Flash Report

The serial reproduction of conflict: Third parties escalate conflict through communication biases ☆

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HIGHLIGHTS

- Chains of four reproduced a narrative about conflict between two groups.
- Some chains were motivated to distort by reading their friends were involved.
- *Motivated chains* blamed outgroup, exonerated ingroup, and desired revenge.
- They used morality and honor loss words to convey their biases.
- Rather than subsiding, these biases *increased* across the chain and over time.

ARTICLE INFO

ABSTRACT

We apply a communication perspective to study *third party conflict contagion*, a phenomenon in which partisan spectators to others' disputes not only become involved in, but escalate, the dispute to a multitude of others. Using the serial reproduction method, we demonstrate the role of third parties' communication biases in conflict escalation, revealing that successive generations of partisan observers share and reproduce conflict narratives that become increasingly biased in their moral framing, attributions for the conflict, evaluations of the disputing parties, and quest for revenge. Despite equal fault between the disputing parties at the beginning, these communication biases increased, rather than subsided, with each iteration throughout communication chains, cumulating in distortions and group biases far above and beyond initial ingroup favoritism. Implications for strategies to debias conflict information transmission are discussed.

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Introduction

Much research on conflict has focused on escalation between two individuals or groups who are directly engaged in dispute. Far less research has examined how conflict spreads beyond the initial disputants to involve a multitude of others, or what we refer to as *third party conflict contagion*. One can easily appreciate the common scenario of people in two neighboring apartments quarreling over noise and trash because these issues directly affect the occupants of the apartments. But, consider the more remarkable scenario of a growing dispute in which their respective friends who live elsewhere become involved, and curiously, over issues far removed from them. What explains the

phenomenon of indirectly related third party observers retaliating against outgroup members several degrees removed, or as history attests, even generations later? It is a question with clear relevance in a world where the spread of conflict often results in tragic consequences for uninvolved third parties turned combatants, their communities, and future generations born into the strife.

This research takes a communication perspective to illustrate, for the first time, that successive generations of third party observers to others' disputes function as active agents of conflict escalation through their sharing and reproducing increasingly distorted information that in turn incites the next generation of audience members. We apply a novel paradigm—the serial reproduction method (Bartlett, 1932) to illuminate the process through which third parties increase empathy toward their affiliated group and antipathy and revenge motivation toward the outgroup, that over the course of time and multiple iterations, escalate an initial conflict beyond the original disputants. The method entails a chain of multiple communicators, the first of whom receives a researcher-created narrative and retells it to the second person, who reads and reproduces that version for the third person,

and so on, until the end of the chain. While every chain starts with identical information, the successive iterations produce a version in the end that emphasizes group-relevant, cultural information across the communicators (Imada & Yussen, 2012; Kashima & Yeung, 2010; Lyons & Kashima, 2001). Upon witnessing their affiliated group engaged in conflict, third parties may be driven to come to the aid of the group by recruiting receptive others to join the fight and seek revenge. The transmission of distorted information in a manner that is favorable to one's affiliated group despite or regardless of the group's role in the conflict would serve to enlist others' support and as a grounding function to establish a shared reality and collective identity (Kashima, Klein, & Clark, 2007). More generally, it allows people *without direct experience* with the conflict to elaborate on the narrative and highlight selective information, forming a corroborative structure across the chain and effectively broadening the scope of people involved. As such, serial reproduction lends itself to investigating the role of communication biases in perpetuating group conflict.

In the current study, the first person in each chain learned about a conflict between two groups, either when one of the groups included the participants' friends (partisan spectator condition) or when neither group included their friends (neutral spectator condition). All other information was identical. We predicted that partisan participants, compared to neutral, would be more, *and* increasingly, biased regarding their evaluations about the two groups (H1); attributions of the conflict to the outgroup (H2); and in a desire to seek revenge against the outgroup (H3). We also examined the linguistic framing of the narratives, predicting moral framing biases—i.e., using more words related to morality and harm to imply a right versus wrong frame—among partisan chains but not neutral (H4). We expected to see bias manifest as the selective retention of favorable information and omission of unfavorable information, implying the outgroup's blameworthiness and the affiliated group's blame exoneration (H5) and in sympathy expressions toward the affiliated group (H6). To test these hypotheses, we used quantitative analyses of communicators' reactions, linguistic analyses, and content coding of conflict narratives across chains.

Method

Participants

One hundred ninety-six undergraduates (mean age = 20.68, $SD = 2.69$; 88 women, 108 men) composed forty-nine (25 partisan, 24 neutral) same-gender chains.

Procedure

Four participants arrived to each session and were asked to imagine each other as roommates and then taken into individual rooms for the duration of the study. The original narrative focused on four specific issues, two in which one group each was to blame (party and trash, counterbalanced), and two (parking and soccer game) in which it was ambiguous who was the aggressor. Pretesting showed that the original narrative depicted the groups as equally blameworthy. Neutral chains read that the two groups were from two cities, Gaithersburg and Rockville. Partisan chains received the version in which the Gaithersburg group was substituted with their friends.

First position participants read and "re-told" the narrative by typing their version, which was printed by the researcher in front of them to take to the next person in the chain. This procedure was repeated through four individuals in each chain.[1] Participants were not told which position they were and whether or not they received the original or a re-told narrative. After retelling the narrative, participants completed

a survey about the conflict and its involved parties. Samples of participants' reproductions are included in the Supplementary data online.

Measures

Group evaluations

Participants rated each group (1 = Not at all, 5 = Extremely) on attributes that factored into positive (α's both groups = .93) (e.g. respectable, respectful, moral) and negative (α's = .91) (e.g. malicious, bullying, manipulative).[2] *Relative positive* and *relative negative* composites were calculated by subtracting Group 1's scores from Group 2. All data was coded such that Group 1 was the affiliated group, and Group 2 the outgroup equivalent, for partisan participants.

Conflict evaluations

Participants evaluated the groups' relative roles in the conflict, on a 1–9 scale anchored by the target groups (1 = Completely Group 1, 9 = Completely Group 2). Factor analyses produced two factors: *blame toward Group 2* (α = .61; blameworthy, responsible for escalation, should be held accountable) and *exoneration of Group 1* (α = .92; actions were understandable, group was provoked, empathize with group, actions were justified, inappropriate (−), harmful (−)).

Revenge

Participants completed the *Transgression-Related Interpersonal Motivations* scale (1 = Strongly disagree, 5 = Strongly agree; McCullough et al., 1998) about each group (6 items; α's = .81–.83), within which we were interested in *revenge intentions toward Group 2* (e.g. "I would want them to get what they deserve", "I would make them pay").

Linguistic analyses

We conducted analyses on the frequency of words in the reproductions to give insight into the underlying psychological processes of the communicator. To tap into the moral framing of the narratives, we focused on two word categories in an available linguistic dictionary that focuses on conflict.[3] *Morality/integrity* reflects a concern with morality and ethics, focusing on the fulfillment of, or, in this case, failure to perform, the duties and obligations of a virtuous person. Examples of these words are "(un)fair", "true/truth", "honest", "moral", and "should". *Misconduct* words include "wrong", "lie", "complain", "inappropriate", and "argue/argument" and reflect concerns with harm, aggression, and wrongdoing. The targeted words in each category were counted as a percentage of the overall word count in each story.

Content coding

Two trained coders coded the reproduced stories for expressions of sympathy toward each group, and instances of exaggerating or attenuating each group's blameworthiness. An example of *blame exaggeration* is "Their neighbors party a lot and smoke cigarettes in their place". An example of *blame attenuation* is "They threw a party a few nights ago, but kept it relatively small (about 10–15 people) in order to try and keep the noise level down". An example of a *sympathy expression* is "I'm so glad we don't have problems like that here! That must suck".

Analysis

Upon finding no effects of gender in three-way ANOVAs, two-way 2 (condition) × 4 (position) repeated measures ANOVAs were conducted and those results are presented. After trend analyses confirmed linear patterns in data (see Supplementary data), paired sample *t*-tests compared the 1st and 4th positions within each condition to test for change over time (Table 1).

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[1] Chains stretched across four experimental sessions and each story was given to another participant in a following session, given the time needed for four reproductions. Pilot participants believed their story was read by someone in the same session.

[2] All factor analyses were conducted with maximum likelihood extraction and direct oblimin rotation.

[3] The full conflict dictionary may be obtained from the 2nd author.

Table 1
Conflict evaluations and narratives content by condition and position.

	Condition						
	Partisan spectator				Neutral spectator		
	1st		4th		1st		4th
Group evaluations							
Relative positive traits (Group 2 - Group 1)	−.09 (.82)	<	−.62 (.96)*		−.18 (.87)	=	.09 (1.01)
Relative negative traits (Group 2 - Group 1)	.05 (.90)	<	.87 (1.13)**		.16 (.87)	=	.26 (.97)
Conflict evaluation							
Exoneration of Group 1	5.32 (1.71)	<	6.68 (1.44)**		5.35 (1.43)	=	5.08 (1.95)
Blame toward Group 2	5.17 (.94)	<	5.75 (1.04)*		5.49 (1.13)	=	5.04 (1.30)
Revenge intentions toward Group 2	1.77 (.59)	<	2.16 (.75)*		2.32 (.90)	>	1.89 (.89)[+]
Linguistic analyses							
Morality/integrity	.24 (.24)	<	.68 (.83)*		.27 (.39)	=	.29 (.44)
Misconduct	1.95 (.83)	<	2.87 (1.74)*		2.47 (.86)	>	1.99 (1.37)[+]
Content coding							
Blame attenuation about Group 1	.24 (.52)	<	.56 (.82)*		.35 (.49)	=	.17 (.39)
Sympathy expressions about Group 1	.00 (.00)	<	.32 (.69)*		.04 (.21)	=	.00 (.00)

Note. Within condition, *t*-tests examined differences between 1st and 4th position means. Values in parentheses are standard deviations.
[+] $p < .10$.
* $p < .05$.
** $p < .01$.

Results

Group evaluations

We predicted that partisan chains would show increasing bias through group evaluations (H1). There was a main effect of condition on *relative positive traits*, $F(1, 45) = 5.74$, $p = .02$, $\eta^2 = .11$ ($-.49_{partisan}$ vs. $-.05_{neutral}$), indicating that partisan participants evaluated the two groups more partially. This difference exaggerated over time, as illustrated by an interaction between condition and position, $F(3, 135) = 3.37$, $p = .02$, $\eta^2 = .07$ (Fig. 1). Within partisan chains, the perception of positive traits of the outgroup relative to the affiliated group worsened from 1st to 4th positions, $t(23) = 2.12$, $p = .05$; however, it remained the same within neutral chains, $t(23) = -1.32$, $p = .20$. In addition, we found a marginal main effect, $F(1, 45) = 3.07$, $p = .09$, $\eta^2 = .06$ ($0.58_{partisan}$ vs. $0.22_{neutral}$), and interaction for *relative negative traits*, $F(3, 135) = 1.99$, $p = .12$, $\eta^2 = .04$ (Fig. 2). Bias increased within partisan chains, $t(23) = -3.26$, $p < .01$, but not within control, $t(23) = -0.50$, $p = .62$.

Conflict evaluations

We predicted partisan chains to show increasing bias in their conflict evaluations (H2). We found a condition effect, $F(1, 45) = 6.42$, $p = .02$, $\eta^2 = .13$ ($6.13_{partisan}$ vs. $5.23_{neutral}$), and an interaction between condition and position for *exoneration of Group 1*, $F(3, 135) = 3.43$, $p = .02$, $\eta^2 = .07$ (Fig. 3). It increased within partisan chains, $t(23) = -3.89$,

$p < .01$, but not within control, $t(23) = 0.61$, $p = .55$. Another interaction emerged for *blame toward Group 2*, $F(3, 135) = 3.09$, $p = .03$, $\eta^2 = .06$ (Fig. 4), which increased within partisan chains, $t(23) = -2.57$, $p = .02$, but not neutral, $t(23) = 1.45$, $p = .16$.

Revenge

An interaction between condition and position was found for *revenge intentions toward Group 2*, $F(3, 135) = 2.80$, $p = .04$, $\eta^2 = .06$ (H3; Fig. 5), which increased within partisan chains, $t(23) = -2.46$, $p = .02$, and marginally decreased within neutral, $t(23) = 1.80$, $p = .09$.

Linguistic analyses

We predicted partisan chains to rely on morality-related words (H4). There was a main effect of condition, $F(1, 47) = 6.29$, $p = .02$, $\eta^2 = .12$ ($0.45_{partisan}$ vs. $0.22_{neutral}$), and an interaction between condition and position, $F(3, 141) = 2.43$, $p = .07$, $\eta^2 = .05$, on the use of *morality/integrity* words (Fig. 6). Usage increased within partisan chains, $t(24) = -2.65$, $p = .01$, but not among neutral, $t(23) = -.15$, $p = .89$. There was also an interaction for *misconduct* words, $F(3, 141) = 3.52$, $p = .02$, $\eta^2 = .07$ (Fig. 7), which revealed that usage increased within partisan chains, $t(24) = -2.39$, $p = .03$, and marginally decreased within neutral, $t(23) = 1.93$, $p = .07$.
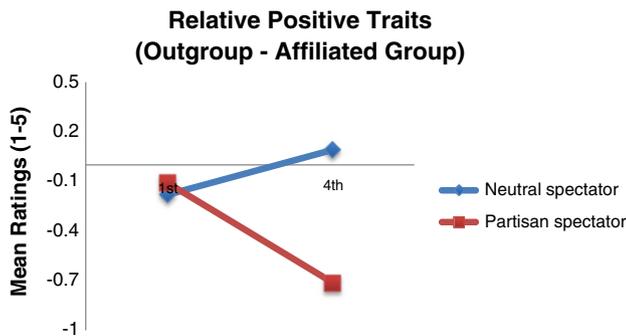

Fig. 1. Perception of relative positive traits (outgroup – affiliated group), by condition and chain position.
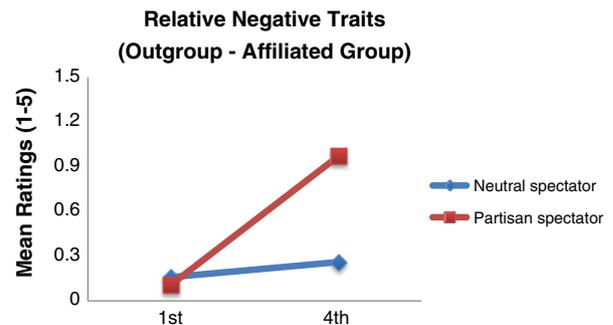

Fig. 2. Perception of relative negative traits (outgroup – affiliated group), by condition and chain position.
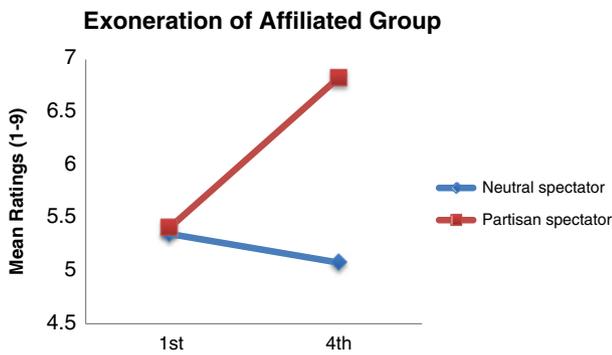
Exoneration of Affiliated Group

Fig. 3. Exoneration of affiliated group, by condition and chain position.
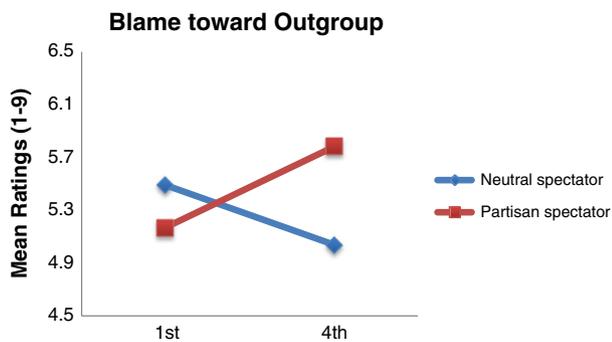
Blame toward Outgroup

Fig. 4. Blame toward outgroup, by condition and chain position.

Content coding

Testing H5, the analyses on *blame exaggeration* revealed a condition effect on *Group 1's blame exaggeration*, $F(1, 45) = 6.30$, $p = .02$, $\eta^2 = .12$, with partisan groups exaggerating less blame about the affiliated group ($1.03_{partisan}$ vs. $1.70_{neutral}$). Likewise, a marginal interaction, $F(3, 135) = 2.07$, $p = .11$, $\eta^2 = .04$ (Fig. 8), was found for *Group 1's blame attenuation*, which increased among partisan chains, $t(24) = -2.32$, $p = .03$, but not neutral, $t(22) = 1.45$, $p = .16$. No significant effects for condition or interaction were found for *blame exaggeration* or *attenuation of Group 2*, $Fs = .02–1.02$, $ps > .32$. Finally, in testing H6, a main effect of condition, $F(1, 45) = 9.64$, $p < .01$, $\eta^2 = .18$ ($0.24_{partisan}$ vs. $0.03_{neutral}$), and an interaction, $F(3, 135) = 2.15$, $p = .10$, $\eta^2 = .05$, were found for expressions of *sympathy toward Group 1* (Fig. 9). Partisan chains increased in their expression, $t(24) = -2.32$, $p = .03$, while neutral participants did not across positions, $t(22) = 1.00$, $p = .33$. The analysis on *sympathy toward Group 2* did not reveal significant effects, $Fs = .30–1.21$, $ps > .31$.

Discussion

In the current study, each partisan communicator contributed small distortions that, when accumulated, produced a highly biased, inaccurate representation of the original dispute, and escalated the conflict beyond the original disputants to involve future and distally related listeners. From a practical perspective, the findings strongly suggest that third parties to a conflict should be skeptical when listening to conflict narratives and to question their authenticity. More often, as this research has shown, it is likely that listeners take conflict narratives at face value, and through their own reproductions, further bias them for later audiences.

This study makes several important contributions. The findings document, for the first time, the role played by third party observers as drivers of conflict escalation through their biased communication. Rather than reproducing faithful narrations, third party communicators shared valued judgments about the conflict through small distortions in their reproductions. These biased distortions may have built coalition and support among the receptive audience, turning what would otherwise remain a small dispute into a prolonged and escalated intergroup conflict. Second, the results illustrate the *evolution* of intergroup conflict through cumulative group bias. Rather than a cognitive bias for just ingroup favoritism, which would have appeared with the first position communicator, the accumulation of distortions led to group level biases that emerged over time and far exceeded initial bias through successive reproductions. In this way, this research moves beyond the classic ingroup favoritism effect. Finally, the results illustrate the powerful role of narratives, in general, and the serial reproduction method, in particular, as a promising method in future research on conflict contagion.

Participants in the experimental condition were merely told that they were affiliated with a group, and did not receive explicit goals to distort information or recruit support for the group. Despite not receiving explicit instructions, and although the research was done in a relatively decontextualized setting (the laboratory), third parties' role in the conflict increased over time and took on a life of its own through their communication biases. This observation leads us to suspect that in the real world, when people's actual friends are engaged in conflict with another group, they may be even more motivated to become involved in the dispute, making the third party phenomenon more alarming. Given how frequently conflict stories are shared in everyday life, and the ease with which partisan communicators distorted their reproductions, biased communication in conflict escalation is an important agenda for psychological science. Future work should examine moderators of the effects shown. Factors that facilitate distortion might include information ambiguity (Balcetis & Dunning, 2006; Hsee, 1996; Kunda, 1990) and resource depletion (Bélanger et al., 2013) while potential debiasing techniques might include giving third party communicators accuracy (Lyons & Kashima, 2006) and accountability motivations (Tetlock, 1985) or instructions to communicate to a neutral audience (Lyons & Kashima, 2003).
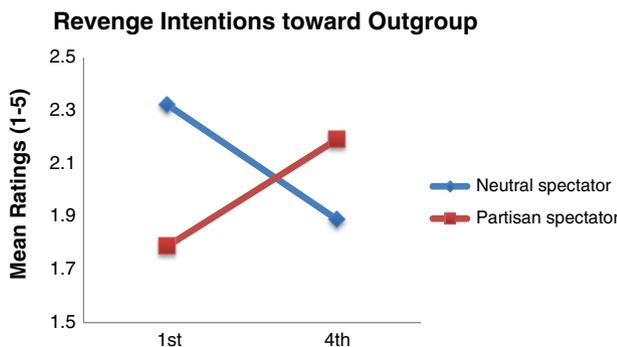
Revenge Intentions toward Outgroup

Fig. 5. Revenge intentions toward outgroup, by condition and chain position.

Morality/Integrity Word Usage
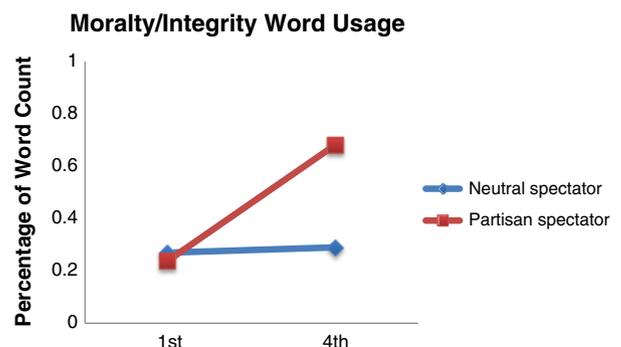
Fig. 6. Morality/integrity word usage, by condition and chain position.

Misconduct Word Usage
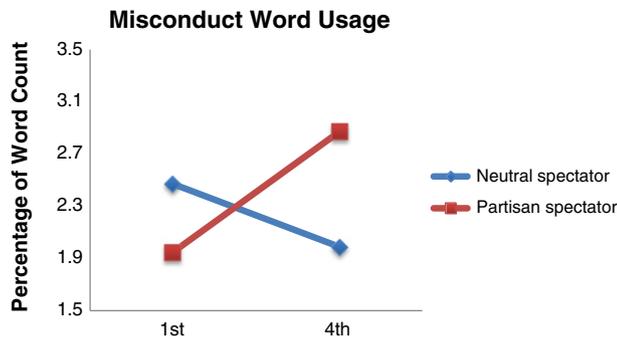
Fig. 7. Misconduct word usage, by condition and chain position.
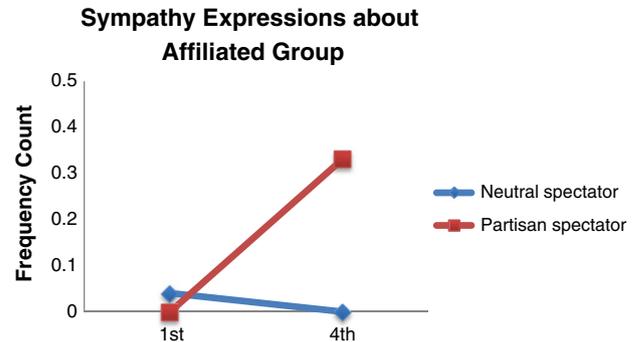
Blame Attenuation about Affiliated Group

Fig. 8. Blame-attenuating statements about affiliated group, by condition and chain position.
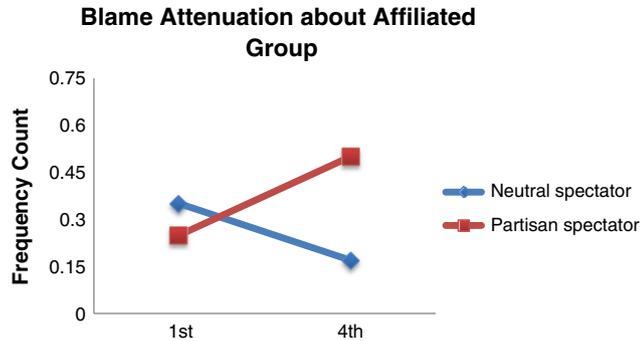
Sympathy Expressions about Affiliated Group

Fig. 9. Sympathy expressions about affiliated group, by condition and chain position.

Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jesp.2014.04.006.

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