

# DIRECT AND MEDIATED INTERACTION IN THE MAINTENANCE OF SOCIAL RELATIONSHIPS

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**Abstract:** This paper is an analysis of how mediated interaction has changed the ways in which we establish and develop interpersonal relationships. The paper examines the dimensions of friendship and also the attempts to separate out the role of interaction via various media such as mobile telephony, MUDs, MOOs, and IRC. The paper finds that interaction via the Internet may aid the establishment of relationships. The relationships are, however, slower to develop and necessarily migrate over to other forms of communication including face to face interaction. After the establishment of a relationship there is a preference for more simultaneous, direct interaction with which one can co-ordinate every day activities.

## 1. INTRODUCTION

The inspiration for this article comes from two sources. The first is a long-standing interest in the role of mediated communication. This interest is perked by the debate of the potential for virtual relationships and the replacement of face-to-face interaction with mediated interaction in a wide variety of social settings.

The second motivation is work done by Calhoun examining the role of mediated interaction on the integration of community [12], [13]. Based on Cooley's distinction between primary and secondary relationships, Calhoun expands this to include four levels. The first of these, primary relationships, are characterized as being directly interpersonal, i.e. face-to-face and

involving “the whole person.” Secondary relationships are also direct but might also include “relationships that require the mediation of a complex communication system.” Tertiary relationships are those in which one never meets the other face-to-face but rather the relationship is mediated through a communication system. As an example Calhoun points to bureaucracies in which one sends in an application that is handled by a person functioning in a bureaucratic position. In many cases Internet based relationships via Internet Relay Chat (IRC or chat), MUDs and MOOs can also be seen in this light. Finally, Calhoun describes quaternary relationships in which the individual is not even aware that they are the subject of interest. Situations in which there is wire tapping or other forms of eavesdropping fit into this group.

Calhoun sets this progression from the intimate and unmediated to the remote and totally mediated into the context of modernity and skillfully draws out the tendency for more and more indirect relationships in modern society. It is interesting to note, however, that the discussion of mediated relationships is, in effect, the discussion of two separate issues that have intersected. The first dimension has to do with interpersonal attachment. The second considers various layers of mediation. While it is true, following Calhoun, that there are those relationships that are never consummated with face-to-face interaction, there are very few relationships that are exclusively direct. It also seems that relationships move back and forth along the dimensions of mediation at various points in their development. This may include the move from asynchronous to synchronous, from text to voice and perhaps to visual interaction. The examination of this interaction is the focus of this paper.

When one brings up this issue one can see that, the boundaries are changing. Mediated interaction, particularly electronically mediated interaction via systems such as the Internet and the mobile telephone system, shifts the boundaries of interaction. Where before there was more of an emphasis on face-to-face interaction now one employs technology to either develop or maintain relationships.

In many ways, it is the shifting boundaries that are the cause of comment. That people meet lovers over the Internet and children coordinate their social life over mobile telephones is new. At the same time third parties, such as marketing agencies, are gaining ever more personal insight into our personal lives.

These phenomena are surprising and they cause us to question the nature of social interaction. This is happening at such a high speed that it has become the focus of comment. With the anticipated integration of mobile telephony and the Internet one is given pause to ask what the social effects of this conversion may be. Will it result in new friendship patterns and forms

of interaction or will it isolate people who no longer feel the need to interact face-to-face [16]. How does mediation change social interaction? Is face-to-face interaction a necessary condition for social cohesion?

The first issue I will take up is to examine the nature and the complexity of relationships, how they are established and how they are maintained. Following this I will consider the impact of Information and Communication Technologies (ICT).

## **2. THE NATURE OF INTERPERSONAL RELATIONSHIPS**

One has a variety of relationships that range from the multi-faceted to the superficial [33]. There are those in which one shares a broad variety of facets. A well established couple can, for example, share interests, political perspective, the concern and joy derived from children, the striving to buy and provide for a home, etc. Thus, there are a whole set of points outlining the interaction between the two [5]. The relationship between marriage partners is perhaps the ideal type for which Calhoun calls the "whole person." This is of course a relative concept since even in the most intense and close relationships there is room for the individual and their idiosyncrasies.

By contrast, there are social relationships that are quite short lived, such as paying a toll to a person in the tollbooth. Here, one would have to go to extraordinary measures to make this interaction into anything more than the simple exchange of money for access. In this case, the two do not even have to share the same language. So long as a common and limited definition of the situation exists then there is no trouble. None-the-less, there are a set of conventions and cultural intersections that maintain in this situation. Most often both partners know what is expected of each. If one steps outside of this script one is redefining the situation. If one begins to ask about the family life of the other, or asks if they know where one can get their vacuum cleaner repaired, then one is moving into realms that are not a part of the simple interaction.

When considering this range of possibilities, one is prompted to ask how it is possible to establish friendships. It is quite complex to sort through the various persons one meets on an everyday basis and determine if they are potential friends and if so, how one might proceed in creating contact, developing awareness, establishing mutual points of interest and the development of trust and mutual respect. In this section of the paper I will examine the development of the most basic social group, i.e. the dyad. While this is one of basic social structures it is not to say that society is simply the

sum of all dyads. Various social dynamics pertain for groups of different sizes.<sup>16</sup> In addition, come the effects and impacts of various overgirding social institutions and social facts such as culture and language. None-the-less, the examination of the formation of social dyads provides one with insight into the complexity of social interaction and the inroads that ICT will likely make.

## 2.1 Availability

One approach to describing the nature of interpersonal relationships, be they same sexed or involving opposite sexed members, is that each individual can be seen as a bundle of interests and activities.<sup>17</sup> In isolation, however, these would go unnoticed and isolated. Obviously there are many institutions that have, as a portion of their activity, to bring people into routine contact and thus provide the opportunity to introduce persons to each other. Universities sort out the “educated” from the less literate. Within the context of American universities, the Greek system of fraternities and sororities provide a further function that is more attuned to the social needs of the members. The summer church camp provides a way for those of similar belief systems to meet and establish friendships. Housing developments such as Festinger’s Westgate Court provide proximity to persons in a similar life phase [15]. Various clubs and associations provide a backdrop for individuals to connect and “network” and, as we will see in the subsequent portions of the paper, the various IRC and chat functions on the Internet can function as the context in which people meet and interact.

These institutions provide routine activities that aid in introducing individuals to each other. Routinized activities provide individuals proximity, a common context and a common definition of activities. It is with this group that one is likely to establish contact [57].

Within the context of routinized interaction it is homogamy, i.e. that which is similar, that generally guides our search for relationships and friends. This is particularly true for the more encompassing relationships in our lives such as marriage partners and close friends. In these situations it is more likely that the individuals will have similar socio-economic status, religion, ethnic background and age [5], [27], [30], [46]. This notion also extends to our self-perceptions in that we seek out those whom we perceive to be somewhat similar in terms of attractiveness and ability [7]. Obviously,

<sup>16</sup> One can think, for example of mob behavior and mass panic that is quite impossible to imagine in smaller social groups.

<sup>17</sup> One is reminded of Thoreau’s poem: I am a parcel of vain strivings tied/ By a chance bond together.

some of the dimensions are difficult to quantify, i.e. a similar sense of humor, the glint in one's eye or the penchant for introspection.

## **2.2 Eligibility**

In addition to availability there is also the issue of who is appropriate. If, for example, status differences are too great the person of lower status will likely hesitate to seek contact with the other. If this norm is ignored and the lower status person perseveres there will probably not be reciprocity on the part of the higher status person. If the two establish some form of repartee that is too close, each will be exposed to sanctioning from their respective peer groups. Thus, at the same time that one is busy gathering information about commonalities there is also the interest in mapping out the individual's drawbacks. If important dimensions are incompatible, no number of other common interests and traits will cover up the incongruity.

Another issue associated with eligibility is the perceived attractiveness of the potential friend. According to Backman ([3], 242-43) there is a type of success potential evaluation that one carries out as they are in the process of seeking out potential relationships (see also [7]). One tends to overlook those persons who are seen as being too glamorous, clever or socially graceful for one to match. None-the-less one is likely to give the benefit of the doubt to those that fulfill social norms of beauty or intelligence. That is one tries to "trade up" when they are on the market for new friends. Another element in weighing up the establishment of new friendships is the other opportunities that one forgoes.

When one is in the process of establishing a relationship there is a type of identity management that takes place. Certain displays are made and props of various types are brought forth and arrayed such that the potential friend can observe them [19], [20].

This leads up to the first direct contact. In traditional face-to-face situations, direct gaze is often one of the indicators of interest [11]. Gaze is perhaps one of the most nuanced types of interaction. Facial expressions lasting as little as 200 ms have meaning in the interpretation of an interaction [8], (see also [1] and [2]). Gaze is also a minor violation of everyday decorum. One is taught to avoid staring at others, as it is an indication that the one being stared at is not within the boundaries of that which is accepted as normal. Thus, the use of gaze sets the social situation apart and, if both parties are aware of the gaze as norm violation, it can be interpreted as a type of low level communication.

If the interaction ends at the level of staring, then no relationship is likely to develop. A verbal interaction is often the next step in the process. The opening line, the butt of many jokes and the source of many clichés, has two

elements. The first is the display of identification, that is a signal that the other is a potential partner in some form of friendship. This is matched by some form of access display, i.e. either an opening for further interaction or a closure [56]. One can see that there is quite an elaborate social interaction before the opening dialogue has been exchanged. The social sorting of the various institutions, negotiations of eligibility and finally the preliminary interaction, such as the exchange of glances, usually need to be in place before the couple exchanges words.

All of this can be short-circuited through the introduction of the two nascent friends by a third party. In this case the third party takes on the role of including the two in a common interaction, with or without the intention of forging a link between the two. The third party, who presumably has some knowledge of each of the partners, can also begin to provide clues as to the common points of interest that the two share.

## 2.3 Establishment of a relationship

After contact has been established and areas of common interest have been mapped out, the real building of a friendship can begin. A central issue in the growth of a relationship is the agreement on the attitudes that the partners hold in common [9], [10]. The broader the agreement the more likely it is that one will perceive the other as an interesting acquaintance.

If, for example, the whole relationship is only based on a common interest in bottle collecting there may not be enough nourishment for further development. In a similar way, if there is only a limited opportunity for the two potential friends to interact there will also be a limited opportunity for them to map out common interests and the potential for the relationship to develop. There is a critical mass of some sort where the individuals are able to explore these issues.

As noted above, similarity is an important issue in the development of relationships. At the attitudinal level this is important because it provides one with a confirmation of their own interests, likes and attitudes [47]. Further, interaction with others who have similar attitudes validates one's own view of the world. There is a cyclical element in that creating friendships with those who have similar attitudes will increase the possibility that one will be respected [39].

The simple mapping of attitudes is a necessary step at the outset of a relationship. However, as the relationship develops there is the need to develop a repertoire of common experiences and a shared history. This is the development of what Berger and Kellner call the *nomos* ([5] 1; see also [49]).

Every social relationship requires objectification, that is, requires a process by which subjectively shared meanings become objective to the individual and, in interaction with others become common property and thereby massively objective. The degree of objectification will depend on the number and the intensity of the social relationships that are its carriers (Berger and Kellner [5], 5).

Marriage is a particularly massively crystallized version of this. Nonetheless, all ongoing relationships have a shared objectification. It can take the form of common memories or shared vocabulary and slang. These common memories are often grounded in shared experiences such that immediate reactions can be exchanged and codified into the lore of the relationship. Later on, through retelling they become the gloss through which the relationship is institutionalized. The retellings can take place between the partners but the need to retell the experience to a third party means that the experience becomes an encapsulated event that exists beyond the memory of the two friends.

There are various rituals and experiences that can form the basis of such objectifications. Going through the initiation to scouting together, winning a three-legged race, shopping together for a particularly fashionable type of clothing and even events so simple as posing for a photograph together can serve to institutionalize a relationship. These types of events provide the basis of a common past that can be brought forth and embroidered as needed.

## **2.4 Deepening of the relationship**

In order for the relationship to gain depth and resonance, the partners need to move beyond superficialities into more involved forms of interaction. The partners will reveal items about themselves or their situation that, while not generally available for others, are perhaps a clarification about their situation [3]. Self-disclosure can include items such as the fact that their father has an alcohol problem, that they are afraid of certain situations, etc. As the self-disclosure moves into more and more intimate regions the couple gains greater and greater insight into each other [33]. If, however, one begins to disclose items that are too intimate at an early point of the relationship it is seen as a type of over eagerness. When the self-disclosure takes place against a backdrop of the appropriate context, it engenders trust. That is, there is a mutual sense that the other is being candid and acting with good will.

As the relationship continues to gain depth and breadth there will be increasing interdependence, commitment and greater levels of

predictability [49]. At the empirical level, there will begin to be more coordinated activity and convergence of the partners' social networks. Another thing that indicates the establishment of group cohesiveness is when the members are able to create a common "newly minted" vocabulary. This is important because a new vocabulary defines the boundaries of the group.

This progression is, of course, not something that is black and white, rather that there are degrees of common understanding and perspective. One moves from the broad general parameters of interaction, i.e. sharing the same language, monetary system etc, to more specific knowledge such as that shared by co-workers and then to the shared pool of knowledge of a well-established couple. As with Berger and Luckmann's example of Robinson Crusoe and Friday, one develops routinized forms of interaction. In the lingo of Berger and Luckmann these institutions *in miniature* are the reciprocal typification of habitualized action that stretch over a period of time ([6], 47-91). Goffman refers to roughly the same phenomena as teams ([10], 85; [54]).

As one moves into the deeper stages of trust and commitment towards a partner there is what has been described as dyadic withdrawal [26], [45], [58]. One, in effect, rearranges their social network giving the new partner a more central position while pushing other older relationships into more peripheral zones. The number of mutual friends also increases [44]. Thus, a new friendship blocks the potential to develop other relationships. In addition, one's interest in new relationships is conditioned by the repertoire of pre-existing relationships.<sup>18</sup>

Obviously, all relationships are not destined to become close and intense. The partners in a friendship may not find enough in common to bear the weight of a close relationship. They may not have an adequate opportunity to develop the friendship or they may be constrained in developing a relationship in that one of the partners already has that "friendship position" filled. This latter situation is particularly the case when considering the most intimate relationships.

## 2.5 Love

In its most intense form, a relationship involves love and passion[59]. According to Rubin love is quantitatively beyond friendship[55]. It involves a sense of responsibility for the wellbeing of the other, confidence in them, a willingness to care for them and their needs, a yearning to be together with them and a sense that one can not easily get along without the other. There is

<sup>18</sup> As we will see below, there is also the potential for new "virtual" friendships to block face to face interactions.

an emotional involvement and a freedom of intimacy that goes beyond that which is common for other forms of relationships. In the case of love one can be more concerned with the wellbeing of the loved than themselves. Parents' concern and sacrifice for children fall into this category of behavior. When discussing partners there is also often sexual access.

## **2.6 The nomic instrumentality of partnerships**

Beyond the interpersonal aspects of a relationship, as two people become fast partners, be it marriage partners or some other variation of deep friendship, they establish what Berger and Kellner call a "nomic instrumentality." That is, a significant portion of the way in which they are socially perceived has to do with their coupled identity. They generally operate in society as a unit. While each retains individual portions of their social world, and maintains activities that are individualistic, these are to a large degree bounded.

As of the marriage, most of each partner's actions must now be projected in conjunction with those of the other. Each partner's definitions of reality must be continually correlated with the definition of the other. . . . Furthermore, the identity of each now takes on a new character, having to be constantly matched with that of the other, indeed being typically perceived by the people at large as being symbiotically conjoined with the identity of the other (Berger and Kellner [5], 6).

Marriage and long term partnership is a crystallizing of the private sphere as segregated from the other portions of the world. In addition to the ideology of romance and intimacy, this type of interaction requires cooperation and coordination. The eventual arrival of children, the maintenance of the household, economic issues and the like all mean that ongoing relationships of this nature require that the partners interact, often in a short hand form, since the range of common understandings is so broad and thick.

It is also often necessary that the partners give signals or tie-signs to others that are outside the relationship. The use of such devices as holding hands in public reinforces the bond between the individuals as well as indicating to the world that the couple are unavailable for other intimate relationships ([21], 194-237)

There is also often immediacy in the need to communicate for persons in these partnerships. The urgencies of everyday life and the need for immediate response mean that in many cases there is a premium on, if not synchronicity, at least efficiency. Children that have become sick at day-care, ingredients that need to be purchased for dinner and the like all mean

that, for practical reasons, there can be few barriers between those who inhabit this type of relationship. As pointed out by Rasmussen ([54], 8) these groupings can adopt various forms of mediated interaction.

Thus, we have examined the establishment and development of partnerships. There has been little reference to mediation of interaction up to this point. It is that issue to which I now turn.

### **3. MEDIATION AND INTERPERSONAL RELATIONSHIPS**

There are also various dimensions associated with mediated interaction. It can be synchronous or asynchronous. The communication can be written, auditory or visual. As noted by Calhoun it can involve the transmission of information via electronic devices, the written word or via social institutions such as bureaucracies or markets [12], [13]. Mediated interaction has the ability to develop its own form, syntax and context. One can see that, for example, writing has developed into a medium that can bring forth a whole range of emotions and feelings that are impossible to replicate using the spoken word in a face-to-face situation. In a similar way, telephonic interaction has its own style and form. This includes the tone of voice one uses and the way that one replaces the visual with verbal gestures [35].

It is rare to find relationships based exclusively on either face-to-face or mediated interaction. It is far more common for there to be some combination of mediated and face-to-face interaction. This does not mean that they do not exist. Standage describes couples meeting, becoming acquainted and courting via the telegraph [60]. Singles' columns in the newspapers are also a type of interaction that, at least at the outset, is exclusively mediated. More recently, the rise of the Internet and specifically the various MUDs, MOOs, list servers and Internet Relay Chat groups (IRC or "chat") have seen the development of groups and relationships. These have many of the characteristics of an ongoing community [32], [49], [61], [62], [63]. The global span of the Internet has also allowed for the development of various niche interest groupings such as those who tie fishing flies, collectors of Stanley wood working tools or the fans of particular television programs. Certain forms of academic interaction can also fit into this category of purely mediated interaction.

The recent revolution in communication via the Internet and mobile telephony has prompted a discussion of the boundaries between mediated and direct interaction. Three specific issues have gained currency in this discussion. These are the so-called "limited band width" issue, mediation of the private sphere, and greater insight into the private life by third parties.

### **3.1 “Limited band width”**

One of the most obvious issues associated with the development and maintenance of a mediated relationship is that there is a limited set of social cues available in the interaction between partners. Telecommunications, including video telephony, have not developed far enough to allow the transmission of all the shades of meaning available in a face-to-face interaction [8].

In direct face-to-face interaction there is the potential for nuanced expression. One can see the shades of change, feel the warmth, observe the responses to various statements, smell either their perfume or body odor, etc. Face-to-face interaction can range all the way from the intimate to the passive. It can involve touch, smell, sight, hearing and, in certain cases even taste [23]. In addition, it draws on the context within which the interaction takes place and a whole range of other particulars.

A portion of the information richness in face-to-face interaction lies in its spur-of-the-moment nature. Aside from the various intended utterances, winks, nods, grounding, clearance signals and other types of para-communication available to conversation partners, there is a whole set of communications that are not directly under the control of the individual. The involuntary loss of concentration, personal ticks, intonation, dialect and movements are all part of the communication that can modify and change the meaning of the intended message. In Goffman's analysis these are described as signs that are “given off” by the individual ([21], 221; [20], 7). Thus, in face-to-face interaction, and to a lesser degree in other forms of interaction, there is a type of gap between that information that one intends to present and the totality of information that is presented.

One of the things that makes synchronous face-to-face interaction particularly rich and also as particularly precarious, is that the signs one “gives off” are a large portion of the total message. Part of one's socialization is, in fact, gaining the knowledge of when and how one can be fooled by those who try to take us in. We are told, for example, that “the ability to look one in the eye” and say something is a type of insurance against being misled.

When considering textual interaction, the ability to compose the text, re-read and edit etc., mean that one can control the information that is “given off” to a greater degree than in other more spontaneous interactions.<sup>19</sup> Since net-based interaction covers up one's status, it allows for people of potentially different backgrounds to interact on a level basis. That is, it

<sup>19</sup> There are signs that are “given off” even in this considered form of communication, i.e. mis-spellings, the specific formulations that are chosen, etc.

allows one to cover over the signals that are “given off.” This is a potential violation of the homogeneity principle discussed above. Marvin ([41], 86-96) has discussed this issue vis-à-vis the telephone and the establishment of greeting rituals in its early history.

The bandwidth issue may, however be a red herring in that people are quite able to adapt communication to the medium available. A medium will develop a unique form into which we will apply meaning. The leeway for style in writing, the telephone conversations and even, among those who know it, Morse code, is broad enough to allow for the inclusion of para-language [41], [48], [60], [65]. These experiences point to the fact that humans make use of the bandwidth that is available to meet their purposes and needs

### **3.2 Greater mediation of the private sphere**

In the face of ever more efficient and pervasive forms of communication an obvious theme for discussion and critique has been the increasing mediation of the intimate sphere. Parents who purchase mobile telephones for their children and those who call sick aunts instead of visiting them replace direct social interaction with mediated interaction. One sees the encroachment of mediated interaction into those areas that were earlier within the realm of face-to-face interaction. As Putnam notes, the time we spend with neighbors is falling. On the other hand he notes that Americans spend time with friends who live in other locations. The replacement of the spontaneous interaction among neighbors with planned interaction among physically remote peers means the coordination (read mediation) of relationships.

For example, recent focus group results carried out by the author indicate that parents allow children to have mobile telephones as a type of safety line. Other research shows that the telephone allows one to keep in contact with a large number of friends and family and many see the device useful in cheering up people [36]. Calhoun noted this tendency in the mid-80’s when he wrote:

There is as much (or more) reason to think that computerization and new communication technologies will lead to or accompany further deterioration of interpersonal relationships. A drift toward relationships of convenience that might be accelerated; passive enjoyment from the mass media might predominate over active participation. A few people might even wind up preferring relationships based on single common interests and mediated through computer networks—or worse (from the point of view of social integration), preferring the company of computers

themselves, which are dependable, don't talk back, don't make silly mistakes (very often) (Calhoun [12], 329-349).

Several major trends are impinging on the private sphere. As outlined by Putnam [51] the private sphere is being pushed, changed and peeled away. The growth of the suburbs and the increasing participation of various groups in the workforce mean that our time for social interaction is being put under pressure. This gives rise to the notion of remote care giving, and the replacement of direct face-to-face interaction with mediated contact [50], [53], [64], [36].

### **3.3 Greater access by third parties into one's private life**

In the same way that intimate relationships are becoming mediated, ICT allows for third parties to gain insight into our private lives in ways that were not possible before. New ICTs provide true strangers and institutions insight into one's life. One need look no further than Caller ID, the system whereby one's telephone number is displayed to the callee. Upon its introduction it was described as a violation of the caller's privacy [14], [28], [42], [43].

The sale of e-mail address and their statistical evaluation by various marketing organizations can result in the personalization of appeals by third parties. Data mining and other forms of information collection can be used to gain a better image of an individual and their various behaviors, needs and purchasing patterns. Direct marketing and spammed e-mails can have the patina of a personal interaction as they give off the impression of familiarity.

Examination of various public and quasi-public databases can also provide one with great amounts of background data on new friends. One can, for example, order a background check of their newly found dating partner<sup>20</sup>. Thus, both the boundary between the individual and their intimates as well as that between them and the broader world are being changed [42], [43], [52].

These three issues, limited bandwidth, greater mediation of the private sphere and greater access into the private sphere by third parties are all issues that have arisen with the development of new ICTs. They are of note because they mean that we need to reconsider how it is that we construct our social lives.

<sup>20</sup> This, in effect, short circuits the establishment of trust in the development of the relationship as discussed above.

## **4. MEDIATION TECHNOLOGY AND RELATIONSHIPS**

Up to this point we have reviewed the progression of interpersonal relationships and examined some of the broad issues of mediated interaction. Now I will turn to the ways that mediation plays into relationship formation and maintenance. Analysis suggests that when considering the various forms of relationships, media can play different roles depending on the relationship's stage of development. The form of mediated interaction that was appropriate at the beginning of the relationship loses its importance as the relationship develops and is replaced by other forms of mediation. Thus, just as the relationship develops, the appropriate form of mediation also change along the way. The development of new technology has spurred on a similar discussion of the socio-technical progression of mediated relationships.

The evidence seems to indicate that relationships can be established over many different types of media. There is also the somewhat anti-McLuhanesque suggestion that the medium does not hinder, promote or color a relationship. Rather, aside from the tempo of development, the medium is somewhat transparent. There seem to be, however, some points where unmediated interaction is necessary if one expects the relationship to be stable and long-lived.

### **4.1 Meeting and early interaction**

Obviously, those technologies that require some form of address – such as a telephone number or e-mail address – will not be used in order to meet others. On the other hand systems in which one can freely approach others, i.e. Chat, IRC, MUDs and MOOs, are amenable to the development of relationships.

Mobile telephony denies the aspects of proximity and access that are necessary for the establishment of interaction. The point to point nature of the technology means that a potential partner has to at least move past the opening of the relationship before one is provided with access, i.e. before one obtains the other's phone number.

#### **4.1.1 Fully mediated relationship development**

The Internet offers the certain advantage in the creation of friendships, but with some risks. During the early exploratory phase of the friendship the Internet, and specifically IRC, chat groups, MUDs, MOOs and Usenet

groups provide a “relatively”<sup>21</sup> safe form of interaction. These fit into Calhoun’s definition of tertiary relationships [12]. These are areas of the Internet that are specifically sorted into areas of common interest. Thus, while they do not fulfill the criteria of physical proximity, they do provide for various aspects of routinized interaction and homogamy described above. There is the chance to test and to get a sense for the other and their style of interaction.<sup>22</sup> One can exchange insights, offer other web sites as being particularly interesting, etc. Interaction on the web can relieve loneliness through routinized contact, can provide engagement and be an area for fantasy and role-playing.

That it is often text-based means that there is a certain deliberate tempo to the interaction and a lack of the immediate reflexivity that one finds in real-time interaction ([48]; see also [4], [12], [25]). All of this along with the differing grammatical conventions for speech and writing mean that there is (often) a more considered aspect to the development of the relationship.

#### 4.1.2 Quasi-mediated relationship development

Moving now to what one might call quasi-mediated interaction, technologies have been developed for exchanging certain types of information while still remaining in the context of face-to-face interaction. Examples include the Japanese *Lovegety* and *Friend.link*. In many respects these are modern variations of singles ads, video dating, mutual friends and matchmakers.

The *Lovegety* is a small radio sender that comes in a “male” and “female” version. On each device one indicates their interest in meeting others first by turning it on and second, by indicating what type of interaction in which one is interested. The possibilities in the US version of the device include “talk,” “date” and “get2.” The signal is sent to a small radio cell surrounding the individual that is about five meters in diameter. When one *Lovegety* comes within range of another that 1) is turned on 2) is of the opposite sex and 3) is programmed to the same level of interaction, a green light flashes. This indicates that one is literally within range of another device and with similar “interests.” If one is near an opposite sexed device that is programmed to another form of interaction, a small red light is lit. In this case, one can

<sup>21</sup> Herring describes some of the hazards of life on the net in her work on harassment [24]. In this context, the issue of “cyber stalking” has arisen wherein one receives threatening notes or where derogatory personal information is broadcast on the Internet [38].

<sup>22</sup> Cyber-friendships are a particularly logical solution for those who have limited mobility. Barnes points out that many can fulfill their need for companionship, and fantasy through this medium [4].

reprogram his or her own device and search out which level of interest is indicated on the corresponding device.

The *Lovegety* and *Friend.link* are basically gimmicks that parallel the traditional ploys used in a single's bar. In effect, they are a type of electronic come on line, the equivalent of buying one a drink or saying "haven't we met somewhere before." While this process short-circuits certain aspects of meeting others, it assumes, however, that the broader issues of availability and eligibility as discussed above have been sorted out.

These devices also bring up the issue of how one manages the transition from mediated to face-to-face interaction. If one sees that there is a corresponding device nearby one must first locate who has the device and then proceed through the "manual" process of interaction and reconfirmation, etc. If the appropriate green light on the *Lovegety* flashes one is still left with the need for the sequence of recognition, identification and access displays that are common in other encounters [56]. This transition is also an issue in Internet based relationships as we will see below.

#### **4.1.3 Combined face-to-face and mediated relationship establishment**

Recent work among Norwegian teens describe a third variation of meeting and early interaction [37]. In this approach the initial contact is often face-to-face at parties and various social interactions. A part of the contact ritual is the exchanging of mobile telephone numbers. The teens report that they enter these into the name register of their MT for later reference.<sup>23</sup> During the next few days one of the partners may contact the other using a Short Message System (SMS) message.<sup>24</sup> A simple noncommittal question such as "What did you think of the party on Friday" is, in effect, a marking of the contact, a sign of interest and a test of the other's sincerity. As with IRC, the use of a text message allows one to compose the text in a deliberate way and perhaps confer with others as to the content. In addition, since the text message goes directly to the individual there is no need to broadcast one's interest in another person to their parents by using the family's telephone, nor does one need to engage in awkward small talk. The fact that the SMS message is not a physical object, such as a written note, means that there is no need to see the other person nor can it be intercepted and thus the logistics are quite simple.

<sup>23</sup> The number of names in the name register actually becomes a quantification of one's popularity.

<sup>24</sup> This system allows for messages of up to 160 characters in length to be sent between GSM telephones. They are generally cheaper than calling an so they are quite popular among cost conscious teens who finance their own mobile telephone use.

If the other responds positively then one can take the opportunity to elaborate the interaction and perhaps move into more synchronous modes of interaction. The stately pace of the interaction also allows one to avoid “giving off” the wrong signals during the critical early portions of the interaction.

## **4.2 Establishment of the relationship**

As a relationship expands, it also develops its own cadence and depth. In relationships that are totally mediated via text there is necessarily a focus on the text.<sup>25</sup> Thus, specialized language and a repertoire of common reference points becomes a part of the common lore that holds the group (or the pair) together. The themes of the IRCs or chat groups, events that occur in the group and various forms of cooperation and interaction provide people the backdrop against which they can discuss topics at various levels of intimacy etc. [32].

The issues of self-disclosure, trust and their interpretation are difficult when considering totally mediated interaction. As noted above self-disclosure and trust are dimensions that arise as a relationship goes over from the initial stages of interaction to the deeper more intimate type of sharing. Self-disclosure and particularly trust are, in effect gatekeepers to the more advanced types of friendships. When thinking of exclusively net-based relationships, the issue of trust has a central importance. The degree to which one can rely on another whom they have never seen face-to-face is a thorny issue. Popular stories about those who masquerade as persons of the opposite sex, regardless of their validity, underscore the dicey nature of this type of activity.

Exclusively mediated access to a partner ultimately limits the degree to which the relationship becomes integrated in one’s life [49], [65]. This is particularly true in the sense that a mediated relationship will never share the same level of practical day-to-day integration as an advanced (and intimate) face-to-face relationship. This means that the progression to and also the expectation of more simultaneous forms of interaction is a norm.

### **4.2.1 The transition from mediated to face-to-face interaction**

As the friendship moves into the more advanced stages of trust, commitment and network conversion, there is a point when the integration of

<sup>25</sup> Physical attractiveness is an important characteristic in many situations and thus, its absence here is particularly notable [7]. Visual cues are only available in those cases where the participants exchange pictures.

“virtual” and the face-to-face perhaps gains importance. Parks [48], Katz and Aspden [29], and Jensen and Jakobsen [25] report on the transition from net base to multiple media forms of interaction. Parks, for example, found that among the users of Usenet news groups that a large proportion of the participants moved from exclusive interaction via the news groups over to other, more direct forms of interaction. This included telephoning and face-to-face interaction.

To the degree that there is a match between the on-line and the face-to-face personae this is not problematic. This, however, is an area that is full of moralistic stories that point out the ability of one to create alternative personalities on the net [29], [61], [4]. At its most extreme, one can become involved in net-based relationships that are antagonistic or even destructive.<sup>26</sup> There is the risk that one can meet a charlatan or even one who can exploit their access in order to do mischief to either one’s computer or their psyche [61].

With the move from asynchronous to synchronous, from text to voice and from invisible to visible, the signals one “gives off” gain a more central role and the potential for miscues and misunderstandings lies near at hand.

Face-to-face interactions can change the dynamic of a group that has previously had only mediated interaction and provide alternative reasons to either continue or discontinue one’s on-line interaction. Barnes notes one such example where the members of a chat group decided to have a face-to-face meeting. In the words of the chat group’s moderator:

The intriguing thing about the contact was the expectations, hopes and realities in conflict. For some it was euphoric. Others were depressed. They went home and dropped off the list. The character of the conversation changed materially. The in-group people who had met, had a shared mythos. They talked ‘in-talk.’ It became imperative to add new list members to rejuvenate the conversation. The list is still struggling to come back to its vigor, dropped from 50 to 37 despite additions” (Barnes [4], 34).

Previous to the meeting the group had defined and elaborated a core understanding. This had been engrained in talk and the “shared mythos” described by the moderator. However, for those who were outside the core of the group the disjunction between the virtual and the real was too great. Their withdrawal had effects on the others in that they were not easily replaced. The dropouts’ familiarity with the argot of the group, the topics of conversation and as a source of conversation topics meant that their loss was a loss to the whole group. Eventual new members would have to be taught

<sup>26</sup> Obviously, this also occurs in face-to-face interactions.

the “mythos” of the group. This means that the institutionalized interaction would need to be transferred to the uninitiated thus defining a boundary between the old and the new members. As Berger and Luckmann note, this means that various forms of legitimacy need to be established, drawn upon and accepted by the members of the group [6]. In the example cited above, the older members of the group had an advantage in this process in that they had, in addition to their on-line interaction, at least the memory of face-to-face interaction. Thus, there is an obvious cleavage in the group that needed to be negotiated between the various members. This event illustrates some of the difficulties associated with the transition from mediated to face-to-face interaction.

#### **4.2.2 Mediation in sparsely knit networks**

One of the strongest aspects of computer mediated communication is its ability to support sparsely knit networks [17], [29], [32], [66]. The net can provide access to the resources of the “weak ties” on a far broader scale than traditional face-to-face society can [22].

Thus, groups such as academics who share similar but perhaps arcane interests can supplement intervals between conferences with e-mail, list servers and other forms of mediated interaction over the Internet. In the same way, hobbyists and those with special interests can seek out a virtual community that supplements the paucity of local contacts [66].

On the negative side, however, this can come at the expense of stronger face-to-face ties.<sup>27</sup> Thus, just as noted by Johnson and Leslie [26] a friendship lays claim to time and energy to the exclusion of other activities, the use of the Internet is a prioritization that can exclude interaction with other face-to-face friends (see also [44]).

#### **4.3 Deepening of the interaction**

As a relationship deepens there is also likely an increase in the number of channels used to communicate. Membership in a chat group might continue but, depending on the degree of geographical separation, also be supplemented by e-mail, telephone calls, face-to-face interaction and perhaps even dating ([25], 47-48; [32], 201; [49]). Lea and Spears describe this progression when citing the example of a couple who met and were married (both in fact and in the MUD in which they met). When the two met via the MUD they were living on opposite coasts of the US. The woman noted that “We spent a lot of time chatting and we got closer and closer. It

<sup>27</sup> Kraut et al [31] and Katz and Aspden [29] have debated aspects of this issue.

was really good—I could tell him anything and he was really supportive.” The informant goes on to note that they built a virtual castle together on the Internet and that the other participants in the MUD began to see them as having a coupled identity [5]. Eventually, the woman visited the man. Of the encounter she notes “He was different from what I’d expected, mostly in the way he looked, but we really got along well, and I decided that I really did love him.” Eventually the man was transferred to the same city as the woman and they were married [32].

This progression outlines a path towards more exclusive, synchronous and information-rich interaction. As one moves toward face-to-face interaction there is progressively less and less control over the signals that one “gives-off” and there is greater and greater spontaneity in the interaction. Thus, the imagined person gives way to a more and more concrete individual.<sup>28</sup>

The evidence points to the fact that people do indeed develop friendships and communities on the net. However, the evidence also suggests that it takes somewhat longer to develop the trust between individuals due to the lack of proximity and the lack of visual information.<sup>29</sup> In addition off-line relationships proceed further than on-line relationships. Lea and Spears found that net based interaction has the same potential for the development of nuanced interaction and rounded insight into one’s correspondent but that this simply took more time to develop. In fact, it was sometimes the gaps in the information that were alluring [32]. Of course, this can make the negotiation of more intimate encounters difficult. Parks and Roberts [49] have found that greater interdependence, predictability/understanding, commitment and off-line network convergence characterize off-line relationships. These are all characteristics of more advanced relationships. Thus, while the Internet allows for (and perhaps encourages) the establishment of relationships, it seems that their flowering is still dependent on traditional face-to-face interactions.

#### 4.4 Routine life

As a relationship develops into the deeper stages of interaction, trust and commitment and also into the more advanced stages of coordinated interaction there is a premium on efficiency in communication. One can think, for example of a married couple’s need for coordination when

<sup>28</sup> It is also worth noting that as the relationship develops there is more tolerance of the “given off” signals. Older couples, for example, make wide leeway for the others’ ties and idiosyncrasies.

<sup>29</sup> The latter issue is handled through the exchange of photographs [48].

delivering and retrieving children from day-care and other forms of interaction. In this case the short hand interaction is adopted since the couple has no need for extended instruction in order to alert each other as to how they can coordinate everyday life. This can be seen, for example in the interpretation of the sentence "On Thursday you have to pick up Tom and remember to stop at the store on the way home." It carries exact meanings to those within the family circle. Those outside the immediate family will not understand the complex of activities included in the sentence [18].

Internet based text messages are one possible form of communication, however, a direct synchronous or nearly synchronous channel is also often needed. The traditional telephone and now the mobile telephone are well adapted to this need. The advantage of mobile telephony is it allows for spontaneity. The technology, in effect, makes the other universally accessible. When thinking of developing relationships the gauging of when and where to call (as well as the issue of when and where to accept a call) become critical. In stable long-term relationships the mobile telephone allows for the micro-coordination of everyday life. The point in this case is not to cement the relationship with another, but to manage it in the most efficient way. The asynchronicity of the Internet along with the clumsiness of the equipment needed mean that it is not as useful in this situation. In this case the immediacy of the mobile telephone is more useful.

## **5. NEW DEVELOPMENTS**

New technologies and systems of communication are being commercialized that will play into the ways in which relationships are developed and maintained. The integration of the Internet with mobile telephony now taking place is one of these.<sup>30</sup> In addition, the integration of Global positioning systems (GPS) into mobile telephony terminals can also be employed in interpersonal interactions.

When considering the integration of mobile telephony with Internet functions one can imagine that initial contact between individuals can take place in IRC or chat functions carried out on a mobile basis. Following the progression from more towards less mediated channels of interaction the individuals can progress from chat to e-mail or text messages and then to voice telephony and finally to face-to-face interaction. The progression however, may happen much more quickly. One can imagine, for example "mobile" chat groups whose theme is "Friday night rave parties in Oslo." One could follow the messages in order to find out where the parties were

<sup>30</sup> Systems include WAP, Edge, UMTS and 3<sup>rd</sup> generation mobile telephony.

being planned and after they had begun, receive updated reporting on their desirability. As with other chat, the participants could also follow the comments of certain participants, contact them via chat, and thereafter progress to interaction via mobile based e-mail, voice telephony and eventually face-to-face interaction. All of this could take place the first part of the evening.

Thus, the interest sorting functions can be handled in the chat interaction and the more individualized information can be exchanged in the person-to-person channels. In some forms of advanced mobile telephony there is even talk of allowing for video telephony.

When considering the inclusion of GPS functions one can also imagine other versions of the *Lovegety* wherein one is able to map out, on a broad geographical basis, the collecting points for others with similar interest profiles on a real-time basis. Thus, the watering holes for surfers or stamp collectors would be easily available.

Looking at stable familial relationships, mobile Intranet solutions can also be seen as a technology that will allow for the coordination of family interactions. Thus, messages could be distributed reminding members of various appointments, calendars could be coordinated, and shopping lists could be maintained and circulated among family members using a closed information system.

## 6. CONCLUSION

Coming back then, to the point of departure, the consideration of relationships and also the consideration of mediation has given insight into the dynamics of each separately and also as a unit. One is left with the image of a society that is in the process of shifting its form of interaction. Where one had spontaneous and random interaction with a broad spectrum of individuals through the day, there are indications that, as Calhoun notes, we seem to be moving into a society where the social net is cast further afield but to a more similar set of individuals.

On the one hand we are more and more able to make contact with those who share similar interests and perspectives. The communication over the Internet has show itself robust enough to maintain friendships and even support the development of intimate relationships. Users are able to exchange ideas, insight and information with others and thus develop a common sense of a relationship. As the relationship develops, and the need for spontaneity grows, both driven by the desire to be together with another and the need to coordinate a set of common activities such as raising children and household maintenance, mobile technology provides nearly

universal and constant access. Relationships can be changed by mediated interaction at both outset and through their development.

Another issue here is that one can streamline their interaction. When turning to interaction within the “everyday” social group of family, friends and co-workers, the interaction is becoming more specific and nuanced. The mobile phone means that for those who have come into our sphere of friendship we are always available. A short message can always be given. Location and activity can always be ascertained.

Thus, aside from clever marketing groups, one need only come into contact with those with whom one is in agreement. In this way, the efficiency of the telecomm systems reduces the breadth of random interaction that in turn forms a part of our broader experience with the world. The grit of social interaction with those whom we disagree or find offensive can be mitigated.

“In the language of economics, electronic technology enables individual tastes to be satisfied more fully, but at the cost of the positive social externalities associated with more primitive forms of entertainment” (Putnam, [51]).

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