HUMAN COMMUNICATION RESEARCH

Human Communication Research ISSN 0360-3989

ORIGINAL ARTICLE

Embracing the Challenges and Opportunities of Mixed-Media Relationships

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Social relationships unfold face-to-face and across an increasingly diverse set of mobile, Internet-based media. Research on these mixed-media relationships (MMRs) offers a unifying focus for understanding of how media use reflects and drives social relationships. Impediments to research on mixed-media interaction include an over-reliance on research focused on a single medium, incomplete and conceptually problematic classifications of media, and limited theoretic approaches. An alternative approach to understand MMRs, grounded in the challenges of managing complex, recurring interpersonal demands, is proposed. These demands include social coordination, impression management, regulating closeness and distance, and managing arousal and anxiety. Implications of MMRs for mediatization and mass communication are briefly examined.

Keywords: Social Media, Mediatization, Mixed-Media Relationships.

doi:10.1111/hcre.12125

Social relationships are increasingly conducted using a rapidly evolving portfolio of mobile and Internet-based media. Friends gather for a party, but then share and discuss pictures of the gathering with one another over social media. At home, family members coordinate their activities over the course of a day using a combination of texts, voicemails, and telephone calls. At work, team members continue discussions that begin in meetings through e-mail, or they may use an online application and texts to organize face-to-face (F2F) collaboration. These are but a few examples of "mixed-media" relationships (MMRs). I contend that the study of these MMRs provides a potentially unifying disciplinary focus for understanding how media use reflects and drives interpersonal communication and social relationships. Further, research on MMRs may yield new insights into the meaning and consumption of mass communication.

The term "mixed-media relationship" joins two variously defined terms, so a brief comment on each is in order. Social relationships represent patterns of interdependency among individuals. A relationship may exist in a single encounter or recur and become more complex over time, as in the case of friendships, family, and many other

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types of relationships. Media represent “channels” or the physical mechanisms and software of message transmission. I will treat different digital applications as different media. Media and “mode” of communication are not entirely separate terms, nor are they the same. Mode as used here will refer to the basic form into which a message has been encoded (e.g., speech, written text, still image, moving image, touch). There is little consensus about where to place F2F communication among these distinctions, so I will informally consider it to be both mode and medium. A given medium may be monomodal (e.g., a text message), but most are multimodal, appealing to multiple senses in multiple ways. Finally, “mixed-media relationships” will refer to social relationships that parties conduct in whole or in part through the use of multiple media, including F2F.

Several streams of research have provided insights into MMRs. I will first examine the most influential of these and then advance an alternative approach for understanding MMRs. Following that, I will note two impediments to the study of MMRs and briefly explore the implications of research on MMRs for mass communication research and current debates about mediatization.

Theoretic precursors to the study of mixed-media relationships

Research on mixed-media interaction has drawn heavily on three particular areas: channel complementarity, media multiplexity, and modality switching. Each has made significant contributions to the study of MMRs, but each also encounters limitations as a general framework for understanding them.

Channel complementarity

Dutta-Bergman (2004a, 2004b) advanced channel complementarity theory as a counterpoint to prevailing assumptions about how the introduction of a new medium influences the use or consumption of existing media. Researchers commonly assumed that a new medium would displace or replace an existing one if it served the same functions, met similar motivations, or provided similar gratifications. Displacement effects have been reported from the early research following the introduction of television (e.g., Schramm, 1961) to more recent work on the Internet’s impact on the consumption of traditional media such as newspapers (Dimmick, Chen, & Li, 2004). But cases in which displacement has not occurred have also been reported (e.g., Jung, Lin, & Kim, 2012).

Dutta-Bergman (2004a, 2004b) proposed that the motivations or gratifications driving media choice are often general enough to activate the use of multiple media, as long as each medium is perceived to facilitate the goal being pursued. As a result, newer media may be adopted without necessarily replacing or displacing existing media. Complementary or multiple media use has been observed for several broad categories of motivations and gratifications. For example, people generally use a range of media when they are seeking information on topics of interest such as health (Tian & Robinson, 2008). People not only use the telephone to connect with others and

obtain social support in times of crisis, but also reach out to others using the Internet (Dutta-Bergman, 2004b). In personal relationships more generally, the frequencies of instant messaging, e-mail, texting, Facebook posting, and telephone calls are positively related (e.g., Ledbetter, 2014; Ledbetter & Mazer, 2014; Ramirez & Broneck, 2009).

Research on channel complementarity has provided important evidence of mixed-media use, but it faces a number of limitations as a general framework for approaching MMRs. First, by focusing on media choice as a function of internal psychological states (needs, gratifications, and motivations), channel complementarity theory fails to account adequately for the influence of environmental constraints as well as practices within particular relationships and larger interpersonal networks. Second, although channel complementarity theory offers an alternative to channel displacement theories, the two approaches share similar explanatory mechanisms. As a result, it is not always clear when the relevant psychological states driving media choice should prompt users to switch from one medium to another and when they should lead users to add media to their current set of media choices. Finally, the fluid choices users make among texting, e-mailing, making phone calls, and posting on a social network site (just a few of the options) are unlikely to be sorted out by appealing to overly broad motivations such as desire for "interpersonal communication" (Dutta-Bergman, 2004b) or "expression/participation" (Jung et al., 2012). More detailed typologies of motivations might address this problem, but such a strategy risks an unparsimonious proliferation of explanatory terms.

Media multiplexity

The central proposition of media multiplexity theory (Haythornthwaite, 2005) is that people use a greater variety of media when communicating with their stronger social ties than with their weaker ties. Although there are exceptions (Miczo, Mariani, & Donahue, 2011), most studies have supported the multiplexity effect. Ratings of interdependence, closeness, and satisfaction in friendships and romantic relationships, for example, have been positively associated with the use of a greater number of media (Caughlin & Sharabi, 2013; Ledbetter, 2009; Miczo et al., 2011). Online daters who contacted each other using a greater variety of channels prior to meeting F2F reported that their relationship was more intimate (Ramirez, Sumner, Fleuriet, & Cole, 2015). Other studies have reported positive associations between relational development and multiplex media use, as well as modest but significant differences in particular combination of media used depending on type of relationship and participants' attitudes toward the role of online communication in personal relationships (Ledbetter, 2014; Ledbetter & Mazer, 2014).

Unfortunately, media multiplexity research offers only a limited account for how media are being used in social relationships. Media multiplexity is only one aspect of relational breadth, which is itself only one of several widely recognized dimensions along which relationships develop and deteriorate (Parks, 2007). Further, because the multiplexity effect focuses only on the number of media used by relational partners,

it fails to address the more central question of how media are actually used in pursuit of the partners' goals and tasks (Caughlin & Sharabi, 2013).

Modality switching

Changing media or, more fundamentally, changing modalities may alter both what can be easily conveyed and how it is interpreted. Research on these "mode switches" to date has largely been framed in terms of the switch from "lean" text to "rich" F2F interaction. In this context, a medium is "rich" if it provides a more personal focus on the partner, immediate feedback, additional visual and other nonverbal cues, and greater ease and accuracy in emotional expression (Daft & Lengel, 1986). When an interaction has been initiated using text messages, shifting to the richer F2F mode provides more useful information and thus enhances partner impressions (Ramirez & Zhang, 2007). But shifting to F2F also introduces new interpretative concerns. Impressions formed through text may be proven wrong in person (Jacobson, 1999). Negative reactions to the other's physical appearance or behavior may alter the direction of the text-based interaction. Shifting to F2F also requires individuals to process a greater variety of cues as well as cues that build on each other in more complex ways.

Further complications are introduced by the timing or sequence of modality switches. For example, surveys of online daters who went on to meet in person have documented a curvilinear association between the length of online interaction prior to meeting F2F and perceptions of intimacy, informality, composure, and social orientation (Ramirez et al., 2015). Interacting online before meeting F2F leads to more positive evaluations, but only up to a point, beyond which prospective daters begin to develop unrealistic expectations which are then violated during later F2F encounters.

The progression from lean to rich media that dominates much of the literature on modality switching remains an important one in many contexts (e.g., dating partners or professional colleagues who begin their relationship with text exchanges). However, it is not clear how well previous modality-switching research describes today's overall online environment, in which communicators frequently switch among several different modes and media platforms. Relationships may break off into text-based side conversations in F2F settings such as meetings. Conversations among friends and family members may unfold over the course of a day through a mix of F2F, voicemail, and texts. These examples suggest that modality switching commonly occurs in more directions and across a greater number of modalities than modality-switching literature has generally considered.

Research on media complementarity, multiplexity, and modality switching has made significant contributions to date, but each is primarily focused on a single aspect of media use, such as the number of media or channels used or the timing of particular shifts between particular modalities. To understand the rapidly evolving, increasingly sophisticated use of media in contemporary social relationships, we would do well to consider what is going on inside those relationships themselves.

An alternative approach to understanding mixed-media relationships

An alternative approach to understanding MMRs is grounded in a close examination of what relational partners are doing as they manage the recurring, often contradictory, demands or tensions inherent in the formation, conduct, and dissolution of social relationships. The idea that much of relational life is about the management of a relatively small number of complex, often contradictory goals and situational demands has very deep roots in the social sciences (e.g., Simmel, 1950) and figures prominently in theories of impression management and politeness (Brown & Levenson, 1978; Goffman, 1967), multiple goals theories (Caughlin, 2010), and dialectical approaches to interpersonal communication (Baxter & Montgomery, 1996; Parks, 1982).

Drawing on these theories, I propose a new approach that examines the use of media and F2F interaction in terms of four types of relational demands that must be managed on an ongoing basis in nearly every social relationship. They are: (a) social coordination, (b) impression management, (c) regulating closeness and distance, and (d) managing arousal and anxiety. How people manage these demands should reveal a great deal about the selection and use of both mediated and F2F communication. To be clear, I am not so much proposing a theory as identifying the phenomena that both have great importance and considerable theoretic potential as we seek to understand MMRs. I will discuss that potential, particularly in contrast to existing approaches, once we examine each of the four relational demands.

Challenges of social coordination

Perhaps the most basic work of relational life is simply coordinating activity with others. In addition to coordinating particular conversations or encounters, relational partners must often coordinate their broader daily activities and schedules. Media both facilitate and complicate this work. They allow relational partners to coordinate their activities even when they are physically distant and mobile. Focus groups in Singapore and Taiwan, for example, regularly used smartphone messaging apps to plan social activities on the fly, manage conflicting schedules, broadcast messages to a group, and spontaneously extend exchanges to include additional individuals as needed (Ling & Lai, 2016). While users generally perceive F2F to be more effective, they often select text-based channels in the name of efficiency and maintaining a regular connection (Eden & Veksler, 2016).

Coordinating channel choices creates further challenges for relational partners. In a survey of individuals involved in a variety of personal relationships, Caughlin and Sharabi (2013) found that partners who were able to integrate discussions across several different media felt closer, whereas partners who reported difficulty transitioning a discussion between from one medium to another (including F2F) felt less close and less satisfied.

Even within a single medium such as e-mail, a message and its response may be separated in the linear order typically expected in conversation, creating what Herring

(1999) termed "disrupted turn adjacency." Time lags in response make it more likely that the party waiting for the other to respond will introduce additional topics. These challenges are even greater when multiple parties and media are involved. Consider, for instance, the difficulty of tracking, let alone coordinating, an interaction among extended family members that unfolds over several days using a shifting mix of Facebook updates, e-mail, texts, phone calls, and multimedia messaging platforms like Instagram. Little is known about how users actually address these challenges or even if expectations have changed so that users no longer seek the same level of coherence online that they would in F2F conversation.

Impression management

A second fundamental relational activity is impression management. Theories of politeness and impression management (Brown & Levenson, 1978; Goffman, 1967) argue that people use verbal and nonverbal strategies to promote others' positive impressions of them (positive face) and to avoid others's seeing them as unduly imposing or intrusive (negative face). We now know that people also select and use media to maintain or promote positive impressions.

The hyperpersonal model (Walther, 2007) accounts for this process by directing attention to four aspects of media: the ability to edit before sending, the amount of time available to construct and craft messages, the amount of "leakage" of undesirable nonverbal information as a result of physical and temporal separation, and the degree to which a medium (or mode) allows users the opportunity to focus on message composition rather than having to manage one's own nonverbal presentation or scan the other's nonverbal behavior. These characteristics in turn give sources time to construct more positive self-presentations and encourage receivers to compensate for minimal cues by "filling in the gaps" with positive interpretations. Positively biased message construction and reception combine in dynamic feedback loops that confirm and reciprocate positive effects and attributions. All together, the effect is to promote more positive impressions and greater intimacy in mediated interaction than would have been obtained in the same amount of time via F2F interaction. The hyperpersonal model does not address MMRs directly, but does suggest intriguing questions about how communicators in MMRs might utilize channels that yield hyperpersonal effects within the larger mix of channels. Clearly one use is to optimize self-presentations, but we know less about how hyperpersonal effects function when receivers can access other information from other sources in addition to that person's own self-presentation.

We also know that people turn to text-based, voice-only, or asynchronous media to minimize face threats when they impose on others. Early CMC researchers noted that individuals in competitive interactions often preferred phone or e-mail to F2F interaction because they felt that these channels imposed less on others and were more deferential (Kayany, Wotring, & Forrest, 1996). O'Sullivan (2000) extended these findings, demonstrating that channel choice was often guided by attempts to minimize face threats. When presented with scenarios calling upon them to communicate in a

way that bolstered or threatened either their own or their partners' identity, subjects preferred partial-cue media (e-mail, telephone, answering machine, or letter) over F2F interaction, especially when the impression at stake was their own.

Even more options exist for impression management in contemporary media platforms. Rather than expressing one's own opinion directly on a social network site, for example, one may post links to sites where third parties express opinions similar to one's own. Posting the link allows the individual to obtain the positive face support of online contacts holding similar positions. But it also creates uncertainty about the relationship between the message and the source, thereby affords the poster flexibility when dealing with those who might have been offended (see also Neubaum & Krämer, 2017). Examples such as this only hint at the range and delicacy of impression management strategies available to communicators in MMRs today.

Regulating closeness and distance

Efforts to manage positive and negative face often reveal deeper, dialectical tensions between relational connection and autonomy. The autonomy-connection dialectic refers to the ongoing tensions between relational partners' efforts to retain their individuality and independence, while at the same time feeling close, or connected and responsive, to their partner (Altman, Vinsel, & Brown, 1981; Baxter & Montgomery, 1996). Expectations for connection and autonomy obviously differ across individuals and relationships, but whatever the expectation, relational partners interpret one another's messages in part as signals of a desire for greater closeness (connection) or distance (autonomy). Media use in MMRs can also reflect tensions between autonomy and connection. For instance, persistent and pervasive online connections between users increase their frequency of communication and indirectly enhance the closeness of their relationship (Eden & Veksler, 2016; Ling, 2008). Yet this increased mediated contact also raises partners' concerns about being less autonomous (Duran, Kelly, & Rotaru, 2011).

Media choice and use also regulate perceptions of closeness and distance by indirectly signaling the perceived status of the relationship. Communicators often match the channel to the presumed or desired closeness or intimacy of the relationship, avoiding channels that they judge to be too impersonal for their close relationships as well as those believed to be too intimate for their more distant relationships (Eden & Veksler, 2016; Miczo et al., 2011). The perceived appropriateness of particular online channels may change as relationships develop. Early in their friendship, for instance, partners may make greater use of more public channels such as social network sites, but as the friendship develops, they add more direct channels such as instant messaging and cellphone calls (Yang, Brown, & Braun, 2014). This example refers to just one of many possible progressions we might observe across MMRs, but whatever the particular set of media choices is, my larger argument is that media choices in MMRs are routinely interpreted as messages about the current or desired state of the relationship. To offer another example, cross-sex friends sometimes implicitly agree to use text-based online channels rather than meeting in person to discuss more intimate

topics, in order to protect the platonic character of their friendship (Parks & Roberts, 1998).

Within a broader social network, the challenges of regulating autonomy and connection often take the form of efforts to manage how and when members acquire information about each other (Parks, 2007). Today we are undoubtedly more aware of our social networks, thanks in part to the visibility, persistence, and pervasiveness of media connections. In addition, media platforms provide new tools for managing personal information within networks. Uses may select particular applications or tools may be selected because they allow messages to be broadcast to a larger portion of one's network (Ling & Lai, 2016), and may avoid others because they do not afford sufficient privacy from other network members (Eden & Veksler, 2016). In other cases users may manage dialectic tensions surrounding decisions to disclose or withhold information by selecting media that help them equivocate or obfuscate (O'Sullivan, 2000).

Managing arousal and anxiety

Anxiety and arousal naturally arouse the ongoing pursuit of complex, often conflicting relational goals, as well as when the relationship is transition. Easing the uncertainties associated with moving from an online relationship to F2F, for example, often involves the expansion to additional media that support messages such as photographs and vocalizations (Parks & Floyd, 1996).

The strategic options presented by media are perhaps most visible during conflicts between relational partners. Several of these options were identified by Caughlin, Basinger, and Sharabi (2017). Their respondents reported using mediated channels to "ease into F2F conflicts" by scheduling a time to talk or by broaching a topic in a less threatening way. Some attempted to manage their discomfort with F2F conflict by keeping the conflict online, although other research suggests these efforts are often counterproductive (Caughlin & Sharabi, 2013). Media may be used to make reference to previous online messages in order to use them as evidence or background, to calm oneself by shifting attention to a cellphone or other device during F2F conflict, or to gather information and support from third parties.

During conflicts, as well as many other anxiety-provoking situations, the use of asynchronous, editable text-based channels allows participants to plan and revise messages before sending them. This may yield the relationally enhancing effects associated with Walther's (1996) hyperpersonal model. However, the use of these channels may also embolden less positive behaviors. Attempts to dominate another person during a conflict, for instance, may provoke less anxiety if conveyed online rather than in person (Frisby & Westerman, 2010).

Research on the role of media in managing the four relational demands discussed here is obviously at an early stage. Even so, research to date extends well beyond the phenomena examined in previous research on media complementarity, multiplexity, and modality switching. By focusing on the use of media in addressing relational demands, theoretic efforts can account for much more than the number of media used

or the dynamics of a particular modality switch. Moreover, mixed-media research suggests new ways to bridge longstanding divisions between media researchers and interpersonal communication researchers.

Impediments to the study of mixed-media relationships

Realizing the potential of research on MMRs will require overcoming at least two impediments. First is the problem of collecting and aggregating data across the range of mediated and F2F interactions among users of interest. This is a formidable task, but given the dynamic mix of channels that increasingly constitutes our social experience, an essential one.

Even more fundamental is the problem of media classification as media forms continue to expand and differentiate. There is little consistency across recent typologies of media. Creating media categories that are exhaustive and mutually exclusive remains a particular challenge. Gibson's (1979) once-useful concept of affordances—design features that suggested behavior—has become ambiguous as scholars have expanded it to include design features, individual responses, interaction patterns, and larger social practices (e.g., Mascheroni & Vincent, 2016). One approach to the classification problem is to conceptualize affordances more rigorously and link them to specific design features (Evans, Pearce, Vitak, & Treem, 2017). A different approach, recently advanced by O'Sullivan and Carr (in press), is to base media classification not on the characteristics of channels, but rather on perceptions of underlying message characteristics such as accessibility and personalization. Regardless of the approach ultimately taken to media classification, reaching a working consensus is essential if we are to understand mixed-media interaction as well as its relationship to mass communication.

Broader implications

The importance of media is difficult to underestimate, particularly in light of recent scholarship surrounding the process of mediatization (e.g., Hepp, 2013; Hjarvard, 2013). Mediatization occurs when society becomes so saturated by media that its political and cultural practices can no longer be separated from the media's own institutions, technologies, and values. Much of the attention in the mediatization literature has been focused on the cultural and political effects of mass communication. My emphasis on MMRs might be taken as evidence that our interpersonal and social lives have also been mediatized. But in fact, research on MMRs is more likely to counter such media-centric worldviews. Social life, including important interpersonal relationships, may have become *mediatized*, but it is also the case that media have become *interpersonalized*. As we have seen, the media that individuals use for communication have become increasingly aligned with the rhythms and structure of their personal relationships and social networks. With notable exceptions (Jansson, 2015), those studying mediatization have undervalued the influence of relationship and networks on media use.

We can most easily observe this influence in the use of media and applications that allow messages to be personalized. However, when personalized channels such as social media deliver mass communication content, the dynamics of personal relationships and networks also begin to shape the way mass communication is consumed and experienced. We need not look far for evidence of this: 62% of U.S. adults sometimes or often get news from social network sites such as Facebook and most who obtain news on these sites are not seeking it, but rather encounter it as they go about their social activities on the site (Gottfried & Shearer, 2016). Items referred from news organizations are more likely to be trusted and explored when online friends endorse them (Turcotte, York, Irving, Scholl, & Pingree, 2015; see also Flanagin, 2017). Personal relationships and networks are shaping our experience of the news, as well as other mass communication content.

MMRs amplify the interpenetration of mass communication and interpersonal communication in other ways that align more closely with mediatization. For example, they enable a variety of hybrid identities including social media "microcelebrities" who begin with small numbers of followers with whom they communicate interpersonally and then take on the characteristics and business models of mass communication figures as they become more popular (Khamis, Ang, & Welling, 2017; Senft, 2008). Becoming "Instagram famous" results in widespread cultural visibility and financial success for a few, but far more people simply wish to enhance their popularity and visibility within their own social networks by applying self-marketing strategies derived from business. The values of mass culture and interpersonal communication can thus become conflated as private individuals craft identities as "personal brands" or members of "brand communities."

Additional critical and empirical issues will arise as MMRs become more prevalent and as media forms continue to evolve. But even at the present juncture, it is clear that media selection and use are creating a new set of options, a new vocabulary for managing the tensions and dilemmas inherent in everyday social life.

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