The Model of Relational Communication: explaining difficulties encountered through the use of technology in alternative dispute resolution.

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Abstract

With the 'bandwidth problem' all but eliminated and the cost of hardware and software declining sharply, the time should be ripe for the use of computer technologies in alternative dispute resolution (ADR). However, many practitioners still appear reluctant to adopt this technology. Computer-Mediated Communication (CMC) research has produced a body of evidence to suggest that the presence of technology has a distorting effect on the way that people create and maintain relationships. It is likely that this distortion restricts or skews practitioner's skills, and is responsible for the reluctance to use computer technology in ADR.

This paper distinguishes between 'active' (human) mediation, in which the mediator reflexively alters communication between parties, through continual assessment of their impact on the existing relationship; and 'passive' (technological) mediation, which alters communication through the medium's inherent properties, regardless of context. It is this paper's contention that it is the interaction between these two forms of mediation that is responsible for the difficulties that practitioners encounter when attempting to mediate using computer technology.

This paper outlines work in progress to investigate this claim. Drawing on research in CMC, ADR, theories of Presence, this paper presents a model of relational communication (MoRC). This model highlights parallels between the effect that a mediator has on the relationship between parties, and that of a technological medium. By providing a way for the two forms of mediation to be discussed in similar terms, relational factors that can be affected by either Passive or Active mediation become apparent. The relationships between these factors and the medium can then be investigated to provide an explanation as to why there may be barriers to mediating through technology and an insight into how these barriers may be overcome.

1. Introduction

The number of websites and services offering online dispute resolution (ODR) is on the rise [3]. However, an examination of the services offered by these sites indicates that synchronous, third-party dispute resolution, such as mediation or conciliation, is underrepresented. Traditionally, it has been thought that computer technologies do not have sufficient information carrying capacity (bandwidth) to emulate face-to-face communication, therefore the use of CMC will have a distorting effect on the way in which relationships are

created and maintained[14][22]. This has restricted their use in fields such as third-party dispute resolution, which rely heavily on body-language, gaze and other such cues to glean information about inter-party relationships. This perception of the low bandwidth of CMC has meant that even those technologies that are closest to emulating face-to-face communication *e.g.* video-mediated communication (VMC), have been rejected, except when a necessity, by dispute resolution practitioners.

Recent technological advances have meant that video-mediated communication (VMC) is now of a higher quality than ever. High-fidelity video-streams can now be transmitted to many people simultaneously, without severe detriment to the quality of the sound or image. However, this has not led to a corresponding increase in the adoption of video for dispute-resolution purposes. Thus, it can be inferred that the reluctance to use VMC in dispute-resolution, may be caused by other factors than simply low bandwidth. By focussing on VMC as a potential method for conducting third-party dispute resolution, this paper attempts to outline why the use of communication technologies may impact on the way in which dispute-resolution practitioners mediate conflict.

2. Computer-Mediated Communication

The field of computer-mediated communication (CMC) already encompasses a vast body of research into the effect of computer technologies on communication. Theories as to how technology alters communication between parties, can be broadly divided into two categories: Reduced-Cues Theories and Social Theories.

2.1 Reduced-Cues Theories

Reduced-cues theories of CMC contend that the creation of meaning in interpersonal communication consists of more than the simple denotive semantics of a statement. Meaning also derives from other contextual, physical cues. Paralanguage, gesture, inflection and nuance, all help to create meaning by accentuating communication [2]. Introducing technology into the communication process, reduces the number of these cues that can be transmitted by parties [14][22]. This may lead to meaning being misinterpreted or becoming unclear, changing the nature of the communication that takes place.

According to a reduced-cues perspective, face-to-face communication is the most efficient form of communication [4]. Any attempt to mediate it through technology will reduce its

effectiveness. The lower the bandwidth of the communication medium, the less cues that can be transmitted, and the greater the propensity for misunderstanding. In terms of VMC, it has been noted that this reduction in cues is akin to communicating "through a glass darkly" [24]: the reduction in cues, imposed by the low-bandwidth of the medium, means that images are distorted or grainy, sound may be muffled or out of sync with the picture. This leads to many facets of communication being missed, or misperceived. For dispute resolution professionals, the loss of these cues may make it difficult for existing techniques and experience to be utilised in the same way.

2.2 Social Theories

Social theories of CMC build upon the reduced-cues theories outlined above. They contend that parties still have the same communicative needs in CMC they do with face-to-face communication [25]. Any reduction of cues, attributable to the medium, will not necessarily produce a corresponding reduction in these needs. Therefore, if parties are communicating through a medium that reduces social cues, parties will use those cues they do receive to fulfil multiple purposes: they will make the cues work harder. In face-to-face communication, the use of cues is highly developed and established, meaning is generally clear from the context of communication and parties' previous experience. However, if a party is unsure how others are using or interpreting cues, misattribution or misunderstanding may occur [5][19][26]. Alternatively, if the salience of social cues is distorted by the medium, parties' behaviours may be altered in unpredictable ways [21][23]. Therefore, the fact that communication is occurring through a medium has a social meaning for parties; if this meaning is not compatible, misunderstanding can occur. For a dispute resolution practitioner the presence of technological mediation will mean that parties may interpret their input in a different manner to face-to-face interaction. This will impact on the way in which they are able to conduct their role.

It is apparent that the introduction of technology into the dispute resolution process will have an effect on the relationship that exists between all parties involved. The cues used by the disputants and the resolution professional, may be unpredictably skewed by the presence of technology. However, if one subscribes to the reduced cues theories of CMC, simply increasing bandwidth would increase the cues that can be transmitted, making CMC equivalent to face-to-face communication, thus allowing for a shared understanding to develop. If one subscribes to the social theories of CMC, then the presence of a medium

distorts the communication between parties, and the skills used by a dispute resolution professional may need to be altered or refined to accommodate this. Therefore, to fully understand how the introduction of video (or any other form of technology) may impact on the role of a dispute resolution professional, it is necessary to look at the way in which CMC has been considered to impact on relationships.

2.3 The Relational Impact of CMC

When assessing the impact of technology on relational communication, CMC research has tended to focus on two different levels of analysis. At the highest level, studies have isolated variables that are considered to be significant indicators that define a relationship *e.g.* trust [12][20], warmth [22], presence [7], intimacy and rapport [25], and have assessed how these are affected by technology. Those studies examining single or multiple combinations of relational factors, have all found these variables to be affected by CMC.

Alternatively, studies have used the social information that parties use to create or maintain these relationships, *e.g.* self-disclosure [13], identity cues [21][23], common ground[3], or shared understanding, as variables of investigation. As with the investigation of relational factors, it has been concluded that the social information transmitted between parties, is altered or distorted by the presence of technology. However, investigation has not provided a consensus of opinion as to the direction or degree of the impact of CMC's effect on any, or all, of these variables.

2.4 Parallels Between CMC and Third-Party Dispute Resolution?

The variables chosen for investigating the impact of CMC on relationships, share similarities with those factors of a relationship that are significant in third-party dispute resolution. A dispute resolution practitioner often seeks to build trust, engender rapport, and develop a shared understanding between parties [15]. This is often achieved by encouraging parties to self-disclose in a way that mitigates the negative effects of status, power or identity cues. Therefore, CMC research indicates that those factors of a relationship that are distorted by technology, may also be those that are significant to a dispute resolution practitioner.

Both of these forms of intervention into inter-party communication can be called 'mediation'. It is apparent that 'mediation' can have a distorting effect on the communication of social information that shapes relationships. Therefore, the causes of the difficulties that a dispute

resolution practitioner may encounter, when attempting to use CMC, may not simply be explained by low bandwidth or reduced cues. There may be something inherent in the process of 'mediation' that has an impact on the way that relationships develop.

The following section seeks to outline ways of categorising how mediation can be said to occur. It is hoped that this will allow for technological mediation and third-party dispute resolution to be discussed in similar terms. In this way, similarities and differences can be established, which may provide insight into mediation's effect on relationships.

3. Passive and Active Mediation

Mediation can be defined as 'the passing of information through a medium' (Oxford English Dictionary); a medium can be defined as any artefact inserted between two or more communicative partners. Therefore mediation can mean many different things in a variety of situations. In order to discuss the effects or implications of technological-mediation on interpersonal conflict mediation, it is necessary to make a distinction between these two views of mediation.

In the terms of CMC, mediation is taken to mean the use of computer technologies to facilitate communication, by transcending geographical and/or temporal distance. The medium takes information, transforms it into a digital code, transmits the code to the relevant location and then presents this digital code in a pre-defined format. It is evident that the transformation of information occurs without reference to context, the medium's effect on the relationship that exists between the parties is unintentional. The technology can be said to be *passively mediating* the communication between the parties. This is best illustrated by an example of e-mail communication. Regardless of whether one is communicating to one's employer or a loved one; whether one is happy or sad; whether the discussions are task-based or social, the technology transforms communication into asynchronous, text-based information. The medium is unaware of any effect it may have on the relationship, nor does it seek to impact on the relationship. In this way it can be said to be passive mediation.

In the terms of dispute resolution, the mediator is present and observes the information that is transmitted between parties, interjecting to alter the way in which this information is interpreted, or to encourage (or restrict) the inclusion of other information. Thus a dispute resolution practitioner *actively mediates* the information exchange between parties. The

mediator is aware of the impact they are having on the relationship and is able to assess and alter their behaviour accordingly. Their goal is to transform the relationship from one of conflict to one in which co-operation becomes possible. Their behaviour is reflexive and self-aware. As with passive mediation, active mediation can be said to alter relationships through the distortion of social information that parties use to communicate.

It can be seen from the above that mediation, in either its active or passive form, impacts on similar aspects of relational communication. It can also be seen that this impact arises actively or passively. Therefore, to understand the impact of computer technologies on the process of dispute resolution, it is necessary to understand how communication is used to shape relationships between parties. It is also necessary to understand where mediation, in its active or passive form, fits into this process. In order to achieve this, this paper presents a Model of Relational Communication (MoRC), that seeks to outline the relationship between various structures in the communication process, and use this to explain how and why active or passive mediation may distort relationships between parties.

4. The Model of Relational Communication (MoRC)

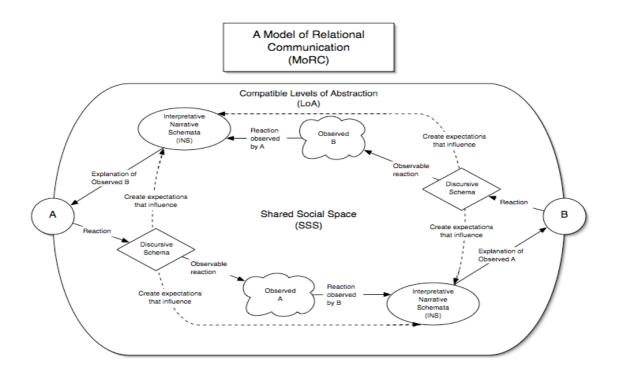


FIGURE 1: A model of relational communication (MoRC)

Figure 1 outlines a Model of Relational Communication. Two entitles, A and B, recognise each other as potential communicative partners: they are operating at compatible levels of abstraction [8]. This enables them to successfully observe (or be present with) each other. At this level of abstraction, various discursive schemas will be salient. Discursive schemas are those social constructs that enable meaning-making to occur [9], *e.g.* shared topic, shared history, recognised cultural language, geographical and/or temporal location, or cultural artefacts [11]. Also present at this level of abstraction, will be the interpretative narrative frameworks that each party uses to explain the information they receive. McNeil argues that human beings have a genetic pre-disposition to use narrative to explain events, enabling them to characterise experience and say that 'this event is like another' [17]. The narrative frameworks, salient at any given level of abstraction, will be shaped in part by the entity's life experience and the expectations that the salient discursive schemas promote [10].

Therefore, for interaction to occur, there needs to be a socially-shared space in which entities can be observed and rendered meaningful by the other party. This space will be bounded by the discursive schemas and narrative frameworks held by each party [27]. For interaction to occur, a reaction by either party needs be observable in terms of the shared space. Therefore, only those reactions that can be observed through the salient discursive schemas will be observable in the shared space. This leads to a potential difference between the entity *e.g.* 'A' and the entity observed by the other entity *e.g.* 'Observed A'. This can best be illustrated by the example of receiving unwanted news via e-mail. Reading the e-mail may promote a reaction such as a frown or hand gestures or a verbal comment., however, in the written reply these cues will not be present - they will not be directly observable by the other party. This difference between reaction and observed reaction is where reduced cues approaches site the difficulties of CMC.

However, not all of the observable aspects of the entity (A) may be recognised by the other party (B). Information may be observable but remain unobserved. This, coupled with the narratives used by B to explain their observations of A, means that there will be a difference between the Observed A and the explanation that B gives for Observed A's reaction. Incompatible explanations may lead to misunderstanding or communication breakdown. This can be illustrated by McLuhan's example of African tribespeople being shown a film about water hygiene [16]. Having watched the film, the viewers were asked to report what they had

seen. Few detailed the hygiene information they had seen, but all reported that they had 'seen a chicken'. Although unrelated to the information the film intended to communicate, a chicken did appear on-screen, for a short period. The viewers, being unfamiliar with the conventions of film and public information broadcasts, did not have narrative frameworks that enabled the information communicated to them to be explained in the way the presenter had intended. However, certain observable aspects (a chicken) held resonance with the narratives they did posses, and became part of the meaning they took from the film.

It can be seen therefore, that any discursive schema that alters the way that narratives are formed, or shapes the way in which entities are rendered observable to others, will alter the communicative expectations that parties hold. If parties differ in the expectations, or narrative frameworks, they associate with these schemas, this may lead to misunderstanding, or misattribution. This is where social theories of CMC site the difficulties with technologically-mediated communication.

4.1 Mediation and the MoRC

Mediation is a process by which information is transmitted between parties. It is also something which itself has a social meaning. Therefore, the presence of mediation will have an impact on the relationship that develops between parties. If mediation, in its active and passive form, can be explained using the MoRC, its impact on relationships can be better understood. This may lead to a better understanding of the way in which computer-technologies may impact on the process of third-party dispute resolution

It is this paper's contention that passive mediation, in the form of computer technologies, exists as one of many present discursive schemas. Parties' familiarity with the technology will shape the narratives they hold. If parties are familiar with technology use, they are more likely to have developed ways of understanding the differences between CMC and face-to-face communication. Technology may also effect the influence that other discursive schemas may have over the way in which an individual is rendered observable in the shared social space. For an obese individual communicating through e-mail, body-size may no longer be as salient as it is in a face-to-face interaction. Therefore the presence of technology may alter the way in which parties are observed in the social space, whilst parties' experiences of the technology will alter how these observations are explained.

Active mediation seems to exert influence from outside the MoRC that exists for entities 'A' and 'B'. Theories of third-party mediation offer various explanations for the way in which a dispute resolution practitioner achieves their goal of transforming relationships. Interest-based theories would suggest that the dispute resolution practitioner seeks to move parties to a different level of abstraction, usually further away from the cause of the conflict [6]. In doing this, different discourses and narrative frameworks may become salient. It is hoped that this change will enable parties to observe and explain each other in such a way that co-operation becomes possible. If this move does not work, the dispute resolution practitioner will seek to move the relationship to another level of abstraction, until co-operation does occur, or all moves are exhausted.

In narrative mediation, the dispute resolution practitioner seeks to assist parties in uncovering those discourses that are salient to their conflict and then investigates the impact that these discourses have on the narratives they hold [28][29]. These discourse can then be altered, changing the way in which each party is observed and explained in the social space. The dispute resolution professional will actively mediate communication in such a way that these changes are likely to lead to co-operation.

5. Conclusions

Investigation into the relationship between passive and active mediation may be a useful foundation for further research into the effects of technology on the process of third-party dispute resolution. A dispute resolution practitioner seeks to communicate with parties in order to alter the way that they observe and explain each other. This is achieved by altering the salience of discursive schemas present in the interaction, and/or altering the impact that these schemas have on the narratives parties use to explain each other. As technology is one of these discursive media, the influence it exerts on other schemas and narratives, needs to be acknowledged, understood and accounted for, otherwise the presence of technology will impact on the practitioner's role in unexpected ways.

Examination of both CMC and dispute resolution literature suggests that technological and third-party mediation impact on similar relational factors, thus making these unforeseen effects particularly salient to the process of ODR. However, as technology is but one discursive schema, familiarity with technology use is likely to reduce it's unpredictable impact, both for the parties concerned and the practitioner. Disputes that have arisen through

CMC may therefore be easier to resolve through CMC. Parties will already be able to observe and explain the other in consistent ways.

As communication through CMC or VMC becomes more commonplace, norms and expectations are likely to become established, that mean that the distorting effect of the passive mediation may be reduced or mitigated as conventions and norms develop. Thus, it may simply be the lack of familiarity with communications technology that is responsible for the difficulties that practitioners face. However, given the rise in the number of disputes being resolved on-line, and the increase in the use of video-mediated communication through computers and mobile telephones, it is likely that this hurdle will be surmounted in the near future.

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