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Anger as the Fuel of Violent Spirals

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Abstract

Conflict scholars have long studied the sequential tit-for-tat violence that defines many dyadic conflicts, but they have rarely considered the emotional forces that may underlie the course of these "spirals." Given increasing scholarly knowledge of emotions, anger would seem to be an essential "fuel" for many violent intergroup spirals. Given this "fuel," actors wishing to begin and enflame a violent spiral (instigators) may attempt to create and sustain anger in both the opposing group's population as well as their own. Those actors wishing to stop or diminish a spiral (mitigators) should work to prevent and diminish the emotion of anger. This article is a theory building exercise combining empirical example with an extended discussion of emotion to arrive at an emotion-centered typology of spiral dynamics.

Keywords: emotion, spiral model, violence, ethnic politics, war

Introduction

Spirals are a fundamental part of conflict studies. X does something to Y, Y retaliates against X, X again responds against Y, and the cycle continues, often with steady escalation. These spirals lead to ever-increasing mutual losses. How do they begin? Why do they keep going?

To address the first question, many spirals (but certainly not all) begin because one particular actor consciously sets out to ignite a spiral of violence. While the characteristics of this set of "instigators" vary, members often include weaker factions of groups competing in intercommunal conflicts. These actors will benefit the most from the disruption created through violent escalation. In addition to the existence of actors intent on igniting a spiral, there is a second and related reason why spirals begin: the instigator's strategy is often effective. In this article, I suggest that effectiveness comes through using violence to trigger the emotion of anger which in turn creates a strong motive for revenge. The instigator hopes that under the influence of this emotion, the opponent will seek immediate revenge and return violence with violence, setting off the spiral.

Many times, instigators do not succeed. Sometimes the victims of the original provocation refrain from a counterattack. Sometimes an actor can "wind down" the spiral after a limited number of iterations. Even in these cases, the emotion of anger is central. If instigators wish to inculcate anger in an opponent, they will choose to commit acts most likely to achieve that goal. They will likely draw blood from the opponent's population, kill its leaders, or attack the opposing group's symbols. To claim that emotions are not involved in this action would require that the population did not experience emotions from the bloodletting of the in-group or the desecration of its symbols. Even in the cases where the leaders of the target group seek restraint, those leaders usually have to explain to their followers why revenge will not be taken. In other words, restraint requires those leaders to be "mitigators" of anger.

This article will make the case that anger is essential "fuel" for many instances of violent intergroup spirals. Given this "fuel," those actors wishing to begin and enflame a violent spiral (instigators) will

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attempt to create and sustain anger. Those actors wishing to stop or diminish a Spiral (mitigators) will work to prevent and diminish the emotion of anger.

The next section provides an example for purposes of illustration and clarification. The following sections build up toward a framework and typology for understanding the instigation and mitigation of violent spirals.

An Illustrative Case: The Centrality of Emotion

After the US invasion of Iraqi in 2003, Abu Musab al-Zarqawi, the leader of al-Qaeda in Iraq, explicitly aimed at fomenting spiraling violence between Sunnis and Shiites.[1] Here is a description of his strategy based largely on a captured letter of al-Zarqawi as reported by Danner (2005, pp. 52-53):

"As Zarqawi described in his letter and subsequent broadcasts, his strategy in Iraq is to strike at the Shia—and therefore provoke a civil war. 'A nation of heretics,' the Shia 'are the key element of change,' he wrote. 'If we manage to draw them onto the terrain of partisan war, it will be possible to tear the Sunnis away from their heedlessness, for they will feel the weight of the imminence of danger.' Again, a strategy of provocation—which plays on an underlying reality: that Iraq sits on the crucial sectarian fault line of the Middle East . . ."

Al-Zarqawi's target set included motorcades of specific and identifiable Shia political figures. Insurgents attacked the Islamic Dawa Party, car-bombed Shia leader Moqtada al-Sadr's office in the Shula district of Baghdad, and hit police stations associated with Shiite dominance in Karada, Saydiyah, and other towns.[2] One summary statement written in May 2005 read, "Political leaders fear that insurgents have intensified their campaign to drive a wedge between Sunnis and Shiites and that they are trying to ignite a civil war. Last month, Shiite leaders accused the largest Shiite militia force of complicity in the killing of Sunni clerics" (Oppel et al, 2005).

Several reports describe the beginnings of spiraling violence during 2005 with clear Sunni perpetrators attacking clear Shia targets and Shia forces committing revenge killings of Sunnis (Burns, 2005). But the most distinct and spectacular use of an anger-based strategy of provocation came with the bombing of the golden dome in Samarra in February 2006. The shrine was central to Shiite identity. The quotations given to reporters after the bombing are textbook responses to an anger–based strategy:

"'The war could really be on now,' says Abu Hassan, a Shiite street peddler who declined to give his full name. 'This is something greater and more symbolic than attacks on people. This is a strike at who we are.'" (Murphy, 2006) "'If I could find the people who did this, I would cut him to pieces,' said Abdel Jaleel al-Sudani, a 50-year-old employee of the Health Ministry, who said he had marched in a demonstration earlier. 'I would rather hear of the death of a friend, than to hear this news.'" (Worth, 2006, Section A, p.1).

Within hours of the attack, thousands of Shiites took to the streets in protest, many of them brandishing arms. Over twenty Sunni mosques were burned in retaliation.[3]

While al-Zarqawi's strategy successfully created anger, opposing Iraqi political and religious figures attempted mitigation. Iraqi opponents of the insurgency recognized the emotion-based strategies of Zarqawi. After these bombings, a prominent disciple of Grand Ayatollah Ali al-Sistani told worshippers that "Submitting to one's passion and confusion will bring us to domestic sedition and eventually lead us to failure. We must go forward, be patient, and carry on building the new Iraq" (Daragahi, 2005). Likewise, political leaders such as Prime Minister Ibrahim al-Jaafari called for a "rational, political" struggle. Leaders also tried to frame the conflict in terms of "criminal terrorists" versus "Iraqis" in their own effort to create or solidify new identities that might cross-cut communal lines and reduce polarization and the chances of civil war. Those appeals apparently fell on deaf ears. After the bombing of the Samarra shrine, Shia and Sunni attacked each other in violent waves that shook Baghdad. Within weeks, Iraqi civilian deaths tripled to reach a figure of over 3,000 a month (Iraq Body Count).

The Treatment of Spiral Models in the Literature

There are likely many cases similar to the Zarqawi/Shrine progression of bombings. Common sense and intuition suggest that emotions should be an important part of the analysis of spirals, even if not the central focus. Yet, classic political science treatments of spirals, often relating to arms races, see spirals as driven by uncertainty, not emotion. Most famously, Robert Jervis's *Perception and Misperception in International Politics* (1976) puts uncertainty about the opposing player's motivation at the center of analysis. Y does not know the nature of X—did X build up arms only for defensive purposes or is X inherently aggressive? Without a clear answer to this question, Y must respond to X with a corresponding increase in arms, perhaps one large enough to act as a deterrent. X then sees Y's response as aggressive and builds up more arms in response. Jervis's theory is built on an assumption of psychological bias: people assume their own actions are transparently benign and thus assume any escalating response is a sign of hostility. Once a negative view of the opposing side is established, a desire for cognitive consistency maintains a negative view of the opponent that helps prevent conciliation.

Other political scientists have followed Jervis's lead. Andrew Kydd's 1997 *World Politics* article laid out a completely rational explanation for spirals based on the existence of incomplete information. Kydd's collaborative work with Barbara Walter (2002) follows a similar line concentrating on how extremist violence may affect perceptions of leaders rather on the impact and emotional nature of the violence itself. In another treatment of spiral models, Ethan Bueno de Mesquita and Eric S. Dickson (2007) argue that "that terrorists use violence to provoke governments into harsh and indiscriminate responses in order to radicalize and mobilize a population" (p. 364). Despite this statement, the authors go on to build their model from a purely rational choice perspective without reference to emotion. [4]

The lack of reference to emotion may stem from the fact that many of the most influential works on spiral models in the field of Political Science have been built from the study of interstate conflict and arms races. While these works may mention the role of nationalism, they have generally concentrated on the strategic, and rational, decisions of state leaders.[5] The focus here is on intercommunal cases, as in the Iraq example above, where one actor decides to commit serious acts of violence—attacking communal leaders, desecrating group symbols. In these cases, I would invoke Donald Horowitz's famous axiom that a "bloody phenomenon cannot be explained with a bloodless theory" (Horowitz, 2000, p. 140).

The unexpected Balkan wars of the 1990's may have been the catalyst to bring a few spiral model theorists toward Horowitz's position. Political scientist Barry Posen brought the theory of the security dilemma, closely related to the spiral model, out of the realm of international relations and into the realm of internal communal violence. In his 1993 treatment of the origins of the Yugoslav wars, Posen incorporated history-based fears into his analysis, although only as a facilitating and exacerbating factor. Following his Realist theoretical views, Posen's treatment remained largely structural and rational.

As with Posen's work, Stuart Kaufman's *Modern Hatreds: The Symbolic Politics of Ethnic War* (2001) attempted to answer the puzzle of the escalating violence of the 1990's Balkan wars, among other cases. In terms of the role of emotions, Kaufman went much further than Posen by synthesizing emotion-laden group myths with the more rational elements of the security dilemma.[6] Kaufman, however, did not distinguish among discrete emotions. The myth-symbol complexes creating "hatred" are actually a mixture of fear (possibility of physical threat), resentment (beliefs about dominance and subordination), and contempt (ubiquity of prejudices). Most important for the purposes here, Kaufman did not discuss the emotion of anger.

More recently, a few social scientists have explicitly recognized the role of the emotion of anger in sparking and sustaining violent spirals. Christopher Blattman's *Why We Fight* (2022) includes anger on his list of conflict producing mechanisms. He sees anger and a desire for vengeance as a sustaining factor in a variety of tit-for-tat attacks. McCauley and Moskalenko (2011) outline ways that weaker actors in asymmetric conflicts are able to attack the stronger side to provoke counterproductive overreactions. They call this "jujitsu politics" (2011, Chapter 11). Perhaps the most explicit reference to anger as an essential part of conflict can be found in the work of Eran Halperin. The title of this article is "Anger as the Fuel of Violent Spirals," but I am not the first to use this analogy. In his work, *Emotions in Conflict*, Halperin states, "(I)n the vicious cycle of perceived provocation that leads to violence, and that in turn leads to additional provocation, anger can be viewed as the emotional fuel that keeps the engine of that cycle working at full capacity" (Halperin 2016, p. 51).

Despite the insightful work of Halperin and some others, there is no existing theoretical framework able to specify the role of anger within violent spirals. There is no theory able to identify the actions and conditions favorable to instigators of anger-infused spirals versus those favorable to mitigators. There is no framework to consider the strategic use of emotions in the interactions among instigators and mitigators.

This article is a beginning step toward such a theory. It proceeds systematically, first by reviewing the nature of emotion in general, then by examining the emotion of anger in particular. These sections will illustrate why anger is such good fuel for beginning and perpetuating violent spirals. These insights are then incorporated into a typology of spirals.

I would also note that there is no database on types of spiral models. No doubt some spirals occur spontaneously without instigators. Some may be inadvertently created by political entrepreneurs who did not understand the volatility of their circumstances. While an empirical database would certainly be useful, we cannot imagine how to construct such a database without some theoretical guidance for establishing coding rules. We need to know what is important and what information to seek. A beginning typology is necessary to guide this task.

Emotion

The subject of emotion is complicated and defies simple definition.[7] For the purposes here, four characteristics are crucial.

Central cognitive antecedent: Discrete emotions (anger, fear, contempt) follow from a central cognitive antecedent. This point follows Ortony and collaborators who wrote: "Our claims about the structure of individual emotions are always along the lines that *if* an individual conceptualizes a situation in a certain kind of way, *then* the potential for a particular type of emotion exists (Ortony et al, 1998, p. 2)." Emotions and beliefs about one's environment cannot be separated; they are mutually constitutive. Emotions shape cognitions/beliefs and beliefs/cognitions trigger emotions (Frijda and Bem, 2000). However, for the topic here, the analysis starts with a consideration of cognitions/beliefs. Because we are ultimately interested in how political actors attempt to set off spirals, we need to explore how strategic instigators and mitigators produce the beliefs/cognitions that create and heighten anger or prevent and diminish it.

Situational appraisal: Beyond a central cognition, other appraisals of the event, situation, and context shape the likelihood of a particular emotion arising as well as help determine the intensity of the emotion (Roseman, 2013; Lerner and Keltner, 2001). For example, a sense of control will affect the likelihood of a particular emotion arising and being sustained. Emotion theorists have identified a set of the most important appraisal dimensions — pleasantness, self/other control, certainty, anticipated effort and attention, novelty, human/situation control, motivational state, and coping potentials (Mitani and Karasawa, 2005).

The effects of emotions once in place: Different central beliefs and appraisals will lead to different discrete emotions. With an emotion in place, three general effects of emotion may follow,

marked as A, B, and C effects in Figure 1.[8] First, and most fundamentally, emotions are mechanisms that heighten the saliency of a particular concern (A effect). This effect is closely related to emotion theorists' idea of action tendency (Frijda, 1986; Elster, 2015, pp. 146-152). The emotion acts as a "switch" among a set of basic desires. [9] Once in place, emotions can help transform that desire into an obsession. Second, emotions can produce a feedback effect on information collection (B effect). Emotions lead to seeking of emotion-congruent information (Clore and Huntsinger, 2007). For example, when under the sway of fear, individuals will seek and prioritize information confirming danger. Third, emotions can directly influence belief formation (C effect) (Frijda et al., 2000). Beyond information effects, emotions can be seen as "internal evidence" and beliefs will be changed to conform to this evidence (Clore et al., 2001). If someone is angry at another, that anger in itself is evidence that the other must be guilty. Even with accurate and undistorted information, emotion can affect belief formation. The same individual with the same information may develop one belief under the sway of one emotion and a different belief under the influence of a different emotion. As William Riker (1986, p. 26) has pointed out, rational individuals may operate according to several different sorts of strategies ("sincere," "avoid the worst," "average value," "sophisticated").[10] Emotions can affect which strategy becomes operative. For example, it is likely that emotions such as fear can influence a switch in method of belief formation, perhaps to an "avoid the worst" strategy.

Time effects: The presence and power of emotions decay over time. This decay may be especially pronounced when the beliefs helping to create the emotion stem from actions and situations rather than about a person or group's inherent nature.

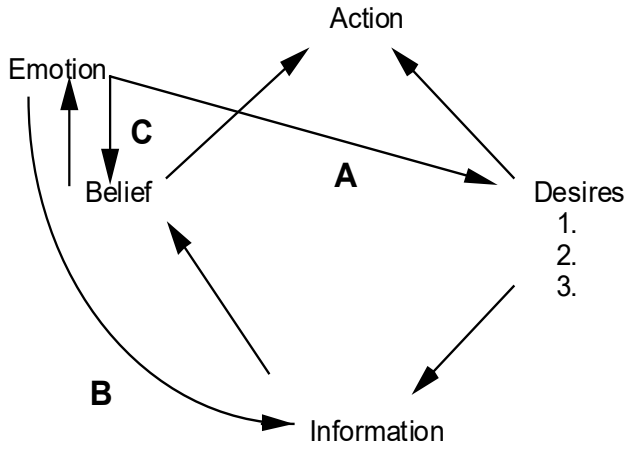

Figure 1: Action Cycle Illustrating Three Possible Effects of Emotion

The Emotion of Anger

These four definitional aspects of emotion can be applied in specific terms to anger.

Central cognitive antecedent: Anger arises from a belief that an individual or group has committed a blameworthy action against one's self or group.[11]

Situational appraisal: As mentioned above, emotion theorists have identified a set of the most important appraisal dimensions that shape the emergence and intensity of discrete emotions. For anger, two of these dimensions are most critical. Above all, certainty (or clarity) is crucial. Anger will be most likely to form and most intense when the cognitive antecedents about actors and the nature of the situation are very clear (Milliff, 2021). If an event creates a belief of a specific, easily recognized perpetrator committing intentional negative actions against one's person or group, anger will almost

certainly arise. Anger will burn when there is an identified agent who can be punished or prosecuted. Second, "sense of control" is important (Lerner and Keltner, 2000, 2001). Anger is most likely to arise, and become more intense, when the individual has a sense of control and an ability to retaliate. This insight goes back to Aristotle who stated, "no one grows angry with a person on whom there is no prospect of taking vengeance, and we feel comparatively little anger, or none at all, with those who are much our superiors in power."[12]

The effect of anger once in place: As with all discrete emotions, once anger is in place it will have predictable effects on desires, information, and belief formation.[13] Anger exhibits clear A, B, and C properties (see Figure 1 above for reference). Its A effects heighten desire for punishment and vengeance against a specific actor.[14] Under the influence of anger, individuals become "intuitive prosecutors" specifying perpetrators and seeking vengeance (Goldberg et al, 1999). Moreover, anger justifies violence (Halperin and Tagar, 2017, p. 94). As noted by Carly Wayne, "for angry individuals support for retaliation may be motivated for *offensive* aims, punishing the perpetrator simply because they deserve it."[15]

Anger's B effects distort information in predictable ways (Lerner and Keltner, 2000). The angry person lowers the threshold for attributing harmful intent; the angry individual blames humans, not the situation (Keltner et al, 1993). Anger tends to produce stereotyping (Bodenhausen et al, 1994). Anger's C effects shape the way individuals form beliefs. Under the influence of anger, individuals lower risk estimates and are more willing to engage in risky behavior (Lerner & Keltner, 2001; Gallagher and Clore, 1985; Lerner et al, 2003; Lerner & Tiedens, 2006).

With anger defined and conceptualized, it is easy to see why anger is an ideal fuel for spirals of violence. In sum, anger heightens desire for punishment against a specific actor, creates a downgrading of risk, increases prejudice and blame, as well as selective memory. The role of anger in a spiral model can be put in the terms of abstract actors X and Y. If X's first violent action vs Y is clear and if Y perceives a high ability to retaliate, then Y is likely to become angry. Y will see X in stereotypical and hostile terms (producing cognitive consistency throughout a number of cycles). Y will remember past instances when X made attacks and forget any times when X was reconciliatory. Critically, during the cycle, both X and Y will downgrade risks of attacking the other side, continually believing in their own control and ability to hit back. All these anger-produced factors will promote not only retaliation but may provide an enduring fuel able to perpetuate multiple rounds of retaliation.

Time effects: Anger is characterized by a "half-life"—it naturally decays over time (Petersen and Zukerman, 2009). Jon Elster (2017) notes that while not all emotions have a short half-life, "Anger, shame, guilt and love rarely persist with the intensity they had at the time of onset" (p. 151). As an event-based emotion, anger will tend to decay faster than emotions about an opponent's enduring or inherent character. We do not fully understand how anger declines. Despite our lack of knowledge, the decay rate of anger holds significance for spiral dynamics, as evidenced by the discussion shortly below. Consider the following possible, and admittedly speculative, decay rates of the emotion of anger.

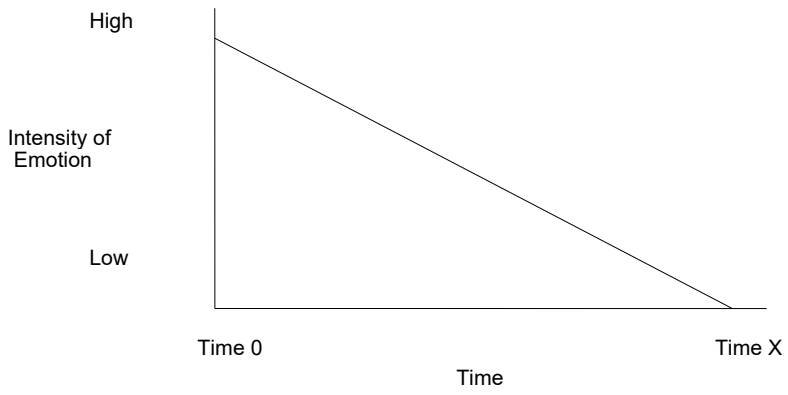

Figure 2: Linear Decline of Emotion

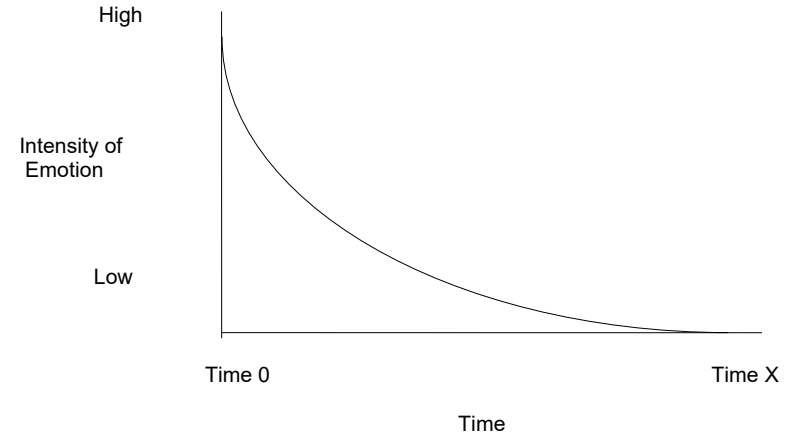

Figure 3: Exponential Decay of Emotion

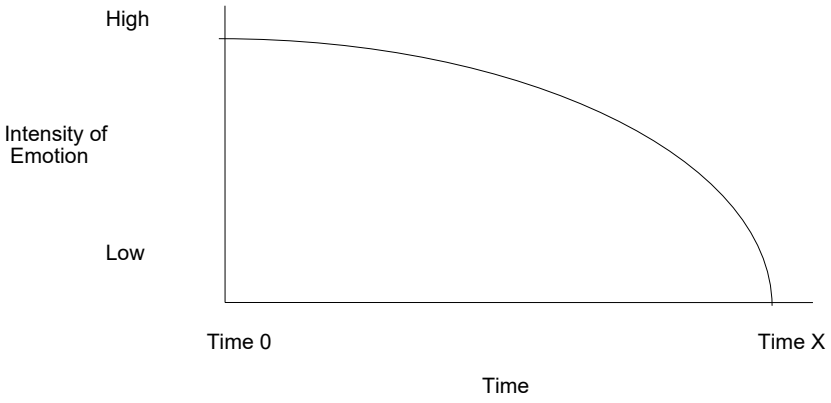

Figure 4: Inverse Exponential Decay of Emotion

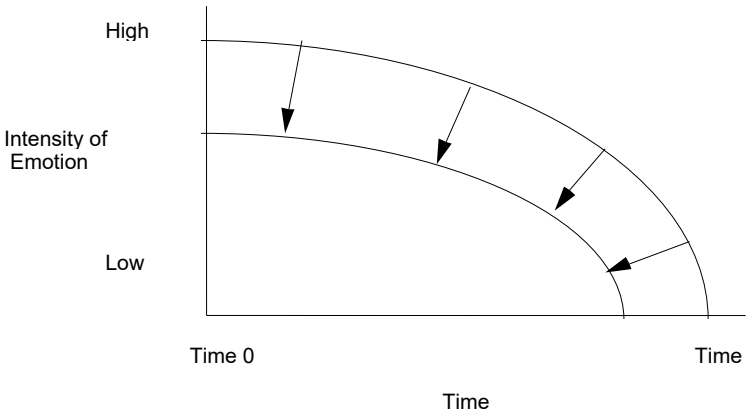

Figure 5: Decline of Anger After a Punishing Event

An instigator will hope that the triggered anger will decay along lines of Figure 4 with the emotional impact of the original violent act enduring. If the violent act produced anger with an exponential decay, as illustrated by Figure 3, the instigator might be compelled to commit repeated acts of violence to sustain a revenge motivation in the target.

On the other hand, mitigators will benefit from exponential decline. Also, they may hope that one act of retaliation is capable of lowering their own population's anger, a phenomenon represented by Figure 5 (Petersen and Zukerman, 2009).

General Ways Actors Can Create, Sustain, Intensify, or Diminish Anger

The preceding section suggests ways that instigators can create, intensify, and sustain the emotion of anger as a fuel for setting off and sustaining a desired spiral. Above all, a spiral instigator should work to form a picture of an unambiguous perpetrator with a crystal clear motive. If an X faction wishes to set off a spiral, it should claim that violence. The clarity of a group-based motive can also be heightened by hitting culturally or religiously important targets. X wants members of Y to know that X hit them on purpose. X wants members of Y to be angry, to strike back hard, to take revenge, to commit a retaliatory act of violence, to conduct the second violent step in the chain. As the findings on anger-promoting appraisals hold, clarity is crucial for anger.

If the instigator's first concern is an unambiguous first strike against the out-group target, the second is installing confidence in the in-group in their abilities to retaliate in later rounds. Mackie, Devos, and Smith (2000) experimentally found that subjects perceiving their in-group as strong are more likely to feel anger rather than fear against outgroups and more likely to take offensive actions against the outgroup. Accordingly, for a spiral to take off, X instigators need their own group to feel able to respond to Y counterstrikes.

On the other hand, mitigators will wish to introduce uncertainty and ambiguity into the situation. In order to blunt the clarity of the perpetrator, mitigators might state that only a small and unrepresentative faction of the other group was involved in the original violence or that the perpetrators were simply "terrorists" or criminals with unclear, multiple, or extremist motives.

In addition to the issues of clarity/ambiguity and capability/control, both instigators and mitigators need to consider time factors and the possibilities for lengthening or shortening anger's decay function. Given the possibly rapid decline of the emotion of anger over time, the instigator may need to repeat attacks to maintain the intensity of anger, especially if anger is following the exponential decay rate seen in Figure 3. If on the other hand, early rounds of violence set off a slowly declining rate of anger (as in Figure 4), the instigator may have some leeway.

If the instigator's first violent action failed to set off a sustained, significant level of anger and desire for revenge (leaving a situation as represented by Figure 3, for example), the instigator might then calculate that an especially deadly or heinous action is required to set off a spiral. Indeed, spectacular acts of terror might transform the situation to the inverse exponential rate represented by Figure 4. Al-Zarqawi may have made this very calculation with his attack on the Samarra Mosque. In some violent contests, violence may have become so common that only a major act of killing or desecration can produce long-lasting anger.

Mitigators also must consider time factors and decay of anger. If a mitigator is convinced that the violent contest will largely be played out with rapidly declining anger (Figure 3), the best strategy may be to just ride out the attacks making verbal condemnations while restraining own-group revenge seekers. Faced with longer term in-group anger, mitigators might try a targeted punishment strategy represented by Figure 5. If they can claim to have hit the key leaders or criminals who instigated the violence, then their own population may feel appeased. In-group anger will drop to a more acceptable level perhaps allowing a cooling off period. Mitigators then will feel less pressure to broadly attack, and enflame, the population on the other side, thus preventing the instigators from achieving that goal.

The Interaction of Anger with Other Emotions Common in Violent Conflicts

While the focus in this article is on anger, in violent contests other powerful emotions are likely at play and could create interactions with anger. Most obviously, violence and death can create the

emotion of fear.[16] Instigators do not wish for fear, not in their own population nor in the opponent's. A quick review of the differences between anger and fear help understand this logic. Anger and fear stand in clear contrast with one another (Lerner and Keltner, 2000; Lerner and Keltner, 2001; Lerner et al., 2003; Halperin, 2016, pp. 71-73).

Fear's central cognitive antecedent is that one is in a situation of danger. Under fear, individuals value self-preservation above all else. The corresponding action tendency may be fight, but is more likely to be flight, or at least an effort to avoid further dangerous confrontation.[17] Under fear, individuals seek information for dealing with a threat and will consider a range of options (Lerner & Keltner, 2000; Glassner, 2000).[18] Under fear, individuals take on less risk; fear-filled individuals become more risk-averse. Because instigators wish for a series of escalating attacks between two sides, they want an action tendency for fight, not flight; they want a quick desire to strike back, not information-seeking from a range of options; they want risk-accepting actors, not risk-averse ones. Mitigators, on the other hand, wish for actors who are appropriately fearful, those stressing uncertainty, those wishing to avoid violence, those taking time to calculate risks.

The emotion of contempt may also interact with anger. Contempt's central cognition is that a group or object is inherently inferior or defective (Frijda 1986, p. 73; Elster, 1999, pp. 72-75); the action tendency is toward avoidance (Ekman, 2025). Contempt is closely related to stigma, a negative emotional reaction to some attribute of an individual, group, or object. Most forms of racism involve contempt. The A effect of contempt is avoidance. The B and C effects are the well-documented phenomena connected to prejudice. Contempt does not systematically decay.

The question here is what happens when anger combines with contempt. If a contemptible out-group launches violent attacks against one's in-group, will anger become yet more intense? Is violence by a contemptible out-group more likely to produce anger than fear? Will attacks by a group seen as inherently inferior produce longer duration of anger? We do not have good answers to these questions. But instigators and mitigators likely do, at least in terms of their immediate conflict.

The Structure of a Spiral Model and its Underlying Strategic Choices

At the risk of oversimplification, consider the interactions among two different identity groups (X and Y). Each group can be divided between a political/military actor capable of launching a targeted violent attack and the general population, which can engage in local violence but not long-distance attacks. We can call the respective political-military actors for each side XE and YE (the E for elites). We can call the respective general population actors XM and YM (M standing for mass). Assume members of XE wish to ignite a violent spiral. In order to do so, in a first step they must provoke members of Y to attack members of X. The instigators then hope that in a second step members of X will feel compelled to violently counter-retaliate, setting the spiral in motion.

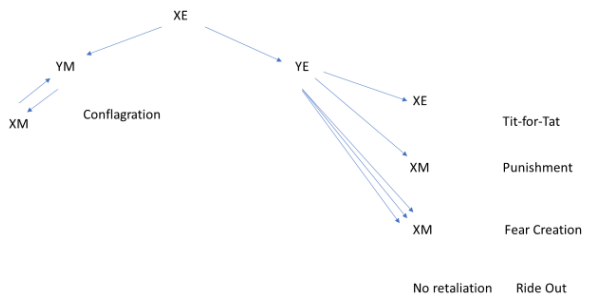

Figure 6: Typology of Spirals

This highly simplified system produces several possible pathways leading to the instigation or mitigation of a violent spiral. These pathways are illustrated in Figure 6 and outlined in turn.

1. Conflagration: In this pathway, armed faction XE attacks the general population of Y (YM). Under high intensity anger, members of YM may spontaneously attack available X targets, most likely the XM population. The XM population then commits violence against YM who then retaliate, and so the cycle turns. This strategy will only be effective if the X and Y populations are mixed or live in close proximity. The strategy aims to bring both side's populations into mutual violence, into a conflagration. This process cannot unfold if the two populations in question live apart.

2. Tit-for-Tat: In this pathway, XE hits political or military targets of Y (YE) in hopes that the targeted YE faction will hit back against XM, thus generating support for retaliation from the X general population and helping to unleash a general spiral. In tit-for-tat, however, YE does not take the bait. Instead of hitting XM, YE limits its attacks to XE military and political targets. YE wishes to make proportionate and measured attacks in order to avoid being perceived as a violent perpetrator against a general population. YE wishes to limit the intensity of anger. Tit-for-tat is a mitigation strategy and if successfully carried out can end a spiral (if XE perceives failure) or downgrade the spiral to proportionate attacks. Whether YE can accomplish that goal depends on the nature of its counterattack and the clarity of its signal.

The decay function of anger may come into play in tit-for-tat. Along lines of Figure 5, YE hopes that its own population (YM) will deem its proportionate counterattack on XE to be a sufficient response. In effect, YM will see the XE perpetrator as punished, lowering the XM anger level. The proportionate response may also avoid heightening anger levels in XM, again lowering the chances of any XM versus YM based spiral.

3. Punishment: In this pathway, XE hits YE but this time YE does take the bait and punishes the XM general population. YE may do this if an XE target if unavailable. Alternatively, YE may believe that by punishing the XM population, that population may pressure the XE attackers to cease their attacks. In effect, in the punishment pathway, YE does try to create anger in XM—but against XE, not YE or YM. YE wants to signal that XE actions against Y will have costs. If XM wishes to avoid those costs, they must constrain XE. Of course, XM may not react in that desired way and the conflict will then be on its way to a spiral. XM's anger at being punished may be aimed at the direct source of that punishment—YE or YM—rather than XE.

4. Fear Creation: The fear creation pathway is similar to punishment. However, while punishment aims to inflict limited pain on the XM population in order to drive a wedge between it and XE, fear creation involves severe attacks (represented by the three arrows instead of one) on the XM population in order to produce a consuming emotion of fear that overwhelms and prevents anger. To recall, fear favors flight, risk-aversion, search for ways out of violence. While XE hit YE in order to create a spiral, YE hits back so ferociously that XM is frozen or simply wishes to flee the conflict rather than hit back.

5. Ride out: In this pathway, YE believes the best way to avoid a spiral is simply not to hit back at all. YE leaders can tell their general population that XE is trying to ignite a spiral and that YM must not give in to impulses for revenge. This pathway will be most successful if YM anger decays according the exponential rather than inverse exponential function.

Conclusion: The Way Forward

The gist of this article can be summarized briefly. Intercommunal violence sometimes involves "spirals." Political actors often try to set off these spirals with a strategy involving the emotion of anger. Some political actors try to stop or weaken spirals; they must also confront anger, if only to diminish it. Not all spirals center on emotions. But many do. Standard political science treatments have ignored or downplayed the role of emotion in spirals. The subject of emotion may be considered too messy to fit the game theoretic models so common in the field. By reviewing the nature of emotion and the specific emotion of anger, and tying those insights into a strategic typology, this article has taken a first step toward a development of a systematic approach toward anger-infused spiral models.

No doubt the article raises more questions than it answers. [19] Which actors in a conflict are likely to become instigators? It would seem that more extreme factions of the weaker side of a contest would be most likely to become instigators. As in the al-Zarqawi case, extremists from the weaker side would have the most to gain from a sharpening of identity lines. However, we don't really know if this intuition holds in the real world. This question should be an empirical one. Since 9/11, governments and political scientists have compiled enormous databases on terrorists and terrorism. There has been extensive work done on terrorism and the emotion of fear. It is the case then that social scientists do address strategic violence and emotion, just not anger among others. The case of anger and intercommunal violence may be more complex than fear and international terrorism, but what is the cost of ignoring this dynamic and just going back to the emotionless and, in my view, unrealistic rational choice models?

The good news is that there are opportunities to answer questions about anger spirals through interdisciplinary efforts. The social movement literature has analyzed how anger is used to stir mobilization. No doubt social movement leaders, including peace activists, have considered how to strategically use "righteous anger." There is no reason why "violence scholars" cannot learn about anger from "peace scholars."[20] As indicated in the review of anger's qualities above, anger is most likely to form and sustain intensity when individuals develop clear beliefs about a perpetrator along with a belief about ability to respond and a sense of control. Both violent entrepreneurs and social movement leaders try to frame events in order to produce clarity and a sense of control in their followers. The large literature on "framing" can be brought to bear to better understand anger-infused spirals.

There is also more to learn from psychology. As pointed out above, the time effects of emotion have critical effects on the use of anger as a strategic resource. The interaction of emotions, certainly a phenomenon ubiquitous in intercommunal conflict, is also poorly understood. While psychologists study the decay of emotion and the interaction effects in laboratory settings, some political scientists and anthropologists are observing these phenomena in real world conflict settings. Communication between the two fields could yield valuable insights, not the least by political scientists suggesting ways to make the findings of controlled laboratory experiments relevant to real-world violent conflicts.

Because of the post 9/11 obsession with terrorism, we may know more about instigators of anger than we do about mitigators of anger. Governments were dedicated to identifying and coding non-state violent actors. A first step in gaining insight on mitigation might be a compilation of instance of mitigation efforts, both successful and unsuccessful. There are many good histories and case studies that can provide rich information on these efforts.

Finally, a major problem with the lack of study of anger spirals is the very nature of the phenomenon. The topic requires seeing killers and desecrators as normal political actors, very strategic actors who line up goals, resources, and means in the same way as other strategic actors. Only in this case, the goal is to create a burning desire for vengeance in both opposing and one's own population; the resource is an emotion; the means involves blood-drawing, insult, assassination. It may be difficult to admit anger-entrepreneurs to the club of normal, strategic actors. It may also be necessary in order to advance our understanding of their actions.

Footnotes

[1] This example is largely taken from Petersen (2011), pp. 84-86. McCauley and Moskalenko (2011, pp. 156-158) also examine al-Qaeda's instigator tactics.

[2] I am basing this judgment on data collected from a research assistant Jessica Karnis, who compiled a list of bombings based on information and descriptions from Iraq Body Count, the New York Times, and other sources.

[3] The Christian Science Monitor put the number at 29 while the New York Times provided a number of 25 mosques "burned, taken over or attacked with a variety of weapons."

[4] I extensively use Bueno de Mesquita and Dickson's model in Petersen (2011, pp. 86-91) to compare rational choice and emotion-based approaches.

[5] There have been recent exceptions, most notably Markwica (2018).

[6] Shiping Tang (2015) is another attempt at synthetization. It critiques both Kaufman (2001) and Petersen (2002).

[7] See Moors (2022) for a recent typology of emotion theories. The most influential summary of emotions is perhaps found in Frijda (1986). For an exhaustive treatment filled with illustrations from literature and philosophy, see Elster (1999). A standard reference for discussion of the relationship between reason and emotion is Damasio (1994). For a recent framework breaking down emotions in violent conflict, see Fernandez (2023). For a short summary of my own general views on emotion, see Petersen (2017).

[8] This paragraph stems largely from Petersen (2011). The diagram is my own, although heavily influenced by the work of Jon Elster.

[9] Recent work by Valentino et al. (2011) has demonstrated how emotion can influence individual policy preferences and voting.

[10] I use this passage in Petersen 2011 (p. 28).

[11] This definition is widespread.

[12] This passage is from Aristotle's *Rhetoric* and is cited in Elster (1999, p. 58).

[13] In his extended analysis of anger and racial identity in the United States, Davin Phoenix (2019) argues anger is a key motivator of political participation. For Phoenix, white anger helps drive voting and actions for regime change; African-American anger motivates protest and a push for systemic change.

[14] Several evolutionary theories argue that humans are hardwired for anger and vengeance for reasons of deterrence. See in particular, the seminal work of Frank (1988). Hogenboom (2017) summarizes recent work in psychology finding that humans often experience pleasure from vengeance.

[15] Wayne 2023, p. 827.

[16] These paragraphs on fear and contempt are largely taken from Petersen (2011), Chapter 2.

[17] The A effect of fear is usually in one of two directions—fight or flight—which differ according to broader appraisals. There is some evidence that when the perception of danger comes from a belief in the deficiencies of one's own capacities (a lack of sense of control), the action tendency will be flight. But, when the perception of danger is accompanied by a belief in one's ability to respond, then the action tendency will be to fight.

[18] Regarding the ability of actors to control fear, Gardner's survey on information and fear (2000) finds that simply providing more and better information downplaying threat does not always counter the effects of fear. For a broader examination of the mitigation of fear in war, see Petersen and Liaris (2006).

[19] As stated by Halperin and Tager (2017): "Research on emotion in violent conflict is only in fledgling stages" (p. 97).

[20] See Halperin (2016) on this issue.

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