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ARTICLE

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## Reconceptualizing 'flaming' and other problematic messages

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### Abstract

Researchers examining 'flaming' – defined as hostile and aggressive interactions via text-based computer mediated-communication – have proposed theoretical frameworks to explain possible causes. However, precise conceptual and operational definitions of 'flaming' have yet to be established, which has implications for understanding this phenomenon. Consequently, we propose an interactional-normative framework that focuses on interpretations of messages from multiple perspectives in the situated and evolving context of appropriateness norms. This framework incorporates intentionality and individuals' strategic choices in language use and channel selection. We discuss the implications of this framework for research on flaming and other problematic interactions.

### Key words

computer-mediated communication (CMC) • flaming •  
interactional norms • miscommunication

### INTRODUCTION

Although users, lay observers, and scholars have ascribed many benefits to computer-mediated communication (CMC),<sup>1</sup> and have touted it

as central to the emerging information revolution, many have also identified a negative side to CMC in the form of hostile, aggressive communicative behavior, or what has been labeled 'flaming'. This tension has prompted communication scholars to investigate the flaming phenomenon (Dubrovsky et al., 1991; Kayany, 1998; Lea et al., 1992; Lerner, 1996; Spears and Lea, 1992; Walther et al., 1994). A general consensus is that flaming consists of aggressive or hostile communication occurring via computer-mediated channels. However, assessment of flaming research indicates that definitions, when offered, are imprecise within, and inconsistent across, research projects (Lea et al., 1992). Nevertheless, scholars have pushed forward to try to quantify levels of flaming as well as to provide explanations and possible remedies.

However, ambiguity surrounding communicative behavior can result in a wide array of problems, with substantial negative social and relational consequences. Thus, there is a pressing need for greater precision in defining flaming, so that researchers can more accurately assess its prevalence and develop explanations based on solid conceptual and operational grounds.

To address this need, we develop a framework of problematic interactions that is intended to clarify the circumstances under which communicative behavior would constitute flaming. Within this framework, we contextualize flaming activity within communication activity broadly and incorporate the role of interactional norms in guiding message interpretation. We also identify the importance of the message sender's intent, which allows a distinction between inadvertent violations of norms (i.e. miscommunication) and purposeful violations (i.e. flaming) and incorporate the interrelated roles of message and channel (CMC, other mediated channels, and face-to-face). We thus situate flaming within the context of problematic interactions online and offline, thereby enriching our understanding of its antecedents and framing its consequences. Our overarching goal is to provide a framework for more precise conceptualizations of various types of problematic interactions, including what has been called 'flaming', which can be a foundation for continuing research on their prevalence, causes, and social consequences.

## **CURRENT PERSPECTIVES ON FLAMING**

'Flaming' as a concept emerged from popular discourse surrounding the online community to describe aggressive, hostile, or profanity-laced interactions via email and in online discussion groups. Commentators expressed concern that this antisocial use of the then-new technology of the internet was an indication of the 'dark side' of technology's social effects. The term has evolved in the popular literature so that lay observers commonly represent flaming as a highly negative message that functions like a metaphorical flamethrower that the sender uses to roast the receiver

verbally. Accordingly, flames have been characterized as 'incendiary messages' (Tamosaitis, 1991) and 'inflammatory remarks' (Bernthal, 1995). Typical descriptions represent flaming as 'scathingly critical personal messages' (Cosentio, 1994), 'vicious attacks' (Dvorak, 1994), or 'rude or insulting' messages (Schrage, 1997).

These characterizations in the popular media have framed scholars' assumptions about the nature of the phenomenon, while contributing to both policymakers' and the general public's anxiety about the negative consequences of the internet. In the academic literature, flaming has been characterized as 'antisocial interaction' (Thompson, 1996), an insult (Herring, 1996), 'hostile verbal behavior' (Thompson and Foulger, 1996), and as 'a form of social aggression' (Colomb and Simutis, 1996). Parks and Floyd (1996) describe flaming as 'verbal aggression', 'blunt disclosure', and 'nonconforming behavior', and Korenman and Wyatt (1996) characterize flaming as 'emotional outbursts'. Flaming episodes are similarly described as 'the hostile expression of strong emotions and feelings' (Lea et al., 1992).

Most academic discussions of flaming implicitly or explicitly link it to CMC (e.g. Thompson, 1996; Thompson and Ahn, 1992; Thompson and Foulger, 1996). A common argument is that CMC, as compared to face-to-face communication, filters non-verbal cues such as gesticulation, facial expressions, tone of voice, and external environmental information. Reduced social cues are seen to lead to correspondingly reduced social constraint and a reduced impact of social norms. The results include greater equality of participation (Siegel et al., 1986), reduction in status differentials (Dubrovsky et al., 1991), and group decisions that are more polarized and risky than those arrived at via face-to-face communication (Kiesler et al., 1984). In addition, the disinhibition characteristic of such environments is also widely held to increase flaming (Kiesler et al., 1984; Siegel et al., 1986; Sproull and Kiesler, 1991). Spears and Lea (1992) noted that the implication is that CMC environments lack social cues, foster difficulties in coordination and feedback, cultivate de-individuation, and promote widespread depersonalization. Thus, several scholars have argued that specific characteristics of computer-mediated channels might contribute to the incidence of flaming and other problematic online interactions (Gurak, 2001; Kiesler et al., 1984; Siegel et al., 1986; Sproull and Kiesler, 1991).

However, the so-called 'liberation' and 'disinhibition' claims and flaming behaviors said to occur within these environments have been challenged on several levels (Culnan and Markus, 1987; Lea et al., 1992; Postmes et al., 1998; Spears and Lea, 1994; Walther, 1992; Walther et al., 1994). Some have questioned both the prevalence of flaming (Lea et al., 1992) and technologically deterministic explanations for it (Walther et al., 1994). In spite of this, these claims continue to enjoy wide support and reflect a sentiment about the impersonal character of CMC. As noted by Walther et

al. (1994), these findings are commonly referenced by scholars as indicative of differences between CMC and face-to-face communications, in spite of some dubious conclusions, the discovery of important mitigating factors such as longer-term interaction (Walther, 1992) and anticipated future interaction (Walther, 1994), and alternative explanations for seemingly inappropriate online behavior (Postmes et al., 2000).

### **CRITIQUE OF CURRENT PERSPECTIVES ON FLAMING**

Current conceptualizations of flaming suffer from several shortcomings that inhibit the development of an encompassing view of the perceived hostile communication acts that occur in human interchange. Specifically, perspectives on flaming suffer from imprecision in conceptual and operational definitions that stem from an overemphasis on message content versus message context. In addition, scholars have tended to view it primarily or exclusively as a CMC-based event and have often appeared to assume that flaming is negative and destructive. We argue that these assumptions are obstacles to developing an accurate understanding of flaming that accommodates its richness as a communication phenomenon. Here, we address these issues to establish the basis for a reconceptualization of flaming that takes into account the rich interplay of the sender, receiver, and third-party interpretation of communication acts.

#### **Conceptual and operational definitions of flaming and the role of context**

Despite abundant commentary, analysis, and research, there is, as yet, little agreement on what constitutes flaming (Lea et al., 1992; Thompsen, 1996). Popular characterizations and academic operationalizations often assume that a flame can be identified solely on the content of the message. For example, if a message contains hostile language or profanity or is provocative or non-conforming, it is viewed as a flame and can be recognized as such not only by the interactants, but also by external observers. This assumption is often the basis for content analyses used to assess the frequency of flames in online interaction (e.g. Kayany, 1998; McCormick and McCormick, 1992; Siegel et al., 1986).

Based on early agreement that flaming comprised a variety of 'uninhibited' verbal behaviors (e.g. Kiesler et al., 1985; Thompsen, 1992; Walther et al., 1994), flaming has been operationalized similarly across numerous empirical investigations. For example, Kiesler et al. (1984) operationalized 'uninhibited behavior' by counting the frequency of remarks containing 'swearing, insults, name calling, and hostile comments' (1984: 1129). Kiesler et al. (1985: 89) instructed coders to count remarks containing '(1) impolite statements (e.g. "You are a jerk.") and (2) swearing'. Dubrovsky et al. (1991) coded for 'socially deviant or "uninhibited" remarks'

by counting incidences of swearing, name calling, and threats. Weisband (1992) and Seigel et al. (1986) also coded transcripts for 'uninhibited remarks' such as swear words, name-calling, or insults. To this, Lea and Spears (1991) added measures assessing perceptions of others' level of uninhibitedness. Kayany defined flaming as messages containing both hostility and lack of restraint, and operationalized it by coding messages as a flame if they contained 'swearing, calling names, ridiculing, and hurling insults towards another person, his/her character, religion, race, intelligence, and physical or mental ability' (1998: 1138). McCormick and McCormick (1992: 383) coded transcripts for threats and put-downs such as 'intimidating or insulting remarks directed at the recipient'.

However, such operational definitions often fail to consider a crucial question: whose message interpretation determines the message label? In research on flaming, the determination of whether a message is considered a flame is often based upon an outside observer's perspective – that of the commentator, the researcher, or a coder.<sup>2</sup> A third party's interpretation, however, might be very different from that of the interactants (Mortensen, 1997). What an outside observer might perceive as 'hostile language' could be perceived by one or both interactants as a routine reminder, an attempt at humor, a deserved reprimand, a poorly-worded but well-intended suggestion, or an intentional use of non-normative language for specific interactional goals. Differences in interpretation could be due to observers' lack of access to the wide array of contextual factors that are key to interactants' message interpretation.

It is precisely this context that interactants draw upon to achieve some degree of shared understanding. There are many types of messages, for example, that could contain elements that typically distinguish flaming behavior and might not be viewed as flames from the interactants' shared perspective. Consider, for example, profanity – an easily identifiable language element used as a key indicator of flaming. In many (perhaps even most) instances, messages that use profanity could be accurately considered a flame. However, there also may be instances when profanity should not be considered a flame.

For example, the casual use of profane language between close friends can be a marker of relationship closeness. Friends have been known to address each other with hostile or vulgar terms as a form of play or friendly verbal jousting—words that they would never use casually with someone outside their social circle. In such instances, the normative language uses within the group would include – and may even require – profanity. A similar case can be made for insults, name-calling, impolite language, and other so-called 'hostile' messages. McCormick and McCormick (1992), in their study of undergraduates' email messages, recognized this potential limitation to their data analyses and conceded that the way in which their coders interpreted

the messages that they had coded as flames might differ from interactants' interpretations:

Although there was no way of knowing for sure, it appeared that many of the threats and put-downs were exchanged by young men who knew each other well. Rather than being a sign of dislike or alienation, such threats and put-downs may be an adolescent sign of affection and trust among some male, undergraduate, computer users. (1992: 390)

Outside of such distinct social networks, where different interactional norms dominate, the exact same language use could hold far different, and far more negative, meanings for both sender and receiver. Recognizing such normative influences in their study of students' CMC, Postmes et al. (2000) distinguished between merely impolite statements and those where swearing was thought to indicate harmful intent. Such consideration of the context in which communication occurs is crucial to a more accurate view of message meaning.

Several researchers have in fact recognized that social categories are important sources of social influence, irrespective of message content or the richness of the channel and the cues that it might convey (Lea et al., 1992; Postmes et al., 1998; Postmes et al., 2000; Spears and Lea, 1992). Consequently, flaming is rightly viewed as 'radically context-dependent' (Lea et al., 1992: 108) and recognized as group-specific and heavily influenced by normative expectations. From this perspective, Lea et al. (1992) advocate an explicit consideration of subcultural norms in order to contextualize 'antisocial behavior' occurring via computer-mediated channels. As Postmes et al. recognized in their analysis of CMC among a group of students:

Although a message might seem rude to an outsider examining it out of context, it is not certain that rudeness was either intended by the sender or perceived by the receiver. This underlines the importance of looking at the context and meaning of messages. (2000: 357)

Accordingly, we argue for more direct and comprehensive consideration of the social and relational contexts in approaches to flaming.

### **The potential utility of flaming**

This focus on the role of norms suggests that scholars should not assume that all use of language that appears to be hostile or non-normative is negative and undesirable. Although much of the popular literature on flaming details the psychological discomfort and emotional pain associated with being flamed (e.g. Tamosaitis, 1991), scholars have generally taken a more balanced approach. Even so, flaming is overwhelmingly characterized negatively and framed in terms of finding solutions to the 'problem' of uninhibited or inappropriate messages via CMC. For example, Markus

(1996) included analyses of misunderstandings and angry, uninhibited exchanges in her study of the 'negative effects of electronic communication'. Thompsen's (1996: 298) analysis of flaming as 'digital bits of vivid vitriol' was intended to identify causes of this antisocial behavior. This tendency to look for solutions to flaming may be because researchers have not generally incorporated the influence of *local* group norms, and consequently have defined flaming as anti-normative in terms of their view of prevailing cultural norms. Although it is certainly true that verbal hostility, profanity, and other hurtful-appearing messages can and likely do cause harm, messages that might be considered to be flaming may also be seen as 'good and desirable' within a specific group in which members share norms of interpretation (Postmes et al., 1998).

We approach the issue of flaming (and related types of interactions) with a focus on how and why it occurs, and what function it serves, rather than with a preconceived value judgement.<sup>3</sup> Just as there may be antisocial motivations for hostile-appearing messages, there also may be functional and/or pro-social motivations and outcomes associated with anti-normative messages. For example, language that appears to outsiders to be outrageous and inappropriate may serve as a means to mark relational closeness or ingroup boundaries, as McCormick and McCormick (1992) suggested. Similarly, Postmes et al. (2000: 357) asserted, 'if flaming is normative to interactants themselves, then an exchange of insults could create a bond rather than a conflict'. Thus, we argue for investigating the function of messages typically labeled as flaming before applying value judgements.

### The role of communication channel

Research on flaming has tended to implicitly or explicitly link flaming to CMC. Although several investigations recognize implicitly that such 'uninhibited behavior' occurs outside of CMC (e.g. by comparing frequencies of flaming via CMC to face-to-face conditions), scholars have tended to discuss flaming as an online phenomenon (see Lea et al., 1992: 95–6, for an extended discussion). To a degree, this may stem from attributing flaming to the relative anonymity and isolation that some view as characteristic of computer-mediated channels.

However, messages that convey hostility, profanity, and blunt criticism are found in interactions conducted via any mediated channel (e.g. telephone, voicemail, Post-it notes, letters), as well as face-to-face. Although conceptualizations of flaming emerged from experience in online interactions, considering it aside from any specific channel (even while acknowledging the role of various channels) allows conceptual linkage to a substantial body of accumulated research on human communication that is useful for forming a precise understanding of the phenomenon. Indeed, the literature on interpersonal communication that examines hostility, anger,

impatience, or candidness rarely considers the role of the interactional channel and does not label such episodes as 'flaming' (e.g. Vangelisti, 1994). Thus, we argue that flaming should be seen as a communicative episode fundamentally independent of, although possibly shaped by, the communication channel.

Indeed, the channel of communication *can* play an important, although not necessarily decisive, role in problematic interactions. Mediated channels can convey fewer social cues and therefore less information to guide interpretation (Daft and Lengel, 1984; Kiesler et al., 1984), which can contribute to misunderstandings. Furthermore, several studies have shown that instances of 'uninhibited behavior' occur more often in CMC versus face-to-face conditions (Dubrovsky et al., 1991; Kiesler et al., 1984, 1985; Siegal et al., 1986; Wiesband, 1992). Many maintain that the relative anonymity of CMC results in a sense of de-individuation that contributes to behavior violating social standards (e.g. Joinson, 1998; Kiesler et al., 1984; Siegel et al., 1986).

However, conclusions regarding this proposed channel effect contributing to flaming have been tempered by recent research. For example, although characteristics common to CMC (e.g. relative anonymity) have been proposed to enhance de-individuation, or a 'state of decreased self-evaluation . . . causing antinormative and disinhibited behavior' (Postmes and Spears, 1998: 238), recent evidence suggests that individuals respond strongly to *situational* norms under de-individuating conditions, which may or may not be 'anti-normative' as judged by more *general* social norms. Thus, even under 'de-individuated' conditions that may occur in CMC, individuals 'make an evaluation as to the social desirability, correctness, or normativity of their actions' (Postmes and Spears, 1998: 252). In fact, evidence suggests that CMC environments might actually serve to *strengthen* adherence to group norms and that de-individuating circumstances have little impact on behavior that is anti-normative according to social norms (Postmes and Spears, 1998; Postmes et al., 2000).

Therefore, the focus of our framework is on individuals' intentions and interpretations based on contextual factors, especially various levels of norms. These interpretations can be shaped by, but are not necessarily determined by, channel characteristics. The approach proposed here focuses on individuals' intentional and unintentional violations of norms for message content, as well as for channel of interaction. Thus, consistent with the position advocated by others (e.g. Postmes et al., 2000), we seek to avoid the tendency in much CMC research to focus primarily on channel characteristics. Instead, we elevate the importance of individuals' perceptions and the choices that they make as they select and use various channels for particular interactional goals (O'Sullivan, 2000).

## TOWARD AN INTERACTIONAL-NORMATIVE FRAMEWORK OF PROBLEMATIC INTERACTIONS

This section outlines a framework for understanding flaming and other problematic interactions that builds on this critique of existing flaming research. The focus is on interactional aspects of message interpretation from multiple perspectives and the role of various levels of situated, negotiated norms that are used to guide those interpretations. This approach moves away from trying to identify flames based solely on a third party's assessment of specific message elements (e.g. profanity), message tone (e.g. hostility), or assumed intent (e.g. aggression). It also provides a conceptual foundation for understanding flaming that is not dependent on channel characteristics (Kayany, 1998), and thus provides a potential for application across a wide range of mediated *and* non-mediated channels. The result is a framework that offers greater precision in determining what flaming is, based on recognizing variations in interactional norms.

### The relational nature of communication

Most current conceptualizations of flaming appear to be based on a transmission model of communication, insofar as they assume that communication is the efficient transmission of unambiguous information from one individual to another. This is exemplified by conceptualizations of flaming that assume a third party's interpretation of a message will be the same as that of the interactants. However, as many communication scholars have noted, the communication process is far more complex and nuanced than this perspective implies. As Coupland et al. (1991b: 3) argued, 'language use and communication are in fact pervasively and even intrinsically flawed, partial, and problematic'. The framework proposed here recognizes that communication is inherently problematic, and contextualizes flaming as one among several specific types of problematic interactions.

Communication ambiguity and equivocality have been conceptualized as residing in the sender's intentions, the receiver's interpretations, the message itself (Eisenberg, 1984), or from an interaction of all three (Bantz, 1983; Putnam, 1983; Putnam and Sorenson, 1982; Weick, 1979). This suggests that message construction should be viewed as a *relational* process, since communication involves at least message sender(s) and receiver(s) in a relational context.

Thus, we argue that an outside observer most often cannot reliably know what the essence of a message means to the sender or the receiver (Bradac et al., 1989; Poole et al., 1987).<sup>4</sup> Furthermore, just as an outside observer might misinterpret the meaning of a particular interaction, the interactants themselves cannot necessarily have perfect understanding of one another through communication. Pearce and Cronen (1980) and Cronen et al. (1988), for example, noted that the communication process requires a

complex co-ordination of efforts among interactants to determine message meanings. Incorporating this assumption helps to develop a more precise conceptualization of flaming, while situating it within a set of other types of problematic interactions. We propose to ground flaming behavior within a *relational* perspective, with an emphasis on the contributions of relational context as a key to interactants' message interpretation.

### **Interactional norms**

Individuals are guided by communicative norms that help them to construct and interpret messages. Norms can be identified at cultural, local or group, and relational levels. Grice's (1975) maxims, for example, identify a set of interactional norms applicable to North American culture. Brown and Levinson's (1987) classic analysis of politeness examines in depth 'universal' norms of language use to manage face in social discourse. Social etiquette rules (e.g. *Miss Manners*, see Martin, 1997) also describe behaviors that are appropriate (and inappropriate) in various social situations.

The emergence of computer-based interactions has also given rise to relatively codified rules of online conduct. For example, 'netiquette' guides provide standards for acceptable interactional practices when conversing on the web (Crump, 1998; Glassman, 1998; Shea, 1994), and are intended to establish the bounds of what is and is not appropriate in a variety of online interactions. In this regard, experience is crucial to recognize online norms (McLaughlin et al., 1997).

Concurrently, and heavily interwoven with cultural norms, norms grounded in local social structures such as a specific organization or other social network can influence individuals' message construction and interpretation. For example, it might be normative in an organization for managers to use highly formal language when interacting with each other and with employees. For another organization it might be normative for managers to use informal language and even engage in teasing and joking with each other and with employees. Of course, formal and informal socialization processes are keys by which an organization conveys to new members the various norms that they are expected to follow (Jablin, 1987). Local interactional norms may be codified into employee manuals, or manifested in the unwritten rules that a newcomer learns by trial and error or with the assistance of a veteran organization member.

Individuals can also develop norms distinctive to specific relationships. These norms might be consistent or inconsistent with local or cultural norms, and they might not be apparent or decipherable to anyone outside the relationship. Relational partners bring a set of expectations based on previous relationships and on other influences such as parents, peers, and other sources (e.g. mass media) (Planalp, 1985). One of the central processes of early relationship development is learning and negotiating expected

behaviors in order to increase one's ability to predict the other's behavior (Berger and Bradac, 1982; Berger and Calabrese, 1975). Most likely, there is mutual – though not necessarily equal – influence of each partner on which norms apply within the relationship (Duck and Pittman, 1994). These norms provide a base for individuals to use in interpreting the meaning of each other's messages within the relationship (Poole et al., 1987).

Interactional norms, then, serve as a guide to the formation of messages and their interpretation. Messages and channels that are perceived as consistent with norms are deemed appropriate. Of course, a message or channel can be appropriate at one level and inappropriate at another level (such as when relational norms differ from cultural norms). Both the message sender and recipient presumably evaluate the appropriateness of a message or channel: the sender in the process of creation, and the recipient as he or she strives to draw meaning and understanding from message.

### **Norm violations**

Although norm violations can be positive or negative (Burgoon and Hale, 1988), the focus here is on negative violations. Individuals might typically avoid negative norm violations; however, such rules can be broken. A variety of goals could motivate someone to intentionally violate interactional norms. For example, one may violate norms to attract attention, to display opposition, or to demonstrate independence. Norms, and their potential violation, can thus be seen as a resource that individuals can use in pursuit of their interactional and relational goals (Burgoon and Hale, 1988).

Alternatively, of course, norm violations can be entirely unintentional. Unintentional violations can be understood as a misalignment of norm sets: individuals (say, newcomers to a social network) hold their own set of understandings about appropriate and effective communication that may not overlap substantially with those of the social network. Socialization (or trial and error) is the means by which norm sets can become more accurately aligned to avoid unintentional negative violations.

In addition, individuals can vary in their communication competency (Spitzberg and Cupach, 1989; Wiemann, 1977). For example, some might be quite able to construct clear messages that are interpreted fairly closely to the sender's intent, while others may have a tendency to compose messages that are obscure or that are interpreted differently than the sender intended. Of course, there is a wide range of competencies possible for different types of interactions, in different relationships, using different channels – even within a particular individual as well as across great numbers of people.

### **The role of normative expectations in 'flaming'**

As already discussed, messages are formed and understood within a framework of interactional norms that evolve over time. Flaming behavior is

extremely complex, however, because cultural, local, and relational norms co-exist; they may conflict, differ from one person to another, change over time, and differ from one channel to another. When multiple levels of norms for messages and channel are considered, the seemingly straightforward task of identifying flaming is a complex assessment that requires incorporating perspectives of those involved as well as any outside observers (Poole et al., 1987). Unintentional norm violations would be considered miscommunication instead of flames, and various types of intentional norm violations (for various motivations) are possible. These different types of episodes are detailed in the following section.

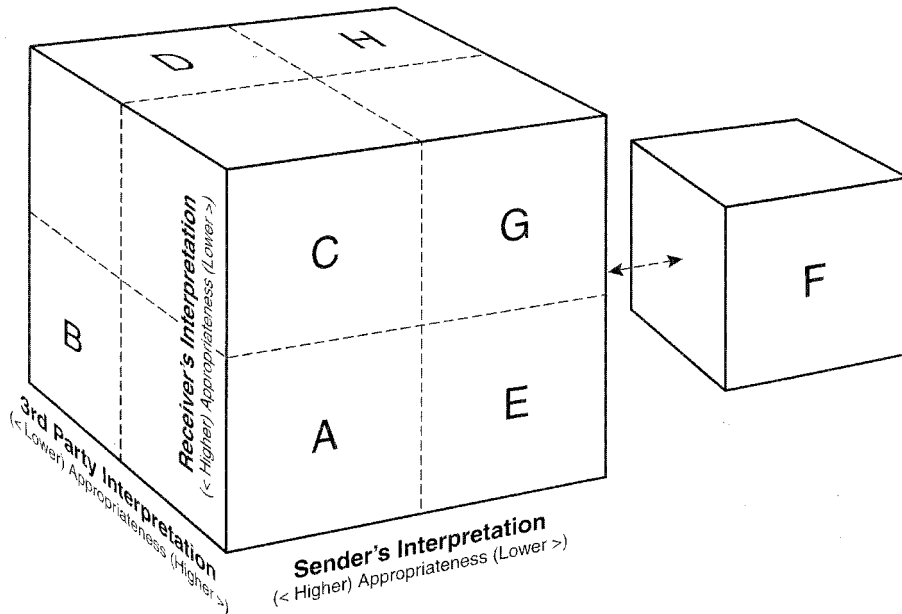
### THE 'INTERACTIONAL NORM CUBE'

Based on a consideration of the relational nature of communication, multilevel norms acting to guide interactants' message formation and interpretation, and the consequences of norm violations and expectations, we identify here a framework (the 'interactional norm cube') and a taxonomy of problematic messages to contextualize communication as it implicates flaming behaviors. Table 1 identifies the possible combinations of message interpretations, as a function of various message sender/receiver and third-party viewpoints, and as informed by normative cues.

Working from message sender, message receiver, and third-party perspectives, Figure 1 considers messages in terms of their perceived appropriateness (on a continuum from highly appropriate to highly inappropriate) and graphically represents the relationships of three perspectives on a specific message's appropriateness or inappropriateness. The highly inappropriate end of each of the continua is where flaming behavior has traditionally been located, although this distinction has typically been made from a view of only one perspective at a time (i.e. sender, receiver, or third party).

The simultaneous consideration of these three perspectives, however, coupled with an understanding of the appropriateness of messages based on their normative context, yields the eight possible conditions represented by the cube in Figure 1 (represented also in Table 1).<sup>5</sup> This approach departs from past conceptualizations of flaming behavior based on a single perspective external to the interactants without consideration of interactional norms. Thus, this framework is intended to expand our understanding of flaming by an explicit consideration of the interactional richness and normative-contextual cues that guide message formation and delivery as well as reception and interpretation from multiple perspectives.

The rows in Table 1 correspond to the octants in Figure 1. Table 1 identifies possible combinations of message interpretations and explains the effects of norms on message interpretation (via the comments and



• Figure 1 Cation to come

examples provided in the table). Each of the eight rows in the table represents a specific communication circumstance in which the interpretation of a message is a function of the sender's, receiver's, and a third party's perception, as shaped by interactional norms. Thus, the rows of Table 1 provide a taxonomy of various types of interactions, including flaming behavior. The first three cells of each row illustrate whether each person interprets the message as socially and normatively *appropriate* or, alternatively, as a negative *transgression* (i.e. inappropriate).

The first four rows of Table 1 are all instances when the originator/sender intends the message to be consistent with relevant norms; hence, the message is interpreted as appropriate by the originator/sender in each case. In addition, each of these rows is distinguished by specific combinations of message interpretations (appropriate or transgression) by the recipient and third party members. The last four rows are all instances when the sender intends the message to transgress relevant norms. Again, each of the last four rows is further distinguished by specific combinations of message interpretations (appropriate or transgression) by the recipient and third party members. Each row and corresponding cube octant will be described in turn.

The first row of Table 1 represents the situation where the sender, receiver, and a third party all interpret the communicative act as an appropriate message consistent with each individual's understanding of

• Table 1 A taxonomy of problematic messages

SENDER'S PERSPECTIVE	RECIPIENT'S PERSPECTIVE	THIRD-PARTY PERSPECTIVE	FIGURE 1 OCTANT	COMMENTS AND EXAMPLES
Appropriate	Appropriate	Appropriate	A	<ul style="list-style-type: none"> <li>Clearly constructed messages in accordance with widely-held, well-understood communication norms held by all parties</li> </ul>
Appropriate	Appropriate	Transgression	B	<ul style="list-style-type: none"> <li>Clearly constructed and well-understood messages within specific local or relational norms of interactants, yet violates norms of third party</li> <li>Examples might be sarcasm, joking, verbal 'play'</li> </ul>
Appropriate	Transgression	Appropriate	C	<ul style="list-style-type: none"> <li>Sender's message viewed as inappropriate by receiver, perhaps due to misalignment of shared cultural, local, or relational norms, but is consistent with third party's norms</li> <li>Receiver misinterpretation or misalignment of norm set</li> </ul>
Appropriate	Transgression	Transgression	D	<ul style="list-style-type: none"> <li>Sender's message perceived to be inappropriate as judged by norms held both recipient and outsider</li> <li>Instance could be due to sender's insensitivity to existing norms relevant for relationship and social system</li> </ul>
Transgression	Appropriate	Appropriate	E	<ul style="list-style-type: none"> <li>Sender's intent to violate norms (to 'flame'), but no one else views this message as a violation.</li> <li>Instance could be due to lack of understanding of relational or social system norms, too high a degree of subtlety, or communication incompetency</li> <li>A 'failed flame'</li> </ul>

Transgression	Appropriate	Transgression	F	<ul style="list-style-type: none"> <li>• Sender's intent is to violate norms but receiver does not perceive message as a violation, even though a violation is apparent to third party.</li> <li>• Instance could be due to receiver's misalignment of norm sets with others in social system or misinterpretation of message.</li> <li>• A 'missed flame'</li> </ul>
Transgression	Transgression	Appropriate	G	<ul style="list-style-type: none"> <li>• Sender's intent is to violate norms and receiver perceives that norms were violated, but a violation is not apparent to 'outsider' due to lack of shared local or relational norms with interactants</li> <li>• Sender could carefully construct a message using relational knowledge to 'flame' another but the message looks innocuous to an outsider so there are no consequences from social system</li> <li>• An 'inside flame'</li> </ul>
Transgression	Transgression	Transgression	H	<ul style="list-style-type: none"> <li>• Sender's intent is to violate norms, receiver and third party perceive the message as a violation</li> <li>• A true 'flame'</li> </ul>

interactional norms. This represents non-problematic interactions, and corresponds to messages located in Octant A in Figure 1.

Row 2 of Table 1 (corresponding to Octant B in Figure 1) describes the occasion where the sender and receiver believe the message is appropriate but a third party views the message as a transgression. In such instances, sender and receiver share the view that the message is consistent with specific local or relational norms that are not shared by the third party. In practice, this can be illustrated by sarcastic or joking messages that are understood as such by the interactants. In organizations, such messages may involve language that violates policy or legal standards on their face even through they are perceived as appropriate to interactants.

Row 3 in Table 1 (corresponding to Octant C in Figure 1) describes the situation where the sender's message is intended to be consistent with appropriate behavioral norms, and is perceived by third parties as consistent with such norms, but the recipient perceives the message as a transgression. This indicates a misalignment of norm sets of the recipient, which could be a result of a misinterpretation due to lack of shared cultural, local, or relational norms. This may represent instances when an individual is oversensitive to evaluations or other comments that are generally viewed as valid and appropriate criticisms. Alternatively, this could result from candid evaluations that are intended as constructive or legitimate, based on the sender's relationship to the receiver.

Row 4 (corresponding with Octant D in Figure 1) represents the situation in which the sender intends his or her message to be appropriate but the message is perceived to be inappropriate by both the recipient and a third party. In general, this represents a misalignment of the sender's norms with widely-accepted norms. In practice, this could be illustrated by incidents when a sender is insensitive to, or unaware of, how others would interpret a specific message (e.g. when new group members with different ideas of appropriate language communicate to their group).

Rows 5 to 8 in Table 1 all represent situations where the sender intends to violate interactional norms. Row 5 (corresponding to Octant E in Figure 1) describes the situation where the sender's attempt to violate communication norms is not viewed as a transgression neither by the recipient nor by third parties. In practice, this may be because the sender does not understand the norms he or she is attempting to violate, uses too high a degree of subtlety, or exhibits communication incompetency. In such 'failed flames', one has not offended someone who takes no offense.

Row 6 (corresponding with Octant F in Figure 1) identifies a situation when a sender intends to violate communication norms but the receiver does not view the message as a violation. This might be due to a lack of sensitivity on the part of the recipient (someone with 'thick skin') or due to the full meaning of the message escaping the recipient's perception.

However, if the message were shared, delivered in a public arena, or detected through monitoring of communications, a third party would view the message as a transgression. In practice, this might represent a 'missed flame'. This also might describe situations when the sender constructs a message knowing the receiver would not perceive it as a flame, but knowing also that others would 'get it.'

Row 7 (corresponding to Octant G in Figure 1) identifies instances when sender and receiver share an understanding that communication norms were violated but the transgression is not apparent to a third party. This 'inside flame' is not understood by those outside the shared local or relational norms salient to the interactants. A comment that, on its face, appears to be innocuous to someone unfamiliar with the specific relational history and norms operating between the sender and receiver could be understood as pointed criticisms or hurtful comments to the interactants themselves.

Finally, Row 8 (corresponding to Octant H in Figure 1) represents the quintessential 'flame'. In this case, the sender intends to violate norms, the receiver perceives the message as a transgression, and a third party also recognizes that the message is a violation. In many instances, the consequences would likely be negative for the sender. However, repercussions might not be universally negative, such as when a sender's goal is to 'get under someone's skin' or to demonstrate an unwillingness to follow established norms – or even to hurt another or to end a relationship. Such violations can be strategic and functional, even though they are generally viewed as antisocial behavior.

## THEORETICAL AND APPLIED IMPLICATIONS OF THE INTERACTIONAL NORM FRAMEWORK

The framework proposed here contributes to the study of flaming by providing more precise definitions for a range of potentially problematic interactions – including flaming – thereby enabling more accurate assessments of the prevalence, causes, and consequences of several distinctive types of problematic interaction. Based on the present perspective, then, 'flames' are: *intentional (whether successful or unsuccessful) negative violations of (negotiated, evolving, and situated) interactional norms*. This definition emphasizes the essential role of the message creator's intent and recognizes that interpretations emerge from the various interactional norm sets used to evaluate communication. It distinguishes flames from unintentional violations of interactional norms (Octants A–D), which are instead viewed as misalignments of norm sets at various (relational, group, organizational, cultural) levels. These types of episodes are more precisely understood as miscommunication (Coupland et al., 1991a; Mortensen, 1997) and point to issues of socialization or communicator competence as possible contributing

factors. Miscommunication, as distinguished from flaming, has distinctive consequences for personal, relational, and organizational outcomes.

The framework also identifies a family of flame types that emerge from possible differing message interpretations by a sender, receiver, and third parties. A 'true flame' is a message in which the creator/sender intentionally violates interactional norms and is perceived as violating those norms by the receiver as well as by third-party observers. 'True flames' (Octant H) can be distinguished from 'missed flames', 'failed flames', and 'inside flames' (Octants E–G), each of which has distinctive consequences for the interactants, as well as for policy and legal issues.

Furthermore, this approach recognizes that interactional norms emerge through negotiation over time within cultures, social networks, and relationships (Postmes et al., 2000). This negotiation process can be viewed as a process of realigning norms, as perceptions of appropriate and inappropriate behaviors evolve (or are reinforced) through communicative exchanges. The *process* of 'flaming' thus includes the creation, transmission, and interpretation of a message that is perceived from multiple perspectives as violating norms, and which can itself be the beginning of the norm negotiation, evolution, and realignment process. From a sender's viewpoint, the recipient's or third party's reaction (or lack of reaction) to an intended 'flame' provides information about the sender's alignment of his or her norm set vis-à-vis others' norm sets. A similar process can occur for the recipient and a third party, resulting in adjustments to norm sets for them as well. Over time, various parties might learn to be more effective in their message construction and interpretation, which may result in increased communicative competence about how and when to follow – or to violate – norms as they pursue their goals.

Another contribution of this framework is that it identifies the origins of some problematic interactions and suggests steps to address issues arising from such instances. Viewing unintentional transgressions as norm misalignments suggests the need for interactants to reassess and renegotiate understandings about appropriate interactional behavior. It does not suggest that communication should be censored or that individuals should be censured for initiating such messages. Rather, it suggests the need for adjustments in socialization processes or for improved communication skills. In relationships, adjustments might include explicit discussions about what each partner views as proper and acceptable language, interactional styles, conversation topics, channels, and interactional settings for certain types of communication. In organizations, adjustments might include individualized coaching for improved communication practices, instituting training programs, and improving orientation processes for new employees so that normative communication behavior is made explicit.

Remedies might also include mutual influence on the specific aspects of the guiding norm set. In relationships, both partners might adjust their expectations to accommodate the other's preferences. In organizations, individuals might help to shape a particular organization's norms of appropriateness rather than an organization imposing its norm set on individuals (e.g. when a new member's casual interactional style loosens up an organization's norms of formality over time). In each case, the goal would be to improve alignment for one or more sets of expectations about appropriate interactional behavior toward a common understanding. These steps would likely not eliminate 'flaming' activities, since some may continue to intentionally violate norms for various goals, but it could reduce the incidence of related, unintentional by problematic interactions and avoid confusing non-flames with flames.

An issue requiring further study is how norms regarding the interactional channels can also contribute to problematic interactions. Although this analysis focused on message content, norms also exist for interactional channels (O'Sullivan, 1997), which likely interact with message content and organizational culture. For example, some may feel that email is an inappropriate channel for critical messages and that face-to-face is the appropriate way to present criticisms (see, for example, Daft and Lengel, 1984). Markus (1994) suggests that a key dimension of technology choice in organizations is to 'behave appropriately', implying that using technology in a manner consistent with one's colleagues is crucial. Consequently, norm violations can occur based on the message and/or the channel, and the channel concurrently shapes the interaction in ways that can contribute to problematic interactions. Adding to the complexity is the finding that media perceptions are also tempered by individual factors, such as experience with the channel, the topic, the context, or the communication partner (Carlson and Zmud, 1999). Identifying existing norms and tracking their evolution for various channels, and investigating how channel-use norms and message content norms are incorporated as individuals make choices about their communication practices, are rich and challenging areas for future research.

There are a number of potential consequences of adopting this framework for the study of flaming. For example, studies examining the frequency of flames in various interactional settings might need to be reassessed, in light of the possibility that what have been counted as flames might actually be other types of interactions. Applying this framework could result in finding even lower incidences of flaming, although some have argued that flaming is actually quite rare already (Lea et al., 1992; Walther et al., 1994). This would be the case if messages that have appeared to a third party to be a flame are instead coded as a form of miscommunication (e.g. Octants B and D). Conversely, actual flaming might be higher than previously thought. Applying this framework might result in identifying messages that do not

appear to a third party as a flame but are perceived as such by interactants (e.g. Octants E and G). Future research that assesses the frequency of true flames, as well as other quasi-flames and various types of miscommunication, would be useful in helping to understand more precisely the prevalence of these types of problematic interactions.

Furthermore, the interactional norm framework points to the need for methods of data gathering and analysis that incorporate multiple perspectives. Assessing interactants' interpretations of messages will require a more labor-intensive research procedure than relying solely on coders external to the episode. Ideally, interactions should be coded by third-party evaluators and by interactants, who would provide data on the intent of their own messages and their interpretation of messages that they receive. Comparing the different perspectives, as described in Figure 1, would allow identification of finer distinctions between various types of intentional and unintentional problematic interactions.

This framework could also stimulate rethinking models that seek to explain causes of flaming. The interactional–normative framework presented here does not seek to explicitly identify motivations for aggressive or offensive language, although we argue that such episodes could be part of individuals' conscious, tactical repertoire of communicative options as they pursue interactional and relational goals. However, the framework can complement existing models that are designed to identify causes and motivations. For example, the SIDE model (Lea et al., 1992; Postmes et al., 1998; Spears and Lea, 1992) emphasizes the interaction between social factors (e.g. social identity) and channel factors (e.g. degree of anonymity of various forms of CMC). The interactional–normative framework could help to ensure that those explanations are focusing on flames rather than a type of miscommunication. In addition, the framework and the assumptions that provide its foundation can serve to re-emphasize the strategic choices that individuals make regarding both message content *and* channel use (O'Sullivan, 2000). As Postmes et al. (1998) noted, although the cognitive aspects of the SIDE model have been examined, the strategic elements have not been fully explored. This approach can help to balance the existing emphasis on channel effects apparent in the SIDE model, and provide a direction for elaboration of the strategic elements.

For example, individuals can assert some control over the degree of anonymity or social distance that will exist in the impending interaction through their selection of the channel of interaction, as well as what they choose to reveal or to withhold (O'Sullivan, 2000). Therefore, individuals can shape the degree of anonymity that they experience, which could have consequences for the degree to which that individual feels disinhibited. Similarly, individuals have the ability to shape others' perceptions of them by using a particular channel and revealing, concealing, or obfuscating

information about themselves salient to their own and others' perceptions of group status (O'Sullivan, 2000). These choices might be crucial for understanding whether interpersonal or social group norms are salient and the normative and anti-normative behaviors that emerge.

This framework might have utility in other, related, areas as well. As noted earlier, the interactional–normative approach is intended to apply to non-mediated as well as to mediated interactions. By taking this broad interactional and relational view, the interactional–normative perspective can inform analyses of other types of problematic interactions, such as harassment in its various forms (Bowes-Sperry and Tata, 1999; Jansma, 2000; O'Donohue et al., 1998). Social and legal discussions have often focused on the challenges of defining 'harassment'. Viewing harassment as a communicative issue suggests the need to draw on communication-based analyses. The framework that we propose confronts directly the crucial issue of the role of third-party observations and assessments in sexual harassment (Jansma, 2000).

Applying the present framework, examples of harassment (sexual or otherwise) would parallel examples of flaming. As in true flames, true harassment would require the intent to harass on the sender's part, the perception of harassment by the receiver, and third-party (e.g. co-worker, job supervisor, judge) perception of the action as harassment. Just as there can be 'missed flames', 'failed flames', and 'inside flames', there might be 'missed harassment', 'failed harassment', and 'inside harassment'. The lack of intent to harass directs attention toward misalignment of norm sets, which represents various sources of miscommunication with consequences distinctive from those appropriate for actual forms of harassment.

Similarly, this framework might be of use in examining hate speech and other types of harmful messages (Leets and Giles, 1997). Applying the framework suggests that what might appear objectively to be hate speech is subject to differing interpretations of interactants and third parties, based on potentially conflicting norms of message content. The framework suggests distinctions between various types of hate speech (i.e. true, failed, missed, inside) and suggests that such speech can sometimes be functional for the speaker (even while being offensive, harmful, and potentially sanctionable) and even normative within specific groups. It also helps to highlight instances when speech that inflicts harm on a recipient is best understood as miscommunication when the intent to violate norms is absent. Whether this framework, designed to better understand flaming, does in fact contribute to understanding other problematic episodes such as harassment and hate speech is worth further study.

Overall, locating CMC behavior in an interactional–normative context expands our understanding of flaming behavior to incorporate multiple

perspectives for situated norms, intentionality, functionality, and channel. In view of the potentially negative outcomes of flaming, the misinterpretations that may arise from communication that is incorrectly perceived as flaming, and the increasing use and importance of mediated channels for contemporary personal and organizational communication, such understanding is both timely and useful.

### Notes

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- 1 References to computer-mediated communication (CMC) have evolved as the forms of communication mediated by computer have expanded to include auditory and visual aspects. In this article we use the term CMC in its traditional sense (text-based electronic interpersonal and group interactions) to be consistent with early theorizing about flaming. However, the convergence of mass and interpersonal media into digital forms (hence, computer-mediated) argues for an approach to flaming less dependent on a specific type of CMC, which we present here.
- 2 There are, of course, exceptions to the focus on independent interpretation of message content. For example, Lea and Spears (1991) took into account perceptions of others' uninhibitedness, and Thompsen and Foulger noted that a message 'is not a flame until someone considers it a flame' (1996: 227).
- 3 Scholars studying other types of interactions branded as socially inappropriate have taken much the same approach. See, for example, Bavelas et al. (1990) regarding equivocal communication, Buller and Burgoon (1994) regarding deception, Coupland et al. (1991) regarding 'miscommunication', and Parks (1982) regarding disclosures.
- 4 A third party's ability to accurately recognize a flame is dependent on that observer's familiarity with the interactants' relationship and the communication context. For example, an external third-party observer to communication within a well-established group in which members share identities and norms of interaction may have difficulty accurately determining the intentions of communicators, and even the meaning of group messages. By contrast, a third-party observer of communication in 'zero history' groups would be better positioned to recognize and assess flaming behavior, because interactions are likely to be less embedded within local or relational social norms and, therefore, more easily and accurately recognizable to an outsider (assuming some level of shared cultural understanding).
- 5 However, it should be noted that identifying octants is a simplification of real life, since the axes are actually continuous measures of appropriateness. The lines showing the boundary between appropriate and inappropriate messages is dotted to indicate that the distinction is not always clear. Messages that would be located close to the dotted lines (e.g. equivocal messages) could prompt confusion and perhaps efforts on the part of the recipient to clarify the meaning (Bavelas et al., 1990).

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