful. It thus still makes sense to me to talk about connectedness when discussing friendship. This has also been suggested by Lynch (2005), who draws from Derrida in defining friendship as a state of connected separateness. She argues that although connection

between friends can best be thought of as an illusion in the sense of being an abstract yet useful concept. The possibility of friendship in her view depends on whether we are willing to accept the fiction of connection. I agree that it intuitively makes sense to talk about connectedness as an abstract concept in friendship but that actual connections in the sense advocated by early philosophers of friendship are going to be very hard to defend. However the feeling/sense of connectedness is often part of people's experience of friendship and one of the reasons why people care so much for their friends. Although friends are in fact separate individuals with no actual connection the idea of having such a connection often provides motivation for acting in a friendly matter. Thus even if illusory, abstract and hard to define, this sense of connectedness provides an important part of friendship.

4.2.8 Character and identity shaping

Character has been an important theme in the philosophy of friendship for a very long time. Many early accounts of friendship take a certain type of character as a precondition for developing true friendships. Aristotle and Cicero for example argue that friendship develops among persons with a certain stable perfect character. Not all philosophers have however spoken about friendship being a relation between stable or static characters. In the discussion of different historical accounts of friendship one can see that friendship is often thought to have an impact on the identity of the friends involved in it. The idea that friendship may influence friends is already present in Aelred. He took friendship as an ideal in itself that may help shape good persons. In contemporary notions of friendship more well-developed accounts of how friendship influences the identities of those participating in them are found. In these accounts friends are often not taken as stable, static or even rigid characters who are fully aware of their own identity but rather ever evolving embodied creatures. Friendships are argued to influence the identity of those involved in them because of the fact that people care for and respect their friends and listen to the things they have to say. As a result there is a large chance that one comes to appreciate, empathize and maybe even adopt the views of one's friend. In this way expanding one's view on the basis of the views of one's friend, thus broadening one's identity. In addition there is an increased chance that friends modify their views in such a way that they meet in the middle of a difference in opinion they might have had. This differs from the first form of identity shaping in that it is not a broadening of one's identity but rather a change in one's identity that result from either nuancing one's views on the basis of the views of one's friend or the (partial) assimilation of a friend's views based on

a recognition of their superiority. LaFollete (1996) has argued that because of such identity shaping practices similarity is formed by friendship instead of being a precondition or cause for friendship as seen in many traditional accounts of friendship (such as encountered in Plato's *Lysis*). Although (the recognition of) similarity still seems to be a strong basis for the development of many friendships to me (not in the least because this increases chances of meeting each other and enjoying shared activities), LaFollette's argument that friendship increases similarity definitely makes sense if only because of the parts of their lives friends share and the fact that they will have to find ways to deal with differences in opinion.

Cocking and Kennett (1998) provide a similar but even more in-depth argument on the influence friends have on each other. They argue that the basis of the shaping that goes on in friendship lies in the adoption of each other's interests. Because the interests of a friend become part of one's own interests one is likely to be inclined to undertake activities and contemplate ideas that otherwise would not have been considered. In this process one's identity is shaped in new ways assimilating parts of one's friend's identity into one's own identity. In addition they argue that friendship influences the identity of those involved in it through the reflection and criticism that is often part of friendship. Criticism uttered by a friend is likely to have an impact on one's self-perception, where it might have been ignored when coming from a stranger. This process does not necessarily lead to the assimilation of parts of one's friend's identity but rather leads to changes or additions to one's identity, based on the evaluations provided by one's friend.

4.3 Reasons for friendship

Friendship is a dynamic process that involves the risk of being disappointed, rejected and left behind. Because of this dynamic character friendship requires significant investment of time and effort to be maintained. Therefore there must be certain reasons why people are willing to make such investments with the uncertainty of any return. Some of these reasons can be considered to be rational in that they are based around beliefs and considerations one has of one's friend's nature and the shared friendship, while others are based primarily around one's desires and emotional impulses without being strongly supported by rational considerations. This section examines both these types of reasons. This provides a valuable addition to the understanding of friendship this chapter tries to provide in that it provides us with insight into which reasons can underlie friendships and which reasons are and are not justifiable as a basis for friendship. In addition it hints at some of the ways in which friendship can be valuable.

The fact that people have certain reasons for friendship is however not necessarily generally accepted. Kim Atkins (2004) has for example argued that giving reasons for friendship makes friendship conditional and in this way undermines it. She argues that no one wants to be friends just because of some reason. Instead of providing an account of the formation of friendship on the basis of rational reasons Atkins argues that it is much more a matter of taste; similar to our preference for certain kinds of food above others. Although this latter part of her theorizing makes some sense the first part, that friendship is undermined by having reasons for it, does not. Atkins promotes a kind of friendship that is unconditional, but this does not match up with how friendship is generally understood. Friendships are dynamic and changing, people do not continue friendships no matter what, they are always conditional to their perceptions of their friends and the friendship shared.

A somewhat similar approach is presented by the analogy between friendship and art suggested by Ronald Sharp and discussed by Lynch (2005). Both activities are characterized by “indirection”: they are not focused on an explicit outcome. As part of such an account the best friendships are characterized by not being directed toward benefits or any sense of objective virtue or goodness. Friendship is based more on taste and imaginative identification than on rational reasons. In one sense such reasoning about friendship contrasts with many of the ancient theories on friendship we have discussed. Many of these take objective virtue as one of the motivations for befriending someone and/or as a direction towards which good friendships should develop. It on the other hand does relate to the ancient conception of loving friends for their own sake, not for benefits that can be gotten from the relationship.

The idea that friendship is a matter of taste and identification as seen in Atkins and Lynch is partially in line with the work of Telfer (1970/1991). However Telfer’s account is much broader and better developed than that of Atkins in that she is aware that people have reasons for friendship and these are at least to some extent rational. She argues that to speak of friendship friends must be prepared to provide an explanation for the desire they feel for each other. Herein lies an important difference between her account and that of Atkins. Telfer argues that such explanations are rational attitudes because they are based on the beliefs we have about the nature of our friend. She however does not argue that the reasons for friendship are completely rational as one often finds it very difficult to make them explicit and/or one cannot justify them or why they are present in certain cases and not in other cases. She argues that liking one’s friend is one of the main motivations in friendship however liking is very difficult to explain. It depends on many different factors such as appearance, tone of voice, way of speaking, manners, life-style and character traits. It is however not simply a

rational weighing of the attractive against the unattractive characteristics of one's friend, but instead is in most cases a reaction to the whole that makes up one's friend.

Liking and the sense of connectedness or a bond are necessary conditions for friendship according to Telfer. But as we have seen, liking is only to a limited extent rational and one does not have complete control over who one experiences liking of and with whom one experiences a sense of connectedness. Therefore the objection has been raised that this does not agree with the idea that we choose our friends. Telfer responds to this objection by arguing that it is not just the fact that one likes somebody and feels connected to them that they become our friends, friendship also requires acting upon these feelings. It is in acting upon these feelings that we do have a choice and therefore friends are in fact chosen by us.

LaFollette (1996) further emphasizes the role of rational reasons in friendship. He recognizes that these only play a minor role in the initiation of relationship, however he argues that they do and should play a major role in deciding on the maintenance of relationships. According to him we do want people to befriend us for reasons, since this gives us the kind of personal affirmation we seek in personal relationships. Within friendship, no one wants to be loved rigidly without any mention of reason. However not just any reason will do. One wants to be loved based on those characteristics that are central to one's person. Here LaFollette hooks on to the ancient idea of loving someone as a unique individual. Lynch (2005) has argued that this leaves us torn between a focus on the qualities, features and traits our friends possess and the unique way in which they instantiate those. There is something about our friend that prevents us from being tempted to trade him or her for a new friend, who embodies the same features, traits and qualities in a better way or to a larger extent. In other words, we want friendship to be conditional, but conditional not just on general qualities but also on our unique personality. Rational reasons in most cases refer to general qualities, while appreciation of how these qualities are instantiated by a certain person seems to be mainly a matter of taste. Thus at this point we are back at Telfer's statement that our reasons for friendship are only rational to a limited extent.

Aristotle's discussion of the different kinds of friendship showed the valuable insight that different reasons can play a role in different kinds of friendship. Some friendships are motivated by the pleasure the friendship brings and/or by certain things friends can do for each other. In these cases the extent and depth of the friendship can be limited to the individual goals of the friend. Other friendships might be based primarily by a fascination with the character of one's friend. The fact that there can be many different reasons for friendship does not mean that any reason is sufficient to talk about friendship. A certain

goodwill and care for one's friend needs to be present.

Apart from the reasons that play a role in the development of friendship there are also certain reasons that play a role in the activities that are part of friendship. Again not just any reason will do when we want to consider some act as being done out of friendship. Acting mainly out of a sense of duty, pity or self interest are examples of reasons that do not qualify as suitable for action out of friendship. In addition if one is solely motivated by the pursuit of one's own interests would that not make friendship or one's friend instrumental to one's own ends? Telfer (1970/1991) has argued that friends should instead be motivated by affection, which she defines as a desire for the welfare and happiness of the other as a particular individual. This kind of affection is irrational in the sense that it does not necessarily have a connection with the characteristics of the person towards whom one feels affection. Roderick Long (2003) has concluded that concern for one's friend for his or own sake is in fact something that arises within friendship even when one was initially motivated by egoistic reasons. Similar observations have been made by Frankfurt (2004) who, in his theorizing about love, has argued that selflessness and self-interest go hand in hand in love. Although love might be the final end for the lover, in the practice of loving, the interests of the beloved are adopted by the lover as interests of his own.

Taking the above into consideration I argue that friendship is based on reasons that are partially rational but also for an important part irrational. This makes friendship conditional but it does not undermine friendship in the way it's defined in this chapter. Friendship in essence is a particular and historical relationship. It is not universal and rigid in that it matters who our friend is and our willingness to actively maintain a friendship is dependent on how he or she develops during our friendship. However not any reason will do if one wants to consider a relationship to be a friendship. Reasons have to refer to the character of one's friend and have to display a certain amount of goodwill and care for the person he or she is. If a relationship is based only on reasons that involve benefit to the self such a relationship becomes too instrumental to talk about friendship in fact it will be hard to uphold that such a relationship is a personal relationship of any kind.

4.4 Conditions for or beneficial to friendship

Friendships do not play out in a vacuum. Instead they are situated in a certain social and physical surrounding that influences both the chances of certain relationships developing as well as the practices and values involved in them. Not all surroundings are suitable breeding grounds for friendship. Certain conditions must be met for friendship to have a likely chance of arising and some conditions promote or deteriorate chances of friendship arising. These conditions can be of different kinds (for example social, infrastructural or economic). Some of these conditions are indicative of the nature of friendships and those participating in it and are for this reason beneficial to the work presented in this chapter. In general knowledge of these conditions can also be beneficial to the evaluation of the nature and value of CMC friendships because it allows for the investigation of whether and to which extent these conditions are met and how differences in these conditions might impact on the friendships developing in CMC environments.

4.4.1 Character

Ancient accounts of friendship put most focus on character related conditions. In Aristotle and Cicero friends for example needed to be morally good persons. Although it remains valid that a truly devious person cannot be a friend, because such a person is incapable of the required caring for his friend for the person that he or she is, contemporary accounts such as Telfer (1970/1991)'s no longer maintain that friends necessarily have to be good persons. Rather the emphasis has shifted to other character traits such as rigidity as discussed by LaFollette (1996) and Cocking and Kennett (1998). Cocking and Kennett argue that extremely rigid persons are unable to develop real friendships because they cannot display the necessary openness to the opinions and affections of their friends. Similarity will not form because such rigid characters are not open to outside influences. This means that in contrast to some of the ancient accounts, rigid virtuous persons are unable to develop true friendships while selectively caring persons are able to develop such relationships.

Apart from rigidity there are other character traits that can become an obstacle to friendship. Vernon (2005) identifies quite a different mental condition that seems to be required for friendship to have any chance of success and that he sees threatened in contemporary society. He argues that the ideals of an overly commercially-minded society will undermine types of friendships that are not directed toward utility. Being able to reason

beyond the mechanisms of the market seems to be a requirement to establish deeper relationships. As Cicero pointed out, advantage is not a sufficient basis for friendship. The origins of friendship “lie in something altogether more primeval and noble,” namely goodwill, which “is established by love, quite independently of any calculation of profit: and it is from love, *amor*, that the word for friendship, *amicitia*, is derived.” (trans. 1971, *Laelius*, 8, 26, p. 191).

4.4.2 Physical

A second category of conditions for friendship are of a physical kind. Aristotle has argued that friendship requires one to be living and working in the presence of one’s friend. Although contemporary common sense perceptions of friendship do not necessarily support the requirement of working in the presence of our friends, most people would agree that friendship involves regular interaction with our friends and requires their presence in a significant part of our lives. Long distances between (potential) friends can make it difficult if not impossible to have regular contact and to engage in mutual activities. The same thing goes for isolated environments that are hard to reach. The late-modern era we live in differs from earlier periods in that such conditions can be more easily bridged through all kinds of media and modes of travel, as a result local and distant activities have become more intermingled in our lives. However not all surroundings are equally well connected to the necessary infrastructure needed to gain benefit from current technological possibilities. Even if physical closeness is no longer a necessary condition for the formation and maintenance of friendship, long distances and inaccessible areas can become an obstacle, making it difficult to develop and maintain friendships that involve many and/or diverse joint activities with people that live in remote and inaccessible places.

4.4.3 Economical

Economical conditions can also play a significant role in the chances of developing and maintaining friendship. Lynch (2005) for example discusses a 1973 study of the Ik by Colin Turnbull that clearly shows this. The Ik are a tribe that lives in the mountains of north-eastern Uganda. Material deprivation among them has taken such an extreme form that the maintenance of personal relationships can become a hazard to one’s own life. This has resulted in a situation where relationships characterized by caring for another for his or her

own sake are largely absent. The situation has even driven mothers to abandon their children because of food shortage. The conclusion that can be drawn from the story of the Ik is that when people are involved fully in surviving, personal relationships cannot arise. In this way the situation of the Ik places an important condition on ideal views of humans being naturally inclined to form personal relationships. A certain amount of welfare is required for friendship to manifest itself.

There are however also more subtle ways in which economical conditions play a role in the development and maintenance of friendship. Although Jeffrey Boase and Barry Wellman(2006) have argued that in today's society relationships form more often between people of different social backgrounds, economic backgrounds still have an influence on personal relationships. Allan (1989) discusses several reasons why background influences personal relationships. One is that people with similar backgrounds are more likely to meet one another and thus have the opportunity to become friends. A second reason is that shared backgrounds often make for some amount of shared experiences and interests which may provide a foundation for friendship. Lack of sufficient economical means can therefore become an obstacle in developing friendship. To be able to pursue certain interests and activities often requires a certain economic situation. Furthermore shared backgrounds are more easily compatible with the character of equality in friendship, which may be more difficult to achieve when friends differ largely in economic (as well as social) background

Another way in which economical conditions influence friendship is through one's working conditions. One way in which this happens is through the fact that the time spent on work competes with the time people are able to spend with friends. Aristotle already emphasized that to develop friendship one needs to have sufficient time. Work can also limit the possibilities people have for nurturing mutual interests on which many friendships partially depend. Thus if one is caught up in a situation where his working life leaves him with very little or no spare time and very little flexibility to pursue other interests than it will become very difficult to develop and maintain friendships. On the other hand work can also have a positive influence on friendship in that it provides an environment in which many people get to know new people and develop new friendships.

4.4.4 Political

Cicero has argued that for friendship to flourish a certain degree of political stability and social equity is needed. Aristotle has argued that friendships have most chance of arising in democracy since democracy creates a situation of political equality between citizens. This seems to make sense as we can imagine that it becomes much harder to develop friendships in an environment that is for example plagued by constant struggle for power and/or where people oppress others as this makes it difficult to trust other individuals, to develop relationships based on equality and make long term plans and investments. Unstable situations can feed distrust of others, which will make people less eager to exchange in joint activities and is likely to decrease people's openness to influences by potential friends. In addition it can undermine honest sharing because of status differences and fear of reprimands.

Friendship can however also provide a way out of such situations. Badhwar (1993) has argued that friendship can provide a counterweight to the power of coercive communities through its socially subversive character. She argues that this quality of friendship is generally feared by dictatorships and they therefore often try to suppress it.

4.4.5 Social

Apart from the conditions in relation to character, physical environment and one's economical and political situation there are also many social aspects that influence friendship. In general these are not so much conditions that need to be satisfied for any friendship to have a chance of developing but rather these are ways in which the possibilities for developing and maintaining friendships are influenced. Giddens (1991) has argued that personal relationships are often part of a bigger network of interconnected relationships which he calls 'milieux of intimacy'. Many of our friendships are linked up with other friendships or family relationships one is part of. The fact that one is involved in such webs of interconnected relationships will influence the new relationships one develops and the old ones one maintains. This is the case even though most of the bonds of kinship in Western society are less rigid and strong than they were in centuries past and most people have more possibilities to choose who they relate with and which values they adhere to. An example of this is that one cannot have a large number of friends that cannot get along very well for the simple reason that one would have to distribute one's time over every individual friend all the time, where it is otherwise possible to interact with multiple friends at once. In addition the

relationships one is involved in and the social background one comes from makes one a more likely candidate to friend one person rather than another if one takes into consideration Allan's (1989) argument that people with similar backgrounds are more likely to develop friendships, because they have larger chances of meeting one another and having shared experiences and interests that can provide a basis for their relationship.

Most people are not only part of a certain family and group of friends but are also involved in different societies, associations, communities and clubs. Trends, norms, values and dominant conceptions within such groups can also have a significant influence on friendship. Gender stereotypes and homophobia are examples of such influential factors that can become obstacles to friendship. The fear of homosexuality can lead to anxiety toward male intimacy and a tendency to prove one's heterosexuality and masculinity. Allan concludes that at the time of his research male friendship still frequently displayed problems with affection and was dominated by an ideal of masculinity. Gender stereotypes and gender roles limit possibilities for friendships both by the norms involved in them and the possibilities they leave to the different parties to engage in activities that increase chances of developing friendships or provide time to maintain friendships. Housewives particularly those with young children are for example generally less mobile and flexible than their husbands and as a result have less options for socializing and developing friendships.

In his book Vernon adds a quite different factor that influences friendship, namely the influence of romantic love—as an ideal culminating in union. This ideal of highly unified romantic love reduces friendships to a non-essential extra to a life that is primarily lived as a lover. Although not many people believe in this ideal in its entirety it does have its influence in society through placing romantic love on a level superior and unattainable to friendship. Another difference is that in the radical separation of private and public in modern democracy, friendship has become a private concern that no longer plays a very important role in public life. Modern life leaves less time for friendships and promotes other priorities.

4.5 Value of friendship

Friendship is generally held to be a valuable addition to our lives, and throughout history philosophical studies of friendship have given account of the different ways in which friendship can be valuable. In this section a survey is given of the different ways in which friendship can be valuable. This is evidently important in the development of a framework for thinking about the nature and value of friendship. It provides both insight into the ways in

which friendship is generally held to be valuable but also in the ways in which different types of friendship can be valuable in different ways.

One of the ways in which friendship is of value is simply the way our friends promote our daily needs. Sociologist Graham Allan (1989) argues that friendships provide us with different forms of support that help us in our everyday lives. These include emotional and moral support, practical support and material aid. Sociability and companionship form further benefits that friendship provides. Many philosophers have argued that friendship should not be developed with the prospect of these kinds of gain in mind but they undeniably result from friendship.

Friends are sometimes described as a second self, because of the mutual care and the promotion of each other's interests involved in friendship, which often manifests itself in that one treats one's friend as one would treat one self, but I agree with Bacon when he argues that this is incorrect. Friends are more than another self. They can do things for us that we cannot do on our own; giving us almost two lives. They can also provide one with a way of escaping the specific roles one is caught up in. In addition they can do things for us other people cannot because of their knowledge and care for us.

A second way in which friendship can be valuable is through the increase in self-knowledge that it can bring about. In Aristotle's work we already found the argument that although in his view the best life is that of contemplation, friends can play an important role in identifying the things that are worthy of being dedicated to, especially in providing a way to counter self-delusion. In more contemporary times LaFollette (1996) has argued that friendship can both increase one's self-knowledge as well as one's sense of self-worth. Self-knowledge is of great importance because without it one cannot make a sensible plan about what one wants to do with one's life. Long term friends can be of particular value for gaining self-knowledge as these have knowledge of our background and development. The increase in self-knowledge and the benefits this brings with it are partly the result of the intimacy in friendship which allows for truthfulness and the sharing of faults, which in combination with the interpretations of oneself given by one's friend allows for more informed self-development. Self-knowledge and development can also be promoted in close friendships by means of the awareness that might arise in the process of sharing something with a friend. Friendship is particularly suitable for the types of interaction that can promote self-knowledge because it provides a platform that is somewhat separated from the formal structures and roles we find ourselves in during many other parts of our lives. It allows one to dig underneath some of the facades people might hide behind in everyday life. Even more so because as

Bacon has argued friends generally possess special knowledge and care for us, which makes them especially suitable as counselors. Friendships may give a further motivation for self-examination because they are dynamic, their consistency is not guaranteed as is the case with for example family relationships. As a result one might be more motivated to explore and try to change parts of one's character that friends argue to be detrimental to the relationship or one's life. Because of the evolving nature of people, self-knowledge is however never complete or entirely correct. Because of this, LaFollette argues that regular detailed and honest sharing between intimates is important to arrive at an understanding of some of the relatively fixed elements of our identities as well as those that are not firmly fixed.

In addition our friends also help shape our identity through their care and reflections, which inform our sense of self-worth. As LaFollette (1996) argues, it is impossible to gain anything but a distorted sense of self-esteem and notion of self-worth in a vacuum.

Branden(1993) argues that to experience ourselves through others as a "concrete object ' out there.'"(p. 69) is one of man's most profound needs. We seek to be reflected in another person in such a way as we would react to ourselves to gain an idea of objective existence.

Friendship can provide in this need. Branden however argues that this requires "a significant mutuality of intellect, of basic premises and values, of fundamental attitude toward life"

(1993, p. 71) and for us to take pleasure in the reflection our friend provides requires that one's self-concept is not too much distorted. Cocking and Kennett(1998) argue that there are certain weaknesses in such reflection accounts of friendship. For one they argue that such views take an account of the self that is static and discrete and can be disclosed to the friend.

However they argue that at it's core friendship is not about passive reflections, but about active interpretation which influences and enriches our self-knowledge and self-awareness and shapes who we are. Cocking and Kennett hold that in friendship friends are "to some significant extent, each other's creators." (1998, p. 509) However they rebel against any form of shaping that holds that the result of friendship necessarily involves character improvement.

In their view this takes up a notion of friendship that is too moralized in comparison with reality. I agree with Cocking and Kennett that friendship is not essentially about passive reflection and a large amount of shaping seems to be going on. This shaping however often happens spontaneously and is not a planned rational process, as a result not all shaping will improve one's character. In my opinion the nature of friendship however does make it likely that it leads to character improvement and as LaFollette (1996) has argued the development of moral traits. It promotes altruistic actions through its involvement of genuine care for one's friend as a unique individual. Through such care for our friends one can also become more

aware of, and concerned with, other people and humanity in general. Furthermore because of the honest sharing that is part of friendship one can as Telfer argues “know what it is like to feel or think or do certain things which we do not feel think or do ourselves” (1970/1991, p. 266). Friendship thus also develops our empathic feelings. As LaFollette has argued “Experience and involvement in close relationships will enhance our interest in and sympathy for the plight of others.”(1996, p. 211). Furthermore friendship can promote honesty through its focus on honest sharing. This idea that friendship can help develop moral traits indicates a shift in the philosophy of friendship. Where in ancient times virtue was seen as a precondition for friendship and with the rise of Christianity and later the secular philosophical theory of Mill and Kant friendship became seen as being non ethical. Badhwar argues that there is in fact a certain morality inherent in friendship, for to be a friend requires the practice of a certain amount of moral deliberation and virtue. It at least requires honesty and fairness to develop trust, understanding and reciprocated caring in the practices that are involved in friendship.

Different philosophers have identified life enhancing qualities in friendship. This life-enhancing character of friendship is exemplified in the observation that one sees in the work of Cicero and Bacon that friendship doubles joys and halves grieves. Telfer holds that friendship enhances our lives through “increasing our stake in the world, and hence our capacity for emotions.” (1970/1991, p. 266), friendship makes one feel more, in addition it enhances many of the activities that are part of one’s life, by increasing both one’s absorption in them and the quality of taking part in them.

Harry Frankfurt (2004) focuses on another way in which friendship enhances our lives. He argues that caring for something (like a friend) is valuable to human life because it provides coherence in our desires and determinations of will. It creates importance and provides us with final ends and in this way adds meaning. Close friendships lead us to adopt the interests of our friend as our interests. A mutual desire arises amongst friends to promote the other's interests. This makes it difficult to separate between altruistic and egoistic motives in friendship, as the ends of one's friend become ends of one self and promoting these ends will thus bring oneself benefit.

Up to this point I have largely restricted myself to the value of friendship for the flourishing and well-being of those partaking in it. This kind of value has received most attention in the literature reviewed for this and the previous chapter. Friendship however also carries value in the larger social, political and economical spheres. Social value is increased by friendship because it involves the consideration of others’ welfare as Telfer (1970/1991)

has argued. In addition it has moral value in society because it involves acting for the sake of another, namely a friend, the process of which leads to moral growth (Friendship, 2005). In addition Friedman has argued that friendships can increase moral progress within society because they can provide support for unconventional values and in this way provide a counterbalance to people's commitment to the more abstract moral guidelines that are influential in society. Related to the ways in which friendship carries social value, friendship can also be seen as carrying political value. Aristotle for example has written about this topic. He has argued that friendship is in many ways similar to the political virtue of justice. In addition it creates a bond between members of state that creates unity and in this way carries additional value.

Friendship also carries economic value in several ways. In one way it can help the functioning of business by providing bonds that make up a network of people that trust and know each other and in this way make doing business more efficient as well as more pleasant. It additionally often increases loyalty among different parties and opens up the different networks of different parties to each other, which can be beneficial to recruitment as well as finding new business partners, customers, etc. Friendship can also carry economic value in that it provides people with free support in cases of for example illness or old age, where otherwise they would have to rely on family or government funded institutions.

4.6 Conclusions

In the previous two chapters a survey of theorizing on friendship has been given on the basis of both historical and contemporary accounts. It has become clear that friendship is a diverse concept that cannot easily be captured in an essentialist definition. Instead I have suggested to approach friendship from Ludwig Wittgenstein (1953/1967)'s notion of family resemblances. From the investigation of different understandings of friendship in this chapter several major themes and important elements of friendship have become clear. This process has also benefitted the goal of this thesis to provide portals into philosophic literature on friendship in order to quickly identify relevant resources for specific content. Together these two elements promote the first two goals I set out for a philosophical framework for thinking about friendship namely:

- Demarcating friendship from other relationships.
- Highlighting significant themes and questions at stake in practical friendship situations.

This chapter has uncovered several central themes that play a role many accounts of friendship. One of these is variety, meaning that there is a variety of relationships that are identified as friendships that differ in focus, intensity and depth. Care is another major theme in friendship. All friendships involve some sort of care for one's friend for the person that he or she is. This care can manifest itself in different behavior. For example in offering support when a friend is going through a rough period or by partaking in activities that you know are important to your friend. Which brings us to shared activity, for friends to be and remain friends requires that they share activities. The things we share are often what makes our friendship and that leads to the next central theme in friendship: connectedness. Although difficult to define and having a mostly imaginary nature the feeling of connectedness provides an important motivation for friendship establishment and maintenance. Often the basis of this feeling of connectedness cannot be rationally explained. Connectedness and shared activity are also important because these relate with another major theme of friendship namely its dynamic and open ended character. Friends and friendships change over time and their continued existence is for the largest part dependent on the friends' willingness to actively maintain the friendship. Identity shaping is another theme present in a lot of theory on friendship. There are several reasons for this. For one friendship puts one in intimate contact with perceptions of another person that may very well differ from one's own views in content as well as the origins on which this content is based. Second friends tend to provide interpretations and reflections on one's personality and one's actions and in this way they can influence how one perceives oneself and how one strives to act. Thirdly friendships often bring us into contact with new activities one is introduced to by one's friends. Fourthly the nature of friendship requires us to develop a somewhat open mind and empathize with another person. This process in itself impacts on one's character.

Many of the elements that define friendship are related to the central themes discussed in the paragraph above. Some of these elements have a somewhat essential character but several are more nuanced being more or less present (and in some cases can be all but absent) in different types of friendship. The elements that seem to be more strictly definitive of friendship are:

1. Friendship is reciprocal. It only makes sense to talk about friendship when it is returned.
2. Friendship is a voluntary relationship it can not be forced upon us neither is it a natural relationship as for example family relationships are.
3. Friendship is a personal relationship and such relationships are characterized by the

fact that those involved care for each other as a unique individual rather than a party that merely fulfills some need or role.

4. Related to this not all reasons will do for friendship and the actions that make up such friendships. A certain goodwill and care for one's friend always needs to be present. In addition friendly actions need at least to some extent be motivated by a desire to promote the welfare and happiness of one's friend. Doing things primarily out of duty, pity or self interest does not contribute to friendship.

Other less essential elements of many friendship are:

1. Friendship is in most cases a relationship of equality, both in the form that it involves a certain equal amount of giving and taking and that it develops between people who recognize and treat each other as equals.
2. Friendship is dynamic and non-institutionalized. The amount of dynamics can differ between relationships.
3. Related to 2. most friendships are not completely exclusive as for example marriages are.
4. Friendships require time and effort to be maintained; because of their dynamic nature they will diminish once neglected. Simply shielding a friendship from negative influences is not enough, shared activity is central to keep informed about a friend and maintain the close relationship one has with him or her.
5. As a result of 4 some exclusivity is always present in friendship. This is the result of the fact that one has a limited amount of time, energy and empathy one can invest in relationships as a result friends will have to make choices in who they become friends with. It is very hard to develop a large amount of close friendships.
6. Friendship is a partial and conditional relationship and as a result can be based around different reasons. These are only partially rational in that they are based on beliefs and considerations concerning one's friend and the friendship shared. Often several reasons are not completely rational in that we find it difficult to make them explicit and cannot justify them or why they are present in certain cases and not in other. In addition some are primarily based on one's desires, preferences and emotional impulses without being strongly supported by rational considerations. As a friend one generally tends to want one's friend to like one for one's unique personality and not just for general qualities.

Apart from the contribution to the demarcation of friendship and the identification of its central themes, chapters three and four have also contributed to the evaluation of friendship. This has mainly been achieved by providing insight into the value of friendship as spelled out in the following elements of the framework:

- Identification of values that are generally promoted by friendship.
- Identification of specific values that are promoted by specific friendship relationships and activities.

One of the ways in which friendships can be valuable is in the support they provide. Depending on the type of friendship this can take different forms. For example when your friend lives close by and you are in the habit of helping each other out with for example household repairs this provides you with practical support. When a friendship is more developed into emotional areas it is also likely that you will receive moral support, for example by friends trying to cheer you up when you are feeling down or trying to help you overcome your bad habits or fears. Some friendships also involve material aid for example friends helping each other out when they're short on cash.

Another way in which friendships are often held to be valuable is through the role they can play in increasing one's self-knowledge as well as one's sense of self-worth. There are several aspects of friendship that contribute to such increases. For one friends often provides evaluations/reflections of each other's actions and character. Secondly most types of friendship that go beyond purely practical interactions include a certain amount of sharing of emotions and thoughts. In spelling these out to one's friend one's awareness of oneself can also increase.

Although not generally agreed upon, I argue that another value of friendship is that it's likely to lead to character improvement. It promotes altruistic actions through its involvement of genuine care for one's friend as a unique individual. Through such care for one's friends one can also become more aware of, and concerned with, other people and humanity in general.

Friendships also have certain life-enhancing qualities. Cicero and Bacon have for example argued that friendship doubles joys and halves grieves. It additionally contributes to the coherence of our lives and provides us with final ends and in this way adds meaning to our lives. This goes especially for close friendships that lead one to adopt the interests of one's friend as one's own interests.

Benefits of friendship are also identifiable on a larger social level in that it involves the consideration of the welfare of others and acting to further their welfare. It can increase moral progress in society by providing a platform for support of unconventional values and carries political value in creating a bond between members of state that increases unity.

Furthermore friendship carries economic value in several ways. First of all it can help the functioning of business by providing bonds that make up a network of people that trust and know each other and in this way make doing business more efficient and pleasant. It additionally often increases the loyalty of several parties and opens up the different networks of the different parties to each other. Some friendships can also carry economic value in that they provides people with free support in cases of for example illness or old age.

This chapter has also contributed to the identification of conditions for friendship as part of the following element of the proposed framework:

- Identification of conditions that promote different types of friendship and influence the value of different friendships. This is combined with suggestions on how differences in conditions can impact on the value of friendship.

In relation to character the following conditions have been identified:

- A truly devious person cannot be a friend. Friendships necessarily involves caring for another person for his or her own sake something that it is impossible for someone of truly devious character.
- Cocking and Kennett have additionally argued that extremely rigid persons are unable to develop real friendships because they cannot display the necessary openness to the opinions and affections of his or her friend.
- Friendships that are not directed towards utility requires friends that are able to reason beyond market mechanisms. As Vernon has argued this runs the risk of being undermined by overly commercially-minded societies.

In addition to these conditions related to character physical and economical conditions also play a role in friendship.

- Many types of friendship involve and require regular interaction with one friend's and requires their presence in a significant part of our lives. When physical or economical conditions make this hard, more intense and deeper friendships are less likely to develop.
- A certain amount of welfare is also required for friendship to manifest itself. In circumstances where people struggle to survive and/or a general lack of trust is present chances for friendship to arise lessen.
- Economical and social backgrounds often still influence the people one gets to know, interacts with and develops friendships with. As a result economical and social conditions influence which friendships arise.

Summarizing friendship is a diverse concept and a variety of friendship relationships can be identified. There are several elements that are shared by such relationships which distinguish them as being friendship relationships. The most prominent of these are their reciprocal, personal and voluntary character and the fact that they showcase a certain goodwill and care for the friend as a unique individual, which is also reflected in actions that are motivated by a desire to promote the welfare and happiness of one's friend. Other shared elements that are presents in most friendships but which might differ more strongly between different friendships are their equal, but partial and conditional as well as dynamic character and the exclusivity present in the relationship.

Friendship relations have been identified as being valuable for a number of reasons including the support, increase of self-knowledge and sense of self-worth, life enhancing qualities and stimuli towards character improvement they provide. In addition friendships can also carry social, political and economic value. For such relationships to develop and blossom certain conditions must be met, both relating to the character of those participating in them (most notably not being truly devious or extremely rigid and being able to reason beyond one's own benefit) and to physical, economical and social conditions (these should allow for the development of trust, meeting potential friends and allowing for sustained interaction).

Part III:

Demonstrating the value of the framework: towards better grounded evaluations

5 Theories on CMC and evaluations of CMC use in friendship

5.1 Introduction

Chapter four provided increased insight into friendship and developed a framework for thinking about its nature and value. This offers some basis to evaluate computer mediated friendships but to be able to evaluate the impact of computer mediation on friendship one also needs to have some theory of what computer mediation is and how it influences human relations. Indeed as this chapter will show, many of the current evaluations of computer mediated friendships are mainly based on theories that are (partially) focused on technological mediation in communication.

A variety of theories is used by researchers from the different fields that have studied CMC friendships (media studies, psychology, philosophy, sociology, etc.). In this chapter, I first discuss different theories that are frequently encountered in articles on CMC and personal relationships. In general these theories are concerned with the effects of the use of different media on human communication and how this influences people's behavior, the establishment of perceptions of their communication partners and the relationship they share. The specific aims of the theories differ and will be discussed in the sections below. In addition the major claims of each theory are summarized and similarities and differences between theories are highlighted.

In the second part of this chapter I survey the main evaluations based on these theories as well as some evaluations that take a somewhat different angle on CMC. This results in an overview of how the role of CMC in friendship has been approached and which major types of evaluations this has led to.

In the third part I look at the discussion that has been going on between those who have given mainly positive and those and who have given mainly negative evaluations of CMC use in friendship. For this purpose, section 5.4 discusses criticism internal to the discussion that has been uttered by scholars from each side. This highlights some of the strengths and weaknesses of current evaluations.

In the next chapter, I critique several studies in which the theories discussed in this chapter have been used as a basis to develop evaluations of the role of CMC in personal relationships and friendship in particular. In addition I identify some of the shortcomings of

these theories. I then provide an approach for future CMC research that tries to mitigate these problems by using insights from the previous chapters as well as insights relating to mediation from philosophy of technology. This approach aims to spur improved interdisciplinary studies and evaluations of the role of CMC in friendship.

5.2 Theories applied to CMC

The past four decades have seen the development of a multitude of theories related to the influences of technological mediation in different fields ranging from psychology and media studies to philosophy of technology. In the following sections I will discuss a selection of theories (based on their prominence in theoretical work on CMC and friendship), whose claims have been used as a basis for evaluations of CMC use in personal relationships and in particular friendship. Not all of these theories have initially been developed with the aim of evaluation or with the intension of being applied to CMC.

5.2.1 *Social Presence Theory*

Social presence theory is the oldest major framework for analyzing Computer Mediated Communication. The origins of the theory lie in the field of social psychology but it has frequently been applied in communication studies. It was developed by Short, Williams and Christie (1976) and was originally meant to be used for comparing telephone, audio and video conferencing. Social presence theory has however also been applied in a multitude of studies on CMC and has frequently been used in the context of online learning.

Social presence refers to the sense of awareness a communicator has of the presence of his communication partner as a person instead of an impersonal object. This awareness is held to be important for one's knowledge and perceptions of other persons. Increased social presence is argued to lead to deeper/more personal perceptions of communication partners and a larger sense of involvement/and connectedness with them.

One of the central claims of Social Presence Theory is that as the number of channels are reduced the sense of social presence is decreased. Media are argued to vary in the degree of social presence they can provide. They are characterized by a certain social presence affordance based on the channels they provide for visual, auditory and physical interaction and the possibilities they provide for dynamic interaction and interaction through natural language. When a medium only involves a very small number of channels, the people one

communicates with are argued to be seen in a more impersonal light than they would through media with a larger number of channels. According to Social Presence Theory low social presence leads to a lower sense of connectedness and group cohesion. Effective communication is achieved when the social presence level of a medium matches the required interpersonal involvement of the task, thus making a medium more or less suitable for certain tasks. This has been used to predict media choice. Empirical studies have however shown little success in using Social Presence Theory's to successfully predict media choice.

5.2.2 Media Richness Theory

Media Richness theory is a somewhat similar theory to Social Presence theory. It was developed in the field of Management Science during the 80s and 90s, mainly through publications of Daft, Lengel and Trevino. The theory makes claims about the capacities different media have for resolving ambiguity and developing understanding between communication partners. On this basis it also makes claims about which medium is best chosen for communicating a certain message. The level of richness of a medium is determined by the amount of cues that can be communicated and the possibilities for quick feedback, natural language use and communicating personality traits. Cues can be visual, auditory, tactile, haptic, olfactory etc. These provide experiences and information on their own but also add information to language expressions for example by emphasizing certain parts of a message, by giving signs of certainty, by indicating whether one intends to keep talking and/or by indicating agreement or acceptance.

Larger levels of richness make media more effective for the exchange of information and knowledge according to Media Richness Theory. Media Richness Theory has gotten a lot of attention in studies of different media. Several studies however found different degrees of support for Media Richness Theory, ranging from general support, to weak support, to no support (Kock, 2005). Trevino, Daft, and Lengel (cited in Utz (2000)) have argued that media can be ranked on the basis of their richness level. In their ranking FtF communication is ranked highest, while formal numeric text is ranked lowest. Media such as e-mail are ranked somewhere in between these two extremes.

5.2.3 Deindividuation and Social Identity Deindividuation Theory

Deindividuation theory tries to give explanations for so called deindividuation effects. Deindividuation effects refer to the effects of situations in which people have a reduced sense of perception of themselves or others as unique individuals and how this impacts on people's behavior. Deindividuation effects that relate to the self are argued to lead to reduced self-awareness, reduced self-regulation and even loss of identity. In general deindividuation effects can mask particular aspects of a person's identity that differentiates that person from other persons. The roots of Deindividuation theory lie in social psychology and date back to the work of Gustav LeBon, especially his book "The Crowd" from 1895. The term deindividuation was coined by Festinger, Pepitone and Newcomb in 1952 (Postmes, 2007). Through the 50s, 60s and 70s it has been further developed on the basis of experiments and studies by Milgram, Zimbardo, Festinger and Diener and it has grown to become a major theory of group behavior in social psychology. The early work on Deindividuation focused specifically on the explanation of group behavior, especially the question how rational individuals are transformed into an unruly crowd. Particular focus was put on the submerging and anonymous character of group environments and how this leads to loss of self-awareness, reduced action according to social norms and reduced reflection on the consequences of one's actions among group members. Later work extended causes of deindividuation to factors such as sensory overload, the use of intoxicating substances and reduced responsibility. Empirical support for Deindividuation theory and especially the influence of anonymity has been scarce as a result the focus of Deindividuation theory shifted away from anonymity in the 1980s (Postmes, 2007). Observations from Deindividuation theory have both been extended to behavior in online groups as well as CMC in general

Deindividuation is set about by both social and technological factors and the interplay between them. Selective disclosure of information regarding one's identity and the highlighting and downplaying of particular aspects of that character are typical social factors. Examples of technological factors are a technology's inability to communicate certain information (for example visual or tactile information through a telephone) and/or its inability to support fast communication. The lack of possibilities to communicate non-verbal information can for example impact on one's perception of a communication partner as being an individual person because this is likely to mask several aspects of that person's identity. For example when only being able to use text chat there are less distinguishing characteristics (such as appearance, tone of voice, etc) and it is sometimes hard to make out if one is dealing

with a real person or a computer program. Anonymity resulting from the affordances of different media also plays an important role in many of the evaluations made by supporters of Deindividuation theory. Support for fast communication is another technological factor that plays an important role in applications of Deindividuation theory to the realm of CMC, in particular in relation to stimulation overload. Stimulation overload in this context refers to situations in which the user is presented with so many stimuli that he or she tends to forget about him or herself and becomes fully emerged in the experience. When speed of communication is low chances of stimulation overload are small. However when communication is fast-paced chances of stimulation overload increase and as a result chances of deindividuation effects increase as well.

SIDE (Social Identity Deindividuation) combines insights from social psychology and communication studies and has been developed specifically with the aim of applying insights on deindividuation to Computer Mediated Communication. It has been developed through a number of publications by Lea, Spears and Postmes during the 1990s. One of the assumptions behind SIDE is that some of the effects in groups are similar to effects in online environments. SIDE makes claims about the consequences of reduced cues, anonymity and social context on CMC users. One of these claims has been that when nonverbal cues are lacking people form impressions based more on social categories that their communication partner belongs to instead of interpersonal cues (Tidwell and Walther, 2002). SIDE makes different claims about the effects of lowered identifiability than classical Deindividuation theory (as will become clear in sections 5.3.1.3 and 5.3.1.4).

5.2.4 Social Information Processing Theory (SIP)

Social Information Processing Theory is a theory developed by Walther (1992) and has its origins in communication studies. It's focused particularly on CMC and makes explicit claims about the possibility and quality of relationship development through CMC. It pays particular attention to the information communication partners receive and how impressions are formed and relationship status communicated on the basis of this information. It draws partially from psychological literature on impression formation and social cognition.

In most media theories, media are evaluated on the basis of the extend to which they are the same as face-to-face communication. SIP however focuses on how users use different media to process social identity and relational cues and in this way how mediated communication can support relationship development. Walther has suggested that people are

motivated to exchange social information by affiliation, impression management, and dominance drives. There are several ways of getting information on a partner available in CMC, cues coming from language variations, style, method of communicating and the encoding of relation content in text or such things as emoticons, capitalization and acronyms such as “rofl”. Some forms of CMC also allow for the expression of body language through the use of animated avatars and even text-based media such as MUDs sometimes involve verbal commands that indicate physical behavior, such as *hugs*.

SIP holds that CMC users as they become more experienced in computer mediated communication learn to verbalize nonverbal parts of communication over time. In this way increasing the information that can be gotten about one’s partner. In addition SIP holds that users make use of knowledge-generation strategies such as” interrogation, self-disclosure, deception detection, environmental structuring, and deviation testing” (Walther, 1992, p. 71 cited in Utz, 2000) to increase their sense of the person they are interacting with. These practices relate some of the practices identified in Uncertainty Reduction Theory (which is discussed in section 5.2.6). SIP has been taken notice of, applied and critiqued by many authors from different fields who have done research in CMC.

5.2.5 Hyperpersonal Model of CMC

The Hyperpersonal model of CMC is another theory developed by Walther (1996) that has gotten quite some attention in literature on computer mediated relationships. It originates from the field of communication studies and it makes claims about the impact of CMC use on the impressions people have of communication partners and the effect this has on attraction and relationship development. The Hyperpersonal model holds that CMC leads to the development of idealized conceptions of communication partners. This, Walther argues, is due to the fact that there are less cues available, as a result there is a large chance of communication partners generalizing the positive information they do receive through CMC to other unknown aspects of a person’s identity. Furthermore CMC allows users greater control over the presentation of themselves, which will generally lead people to emphasize certain positive aspects of their personality. In addition the hyperpersonal perspective of CMC also argues that in CMC settings cues are often missing that emphasize interpersonal differences in face-to-face settings. In most cases such cues are nonverbal for example physical appearance, use of body and facial expressions, clothing, etc. The lack of such cues may make people feel a stronger similarity than they would have felt in face-to-face

interaction. The reduced cues in CMC environments are also argued to reduce inhibition and encourage people to be more disclosive. In addition the lack of available cues is argued to make people more actively pursue interactive uncertainty reduction strategies (Antheunis, Valkenburg and Peter, 2007)

Lea and Spears (1995) have similarly argued how in CMC the few cues that are available take on greater value than they would offline. They argue this leads to development of stereotypical impressions of communication partners on the basis of the language content present in CMC messages. In addition when people meet other people in online groups/communities focused on a common interest it becomes easier to judge the people as similar to oneself in other ways as well.

5.2.6 Uncertainty Reduction Theory

Unlike the other theories discussed here, uncertainty reduction theory is not so much a theory that is concerned with technologically mediated communication as rather a theory about how people interact with strangers and establish and develop relationships. However since it does play an important role in many evaluations of the role of CMC in personal relationships, and seems clearly relevant to the evaluation of possibilities CMC offers for relationship establishment and development, it deserves some attention here. Uncertainty Reduction Theory originates from work by Berger and Calabrese in 1975 and has over time developed through a multitude of publications by Berger. It is a much discussed theory in communication studies has been applied to several areas of research: the explanation and prediction of initial interaction, organizational and intercultural communication and as a function of different media.

In its initial form Uncertainty Reduction Theory was made up out of a number of assumptions about the relationship between uncertainty and different elements of communication. The main claim of uncertainty reduction theory is that people are driven to reduce uncertainty about interaction partners by gathering information that helps them predict the partner's behavior and attitudes. To this purpose three types of uncertainty reduction strategies are identified by URT: passive, active and interactive. Passive strategies include activities where a potential partner is observed unobtrusively for example as he or she interacts with other friends. Active strategies differ from these in that they involve more proactive behavior to gain information about the person. Such strategies for example include talking to third parties about a person (for example his or her friends and family). Finally

interactive strategies include direct interactions with the person through for example asking him or her questions or using self-disclosure with the intention that he or she will feel obliged to disclose some things about him or herself. These strategies help their users to create mental models of other people and their behavior and attitudes. In Face-to-Face interaction there are many verbal and nonverbal cues available that can be used to create such models. In many types of CMC this amount is significantly lower. URT assumes that when uncertainty levels are low this will positively influence attraction between interacting persons, this has been supported by the majority of studies in this area that have focused on an offline context (Antheunis et al, 2008a). In addition URT states that in building relationships persons are driven to further reduce uncertainty through trying to get to know each other as well as possible. There has however been a lot of discussion in communication studies related to URT. Especially this last claim that uncertainty reduction is the driving force behind interaction between persons building a relationship has been criticized

5.3 Evaluations of CMC friendship

5.3.1 Negative evaluations and Cues Filtered Out

Most early CMC analysis were done on basis of the idea “that media characteristics have consistent effects on communication”(Baym, 2001, p. 63). Efficiency and effectiveness of CMC were often the main focus of such studies. Cues filtered out (see Baym(2001), Chenault (1998) and Walther, Loh, and Granka (2005)) is a term used to refer to a collection of accounts that present a rather bleak picture of CMC’s suitability for developing and maintaining friendship relationships. Central to these accounts is the idea that visual spatial modalities that allow for nonverbal communication in face-to-face interaction are critical to the communication of identity and affection. Interaction through CMC is argued to be more impersonal and results in thwarted impressions, because important information about a friend’s physical appearance, his or her proximity to us, the tone of his or her voice, his or her body language, information about the broader social context in which this person is situated and information about the groups this person is a member of are often missing in CMC. In short CMC is argued to lack important social and contextual cues, which brings with it greater anonymity and can lead to uninhibited, undermining, depersonalized and antisocial behavior. As a result of these effects CMC is argued to constitute an environment that is less suited for the development of friendship. In addition some proponents of this view have argued that

when relationships are developed through CMC they are inauthentic (Chenault, 1998) or of generally lower quality (Chan and Cheng, 2004). Such negative cues-filtered-out views have been present from the seventies on and are still common today (Cummings et al 2002; Walther et al, 2005).

Two theories discussed in the previous section form the backbone of what is now called cues-filtered-out: Social Presence Theory and Media Richness Theory. Both hold that media have different capabilities for conveying certain information and as a result are to different extents appropriate for different forms of communication.

5.3.1.1 Social Presence Theory

Social presence theory has often been used to back characterizations of CMC as being impersonal and cold and not very suitable for the development of personal relationships. CMC is for example claimed to lead to more impersonal interaction because of the lack of features that allow users to gain information on the “identity, status, role, state of mind, emotion, and approval (or disapproval) of the people with whom they converse” (Papadakis, 2003, p. 21). A large part of CMC is text-based and one misses out on such social presence cues as body language, facial expression, tone of voice, various social context cues. Text-based communication is for these reasons ranked on the lower side of the social presence spectrum. As a result of this reduction in social presence it is more likely that communication partners are seen less as individual persons and more as impersonal objects according to SPT. Early studies of CMC have provided some evidence that lack of social cues leads to more aggressive and antisocial behavior (Papadakis, 2003). All in all CMC is argued to lead to interaction that is less likely to lead to or benefit developed friendship.

5.3.1.2 Media Richness

Media Richness generally rates media higher as they are able to carry higher amounts of nonverbal cues, provide rapid feedback and support natural language use and communicate personality traits. CMC is often argued to be lacking in social context cues and is therefore seen as being more impersonal and leading to lesser quality outcomes than face-to-face communication. Although some of the nonverbal cues that are missing in many CMC platforms can be encoded in text, receiving and sending both verbal and nonverbal cues happens faster and more accurate when these are represented in one's native verbal or

nonverbal format (Dennis & Kinney, 1998).

According to Media richness theory richer media are better at reducing uncertainty and ambiguity (Cummings, Lee & Kraut, 2006) and make it easier to express emotions and give direct feedback (Utz, 2000). Leaner media are argued to lack important information about physical appearance, dynamic nonverbal communication cues and spatial features, which has been claimed to lead to communication that is shallow, impersonal, non- or antisocial or straight out hostile (such claims have however been frequently challenged for example in Parks and Floyd (1996)). This character for example exhibits itself in unrestrained and verbally aggressive behavior online and a difficulty in resolving conflict in online relationships (Cheng, Chan & Tong, 2006). In addition such leaner media are also argued to provide lower physical availability and frequency of exposure, which are held as being important for the development of close relationships (Chan & Cheng, 2004). For these reasons leaner media such as instant messaging would be less suitable for developing and maintaining friendships and result in lesser quality friendships (see Parks and Roberts (1998) and Chan and Cheng (2004)).

5.3.1.3 Deindividuation Theory

According to Coleman, Paternite and Sherman (1999) there is little agreement within classical deindividuation theory whether deindividuation is an intrinsic effect of CMC or whether it is something that happens within users of CMC. Those who use Deindividuation theories to criticize CMC often argue that CMC results in a situation of increased anonymity and reduced presence which promotes disinhibited behavior such as flaming that leads to CMC environments becoming hostile and impersonal. Early empirical research into behavior among CMC users has given some evidence to users exhibiting more disinhibited and flaming behavior as a result of reduced social cues. As a result of the effects of deindividuation, friendship development in such CMC environments is impeded. In addition researchers such as Stoll (cited in Chenault, 1998) have argued that CMC is harmful in that it takes away from the time people are involved in real-life interaction and in this way tunes us out of the “real world”, because CMC leaves out important things of one’s identity and that of one’s communication partners and allows for formation of identity solely on what one wishes to show to other people.

5.3.1.4 Social Identity Deindividuation

SIDE however challenges some of the claims made by classic deindividuation theory, such as the claim that lowered identifiability leads to loss of identity and uninhibited negative behavior (Reicher, Spears and Postmes, 1995). According to SIDE anonymity can for example also lead to increase in self awareness when a person doesn't feel strongly connected to a certain group, in such a case anonymity can further amplify his or her status as being isolated from the group. In situations where a person feels strongly connected to a group SIDE theory argues that social influence increases and group norms become more influential. Coleman et al. (1999) argues that this in fact promotes social behavior and increased communication, which is opposite to the claim of classical deindividuation theory (Coleman et al., 1999). According to Coleman et al. SIDE predicts that CMC will be less personal and more topic focused, but may involve a higher level of self-disclosure. SIDE thus leaves room for both positive and negative deindividuation effects and evaluations based on them. Antheunis et al. (2008b) have argued that current CMC environments that are able to carry a larger amount of cues give some reason to reconsider the claim of SIDE theory that people are likely to feel more similar to each other when using CMC because of the lack of auditory and visual cues. Their empirical research has given evidence that participants in online friendships do not feel more similar to those in friendships conducted offline or by a mix of CMC and FtF communication.

5.3.1.5 Philosophical evaluation: Unreal friends

In their article *Unreal Friends* philosophers Cocking and Matthews (2000) identify several negative aspects of CMC regarding the possibilities CMC offers for friendship development that can be related to cues filtered out accounts of CMC. They base their criticism on a more philosophical account that provides larger emphasis on the nature of friendship than most studies discussed so far. Their criticism is based on an account of friendship they call the drawing view of friendship. They position this view as an alternative to the secret-sharing and mirror view of friendship both of which they see as being mistaken. The secret-sharing view of friendship sees intimate self-disclosure as the basis of friendship and the Aristotelian or mirror account of friendship states that similarity in character is seen as the basis of friendship. According to the drawing view of friendship both these elements are not important or distinctive of close friendship. Instead what is distinctive is that the identity and world view

of close friends are shaped by their relationship through the extensive sharing of experiences. One way in which this takes place is through the fact that close friendships will likely involve one undertaking activities that one would not have undertaken without one's friend. Another way in which this happens is through the extensive sharing of activities, which will make one come to see part of the world through one's friend's eyes. In addition friends develop important interpretations of each other's character. Cocking and Matthews argue that the kind of shared experiences that can be had through CMC are limited as are the indications of one's friend's character received through CMC. As a result they argue that CMC poses several barriers to the development of close/strongly developed friendships.

The main important difference between CMC and face to face interaction lies in the fact that interpretations of one's friend's character in CMC will be mainly based on voluntary self-disclosure as the control over which aspects of one's character are disclosed in which way is much higher in CMC. In addition most forms of non-voluntary self-disclosure present in FtF interaction are not available in CMC. These include disclosure of aspects of one's personality one might not be aware of or sides of one's personality about which this person is self-deceived. So even if one would try everything one could to voluntarily disclose the information that would otherwise become available through non-voluntary self-disclosure, one would not be successful for the simple reason that one cannot disclose information one is not aware of. As a result one's friend would be unable to pick these things up and reflect on them. One would thus also miss out on the interpretation a friend might give of such things. In addition to the information that might be lost by the focus on voluntary disclosing, the perception of sincerity one's friend might also suffer from not being able to pick up the non-voluntary clues of such things as sharing distress, joy, enthusiasm, etc. All of these things make CMC lacking in comparison to Face-to-Face interaction.

Through CMC one can carefully construct one's responses (and even choose not to respond at all), without there being uncomfortable silences or interruptions that might be indicative of one's character. To a certain degree Cocking and Matthews (2000) argue that this can be a good thing. It for example makes one less likely to be quickly persuaded by a friend to for example take part in morally questionable activities. In addition it might provide an easier way of establishing friendships for those who are extremely shy and/or those that suffer from certain disabilities for example speech related that make it more difficult to develop friendships in the offline world. Their account thus shows that some of the ways in

which CMC seems to be lacking can have both positive and negative effects. The absence of uncomfortable silences or interruptions, Cocking and Matthews identify, however seems to be particularly related to asynchronous CMC. If one focuses on for example chat, instant messaging or videoconferencing this would apply to a much lesser extend

5.3.2 Making up for cues filtered out

Cues filtered out approaches of CMC have received serious criticism based both on empirical findings and theoretical arguments. Research by Parks and Floyd (1996) and Parks and Roberts (1998) for example shows that many users are able to develop personal relationships through CMC. Kock (2005) cites research by Rheingold and Walther that found that people have rich interaction through media that were evaluated as not being very rich by Media richness theory. Utz (2000) on the other hand has shown that research findings are not always consistent with Social Presence Theory. She for example cites research that indicates higher attitude change in sound only communication than through Face-to-Face communication. On the basis of such findings researchers such as Walther (1995) have suggested that problems related to reduced cues may be overcome if interactants are given sufficient time to communicate. Several theoretical accounts have been given why missing cues might be overcome or might even positively influence the development of intimate relationships.

5.3.2.1 Social Information Processing Theory (SIP)

SIP holds that personal relationships with the same qualities and dimensions as face-to-face relationships can develop through CMC. This development might however require more time than it would in traditional face-to-face environments. Walther (1995) argues that the lack of nonverbal cues does not make it impossible to develop close relationships, it only slows down their development. The quality of relationships that involve CMC thus is partially affected by how long they have been running. According to SIP relationships that are maintained through FtF interaction are likely to have initially higher scores for relationship dimensions such as depth, trust and receptivity, however unlike cues-filtered-out theories which argue that scores in CMC will remain lower, supporters of SIP argue that this difference will be gradually reduced over time. This happens through the accumulation of messages and the way in which people learn to communicate and interpret individuating information which can partially substitute for the nonverbal information that is missing in CMC. Thus relationship

development is not a matter of capability but rather of rate. CMC contains less information per exchange because of missing non-verbal information and is generally slower because it often requires translating messages to text and in some cases takes place asynchronously.

Relationships might however develop through CMC that would not have formed in the offline world, for example because they are hindered by gating mechanisms that make intimate relating difficult between members of different social groups. Such gating mechanisms for example prevent people of different racial or religious background or social stature to develop friendships. So far empirical studies have only yielded partial support for SIP (Walther 1995, Walther et al, 2005) such as CMC groups becoming less formal and less task oriented over time. However Walther (1995) has argued that his results have neither lent much support for the claims of other existing theories regarding CMC.

5.3.2.2 Hyperpersonal Model of CMC

On the basis of his Hyperpersonal Perspective of CMC Walther (1996) has argued that CMC can at times be more social and friendly than FtF-interaction. The idealization resulting from greater control over self presentation and the generalization over positive information are argued to have the potential to increase feelings of connectedness and positively influence trust. Feelings of connectedness and similarity might be further increased by the fact that part of the population who meets in CMC meets through online groups that focus on some shared interests. Quite opposite to cues filtered out theory Walther's theory predicts that less cue rich environments lead to more positive attitudes towards other people because for example text only CMC leaves more room for idealization than for example videoconferencing or FtF meeting. Such CMC is argued to for example lead to higher levels of perceived similarity.

5.3.2.3 Relationships liberated

The relationships liberated view is a collective term introduced by Parks and Floyd (1996) in their article "Making friends in Cyberspace". It is used to refer to the collection of positive claims about the opportunities and influences of CMC use in relation to personal relationships that are quite opposite to the negative appraisals of the cues-filtered-out perspective.

Relationship liberated includes claims that CMC creates new possibilities for the development of genuine personal relationships and frees relationships from some of the confines present in face-to-face interaction. Evaluations that could be said to hold elements of relationships

liberated can be found in many works on CMC and some of their arguments highlight the positive effects of missing cues while others fall outside the discussion about available cues in CMC.

Chan and Cheng (2004) for example draw attention to the fact that cross-sex relationships seem to be easier to develop offline because they are often constrained in offline society by both structural and normative factors that are only to a more limited extent present in most forms of CMC. These can be structural constraints on the opportunities for men and women to have continuing interaction and for example social disapproval of intimate cross-sex relationships between people who are in a serious romantic relationship with someone else. In addition in CMC many of the indicators that can lay at the basis of constraints to cross-sex relationships, such as age, social and marital status, are less apparent. Parks and Roberts (1998) provide empirical backing for Chan and Cheng (2004)'s point. Their research showed that among their participants cross-sex friendship made up the largest part of their online friendships.

Kang (2007) further argues that CMC can lead users to experience lower senses of social responsibility and display less differentiation based on status and act in more uninhibited fashion. Authors such as Whitty (2008) also stress that the anonymity provided by CMC allow people to feel freer in disclosing things about themselves and overcoming fears as well as displaying kind behavior. Chenault (1998) additionally calls attention to a study by Lea and Spears which points out that CMC provides a fresh new way of exposing people to the relationships and basis of the relationships they take part in. She concludes that "CMC "blurs" traditional boundaries between interpersonal and mass communication, allowing for "new opportunities and risks for the way individuals relate to one another" (Parks and Floyd, 1996; Lea & Spears, 1995)" (Chenault, 1998, ¶ 76). Baym (2001) and Walther (1995) have both to some extent argued that CMC allows for equalization. Baym argues that CMC allows everyone who can type an equal chance. Baym additionally calls attention to the freedom and ease many types of CMC provide for users to experiment with different and/or multiple identities without much risk. It also becomes less socially risky to start up conversation with strangers. In addition Baym argues that physical appearance plays less of a role in relationship development. A result of this can be that similarities in interests and values will become a stronger focus and allow for a different basis for relationship development. McKenna et al (2002) have for example argued that the lack of social presence cues and the superficial level of social cues in CMC gives users better opportunities to get to know one another's true self.

These media might be particularly suitable for people suffering from social anxiety since it allows them to develop friendship without the many of the pressures that feed their anxieties in face-to-face relating. They propose that forming friendships on the basis of mutual self-disclosure and common interests, provides a more durable and stable basis for the relationships to survive and flourish than developing such relationships on the basis of for example physical attractiveness, which often plays a bigger role in face-to-face interacting.

5.3.3 Beyond loss of Cues

On the basis of findings in Walther's research that as time was less restricted the socio-emotional character of messages increased, Parks and Floyd (1996) argue that the important point is not whether CMC is able to convey relational and personal information but more how much extra time it needs to do so. They question whether many of the things that are indicated as being missing according to critics of CMC, such as physical proximity and physical appearance cues, are actually necessary for relationship development. Several theories such as social penetration theory and uncertainty-reduction theory seem to suggest that although these conditions might be helpful they are not necessary. Instead these theories put emphasis on participants expectations of positive reward from the relationship and the reduction of uncertainty about both the partner and the relationship. Such theories and the above mentioned questions have inspired some theorists to make claims about CMC's suitability for supporting friendship, which are located somewhat outside the debate of missing cues and focus more on the possibilities for CMC to support certain practices held to be important for relationship development and maintenance.

5.3.3.1 Uncertainty Reduction Theory based evaluations

Tidwell and Walther (2002) conclude that not all of the strategies identified in uncertainty reduction theory are available in CMC environments. Passive strategies for example require a public setting for observation, these are not or only to a limited extend available in most forms of CMC. Active strategies might also be available to a more limited extend in CMC. CMC for example in many cases only gives limited possibilities for asking third parties for information. In addition the network of common acquaintances is often also limited in CMC relationships. Many of one's relationships might not be identifiable as such online and/or might not even be connected to the Internet (or other network used for CMC). Especially in

chat environments and messageboards, relationships outside the particular platforms are often unavailable.

Tidwell and Walther argue that all the interactive strategies for uncertainty reduction are available in CMC but deception detection, for example is unreliable in CMC. Deception detection is partly based on the observation of nonverbal “signs” of deception which are not available in CMC. Deception detection is therefore less likely to be employed in CMC, making verbal interrogation and self-disclosure the most easily available strategies in CMC. Disclosure and asking questions can both be performed through the use of text. Antheunis et al (2008a) has indicated that early research has shown that in cue-poor CMC settings such as e-mail and instant messaging interactive strategies are in fact most frequently used. Disclosure has the added benefit that it can influence the recipient to feel an obligation to reciprocate in disclosing things about themselves. Antheunis et al (2007) indicate that the prominence of interactive uncertainty reduction strategies because of the lack of possibilities to pursue other types of uncertainty reduction might have positive effects. They argue that direct questioning is in face-to-face settings more likely to be seen as impolite, where such strategies are more likely to be forgiven in CMC settings because there are less other strategies available. This they argue might lead to increased attraction to one’s communication partner as a result of his or her apparent direct interest in one’s life. Antheunis et al(2008a) cites several studies that have demonstrated that increased use of interactive uncertainty reduction strategies enhances interpersonal attraction in both on an offline situations.

Research by Antheunis et al(2008a) has also indicated that on social networking sites passive strategies were most commonly used, very much unlike the observations made for instant messaging and e-mail. In general CMC environments that are richer in cues and more open, are more likely to support different uncertainty reduction strategies. Social networking sites provide the possibility to unobtrusively observe someone via his or her personal page/profile. Such pages in most cases allow users to share a lot of different information ranging from pictures, self descriptions and videos to links to interests. Additionally such sites also make it easier to get into contact with other relations of the person and to ask them questions about him or her. Nonetheless active strategies were least frequently used on this platform. Although uncertainty reduction theory seems to suggest that the amount of information impacts on relationship development Antheunis et al (2008a) found that valence of the information was much more significant when looking at social attraction.

5.3.3.2 Social bonding activities

Nardi's article beyond bandwidth(2005) draws attention to the focus in CMC studies on the relationship between affordances of different mediating technologies and the communication that results from using such technologies. A large part of CMC studies is occupied with studying the possibilities to provide information about such things as body language, pronunciation, tone of voice and physical interaction.

Nardi suggest that a more comprehensive theory that explains how interaction is sustained is possible. Central to this theory is common ground between communicators, that as they communicate grows and readiness to communicate, which is indicative of the connection between participants and which degrades when no interaction takes place. The connection between participants is promoted by activities of social bonding that include:

- “ 1. touch*
- 2. eating and drinking*
- 3. sharing experience in a common space*
- 4. informal conversation” (Nardi, 2005, p. 99)*

Informal conversation is clearly not reserved to face to face interaction and is often seen in CMC. This however is not clear for the other three types of activities. Nardi argues that these are more difficult to take part in when interaction is computer mediated, but they can all in some way be simulated through CMC. Textual description can for example be used to communicate physical affection by describing the physical activity like *x hugs y* or through xxx indicating kisses. In addition people may put particular effort in portraying one's own and other participants bodies to increase engagement and affinity.

Nardi also argues that empirical research shows that we can find similar analogs to eating and drinking in CMC, for example by bringing (virtual) food to a chat session and/or conversing about food one is currently eating. In addition Nardi argues that for example buddy lists in instant messaging can give a feeling of sharing a certain space. Virtual worlds in my view provide an even better example of how this feeling of shared space can develop through CMC. In this sense it seems that the bandwidth of many forms of CMC is sufficient for sustained communication and developing social bonds. Nardi however argues that CMC studies when putting so much emphasis on the bandwidth of media are missing out on important roles of the body. She argues that touch, eating and drinking, sharing experience in common space and eye contact are not just informational in the sense that they can be seen

codes that can or cannot be transmitted through different types of media. Instead they seem to be pre-linguistic and have an impact at a pre-conscious and physiological level and in this way play an important role in the connections through which communication takes place. Some of the responses in Nardi's research seem to indicate that somewhat similar effects can be achieved through CMC variant of the four activities argued to be important for social bonding. It however remains the question whether CMC can come close to the power of face-to-face interaction in communicating commitment and bringing about similar psychological effects achieved by eye-contact.

5.4 Internal critique of theoretical work on CMC

The many different theories used to make sense of and evaluate the use of computer mediation in social relationships have led to different forms of criticism towards competing views. These point to some of the weaknesses of current studies into the role of CMC in personal relationships. More importantly however they can be very useful in evaluating the pros and cons of different ways of looking at CMC and can inform new studies into and methods for studying the role CMC in friendship. For this reason, the next three subsections summarize some of the important critiques given from within CMC literature. This is done by examining critiques directed towards the two major groups within the discussion: the negative perspectives such as cues-filtered-out and the more positive perspectives such as the relationships liberated view and concluding with critique regarding the discussion in general.

5.4.1 Negative views

The cues-filtered-out perspective has met with many different critiques. One of the early forms of criticism, that is for example encountered in Walther (1996) and Parks and Floyd (1996), states that the empirical support for cues-filtered-out is questionable. Both Walther (1996) and Parks and Floyd (1996) argue that heightened levels of intimacy and solidarity are quite often encountered online, which is quite different from what one would expect on the basis of the claims of the cues-filtered-out perspective. Parks and Floyd (1996) cite several empirical studies that conclude that people will adapt to textual communication fueled by their need to manage uncertainty. Walther et al (2005) make a similar claim arguing that users are very well able to overcome the reduced number of cues available in many types of CMC in their communication of affinity. Walther (1995) studied task-related groups of college

students comparing how group members evaluated their relationships with fellow group members. At the stage of the third meeting in the fifth week of the study the participants interacting through CMC did in no case express less intimacy than the members of FtF groups, which seems to lend support to the claims of SIP theory rather than the cues-filtered-out perspective of CMC.

A second point of criticism is that the filtering of cues may actually be positive. It can provide opportunities of overcoming shyness or obstacles provided by one's social environment or one's physical condition. In addition Parks and Floyd (1996) argue that it can provide an opportunity to experiment with one's identity and to develop different social skills. In Turkle's famous work "Life on the screen" (1995) we find a similar argument, in which she states that such experimentation can help people discover who they are and what they want to be. Walther (1996) argues that CMC can in fact support positive behaviors and images of partners because of the controlled way messages are constructed on many CMC platforms.

Parks and Floyd (1996) further argue that support for the cues-filtered-out perspective might be a methodological artifact of time constraints on experiments. This has a negative effect for CMC since they argue that information flow is slower in CMC because of the reduced amount of bandwidth available for communication. This however does not mean that intimacy cannot or does not develop. Walther as part of his social information processing perspective already suggested in 1992 that the difference between FtF and CMC lies in the rate of information exchange not in the actual capability of exchanging social information (Chan and Cheng, 2004). According to his SIP theory relational communication can grow to become similar to FtF when sufficient time is given.

Furthermore Parks and Floyd (1996) and Parks and Roberts (1998) argue that theory on relationship development is biased towards face-to-face interaction as most theory was developed before the rise in popularity of CMC. As a result they emphasize things such as proximity, social context and physical appearance more than might be necessary. Exchange based theories such as uncertainty reduction theory and social penetration theory show that this might not be necessary.

5.4.2 Positive views

In this chapter we have seen that there are also alternative theories that provide more positive views of the possibilities and value of CMC in social relationships. These include theories such as Walther's SIP model and the Hyperpersonal Model of CMC. The terms Relationships liberated has also been used by different authors to refer to more positive perspectives. Many of the critiques of the more negative views of CMC came from those subscribing to more positive perspectives of CMC. These views have also been the subject of several forms of critique. One of these critiques has been made by Walther (1996). He has argued that those who reject the cues-filtered-out perspective at the time lack empirical backing for both explaining the results obtained by many experiments that confirmed cues-filtered-out (studies that showed increased uninhibited, anti-social and aggressive behavior) and to provide evidence for the adapting behavior of CMC users he and others have suggested.

Cheng et al. (2006) question the view that CMC can be valuable for relationship development because it takes away certain inhibitions and in this way promotes disclosure. They argue that this is a one sided presentation of reality. In their view such fast disclosure might lead relationships to become too intense in a short period without sufficient trust between participants being available. In addition lack of inhibition can lead to quicker and freer expression of negative emotions and closing off bonds. One can add to this that the anonymity provided by CMC might also promote more negative behavior such as higher amounts of deception, flaming and anti-social behavior as argued and supported by some of the early works on CMC that have emphasized the disadvantages of CMC (see Harper, 1998 and Parks and Floyd, 1998).

Harper has developed a specific critique of Walther's Social Information Processing theory. He has argued that because contextual and nonverbal information is missing in CMC it becomes much more difficult to build an understanding of other persons. The reason for this is that nonverbal and contextual information is not only added up over time (as Walther argues) but also changes with time. To keep up with this information participants would thus have to continually translate it, which Harper argues would slow down communication tremendously. According to him such a translation process is not happening in CMC, instead several studies have described interaction as task oriented and direct and indicates the presence of flaming and aggressive or uninhibited behavior. The empirical support Walther has found for SIP is, according to Harper, not caused by people's ability to transform nonverbal and contextual information but by the social construction of the missing

information. CMC participants are argued to develop faulty impressions on a larger scale than those communicating FtF and they communicate as if they really know each other. CMC participants are thus deceived into believing that their CMC relationships are similar to FtF relationships. Harper's critique however seems to have several evident weaknesses. Firstly, he does not show awareness that the degree to which contextual and nonverbal information is missing differs greatly between different CMC platforms. Secondly, although his insight that nonverbal and contextual information changes is a very valuable, it seems questionable whether the amount of such information that continuously changes and is essential to our images of another person is so large that this enormous slowing down of communication would occur. This actually seems rather unlikely to me and Harper gives little to no justification to back up this supposition. Thirdly his negative characterization of online interaction seems to rely solely on studies from the eighties, while several of the later studies discussed in this chapter have shown a much more positive characterization of CMC interaction. This does not take away from the fact that SIP does not provide an explanation for such negative findings.

Utz (2000) has also argued some criticism towards SIP. On the one hand there seems to be insufficient evidence for the specific communication processes that SIP identifies as taking place in CMC. This results from the fact that much of the research on CMC has focused on media inputs and relationship outputs and not so much on the actual processes taking place. Utz's own study however confirms that people learning to textualize nonverbal content was an indication for the development of friendships. The second problem is that SIP theory originally assumed that all CMC users are motivated to develop significant relationships with people they communicate through CMC with, further research has shown that this motivation can be dampened by several factors (Walther, 1994 and 1997 cited in Utz, 2000).

Antheunis et al (2008b) have found that different from the claims of the hyperpersonal view of CMC perceived similarity was actually lower in online friendships taking place through social networking sites. On this basis they have argued that the claims of the hyperpersonal model should be reconsidered in light of some of the current CMC platforms that provide a higher amount of cues.

5.4.3 General critique

Apart from the criticism that has been targeted at specific positive or negative perspectives on relating through CMC some authors have also made critical statements that apply to the study of CMC relationships in general. Parks and Floyd (1996) in their article “Making friends in cyberspace” developed one such important observation. They argued that many of the participants in their research saw cyberspace as just another place to meet, as their relationships moved in and out of CMC environments. The sharp boundary between CMC and FtF that is drawn in many CMC studies does not seem to be present in the interactions of most actual users.

Quan-Haase and Wellman (2002) developed two other points of criticism towards current CMC studies. First off they argue that most research is aimed at identifying an effect, either positive or negative. Their analysis of social capital however indicates that in many cases there is actually no directional effect present because Internet communication adds to already existing practices of communication and engagement. Secondly they argue that up until their study many researchers have implicitly assumed that as Internet use grows it will resemble the way it is used in North America, with the emphasis in use being on e-mail and surfing the web. However research has made clear that Internet use differs around the world and as new possibilities arise, use within countries also changes.

Joinson(2001) has critiqued the use of deindividuation to explain both pro and anti-social behavior. He argues that evidence suggests that high levels of self-disclosure are common in CMC and Internet-based behavior in general. He draws (among other researchers) upon Reingold's observation that people tend to reveal more when mediation through screen and pseudonyms takes place and Wallace's observation that people tend to disclose more to a computer. According to Joinson anonymity “is central to most explanations of both pro- and anti-social CMC behavior, including self-disclosure (Kiesler et al., 1984; Spears & Lea, 1994; Walther, 1996).” (2001, p. 5). Joinson however argues that increased self-disclosure is an established outcome of higher levels of private self-awareness. He therefore argues that the results of his study seem to undermine the idea of applying deindividuation to both pro and anti-social behavior on the Internet. Since reduced self-focus is required for deindividuation and his study shows that low self-awareness results in significantly lower levels of self-disclosure. His study however doesn't explain why CMC seems to encourage private self-awareness. Two possible explanations that Joinson argues to be likely are that a decrease in public self-focus might lead to an increase in private self-focus or that the environment in

which most people get involved in CMC promotes private self-focus, for example because one is often sitting behind a computer alone and one is shut off from most outside influences. The first explanation seems to be countered by the fact that private and public self-awareness seem to operate independently in his experiment. A third explanation presents the computer as a possible mirror that “reflects back to the communicants themselves”(Joinson, 2001, p. 21). Furthermore the requirement of focusing on one's emotions through writing them down might also lead to heightened private self-awareness.

Schklovski, Kraut and Kiesler (2003) issued several forms of criticism towards research methodology in CMC studies on the basis of 16 studies done in different academic fields. The first of their criticisms was fueled by a study on social activity. Over a short interval the amount of social interaction online was compared to social interaction offline. Schklovski et al. argue that such limiting of sampling periods in research into social behavior leads to negatively biased estimates of social interaction, because it excludes appointments made for interaction offline (which often fall outside the time frame) and because they assumed people cannot simultaneously take part in two primary activities, for example surfing the web and interacting with a friend. Thus it is not strange that when comparing the amount of social activity online with social activity offline that social activity online falls short. Schklovski et al. further argued that the samples used in several social psychology studies were not representative of larger user groups. They for example oversampled Internet users with a low income, because they were interested in the effects of social class.

Utz (2000) discusses criticism by Markus who has shown that the way media are used and whether they result in positive or negative social effects is not only determined by the characteristics of media used but also by the intention of the users. Utz argues that user attitudes towards media have not received sufficient attention in most studies on media use. Whether social relationships or more specifically friendships are formed and which of these relationships are formed is dependent on motivation. She found in her own study that skepticism about the possibilities to develop friendships and communicate feelings in CMC influenced whether users try to communicate feelings and build relationships in virtual worlds.

6 Evaluating the role of CMC in friendship

6.1 Introduction

In the previous chapter I've given an overview of the main theories applied to CMC use in personal relationships, several important positive and negative evaluations of such CMC use and some of the criticism that scholars from within the field have given of both these theories and evaluations as well as research in this field in general. In this chapter I will argue that many of the current approaches to CMC use in friendship are to some degree lacking. In section 6.2, I follow up on the criticism made from within the field with some of my own, more philosophically informed critiques. Section 6.3 gives an overview of the major issues with current research identified throughout this and the previous chapter. In the final part of this chapter, I suggest an approach for future research in this field that tries to address the identified problem areas by combining insights into CMC practice, friendship and computer mediation. This approach summarizes my research findings and is intended for use by the interdisciplinary community engaged in analyses and evaluation of the role of CMC in friendship.

6.2 Criticism from a philosophical perspective

Most of the criticism discussed in section 5.4 comes from those involved in empirical studies of CMC and its consequences for relationship development. Little criticism has been developed by philosophers at this point. In this section, I develop several points of criticism that result from taking a more philosophical perspective on the research done into the role of CMC in social relationships and friendship in particular.

6.2.1 Nature of friendship

One of the issues that is striking when reading many of the articles on CMC's influence on social relationships is the lack of clarity regarding which relationships are considered and what constitutes these relationships. Such clarity is important to judge both the applicability and generalizability of research findings. One cannot defend arguments regarding the possibility of establishing friendship through CMC and the impact CMC use has on the quality of such friendship without specifying some conception of friendship. Such

specification is required to be able to make well-informed evaluations of the implications of CMC use and can additionally help reduce confusion among both research participants as well as those interested in the research results. This is especially true when certain types of friendship become part of the terms integrated in the CMC platform as for example indicated by Fono and Raynes-Goldie (2006) in relation to the use of the term friend in the LiveJournal. If such clarity remains lacking one runs the risk of comparing different relationships or missing out on important constituents of these relationships, which is likely to lead to biases towards either FtF or CMC interaction.

To illustrate this point, no definition of which social relationships are considered and what constitutes them are given in Cummings et al (2002) and Matsuba (2006). With few exceptions (for example Rosen, 2007) studies focusing specifically on friendship also do not involve well-developed and/or clear conceptions of friendship. For example Parks and Floyd (1996), Parks and Roberts (1998), Utz (2000) and Cheng, Chan and Tong (2006) give no definition of what they understand by friendship. Chan and Cheng (2004) are one of the few examples of the articles where some space is spent to discuss the meaning of friendship. They consider several different definitions given by other authors; however it is not clear whether these are just examples or whether these are definitions they subscribe to and if so why. Their concluding remark after these examples is rather superficial and not sufficiently worked out to make any clear statements on how friendship differs from other relationships and why friendship is valuable. Further clarity on the actual relationships considered is necessary for improved research in the future.

6.2.2 Grounds for evaluations

In chapter three and four we have seen that many philosophers have given accounts why friendship is valuable. In the CMC literature, there is very little theorizing on why friendship is valuable or which things determine the quality of a friendship. Nonetheless many scholars do evaluate the quality and value of friendships in which CMC plays an important role. As Parks and Floyd (1996) and Parks and Roberts (1998) have argued this is mostly done on the basis of theory that is biased towards face-to-face interaction by overemphasizing such things as proximity, social context and physical appearance. These conditions clearly favor face-to-face relating, but researchers simply assume their importance for friendship without providing arguments.

Indeed, I argue that this bias towards face-to-face interaction cuts even deeper than

Parks and Floyd have suggested and can be identified in their own research. They developed a set of seven dimensions to evaluate online friendships, which are also used by Chan and Cheng (2004). These are: interdependence, breadth, depth, code change, understanding, commitment and network convergence. These dimensions are indicative of offline relationship development, and Parks and Floyd seem to make an argument that is mostly about the possibility and depth of online relationships. Yet it is questionable whether these are the best and least biased dimensions to measure relationship depth, for example network convergence seems to carry part of the bias identified in proximity and social context. In any case what these dimensions do not provide is a good basis for evaluating the quality of friendship as Chan and Cheng (2004) seem to be doing at several points in their article. Why for example would high levels of code change, network convergence or breadth be indicative of a high quality friendship or for that matter make one friendship more valuable than another?

To make this clear consider two friends that are located a large distance apart from each other. They however have several shared interest, for example music, philosophy and jogging. They communicate their opinions and insights about these interest via telephone, e-mail and chat contact. Because of the distance between them they are however rarely able to meet face-to-face and as a result hardly come into contact with each others social networks in their physical community. Now let us consider that each of these friends has another friend that lives very close by. As a result of living close by this friend shares a larger diversity of activities and is stronger connected with a large part of the friend's social network in addition they have developed some special greeting hand shake and they use nicknames when referring to their neighbors. This second friendship seems to score higher in both network convergence, code change and breadth, but does this make this a higher quality friendship?

Even when the levels of interdependence, depth, understanding and commitment are similar the answer does not necessarily seem to be yes. These dimensions tell very little about our evaluations of the effort put in by both parties and our evaluations of the interactions that make up our friendship and the willingness to provide emotional and/or practical/financial support. Especially network convergence and code change seem to be very hard to directly relate to any important value one might draw from friendship. In addition one might argue in line with Emerson and Nietzsche that high levels of interdependence do not indicate or make for quality friendships, rather these might indicate lesser quality relationships where the friendship is no longer a coming together of two separate and unique individuals and friends are not cared for primarily for their own sake, but for our dependence upon them. Thus all in

all such lists as these seem to say little about friendship quality and more about patterns in face-to-face relationship development. Since questions about the quality of computer mediated relationships and their value in comparison to offline relationships are present among a large audience (both popular and academic), it is valuable to develop methods that allow for such evaluations.

Matsuba (2006) compared online friendships to the closest face-to-face friendship participants had and these were then compared on both length and quality of their relationship. Again this seems to be questionable practice as under these conditions online friendships are not compared to face-to-face relationships, but only to the best among them. This method thus appears to be biased towards face-to-face relating. The relationships were rated on a five point scale on companionship, instrumental aid, intimacy, nurturance, affection, admiration and reliable alliance, punishment, conflict, satisfaction, and relative power. How this happened is not stated. Some of these dimensions however seem particularly questionable, such as admiration and conflict. High levels of admiration might for example be indicative of an unequal relationship where one of the friends might feel inferior to his friend. According to many theories of friendship (e.g. Bacon), this would be a sign of reduced relationship quality. Very high levels of conflict are likely not to be a good sign for the quality of one's friendship, however low levels of conflict might not necessarily be a good sign either. Alterity and honesty between friends can very well lead to moderate levels of conflict; that does not bring down the quality of the friendship, rather it can be indicative of the depth and seriousness of the friendship. Matsuba (2006) argues that his results are in line with Parks and Robert (1998) in that both show that relationships are more developed on several dimension in face-to-face conditions in comparison to MOO relationships. This however misses the fact that Parks and Roberts found that results did not show very big differences and that MOO relationships scored higher or equal on certain dimension of relationship development, which seems too important not to state

Similar critiques of dimensions of evaluation can be targeted at the work of Cummings et al (2002). They evaluate social relationships on- and offline on the basis of interactivity and user evaluations. While interactivity is definitely important to maintain friendships, it is questionable whether more interactivity is always better? The answer to this question can be negative. For one very large levels of interactivity might lead one to become tired of one's friends company or might increase irritation resulting from certain parts of a friend's personality when constantly confronted with them. In addition one can argue that in subtler version of Emerson's more extreme account that a certain distance is required for friendship

which allows partners to maintain their alterity.

User evaluations seem to provide a better dimension for evaluating social relationship. These are definitely important when doing research into social relationships and one does not want to lose touch with actual practices and users. One should however be careful that these can differ largely on individual basis and evaluations can be very specific to a certain group as well as very much influenced by current trends and general perceptions. As such these might not provide a sufficiently strong basis for a general evaluation of practices such as CMC relating. This critique can in the case of Cummings et al's work particularly be placed against the third part of their empirical research as this focuses on Internet new comers whose evaluations are likely to be influenced by their inexperience with the technology. In addition the user evaluations of the first part of their research are about a different kind of relationship (namely working relationships) so generalizing these is also questionable.

Another problem with user evaluations is that friendship can have many different meanings for different people. This becomes especially problematic when researchers do not provide a clear definition of what they understand by friendship, which can then function as a guideline. In cases where this is missing different understandings are likely to lead to rather different evaluations.

6.2.3 Generalization

Another area where criticism towards a lot of CMC studies is warranted are the generalizations often made in their conclusions. I already touched upon these a bit in the previous section when talking about user evaluations. These however are present at several levels and allow for several improvements.

Generalizations over different relationships deserve greater scrutiny. For example Cummings et al (2002) argue that the Internet is less effective for forming and maintaining social relationships and that social interaction online is less valuable and wanting compared to the standards of face-to-face communication and offline relationships. The basis on which they draw these conclusions however exemplify several problems that are encountered in many evaluations of CMC at the moment. The first part of the empirical data that they use to back up their claims, comes from a survey among employees of an international bank and focuses primarily on the use of e-mail in the forming and maintaining of working relationships. It is however very much the question if such observations can be generalized towards social relationships. This seems to be an extreme of the kind of mix up that could

result from lack of clarity of what constitutes the kind of relationships one tries to evaluate. If we only take a look at the nature of friendship as described in chapters three and four, it will be evident that there are clear differences between working relationships and friendship. This is likely to be the case for other social relationships as well.

Another area where generalizations require further attention is that of research population vs. real world users. Generally studies often focus specifically on users of a certain form of CMC, participants from a certain age group and/or participants from a specific area. Chan and Cheng's (2004) and Cheng et al (2006) studies for example focused only on a small group of Hong Kong newsgroup participants with far out the most of them being between 18 and 24 years old. Similarly Parks and Floyd(1996)'s research focuses solely on users of 24 newsgroups and Parks and Roberts (1998) focus solely on people who have developed relationships through MOOs. Matsuba's (2006) participants consisted only of 1st year university students from Canada. Utz (2000) focused solely on participants of three German MUDs of which far out the largest part where educated German males with an average age of 23,5 years. More attention needs to be given to how these research populations relate to users of CMC in general.

Apart from generalizations on the level of relationships considered and the research population, generalizations are also often present across CMC platforms. The second and third part of Cummings et al empirical research for example did focus solely on e-mail. This does not mean that results can be generalized to CMC in general. In the fourth part of Cummings et al.'s empirical research they looked into listservs. They found very little interactivity and mostly weak ties in the listservs they examined. Although this is valuable information it remains the question if these conclusions can be generalized towards CMC in general. From our study of CMC in chapter one it should have become clear that listservs are quite different from for example a 3D virtual world or gaming environment such or for that matter ordinary text chat. A general problem with all parts of Cummings et al.'s empirical research is that none of their research has involved synchronous forms of CMC. Similarly since Parks and Roberts (1998) research mainly focuses on relationships developed through MOOs as a result its results will be primarily applicable to similar forms of synchronous CMC. Similar focus on one typical platform or only synchronous or asynchronous communication can be found in other studies as well (Parks and Floyd, 1996 focus solely on newsgroups, Utz, 2000 focuses solely on MUDs, Walther, 1996 focuses on text chat using Microsoft NetMeeting within a lab setting). It is questionable how well the findings of such studies translate to other CMC platforms and forms of CMC and whether findings from such

studies can be used to make claims about CMC in general. This is especially true when arguments are based on missing cues or interaction speed (as these differ quite extensively between platforms). Antheunis (2009) seems to be at least partially aware of this problem and has argued that the comparison between purely text-based CMC and face-to-face interaction might not reflect the reality of current CMC use. For this reason she makes a distinction between cue-poorer and cue-richer environments (which seems to be based on their ability to carry audiovisual cues) and more and less open forms of CMC (relating to whether they focus on one-to-one vs one-to-many communication). I think such a distinction is already an important step forward compared to earlier studies, although a clearer or more developed sense of when a CMC platform is to be considered cue-richer and when it is to be considered cue-poorer needs to be presented. Further differentiation on the basis of possibilities for synchronous and asynchronous communication would also be beneficial.

6.2.4 Context sensitivity

Many people do not draw a sharp boundary between CMC and FtF and see cyberspace as just another place to meet, their relationships moving in and out of cyberspace (see for example Parks and Floyd, 1996). Many studies of CMC however persist in drawing a sharp boundary between CMC and FtF and online and offline friendships. Chan and Cheng (2004) and Cheng et al (2006) for example defined the online friendships that they measured as being made online and solely taking place through CMC. These were related to friendships of a similar length that were developed offline. Although such research says something about the quality of a part of the relationships in which CMC plays a role, it does however miss out on an important part of relationships that consist of intertwined online and offline interactions. One of the things that requires further research is how large the group of online only friendships is compared to the group of mixed relationships. This might indicate that more research is warranted into the mix of online and offline interaction and might even indicate that online only relationships are a minority.

The results from the third part of Cummings et al (2002) empirical research seem to be negatively influenced by the fact that they compared relationships with a partner with which the research participants interacted with most through e-mail vs relationships with a partner with which the research participants interacted with most through any other modality. Not only does this single out e-mail vs the combination of any number of other communication platforms and in this way provide a unfair and likely unrealistic comparison, as chapter two

has shown that it is common that people use different platforms/media in their interactions (for example see Parks and Floyd (1996) and Parks and Roberts (1998)). It also very likely compares relationships in which a relative large amount of e-mailing takes place to relationships that involve a lot more interaction in general. Although more communication might not necessarily lead to more valuable relationships as indicated in section 6.2.2., such a method does seem to be at least somewhat biased to non-Computer-mediated relationships. Especially their finding that Internet partners communicated less frequently is altogether hardly surprising when we take their method into account. They also found that people felt less close to their Internet partner, but this might be the case because they were simply put up against their most active relationship in general.

Not only do some studies single out media, many studies also focus on platforms such as MUDs, MOOs and newsgroups which are rather old and not necessarily the most popular types of CMC used in personal relating. Some of these were actually already pretty dated at the time the studies were performed (for example Utz (2000) focused solely on MUDs while these were already losing some of their popularity to more developed virtual worlds). In other cases this can hardly be used as criticism because these studies are rather dated themselves. In both cases however this raises the question whether their observations are still applicable to our current situation where newer and in many ways more developed forms of CMC are present. It at least seems important to be aware of which platforms are popular at the present to avoid doing research based on platforms that have lost their appeal to most CMC users.

Summarizing: the methods discussed in this section indicate little sensitivity to the actual context in which many if not most computer mediation plays a role in personal relationships and in general provides biased circumstances which reduce the value of the outcomes of the study.

6.2.5 Determinism

Utz (2000) has argued that user attitudes towards media have not received sufficient attention in most studies on media use, in the sense that most of these attribute positive or negative effects to CMC solely on the basis of media characteristics. This criticism is well placed and indicative of the rather deterministic view of technology presented in many of the theories discussed in chapter five and the applications thereof discussed in this and the previous chapter. In many of the studies discussed little or no attention is given how characteristics of

media interact with different user motivations (as identified in chapter two) and/or different and changing ways of use. Rather it is argued that certain kinds of information is missing in CMC and it therefore is argued to lead to such things as less social interaction, deception and lack of understanding between participants. In some sense these kinds of evaluations and the theories they're built upon are similar to the negative and deterministic images presented by classic philosophy of technology. These have however come under strong criticism and better developed theories of technological mediation have been developed by for example Ihde and Verbeek. In such theories the relationship between human and technological artifact is described in a way that is neither neutral nor deterministic, but rather analyses how our possibilities for perception, interpretation and action are influenced in this relationship and how this invites and/or inhibits certain ways of being in and/or perceiving the world.

Most philosophical work on mediation has however focused mainly on human-world and human-artifact relationships, little attention seems to have gone to the mediation of interpersonal communication, especially in the development and maintenance of personal relationships. In addition philosophical work on mediated friendship such as Cocking and Matthews (2000) does not spent much time on theoretical accounts of mediation either. Kolb's "Discourse across Links" (1996) is one of the few works that have tried to develop a more philosophical account of computer mediated communication, but it focuses mainly on e-mail and is at this point insufficient to provide a good alternative to the popular theories discussed in chapter five. Verbeek (2002) in his criticism of Borgmann's *Holding on to Reality* (1999) presents some observations on the mediation of communication that are more insightful and seem to provide a useful basis for further development into a theory that can address some of the weaknesses of currently popular theories in the field of CMC and the evaluations these have led to. Developing such a theory is unfortunately beyond the scope of this thesis but I highly encourage future researchers to look into this subject and at least take into account some of the insights from philosophy of technology in approaching mediation.

6.2.6 Summary of issues

On the basis of my critique above and the critique by other authors as provided in section 5.4 I argue that the following list of issues plagues current research into the role of CMC in friendship:

1. Lack of clear/good definitions of friendship
2. Lack of convincing ways of evaluating the value of friendship. Often dimensions for evaluation are used that emphasize elements present in FtF relationships (such as proximity, social context, physical appearance, code change etc) that are not necessarily important to friendship or indicative of its quality or value. In addition unfair comparisons between FtF and CMC relationships are not uncommon (unfair either because of time-scope constraints, the singling out of media or the comparison of relationships that are from onset clearly different in depth).
3. The sharp distinction between CMC and FtF maintained in many studies seems to be much less sharp in actual practice.
4. None of the popular theories applied to CMC seem to be very successful in explaining all of the empirical findings and several need further empirical backing to several of their claims. Many provide a rather one-sided view of some of the possible effects of CMC evaluating these as purely positive or negative to the possibilities for friendship and/or its quality and value, where arguments can also be made to the opposite (examples of these effects are increased anonymity, increased user control, increased idealization, etc)
5. Several of the popular theories discussed in chapter five provide a rather deterministic view of technology and many studies take insufficient account of the influence of different user motivations as well as different and changing uses among different user groups.
6. A significant amount of studies pay insufficient attention to the differences in the character of interaction and affordances of different CMC platforms and/or focus on outdated CMC platforms. Leading to questionable generalization over CMC platforms.
7. Questionable generalizations over user groups and even different relationships are also not uncommon.

6.3 The way forward: An approach to evaluating CMC friendships

On the basis of the work done in this thesis and particularly the issues identified in section 6.2.6. I argue that the following elements should be present in future research into the role of CMC in personal relationships and in friendship in particular:

1. A clear definition of CMC. This is important to draw boundaries on the technological domain one is considering and to show how broad or narrow one's focus is.
2. An orientation on the types of CMC platforms that are popular at the moment of the research and a clear justification for the selected platforms for research. This is important to avoid conclusions based on CMC platforms that are outdated and/or have lost appeal. Chapter one has provided an example of how this could be done, such investigations are however in need of frequent updating because of the changes in possibilities offered by different platforms and the differences in how these are used and which become most popular.
3. A study of the dimensions along which the considered platforms differ among each other and from other CMC platforms that might not be taken into account. This helps in countering unjustified generalizations. On the basis of the research done in this thesis I argue that at least the following elements should be considered in developing such dimensions: synchronous vs. asynchronous character of the platform, affordances for audio, visual, haptic, tactile and olfactory information exchange and whether communication is on a one-to-one or one-to-many basis.
4. Affordances of the chosen CMC platforms and (where possible) CMC in general should be investigated and differentiated. This also helps us increase context awareness and awareness of the broader implications of CMC use. Some examples of such observations on the basis of the research reviewed in the process of writing this thesis are:
 - The possibility to overcome large distances
 - Instant access with little effort or financial investment required
 - The possibility to constantly keep informed about one's social network to a degree that would be impossible in a normal life without CMC

- The promotion of short and primarily textual messages (mainly in synchronous text based CMC platforms)
 - The possibility to integrate all different kinds of media and digital information in one's interaction in some of the more developed forms of CMC such as social networking sites and virtual worlds.
 - Increased user control over interaction (when we interact, which information we put out into world and in who gets to see this information)
 - The possibility to take part in multiple conversations/interactions at the same time
 - The ability to recall interaction from the past. (most platforms allow for the storage of messages)
 - The possibility to develop several different pseudonyms/identities
 - The possibility for communities of choice (with both positive and negative results)
5. A clear understanding of which relationships are being considered and equally clear focus on such relationships in the study.
 6. A justifiable idea of what makes the considered relationships valuable and how the quality of these relationships can be decided. In the best case this should allow for a certain openness that allows for the identification of new ways in which newly identified practices or even new types of relationships (that take place via new forms of CMC) can be valuable.
 7. An idea of who develops such relationships and how the chosen research participants relate to this group. This should help in preventing questionable generalizations over different user populations
 8. Insight into the way users use different CMC platforms and how different combinations of CMC platforms and/or other media are used in relationship establishment and maintenance. This should also give insight into the significant part of the relationships formed and/or maintained using CMC that do not play out solely online. These insight should be combined with the observations on affordances developed in 4 to provide a more developed picture of the influences of CMC on the practice of friendship.

9. A study of user motivations for and expectations of relationships developed and/or maintained through CMC as these are likely to impact on both the uses CMC are put to as well as the type of relationships users generally develop.
10. A study of user evaluations of such relationships, which can inform an evaluation of the ways in which such relationships are valuable as well as lead to the identification of new ways in which computer mediated relationships can be valuable.
11. As none of the discussed theories is able to explain all empirical findings it seems best to combine currently popular theories and to try to nuance their deterministic tendencies. Insights from mediation theories from philosophy and sociology of technology can be very useful for this purpose.
12. Insights from 11 should be combined with 5 and 6 to provide an idea of how CMC platforms combined with certain user motivations might impact on the value and quality of the relationship. In all cases friendship should become central to the evaluation. In addition friendship should be related to the bigger picture of how our lives and our friendships are lived out and are changing in societies that feature large amounts of CMC and reason how different kinds of friendship can be valuable in this environment. In this way one can go beyond measuring CMC into FtF development terms and the interchange of cues and provide more insight in the deeper values that play a role in friendship.

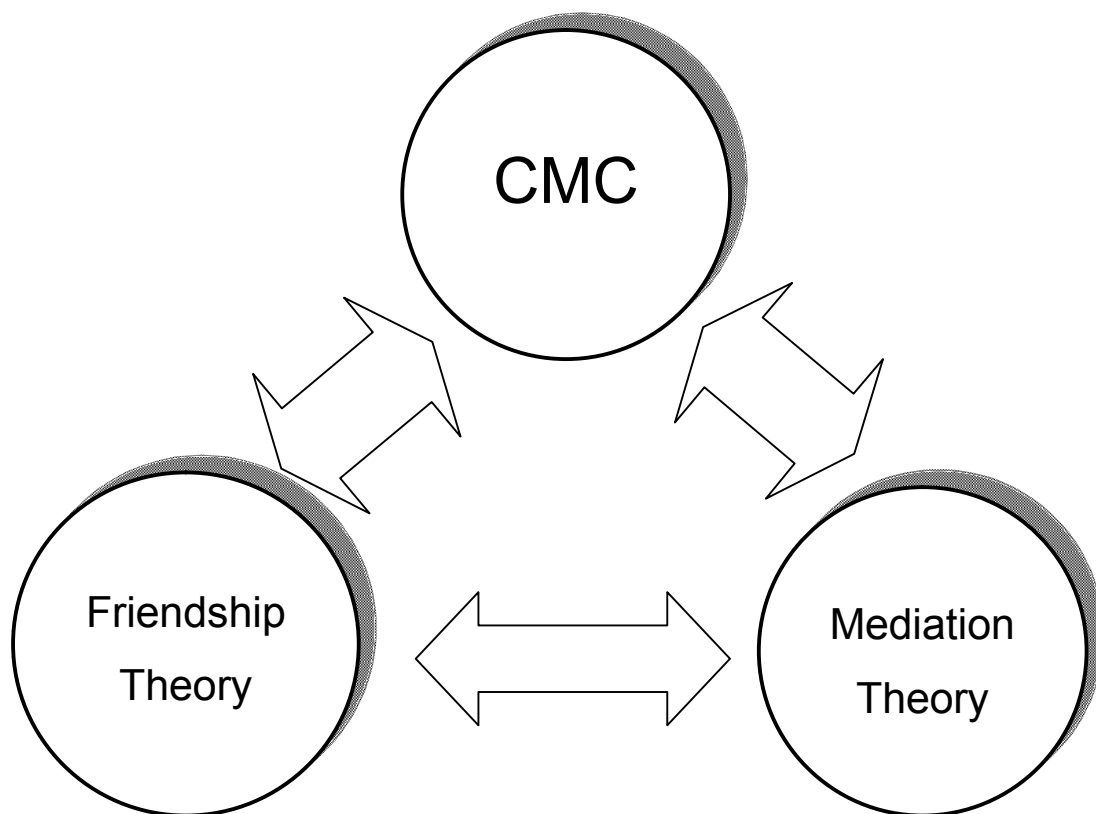


Figure 1. The three major categories of research

In general there are three categories in which these 12 elements can be divided that need to be considered when doing research into the role of CMC in friendship. These are (see figure 1.):

1. CMC
2. Friendship theories
3. Mediation theories

Each of these categories can be used as a starting point for research, depending on one's focus. In almost all cases, however, insights in one category can require one to revisit one of the other categories, as many of the elements in these categories are not completely detached from other elements but should be related in studying the role of CMC in friendship, for example user evaluations of a CMC relationship might cause one to develop new ideas about the possible ways in which friendship can be valuable. Empirical evidence about user behaviors with a certain CMC platform might cause one to adjust assumptions about the scope of agency attributed to users in one's theory of technological mediation. In addition, insights gained in one category might fuel new questions in another, for example in considering a certain theory of mediation one might question what effects are brought about

according to this theory in a certain CMC platform, which might require further research into the affordances and uses of the platform.

So far most studies of the Role of CMC in friendship have focused mainly on the third category and to a lesser extend on the first. In general the first and especially the second category have gotten insufficient attention, with the identified issues as a result. However even in the third category clear problems are evident. The problems in each of the three categories boil down to generally two types:

- Important parts of the work required in these categories are missing or left implicit where they should have been made explicit.
- Assumptions and conclusions in these categories are based on questionable methods and theoretical backgrounds.

What is thus needed is a framework that makes sure that all parts of these categories are actually present and that they have been developed in a justifiable way. In figure 2, 3 and 4 I give a flowchart that includes the major steps and data sources that need to be taken into account in each of these categories.

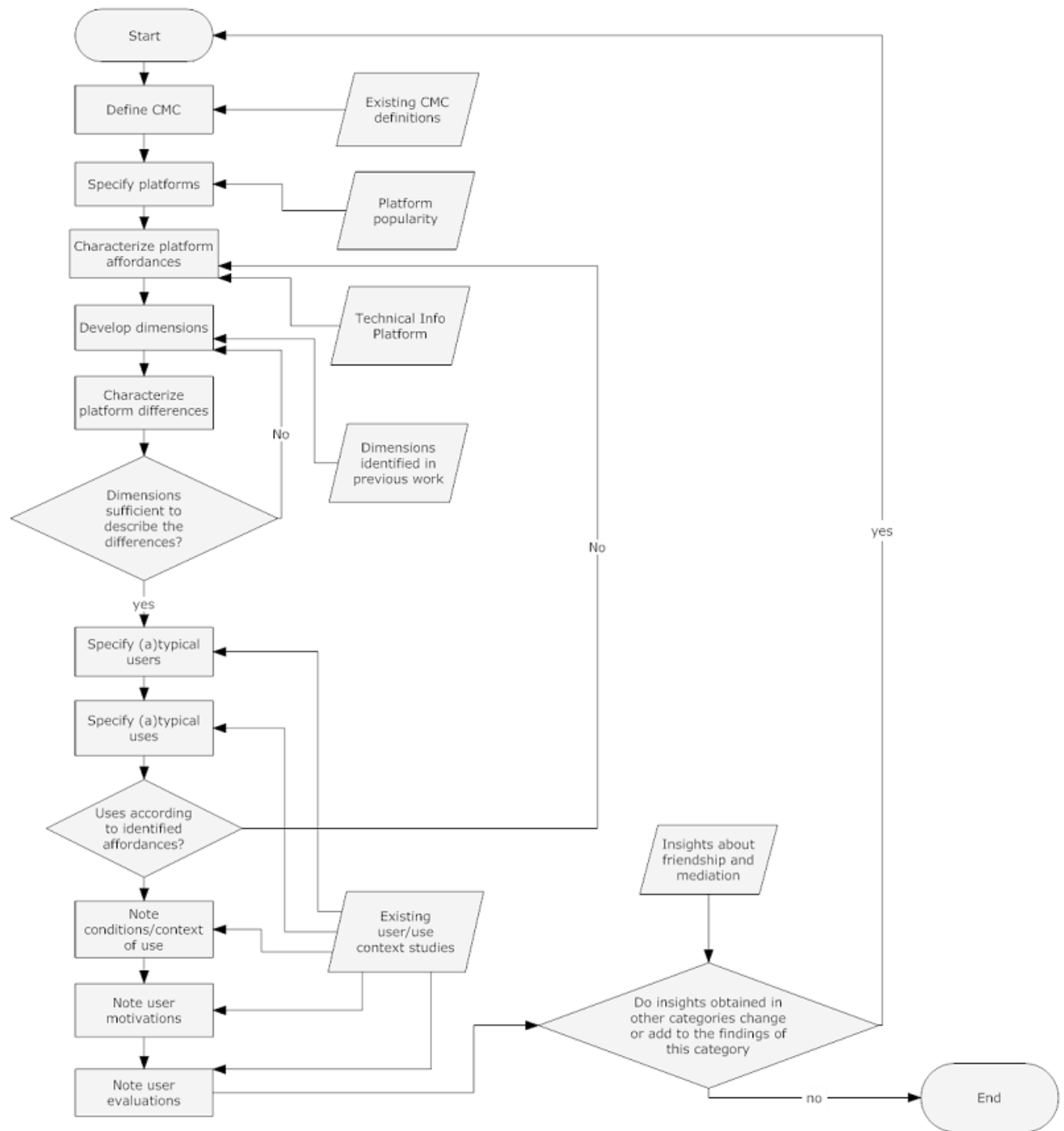


Figure 2. Flowchart of the CMC category

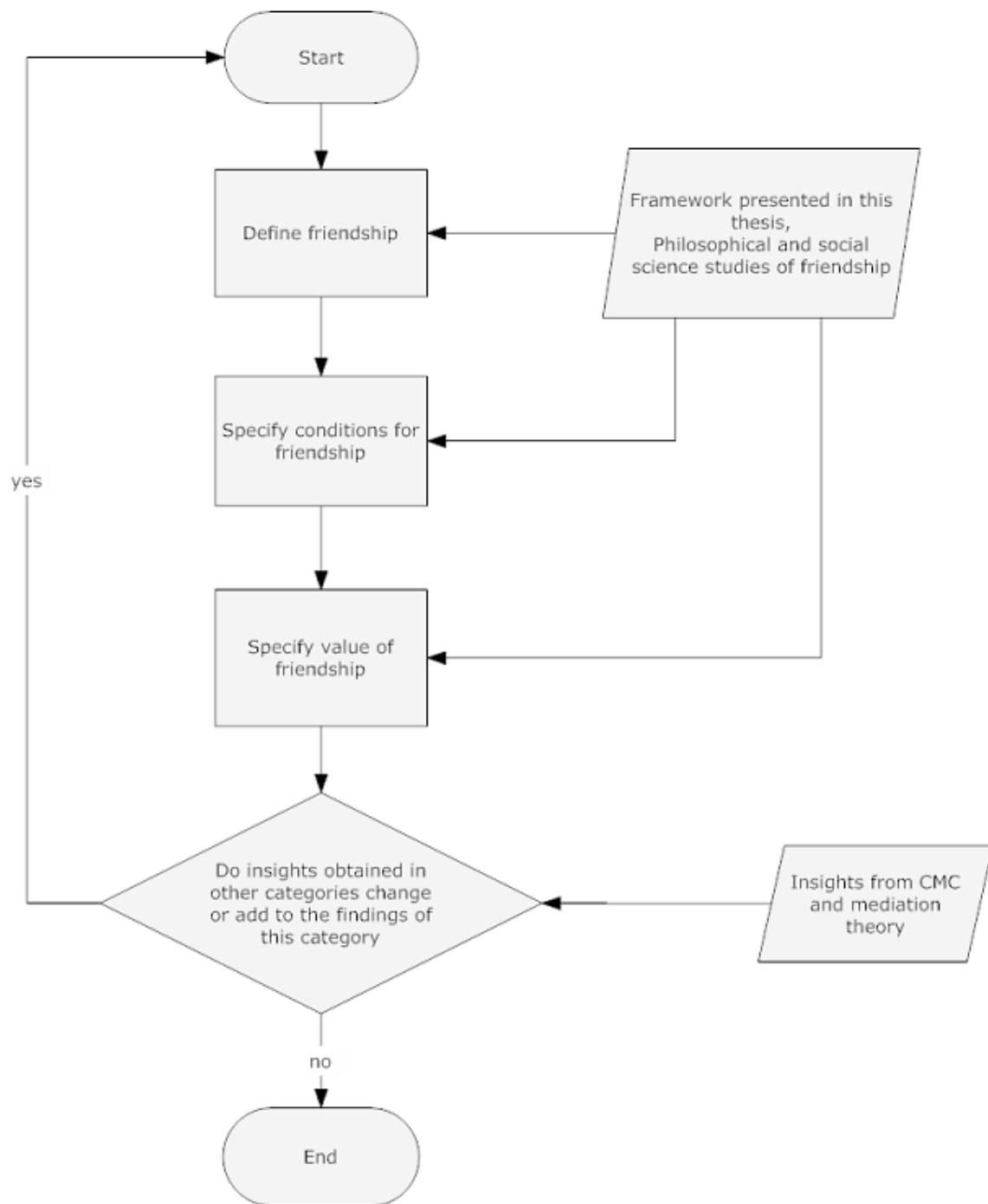


Figure 3. Flowchart of the Friendship theory category

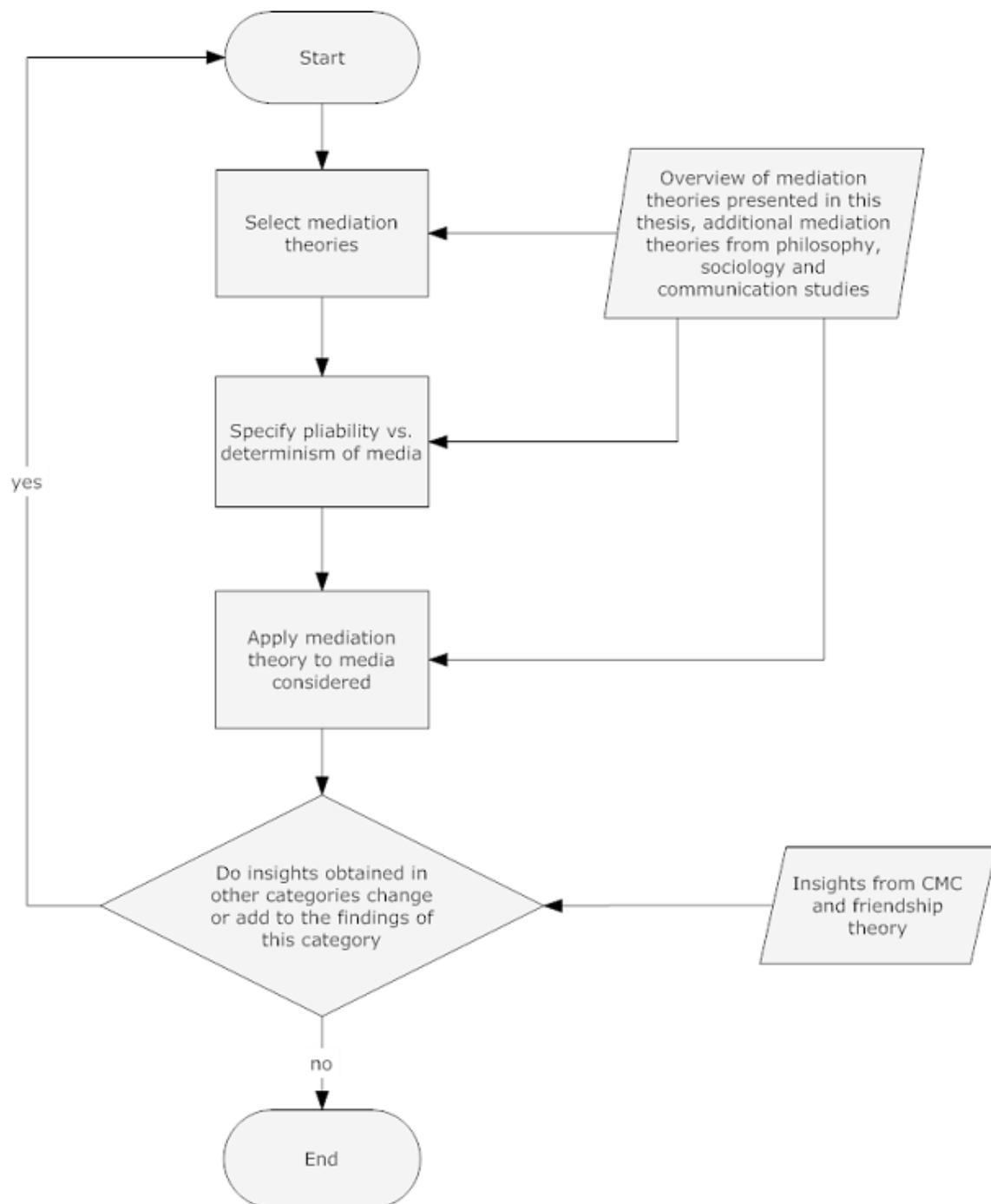


Figure 4. Flowchart of the Mediation theory category

This identification of important research elements and the structuring of these are two of the ways in which I hope this thesis will contribute to future research into the role of CMC in friendship. Additionally this thesis has developed many insights that can be used as inputs into the different research elements in each of the three major research categories (as indicated in the data input symbols in the flowcharts above). These are:

- A clear definition of CMC as:
a process involving two or more people participating in a two-way or multi-way exchange or development of information through networked computer systems
- An overview of different types of CMC and their affordances (see chapter 1), which can be used and elaborated on in future work.
- An overview of philosophical insights on friendship (see chapter 3), which can be used as entry points into the large body of literature available on friendship as well as incentives for thinking about new and existing friendship practices.
- A framework for thinking about friendship (see chapter 4), which can benefit the process of defining friendship and building models of its value.
- An overview and critique of theories applied to CMC and how these can be used to evaluate the role of CMC in friendship (see chapter 5 and this chapter).

I believe all of these parts have together provided increased clarity and structure that will benefit future work in this exciting and still young area of research and will help increase our understanding and possibilities to provide well-informed and justified evaluations of the practices that make up the field.

Conclusions

In the process of this thesis I've tried to answer the question:

How can well-informed evaluations of the role of CMC in friendship be developed?

With the aim of contributing to the debate on CMC friendship by:

1. Providing an empirically nuanced picture of the realities of computer mediated friendship
2. Assembling a flexible philosophical framework for and approach to assessing those realities
3. Demonstrating why this framework is superior to most existing theoretical evaluations of computer mediated friendship.

For this purpose I've investigated the a number of sub-questions:

What is CMC?

The following definition of CMC has been developed in this thesis:

a process involving two or more people participating in a two-way or multi-way exchange or development of information through networked computer systems.

On the basis of this notion of CMC chapter one has described the development and functioning of different popular CMC applications. It has become clear that CMC platforms differ quite extensively in the (combinations of) forms of communication they provide: synchronous vs. asynchronous, one-to-one vs. one-to-many, text-based vs. speech vs. video-based, private vs. public. In addition there are significant differences in interfaces, user and relationship representation and different forms of moderation. Extrapolating from the observations made in chapter one on the history of the Internet and CMC it is highly likely that the future will bring further possibilities in the forms of even more and higher bandwidth connections and new (combinations of) forms of interaction and representation.

Which roles does CMC typically play in friendship relationships and who is participating in computer mediated friendships and with which motives?

During the survey of the many smaller studies that made up the bulk of chapter two it has become clear that worldwide a large and varied group of people is developing and maintaining friendships online. In most developed countries a large part of the population has access to an Internet connection and many people use CMC for social purposes. As a result participants in computer-mediated friendships come from all over the world and include different ethnic groups. Although teenagers and young adults seem to be most frequently involved in online social activities, it is not uncommon for people from older age groups to participate in these activities as well and there seems to be a growth in participation among these groups. Both men and women are involved in computer mediated social practices. Females however seem to develop relationships online slightly more frequently.

Chapter two identified five popular motivation categories among participants in computer mediated friendships:

- Friendship for the sake of maintaining and/or enhancing existing offline friendships
- Friendship for the sake of broadening one's social environment
- Friendship for the sake of self-expression
- Friendship for the sake of achieving status
- Friendship for the sake of saving face

The surveyed data suggests that a large part of friending behavior online is motivated by offline relationships. In addition in many cases use of CMC is supplemented with use of other media and face-to-face communication. This leads to the question whether the distinction between on- and offline social relationships and in particular friendships that is made in many studies of CMC is actually justified.

Part of the friendships that develop online do not develop between people who are actively motivated by any of the above mentioned motives but develop rather spontaneously as a by-product of other computer mediated activities (this seems to happen especially often in active online communities).

From the research discussed in this thesis it has become clear that CMC provides a way to overcome some of the bounds in offline life, for example making it easier to develop cross-sex friendships. Although CMC does seem to increase people's freedom in interacting, social, cultural and ethnical background do still play an important role for at least a portion of the users.

Those participating in computer mediated friendships in most cases consider these

friendships as important and in many cases (nearly) as important as their offline friendships. A small number even consider them to be more important or enjoyable than their offline friendships.

How can we understand friendship and its value?

In chapter three and four a survey and analysis of theorizing on friendship has been given including both historical and contemporary accounts. On the basis of this work I have argued that friendship is a diverse concept that cannot easily be captured in an essentialist definition. Instead I have suggested to approach friendship from Ludwig Wittgenstein(1953/1967)'s notion of family resemblances. Several central themes that play an important role in theorizing about friendship have been identified:

- Variety (in focus, intensity and depth)
- Care (for one's friend for the person that he or she is)
- Shared activity
- Connectedness
- Identity shaping

Many of the elements that characterize friendship are related to the central themes discussed above. Some of these elements have a somewhat essential character, these are:

1. Friendship is reciprocal.
2. Friendship is a voluntary relationship
3. Friendship is a personal relationship and such relationships are characterized by the fact that those involved care for each other as a unique individual.
4. Related to this not all reasons will do for friendship and the actions that make up such friendships. A certain goodwill and care for one's friend always needs to be present. In addition friendly actions need at least to some extent be motivated by a desire to promote the welfare and happiness of one's friend.

Other less essential elements of many friendship are:

1. Friendship is in most cases a relationship of equality

2. Friendship is dynamic and non-institutionalized
3. Related to 2 most friendships are not completely exclusive
4. Friendships require time and effort to be maintained
5. As a result of 4 some exclusivity is always present in friendship
6. Friendship is a partial and conditional relationship

Apart from the contribution to the demarcation of friendship and the identification of its central themes, chapters three and four have also contributed to the evaluation of friendship by providing insight into the value of friendship. It has been argued that friendships can be seen as valuable for the following reasons:

- The support they provide (practical, material, moral, emotional, etc)
- Their promotion of one's self-knowledge and one's sense of self-worth.
- Their contribution to character improvement.
- Their life-enhancing qualities (providing coherence and meaning to our lives as well as increasing the depth of our experience)
- The societal benefits they provide (in relation to moral progress, bonding between members of state, promoting the care for and welfare of others)
- The economical benefit they can provide both to the functioning of business and to the organization of all kinds of support.

How has the role of CMC been studied and evaluated so far? and on the basis of which theories has this happened?

Chapter five and six has given an overview and critique of the current studies of the role of CMC in personal relationships and friendship in particular. In general CMC has largely been studied on the basis of empirical research among specific user groups and CMC platforms. Most research has come from the fields of communication studies and social psychology. Chapter five has discussed several currently popular theories that play a major part in many of the evaluations of the role of CMC. These are:

1. Social Presence Theory
2. Media Richness Theory
3. Deindividuation Theory

4. Social Identity Deindividuation Theory
5. Social Information Processing Theory
6. Hyperpersonal Model of CMC
7. Uncertainty reduction theory

The first three theories have mainly been used to give negative evaluations of the possibility, quality and value of computer-mediated friendship practices, emphasizing the negative consequences of information that is missing in CMC. Theories 5 to 7 have mainly led to mainly positive evaluations, arguing how this lack of information can be overcome or that it actually leads to positive consequences for relationship development and/or maintenance.

In which ways can current research and the evaluations resulting from that research be improved?

Chapters five and six have identified several shortcomings in current research:

1. Lack of clear/good definitions of friendship
2. Lack of convincing ways of evaluating the value of friendship.
3. The sharp distinction between CMC and FtF maintained in many studies seems to be much less sharp in actual practice.
4. None of the theories applied to CMC seems to be very successful in explaining all of the empirical findings and several need further empirical backing to several of their claims. In addition many provide a rather one-sided view of the possible effects of CMC.
5. Several of the theories and evaluations discussed in this thesis provide a rather deterministic view of technology and many studies take insufficient account of the influence of different user motivations as well as different and changing uses among different user groups.
6. A significant amount of studies pay insufficient attention to the differences in the character of interaction and affordances of different CMC platforms and/or focus on outdated CMC platforms. Leading to questionable generalization over CMC platforms.

7. Questionable generalizations over user groups and even different relationships are also not uncommon.

Chapter six has provided an approach for future research into the role of CMC in friendship that tries overcome these issues by using structured research in three areas: CMC, friendship theory and mediation theory. The insights developed in the rest of this thesis can help inform the three parts identified in this approach.

Discussion and recommendations

In this thesis work I've tried to improve on current reflections on CMC by the following means:

1. A clear presentation of CMC it's meaning and different forms
2. A broad overview of CMC practices
3. Critical thinking about the meaning and value of friendship
4. An extensive overview of current CMC studies and their evaluations
5. The application of philosophical insights to further research into this area

As far as I'm aware points 2, 3 are missing in almost all of the serious articles about CMC and personal relationships and there have been few works that have tried to achieve 4 or 5. This work has resulted in a framework that should help in thinking about friendship relationships and an approach for structuring research into the role of CMC in personal relationships and friendship in particular. In this way I hope to have contributed to better developed evaluations of the role of CMC in friendship. There are however several areas in which I think more research is valuable and that can lead to the further development of the approach presented in this thesis.

Firstly (and quite obviously) the application of the approach to actual research, as this is of course the ultimate test of its usability and is likely to increase awareness of its strengths and weaknesses. Secondly I would like to urge the development of theories of mediation of communication especially from a philosophy of technology perspective and focusing on CMC, as little work seems to be done in this direction and my thesis work has uncovered several areas where philosophical insights are likely to be beneficial to current research. Thirdly the increased study of practices and participants in new types of CMC. This is an evident and ongoing subject for research that is very relevant to any evaluation of the role of CMC in the development and maintenance of personal relationships. For one this could help provide an answer to the important question of which portion of CMC friendships are actually solely computer-mediated relationships and could provide greater clarity on which motives are most popular among CMC users who participate in computer mediated friendship practices.

References

- Abell, J.C. (2009, March 26). Facebook is your father's (and mother's) social network. Message posted to <http://www.wired.com/epicenter/2009/03/facebook-isyour/>
- Aelred (1991). Spiritual friendship. In M. Pakaluk (Ed.), E. Laker (Trans. 1974) *Other Selves: Philosophers of Friendship* (pp. 28-69), Indianapolis: Hackett Publishing Company Inc. (Original work published in 1148)
- Allan, G.(1989). *Friendship: developing a sociological perspective*. New York: Harvester Wheatsheaf.
- Anderson, T. L. (2005). Relationships among Internet attitudes, Internet use, romantic Beliefs, and perceptions of online romantic relationships. *CyberPsychology and Behavior*, 8(6), 521-531.
- Antheunis, M.L., Valkenburg, P.M., & Peter, J. (2007). Computer-mediated communication and interpersonal attraction: An experimental test of two explanatory hypotheses. *CyberPsychology & Behavior*, 10, 831-836.
- Antheunis, M.L., Valkenburg, P.M., & Peter, P. (2008a). *Getting acquainted through social network sites: testing a model of online uncertainty reduction and social attraction*. Paper presented at the annual meeting of the International Communication Association, Montreal, QC.
- Antheunis, M.L., Valkenburg, P.M., & Peter, P. (2008b). *The quality of online, offline, and mixed-mode friendships among users of a social network site*. Paper presented at the 2nd European Communication Conference of the European Communication Research and Education Association, Barcelona.
- Antheunis, M.L. (2009). *Online Communication, Interpersonal Attraction, and Friendship Formation*, (Doctoral Dissertation, University of Amsterdam, 2009).
- Aristotle (1991). Nicomachean ethics books VIII and IX. In M. Pakaluk (Ed.), T. Irwin (Trans. 1985), *Other Selves: Philosophers of Friendship* (pp. 28-69), Indianapolis: Hackett Publishing Company Inc.
- Ashlund, S.L., & Pemberton, S. (1996). A future for e-mail. In M. Tauber (Ed.) *Conference companion on Human factors in computing systems: common ground* (pp. 434). New York: ACM Press.

- Atkins, K. (2004, July 2). What are friends for? [Review of the book *Friendship: Liberty, Equality and Utility*], *Australian Financial Review*, Retrieved April 23, 2008, from <http://www.australianreview.net/digest/2004/06/atkins.html>
- Bacon, F. (1991). Of friendship. In M. Pakaluk (Ed.), *Other Selves: Philosophers of Friendship* (pp. 200-207), Indianapolis: Hackett Publishing Company Inc. (Original work published in 1610-1625)
- Badhwar, N.K. (1993). Introduction. In N. Badhwar (Ed.), *Friendship A Philosophical Reader* (pp. 1-37), New York: Cornell University Press.
- Bakardjieva, M. (2003). Virtual togetherness: an everyday life perspective. *Media, Culture & Society*, 25(3), 291-313.
- Bashor, P.S. (1968). Plato and Aristotle on friendship. *Journal of Value Inquiry*, 2 (2), 269-280.
- Bausch, S., & Han, L. (2006, May 11). *Social networking sites grow 47 percent, year over year, reaching 45 percent of web users, according to Nielsen//Netratings*, Retrieved December 10, 2007, from http://www.nielsen-netratings.com/pr/pr_060511.pdf
- Baym, N. K. (2001). Interpersonal life online. In S. Livingston & L. Lievrouw (Eds.), *The Handbook of New Media* (pp. 62-76), London: Sage Ltd.
- Bell, M. W. (2008). Toward a definition of “virtual worlds”. *Journal of Virtual Worlds Research*, 1(1), 1-5.
<http://journals.tdl.org/jvwr/article/viewFile/283/237>
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Theory*, 1(2), 99-112.
- Boase, J., Horrigan, J.B., Wellman, B., & Rainie, L. (2006, January 25). *The strength of Internet ties*. Retrieved June 20, 2008, from http://www.pewinternet.org/~media/Files/Reports/2006/PIP_Internet_ties.pdf.pdf
- Boase, J., & Wellman, B. (2006). Personal relationships: on and off the Internet. In D. Perlman & A.L. Vangelisti (Eds.), *Handbook of Personal Relations*(pp. 709-723), Oxford: Blackwell.
- Borgmann, A. (1999). *Holding on to Reality. The Nature of information at the turn of the millennium*. Chicago/London: University of Chicago Press.

- Boyd, D.M. (2006, December 4). Friends, friendsters, and top 8: writing community into being on social network sites. *First Monday*, 11(12).
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/1418/1336>
- Boyd, D.M., & Ellison, N.B. (2007). Social network sites: definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1)
<http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>
- Branden, N. (1993). Love and psychological visibility. In N. Badhwar (Ed.), *Friendship A Philosophical Reader* (pp. 1-37), New York: Cornell University Press.
- Buckman, J. (2001, April). A history of listservers. *Domino Power Magazine*,
<http://john.redmood.com/listservershistory.html>
- Castells, M. (2001). *The Internet galaxy, reflections on the Internet, business and society*. Oxford: Oxford university press.
- Chan, D.K.S., & Cheng, G.H.L. (2004). A comparison of offline and online friendship qualities at different stages of relationship development. *Journal of Social and Personal Relationships*, 21(3), 305-320.
- Chenault, B. (1998, May). Developing personal and emotional relationships via computer-mediated communication. *CMC Magazine*,
<http://www.december.com/cmc/mag/1998/may/chenault.html>
- Cheng, G.H.L., Chan, D.K.S., & Tong, P.Y. (2006). Qualities of online friendships with different gender compositions and durations. *Cyberpsychology & Behavior*, 9(3), 14-21.
- Cicero (1971). Laelius: On friendship. In M. Grant (Trans.), *On the Good Life* (pp. 172-227), New York: Penguin Books.
- Cicero (1991). On friendship (De Amicitia). In M. Pakaluk (Ed.), F. Copley (Trans. 1967) *Other Selves: Philosophers of Friendship* (pp. 77-116), Indianapolis: Hackett Publishing Company Inc.
- Cocking, D., & Kennett, J. (1998). Friendship and the self. *Ethics*, 108, 502-527.
- Cocking, D., & Matthews, S. (2000). Unreal friends. *Ethics and Information Technology*, 2(4), 223-231.
- Cole, H., & Griffiths, M.D. (2007). Social interactions in massively multiplayer online role-playing gamers. *Cyberspsychology & Behavior*, 10(4), 575-583.
- Coleman, L.H., Paternite, C.E., & Sherman, R.C. (1999). A reexamination of deindividuation

- in synchronous Computer-Mediated Communication. *Computers in Human Behavior* 15, 51-65.
- Coverdale, E. (2006). Cyberculture and gender identification in online chat communities. *Amalgan*, Spring 2006, 48-56.
<http://www.usi.edu/LIBARTS/amalgam/>
- Cummings, J.N., Butler B. & Kraut R. (2002). The quality of online social relationships. *Communications of the ACM*, 45(7), 103-108.
- Cummings J.N., Lee J.B. & Kraut R. (2006). Communication technology and friendship during the transition from high school to college. In R.E. Kraut, M. Brynin, S.Kiesler (Eds.), *Computers, phones, and the Internet: Domesticating information technology* (pp. 265-278), Oxford University Press, New York.
- December, J. (n.d.). *What is Computer-mediated Communication?* Retrieved April 20, 2008, from
<http://www.december.com/john/study/cmc/what.html>
- December, J. (1997, January). Notes on defining of Computer-Mediated Communication. *CMC Magazine*.
<http://www.december.com/cmc/mag/1997/jan/december.html>
- Dennis, A.R., & Kinney, S.T. (1998). Testing media richness theory in the new media: The effects of cues, feedback, and task equivocality. *Information Systems Research*, 9, 256 - 274.
- DeVito, J.A. (1992). *The Interpersonal Communication Book*. New York: HarperCollins.
- Dobra, A. (2008). World of Warcraft Breaks Records and Reaches 11.5 Million Users. Retrieved July 2, 2009, from
<http://news.softpedia.com/news/World-of-Warcraft-Breaks-Records-and-Reaches-11-5-Million-Users-100796.shtml>
- Donath, J., & Boyd, D. (2004). Public displays of connection. *BT Technology Journal*. 22(4), 71-82.
- Emerson, R.W. (1991). Friendship. In M. Pakaluk (Ed.), *Other Selves: Philosophers of Friendship* (pp. 218-232), Indianapolis: Hackett Publishing Company Inc. (Original work published in 1840-1841)
- Ferris, P. (1997). *What is CMC? An overview of scholarly definitions*. Retrieved April 20, 2008, from
<http://www.december.com/cmc/mag/1997/jan/ferris.html>

- Fono, D., & Raynes-Goldie, K. (2006). Hyperfriends and beyond: friendship and social norms on LiveJournal. In Consalvo, & C. Haythornthwaite (Eds.), *Internet Research Annual Volume 4: Selected Papers from the Association of Internet Researchers Conference*, New York: Peter Lang.
- Frankfurt, H.(2004). *The reasons of love*. Princeton: Princeton University Press.
- Friedman, M. (1989). Feminism and modern friendship: dislocating the community. In N. Badhwar (Ed.), *Friendship A Philosophical Reader* (pp. 1-37), New York: Cornell University Press.
- Friendship. (2005). In *Stanford Encyclopedia of Philosophy*. Retrieved November 6, 2008, from <http://plato.stanford.edu/entries/friendship/>
- Gedney, C. (1990). Understanding e-mail addresses. *ACM SIGUCCS Newsletter*, 20(4), 8-23.
- Giddens, A.(1991). *Modernity and self-identity*. Stanford: Stanford University Press.
- Hardie, E., & Buzwell, S. (2006). Finding love online: The nature and frequency of Australian adults' Internet relationships, *Australian Journal of Emerging Technologies and Society*, 4(1), 1-14.
- Harper, V. (1998). *Computer-Mediated Communication (CMC): A response to the Social Information Processing perspective*, Paper presented at the AEJMC 1998 Convention, Baltimore MD.
- Hauben, R. (1995). Chapter 8, The birth and development of Arpanet. In M. Hauben & R. Hauben (Eds.), *Netizens: On the History and Impact of Usenet and the Internet*. Retrieved September 20, 2007, from <http://www.columbia.edu/~hauben/netbook/>
- Hendra, A. (2006). *Will you be my friend? An analysis of friendster.com* (Master thesis, Wichita State University, 2006), Retrieved from Shocker Open Access Repository, <http://soar.wichita.edu/dspace/bitstream/10057/282/3/t06003.pdf>
- Higgins, R. (1991). *Computer-mediated cooperative learning: synchronous and asynchronous communication between students learning nursing diagnosis*, (Doctoral Dissertation, University of Toronto, 1991).
- Hu, Y., Wood, J.F., Smith, V., & Westbrook, N. (2004). Friendships through IM: examining the relationship between Instant Messaging and intimacy, *Journal of Computer-Mediated Communication*, 10(1).

<http://jcmc.indiana.edu/vol10/issue1/hu.html>

Internet World Stats (2009a). *European Union Internet usage and population stats*. Retrieved May 11, 2009, from

<http://www.internetworldstats.com/europa.htm#nl>

Internet World Stats (2009b). *European Union Internet usage stats and population statistics*. Retrieved May 11, 2009, from

<http://www.internetworldstats.com/stats9.htm>

Johnson, D., Sutton, P., & Poon, J. (2000). Face-to-face vs CMC: student communication in a technologically rich learning environment. *Proceedings 17th Annual Conference of the Australian Society for Computers in Learning in Tertiary Education: ASCILITE 2000*, http://www.ascilite.org.au/conferences/coffs00/papers/daniel_johnson.pdf

Joinson, A.N. (2001). Self-disclosure in computer-mediated communication: the role of self-awareness and visual anonymity. *European Journal of Social Psychology*, 31(2), 177-192.

Kang, S. (2007). Disembodiment in online social interaction: impact of online chat on social support and psychosocial well-being. *Cyberpsychology & Behavior*, 10(3).

Kant, I. (1991). Lecture on friendship. In M. Pakaluk (Ed.), L.Infield (Trans. 1930), *Other Selves: Philosophers of Friendship* (pp. 208-217), Indianapolis: Hackett Publishing Company Inc.

Kock , N. (2005). Media Richness or media naturalness? *IEEE Communications on professional communication*, 48(2), 117-130.

Kolb, D. (1996). Discourse across links. In C. Ess (Ed.), *Philosophical Perspectives on Computer Mediated Communication*(pp.15-27), Albany: Suny.

Kövecses, Z. (1995). American friendship and scope of metaphor. *Cognitive Linguistics*, 6(4), 315–346.

Kzero Research (2008). *Virtual World total registered accounts*. Retrieved July 1, 2009, from <http://www.kzero.co.uk/blog/wp-content/uploads/2008/01/all-world-numbers-v11001.jpg>

LaFollette, H.(1996). *Personal relationships: love, identity, and morality*. Oxford: Blackwell.

Lampe, C. (2006). *Ratings use in an online discussion system: the slashdot case* (Doctoral Dissertation, The University of Michigan, 2006), Retrieved from Cliff Lampe's Home Page, <http://www.msu.edu/~lampecli/papers/dissertation.pdf>

- Lampe, C., Ellison, N., & Steinfield, C. (2007). A familiar face(book): profile elements as signals in an online social network. In B. Begole, S. Pay, E. Churchill, R. St. Amant, D. Gilmore & M. Rosson (Eds.) *Conference on Human Factors in Computing Systems* (pp. 435-444). New York: ACM Press.
- Lea, M., & Spears, R. (1995). Love at first byte? Building personal relationships over computer networks. In J. T. Wood & S. Duck (Eds.), *Understudied relationships: Off the beaten track* (pp. 197-233). Newbury Park, CA: Sage.
- Lenhart, A., & Madden, M. (2007). *Pew Internet project data memo*. Retrieved July 5, 2007, from <http://www.scribd.com/doc/15002/Teens-and-Social-Networking-PEW-Internet-2007>
- Lenhart, A., Rainie, L., & Lewis, O. (2001). *Teenage life online: the rise of the Instant-Message generation and the Internet's impact on friendship and family relations*. Retrieved June 25, 2009, from <http://www.pewinternet.org/Reports/2001/Teenage-Life-Online.aspx>
- Leung, L.(2001). College students motives for chatting on ICQ. *New Media & Society*, 3(4), 483-500.
- Linden Lab (2009). Second Life | economic statistics (raw data files). Retrieved July 2, 2009, from <http://secondlife.com/statistics/economy-data.php>
- Long, R.T.(2003). The value in friendship. *Philosophical Investigations*, 26(1), 73-77.
- Lynch, S. (2002). Aristotle and Derrida on friendship. *Contretemps*, 3, 98–108.
- Lynch, S. (2005). *Philosophy and friendship*. Edinburgh: Edinburgh University Press LTD.
- Mace, M. (2008). Online Communities and Their Impact on Business. Part Three: Web Community and Social Life. Message posted to http://rubiconconsulting.com/insight/winmarkets/michael_mace/2008/10/online-communities-and-their-i-4.html
- Matei, S., & Ball-Rokeach, S. (2001). Real and virtual social ties: connections in the everyday lives of seven ethnic neighbourhoods. *American Behavioral Scientist*, 45(3), 550-564.
- Matsuba, M.K. (2006). Searching for self and relationships online compositions and durations. *Cyberpsychology and behavior*, 9(3), 14-21.
- McKenna, K.Y.A., Green, A.S., & Gleason, M.E.J. (2002). Relationship formation on the

- Internet: what's the big attraction. *Journal of Social Issues*, 58(1), 9-31.
- Media Richness Theory (2004, September 9). Retrieved June 24, 2009, from http://www.tcw.utwente.nl/theorieenoverzicht/Theory%20clusters/Mass%20Media/Media_Richness_Theory.doc/
- Men form strong bonds of friendship via online games (2006, May 19). *Chicago Sun-Times*.
- Miura, A., & Shinohara, K. (2005). Social intelligence design in online chat communication: a psychological study of congestion effects. *AI & Society*, 19(1), 93-109.
- Montaigne, M. (1991). Of friendship, In M. Pakaluk (Ed.), *Other Selves: Philosophers of Friendship* (pp. 208-217), Indianapolis: Hackett Publishing Company Inc.
- Murray, P., J. (1997, January). A rose by any other name. *CMC Magazine*.
<http://www.december.com/cmc/mag/1997/jan/murray.html>
- Nardi, B.A. (2005). Beyond bandwidth: dimensions of connection in interpersonal communication. *Computer Supported Cooperative Work*, 14(2), 91-130.
- Nardi, B.A., Whittaker, S. & Bradner, E. (2000). Interaction and outeraction: Instant Messaging in action, *Proceedings of the 2000 ACM conference on Computer supported cooperative work* (pp.79-88). New York: ACM Press.
- Nottingham Trent University (2007). *Online gamers meet life-long friends and partners in virtual worlds*, Retrieved June 23, 2009, from http://www.ntu.ac.uk/news_events/news/archive/2007/78179.html
- Ostrow, A. (2009, March 16). Twitter now growing at a staggering 1,382 percent. Message posted to <http://mashable.com/2009/03/16/twitter-growth-rate-versus-facebook/>
- Papadakis, M.C. (2003), *Computer-mediated communities: the implications of information, communication, and computational technologies for creating community online*. Retrieved April 23, 2008, from http://www.sri.com/policy/csted/reports/sandt/it/Papadakis_IT_virutal_communities_main_report.pdf
- Parks, M.R., & Floyd, K.(1996). Making friends in cyberspace. *Journal of Communication*, 46(1), 80-97.
- Parks, M. R., & Roberts, L. D. (1998). Making MOOsic: the development of personal relationships on-line and a comparison to their off-line counterparts. *Journal of Social & Personal Relationships*, 15(4), 517-537.

- Peris, R., Gimeno, M.A., Pinazo, D., Ortet, G., Carrero, V., Sanchiz, M., & Ibanez, I. (2002). Online chat rooms: virtual spaces of interaction for socially oriented people. *CyberPsychology & Behavior*, 5(1), 43-51.
- Peter, I. (2004). *Early Internet - history of PC networking*. Retrieved April 23, 2008, from <http://www.nethistory.info/History%20of%20the%20Internet/pcnets.html>
- Plato (2006). *Lysis; or friendship by Plato*. Jowett, B. (translation and introduction), Retrieved April 23, 2008, from <http://etext.library.adelaide.edu.au/p/plato/p71ly/>
- Postmes, T. (2007). Deindividuation. In R. F. Baumeister & K. D. Vohs (Eds.), *Encyclopedia of Social Psychology*. London: Sage.
- Preece, J., Maloney-Krichmar, D. & Abras, C. (2003). History of emergence of online communities. In *Encyclopedia of Community* (1023-1027). Thousand Oaks, CA: Sage Publications.
<http://www.ifsm.umbc.edu/~preece/paper/6%20Final%20Enc%20preece%20et%20al.pdf>
- Quan-Haase, A., & Wellman, B. (2004). How does the Internet affect social capital? In M. Huysman & V. Wulf (Eds.) *Social Capital and Information Technology* (pp. 113-135). Cambridge, MA: MIT Press.
- Reicher, S. D., Spears, R. & Postmes, T.(1995). A Social Identity Model of Deindividuation phenomena. *European Review of Social Psychology*, 6(1),161-198.
- Reingold, H. (1993). *The virtual community: homesteading on the electronic frontier*. Retrieved June 24, 2009, from <http://www.well.com/~hlt/vcbook/>
- Romiszowski, A., & Mason, R. (2003). Computer-Mediated Communication. In D. Jonassen (Ed.). *Handbook of Research on Educational Communications and Technology* (pp. 397-432). Mahwah, NJ: Erlbaum.
<http://www.aect.org/edtech/15.pdf>
- Rosen, C. (2007). Virtual friendship and the new narcissism. *The New Atlantis*, 17, 15-31.
<http://www.thenewatlantis.com/publications/virtual-friendship-and-the-new-narcissism>
- Roseneil, S. (2004). Why we should care about friends: an argument for queering the care imaginary in social policy. *Social Policy & Society*, 2(4), 409-419
- Santoro, G. M. (1995). What is Computer Mediated Communication? Z.L. Berge & M.P. Collins (Eds.). *Computer Mediated Communication and the Online Classroom*:

- Overview and Perspectives* (pp. 11-27). Cresskill, NJ: Hampton Press.
- Seneca (1991). On philosophy of friendship epistle IX, In M. Pakaluk (Ed.), *Other Selves: Philosophers of Friendship* (pp. 117-128). Indianapolis: Hackett Publishing Company Inc.
- Shiu, E., & Lenhart, A. (2004), *How Americans use Instant Messaging, Pew Internet & American Life Project*. Retrieved August 15, 2007, from http://www.pewinternet.org/pdfs/PIP_Instantmessage_Report.pdf.
- Shklovski, I., Kiesler, S., & Kraut, R. E. (2006). The Internet and social interaction: A meta-analysis and critique of studies, 1995-2003. In R. Kraut, M. Brynin, & S. Kiesler (Eds.), *Domesticating information technology* (pp. 251-264). New York: Oxford University Press.
- Short, J. A., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London: John Wiley & Sons.
- Sterling, B. (1993). A short history of the Internet. *The Magazine of Fantasy of Science Fiction*. Retrieved June 20, 2009, from <http://www.library.yale.edu/div/instruct/internet/history.htm>
- Stivers, T., & Sidnell, J. (2005). Introduction: multimodal interaction. *Semiotica* 156(1/4), 1-20.
- Symantec (2008). *New Global report reveals startling statistics about online digital family behavior*. Retrieved June 30, 2009, from http://www.symantec.com/en/uk/about/news/release/article.jsp?prid=20080213_01
- Symantec (2009). *Norton online living report 09*. Retrieved June 30, 2009, from http://www.nortononlineliving.com/documents/NOLR_Report_09.pdf
- Synovate (2008). *Social networking myths and facts: It seems everyone is social networking. Or are they?*, Retrieved May 1, 2009, from http://www.synovate.com/changeagent/index.php/site/full_story/social_networking_myths_and_facts/
- Telfer, E. (1991). Friendship. In M. Pakaluk (Ed.), *Other Selves: Philosophers of Friendship* (pp. 218-232), Indianapolis: Hackett Publishing Company Inc. (Original work published 1970).
- The Economist (2009, February 26). Primates on Facebook. Retrieved June 30, 2009, from http://www.economist.com/sciencetechnology/displayStory.cfm?story_id=13176775

- Tidwell, L. C., & Walther, J. B. (2002). Computer-Mediated Communication effects on disclosure, impressions, and interpersonal evaluations getting to know one another a bit at a time. *Human Communication Research*, 28, 317-348.
- Turkle, S. (1995). *Life on the screen: identity in the age of the Internet*. New York: Simon and Schuster.
- USC-Annenberg Digital Future Project (2006), *Online world as important to Internet users as real world?* Retrieved June 23, 2009, from <http://www.digitalcenter.org/pdf/2007-Digital-Future-Report-Press-Release-112906.pdf>
- Utz, S. (2000). Social information processing in MUDs: the development of friendships in virtual worlds. *Journal of Online Behavior*, 1(1).
- Verbeek, P.P.C. (2002). Devices of engagement: on Borgmann's philosophy of information and technology. *Techne*, 6(1), 69-92.
- Vernon, M. (2005). *The philosophy of friendship*. New York: Palgrave Macmillan.
- Walther, J.B. (1992). Interpersonal effects in computer-mediated interaction: a relational perspective. *Communication Research*, 19(1), 52-90.
- Walther, J. B (1995)., Relational aspects of Computer-Mediated Communication: experimental observations overtime. *Organization Science*, 6(2), 186-203.
- Walther, J.B., (1996). Computer-Mediated Communication: impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23(1), 3-43.
- Walther, J.B., Loh, T. & Granka, L. (2005) Let me count the ways: the interchange of verbal and nonverbal in computer-mediated and face-to-face affinity. *Journal of Language and Social Psychology*, 24(1), 36-65.
- Wellman, B. (1999). The social affordances of E-mail, *ACM SIGGROUP Bulletin*, 20(2), 63.
- Wellman, B., Quan Haase, A., Witte, J., & Hampton K. (2001). Does the Internet increase, decrease, or supplement social capital? *American Behavioral Scientist*, 45(3), 437-456.
- Whittaker, S. (2003). Theories and methods in mediated communication. In A. Graesser, M. Gernsbacher, & S. Goldman (Eds.). *The Handbook of Discourse Processes* (pp. 243-286). Mahwah, NJ: Lawrence Erlbaum Associates.
- Whitty, M. T. (2008). Liberating or debilitating? An examination of romantic relationships, sexual relationships and friendships on the Net. *Computers in Human Behavior*, 24, 1837-1850.

- Williams, J.B.(2005). *Collaborative software and community building* (Doctoral Dissertation, Kansas State University, 2005). Retrieved from K-State Research Exchange, <http://krex.k-state.edu/dspace/bitstream/2097/87/1/JeffreyWilliams2005.pdf>
- Wittgenstein, L.J.J. (1967). *Philosophical Investigation* (3rd ed.). G.E.M. Anscombe (Trans.), Oxford: Blackwell. (Original work published in 1953)
- Wolak, J., Mitchell, K., & Finkelhor, D. (2003). Escaping or connecting? Characteristics of youth who form close online relationships. *Journal of Adolescence*, 26, 105-119. <http://www.netsmartz.org/pdf/EscapingOrConnecting.pdf>
- Workman, J.P., Jr. (1992). Use of electronic media in a participant observation study. *Qualitative Sociology*, 15(4), 419-425.
- Zakon, R.H. (2006). *Hobbes' Internet timeline v8.2*. Retrieved June 25, 2009, from <http://www.zakon.org/robert/internet/timeline/>