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## Intervention in (inter)action

*A video-based analysis of the role of third parties in interpersonal conflicts*

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Peter Ejbye-Ernst

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Intervention in (inter)action

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aan de Universiteit van Amsterdam

op gezag van de Rector Magnificus

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door Peter Ejbye-Ernst

geboren te Aarhus

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# Summary

This dissertation investigates the role that third parties play in the development of interpersonal conflicts. I conceptualize the role of third parties from an interactionist perspective, whereby third-party behavior both shapes and is shaped by the conflict development. The empirical investigation of the dissertation draws on CCTV footage collected in 2017 from public streets in Amsterdam, the Netherlands. I develop and apply both qualitative and quantitative methodological approaches to analyze the video footage. The role of third parties is empirically investigated in four chapters: Chapter two and three investigate if the target selection and aggression of third-party interventions are shaped by the development of the conflict situation. Chapter four and five investigate if and how the third parties influence the way an interpersonal conflict situation develops. While each empirical chapter approaches the video material in a unique way, they all incorporate the sequential development of the conflict situations into the analysis. The findings of the empirical investigations confirm that the third parties are both influenced by and influencing the way conflict situations develop. This bi-directional relationship shows the complex nature of real-life human behavior, which poses a challenge for research on the role of third parties in conflict situations, since it means that cause and effect are interconnected. In order to disentangle this bi-directionality, I suggest that researchers measure and analyze interpersonal conflict in ways that allow them to take the chronology of the situations into account.

# **Chapter 1.** Introduction

It is ten in the evening on a Thursday in the middle of June. This day is among the days of the year with most daylight and the streets are full of people wearing shorts, t-shirts, and other airy summer clothes. We are observing an intersection through a surveillance camera that is placed on a corner wall in Amsterdam East. On the corner across the intersection is an entrance to a grocery store. The store closes at 10PM, so there is a rush of people trying to make it into the store to get a bottle of wine, some snacks, or ingredients for a late dinner, before the store closes its doors for the day. As the clock turns 10:01 a man on a scooter arrives to the scene, let us call him Mike. Mike is in a hurry. He is just slightly late in order to make it into the shop. In less than 10 seconds, he parks his scooter, removes his helmet, and starts running towards the entrance of the store. As he is rushing towards the store, another man - let us call him Drew - also arrives on a scooter. Drew also hurries to park his scooter to try to make it into the store before closing time. As Mike approaches the shop, the automatic doors open and he walks inside. Once he takes the first step inside the store, however, a security guard of the store, let us call him Jonas, approaches Mike. Mike points towards something in the store, presumably the item he is interested in buying. The two appear to be bargaining. While Mike keeps pointing into the shop, Jonas appears stoic and stands demonstrably in front of Mike, blocking his further movement into the store. After a few seconds, Mike turns around and leaves the store. Once outside the automatic doors of the shop, he stops and looks at his watch. The time is now 1 minute and 48 seconds past closing time of the shop. Drew walks up and stands next to Mike, looking into the shop. A stream of shoppers leaves the shop, passing the two men who were a minute too late. Mike turns his head around and shouts something towards the security guard Jonas, who in turn repeatedly crosses and uncrosses his hands in front of his hips, and clearly shows that there is no way Mike will get to do his shopping. Mike walks away from the store, with his head turned towards Jonas while gesturing towards him with his right hand. Drew, who has remained calm throughout, walks towards his scooter. An employee of the grocery store, wearing the uniform of the store, she could be called Claire, walks out and stands in the entrance of the store, close to Jonas. Jonas walks outside the store, and once seeing this, Mike makes a U-turn and starts walking back towards Jonas, who now stands in front the entrance to the store. The two of them walk up very close to each other - their heads only a few centimeters apart. They remain in this intense stand-off for more than 10 seconds. Meanwhile, Drew reaches his scooter, looks back towards the entrance and sees Mike and Jonas standing very close to each other. Instead of getting on his scooter and leaving, Drew slows down and keeps looking towards the two men engaged in this stand-off. Similarly, Claire stands just inside the entrance of the store intensely observing the two men standing face-to-face.

While the conflict outside the grocery store happens between two people, Mike and Jonas, these two antagonists are not the only ones present in the situation. There are also a number of other people present: There is Claire, the colleague of Jonas standing at the entrance of the store. There is Drew who arrived just after Mike and who was also too late to enter the store. There are the customers leaving the store, and people passing by on the street.

The presence of someone besides the main antagonists of the conflict is not unique to the case described here. Quite on the contrary. Previous research have found that in approximately seven out of ten assaults, there are more people present than the primary conflict parties (Planty, 2002). These third parties - that are oftentimes present but typically neglected in scientific investigations of conflict and violence (Phillips & Cooney, 2005) - are the focus of this research project.

Back on the corner in Amsterdam East. Mike and Jonas are still standing close to each other, with their faces only centimeters apart. Mike starts gesturing towards the face of Jonas, who remains stoic and with a raised chest. Mike takes a step backwards. Jonas remains completely still for a few more seconds and then starts walking back towards the entrance of the store. As Jonas reaches the entrance of the store, Mike starts gesturing towards him with his arms and Jonas stops and turns around. This continues for a while, with the two antagonists of the conflict taking turns at gesturing towards the opposing party and moving further away and closer to each other. Throughout this exchange, the third parties present in the conflict remain passive, but appear to observe the conflict carefully. Drew has stopped getting on his scooter, stands next to it, and keeps an eye on the developing conflict. Similarly, Claire is lingering by the store entrance while observing the exchange between Mike and Jonas.

It seems like the two third parties in the situation are trying to figure out what to do. As if they are unsure, whether they should do something in this situation. In this kind of situation, the third parties present are faced with questions like; Is this a situation that calls for action? If the situation required someone to do something, why is the other third party in the situation not doing anything? (Darley & Latané, 1968; Latané & Darley, 1968). The uncertainty of the third parties in emergency situations is the genesis of research on, and by far the most investigated aspect of, third-party behavior. This line of research, which refers to third-parties as ‘bystanders’, famously originated with the murder of a woman named Kitty Genovese in New York. During the murder a number of people was aware of the crime taking place but none of them did anything to stop it (parts of this narrative have later been contested (Manning et al., 2007)). Darley and Latané argued in their theory of bystander passivity that part of the reason for this inaction was exactly the presence of other passive individuals. They found

that the presence of other passive observers increases the individual chance of remaining passive, too (Darley & Latané, 1968; Latané & Darley, 1968). This seminal study has become a staple in social psychological textbooks and is known widely both within and outside academia. It has inspired a vast number of studies investigating which additional situational factors might influence when third parties remain passive bystanders (for a review of this literature, see Fischer et al., 2011).

Back on the corner in Amsterdam East, the situation escalates further. While the antagonists this far have stuck to verbal outbursts and forceful gesturing, the conflict eventually turns into a physical altercation. Jonas breaks his cool composure, lifts his left hand up, and points twice towards Mike, before taking another couple of steps to be inside the store. This is followed by a period of aggressive gesturing from both antagonists and a rhythmic increase and decrease in distance between them. Eventually, Mike goes back to his scooter. Drew seems to think the situation is over, and drives off on his scooter. Jonas stops gesturing towards Mike and goes into the store. However, after a few seconds Jonas comes out of the store again and starts pointing forcefully towards Mike, who now starts walking from his scooter towards Jonas at the entrance of the store. As Mike gets close to Jonas, he punches him in the face, and the two men grab each other and start wrestling and fall over after a few seconds. As soon as the situation escalates to physical violence, the third parties in the situation take action. The first to take action are two customers who have just left the Supermarket. The first person to intervene, let us call him Simon, is caught in the middle of the situation. As the antagonists start wrestling, they barge into Simon who is leaving the store. When the antagonists fall over, Simon runs over and starts pulling Mike away from Jonas. The second person to intervene has just left the grocery store and is on his bike as the conflict escalates. Let us call him Kyle. Kyle quickly parks his bike, runs towards the antagonists wrestling on the ground, and helps Simon pulling Mike away from Jonas.

While the research on bystander passivity has led to a thorough understanding of the complex process that impedes third-party intervention, the focus on passivity has meant that the situations, similar to the one described here, where third parties do take action have been comparatively neglected. The success of the research investigating when third parties remain passive bystanders, has, in other words, meant that few studies have investigated what third parties actually do when they take action. This is especially problematic since recent research shows that when third parties are present, someone takes action in the vast majority of conflict situations (Philpot, Liebst, Levine, et al., 2019). The intervention by the third parties described in the conflict outside the grocery store is thus not atypical, but rather exemplifies a general trend. While the bystander effect details that the *individual* likelihood of intervention

decreases when there are more passive people present, the *situational* likelihood of someone doing something remains high across real-life conflict situations. In order to understand the development of the typical conflict situation, it thus seems necessary to look beyond the antagonists of the conflict and look at the situation more widely. This means moving beyond the primary conflict dyad of conflict, which in the conflict taking place outside the supermarket would be the conflict between Mike and Jonas. Previous research on both human and non-human conflicts has argued for this move beyond the primary conflict dyad is necessary if we want to understand how conflicts develop (de Waal et al., 1976; Philpot, 2017; Vuchinich et al., 1988). This means that in order to understand the development of conflict situations, research must look at the way the situation is co-created between the people present. This insight that third parties are typically present and actively take part in real-life conflict situations in public spaces, is the starting point of the current research project.

## Interactionist theory of conflict and human behavior

Back on the streets of Amsterdam, the antagonists are being separated by the third parties. Simon and Kyle, who were the first to intervene, drag Mike across the pavement to separate him from Jonas, while Claire attempts to hold Jonas back. Jonas quickly gets back on his feet, frees himself from Claire, and kicks Mike who is still laying on the ground. As the two combatants are separated again, Claire and Kyle continue to hold onto or gently touch each of the antagonists. Multiple people arrive at the scene and suddenly there are eight people present besides the two antagonists. Drew, who must have seen the conflict escalate after taking off on his scooter, has also returned to the site of the conflict. Most of the third parties stand in the physical space between the two separated antagonists, creating a wall of obstruction between the two combatants. Claire leads Jonas towards the entrance of the grocery store by wrapping her arms around his waist and walking them both backwards. However, suddenly Mike frees himself from the grasp of Kyle who was holding onto him and starts walking quickly towards Jonas. Jonas immediately starts moving closer to Mike, too, so that the two antagonists of the conflict are both moving closer to each other again.

Both the original escalation and this re-escalation of the situation has a reactive character. Throughout the situation, the behavior of one party (in this case, Mike starts approaching Jonas) appears to lead to the following action (in this case, Jonas also starts moving closer to Mike). The actions in the situation resemble a conversation where one person reacts to the utterance of another person, who then in turn reacts to the reaction. It is not separate individuals performing predetermined actions at each other, but rather reactions to

what has previously taken place in the situation. The behaviors appear to be a response to the preceding behaviors, which in turn inform the proceeding behaviors. This was also clear in the original escalation of the conflict. For example, the exit of Jonas from the grocery store was immediately reciprocated by Mike, who started moving closer to Jonas. It is not one side of the conflict carrying the situation forward, but rather an interplay between the parties of the conflict that becomes the driving force.

This co-creation of a situation visible between the people involved in the conflict outside the grocery store, is described more generally by the interactionist theory (R. B. Felson & Tedeschi, 1993; Jackson-Jacobs, 2013; Luckenbill, 1977). This theory argues that interpersonal conflicts are the product of interactions between the parties involved in the situation. The involved parties are responding to the behavior of other actors in the situation. Most research on conflict and violence has focused on stable individual characteristics such as cultural background, personal history, and biological makeup (R. B. Felson & Steadman, 1983). While acknowledging that these factors matter, the interactionist theory of violence is based on the situational credence that even the most violent individuals are only violent in very specific situations (Collins, 2009). This theory thus argues that the outcomes of aggressive interaction "*are not predetermined by either the characteristics or the initial goals of the participants; rather, they are at least partly a function of events that occur during the incident. In other words, violence is, in part, situationally determined*" (R. B. Felson & Steadman, 1983, pp. 59–60). While the motivation and personal grievances might be central to the occurrence of a conflict, the development after this initial spark depends on what takes place within the conflict rather than what motivated it originally (R. B. Felson, 1984).

Following this theory, we thus see the behavior of Mike partially as a function of the behavior of Jonas and vice versa. This understanding of conflict behavior has been empirically corroborated by an analysis of violent interactions which showed that: "*the successive behaviors of a participant are more a function of the antagonist's behaviors than they are of his or her own earlier actions*" (R. B. Felson & Steadman, 1983, p. 69). In other words, the antagonists of a conflict are influenced by the preceding behavior of their opponent. Stated more generally, there is an influence within the situation where the behavior of one individual influences the proceeding behavior by the other individuals in the situation and can lead them towards more or less aggressive behavior.

The interactionist conceptualization of conflict also helps us understand why some seemingly trivial conflicts can escalate to violence or even murder, while other conflicts do not (Cooney, 1998). Even though conflicts require some kind of initial spark to happen, this original cause

can develop in many different directions, depending on how the individuals in the situation react to the behavior of each other. In the conflict between Mike and Jonas, we saw a way out when Jonas entered the store and Mike was walking towards his scooter. This appears to be a turning point, because the conflict situation could have ended here. Jonas has walked into the store and Mike is walking towards his scooter. If both continued on their current path, this could have been the end of it. The exit of Jonas from the store, however, leads to an escalation of the situation. In his seminal study on the social processes that lead to homicide, Luckenbill argues that homicide typically is a co-construction between the victim and the perpetrator of a situation. He argues that the victim and the perpetrator mutually, either implicitly or explicitly, reach an agreement that violence is a suitable means of solving the conflict. The escalation to violence is thus typically not something that comes from just one of the antagonists of the conflict, but rather a collaborative effort between the parties (Luckenbill, 1977). While the interactionist approach to conflict often focuses on how the situational developments influences the antagonist behavior, another party influenced by the interaction is the third parties present in the conflict situation. This influence between situational developments and the behavior of third parties is what the current research project aims to explore.

## *The influence of situational developments on third-party behavior*

Back on the streets of Amsterdam. A person runs out of the grocery store, just after the combatants have been separated. Let us call him Ruben. First, Ruben stands with the other third parties between the two antagonists. He is holding up both his stretched-out arms in shoulder height with a palm directed at each of the combatants, as if to say: "*do not move any closer to each other*". As the two combatants move closer to each other a few seconds later and re-escalate the conflict, Ruben grabs onto the shirt of Jonas the security guard and forcefully pulls him backwards. As Ruben pulls, he is using his entire bodyweight and as he has pulled Jonas backwards, he uses both hands to grab the arms of Jonas and shoves him even further backwards. This forceful maneuver appears rather aggressive. Within a few seconds, Ruben has thus gone from lifting his arms in symbolic objection to using his physical power to pull and shove the antagonists of the conflict apart. This development in the intervention exemplifies how third parties react to the way interpersonal conflicts develop. As the conflict between the antagonists re-escalate the intervention behavior of Ruben immediately changes, too. The behaviors of third parties thus seem to be dependent on the conflict situation, just like the behavior of the antagonists is.

The existing scientific literature has, however, not spent much time investigating what third parties do when they intervene in a conflict. Banyard (2015) details that for the

studies investigating the passivity of third parties "*Describing the type of action taken is usually not the focus of study or only a small set of helping behaviors are called for by the situation (helping to fix a flat tire, helping to pick up dropped items)*." (Banyard, 2015, p. 32). This line of research, which comprises the majority of research on the field, is thus often not concerned with what behaviors third parties would perform, or offer situations that are very specific in what kind of help is needed. In real-life conflict situations, however, it is typically less clear what actions are called for. These situations happen quickly, are complex, and many third parties will be inexperienced in this what to do in this type of situation. Vuchinich and colleagues describes that: "(…) *numerous further complications become apparent when one considers the wide variety of ways in which third parties can participate in dyadic conflicts"* (1988, p. 1294). Third parties can thus not just intervene or remain passive, but rather, perform a wide variety of interventions.

To exemplify this variation in how third parties intervene, we can look towards the conflict outside the Supermarket in Amsterdam. To see large variation of behavior, we do not have to look at the situation at large, but can rather just focus on the intervention behavior of a single individual throughout the situation. Throughout the conflict, Ruben performs the following intervention behaviors: one-armed push, lifting both arms with the palms turned towards the antagonists, full-body pull, two-armed push, standing with both palms turned towards the sky, shoving, pointing forcefully, holding onto an antagonist, inserting an arm in front of an antagonist, pointing away for an antagonist to leave the scene. The span of these behaviors shows the large variation in the way third parties can intervene in a conflict, and the behaviors tallied are only the intervention behavior of one individual in a single situation. When we actually look at what third parties do when they intervene in a conflict, we thus see large complexity in behavior.

While third parties intervene in a wide variety of ways, this variation is typically reduced to crude categorizations in the scientific literature (Bloch et al., 2018). In the literature investigating bystander passivity, this is typically done through a binary operator measuring either the absence or presence of intervention behavior. Other studies interested in the influence of third-party intervention on the conflict development measure the intervention behavior in categories such as escalatory/de-escalatory intervention (Levine et al., 2011), aggressive/non-aggressive (Parks et al., 2013), instigation/mediator (R. B. Felson, 1982), partisan/settlement agent (Phillips & Cooney, 2005). The third parties are thus categorized in one of two outcomes for their behavior throughout the conflict situation.

There is thus an acknowledgement of a large variation in the potential actions that third parties can do in the literature, but little knowledge about when they perform these actions because the behaviors are typically categorized in a binary variable measured on a situational level in the empirical investigations. This is further complicated by the interactionist insight that conflict situations are not predetermined entities, but rather dynamic interchanges that develop depending on what has transpired in the conflict so far. The third parties are thus continuously reacting to a developing situation and therefore not necessarily doing one thing throughout the conflict. Since the situation develops and changes character, this in turn means that the behavior of the third parties might develop too. In order to understand how third parties behave we thus need to see their behavior not as a situational constant, but rather as part of an interaction that develops throughout the conflict situation.

While the existing scientific literature does not address whether third parties adapt their behavior throughout conflict situations, the description of the conflict outside the supermarket shows an example of this. Here Ruben first lifts his arm in a non-physical intervention showing to the antagonists to stay back. A few seconds later the intervention of Ruben becomes physically forceful and pulls and shoves Jonas backwards. Following the interactionist credo, this sudden change in behavior could be connected to the development of the situation. While the antagonists are separate, the symbolic gesture is sufficient, but as they start moving closer to each other, Ruben responds to this development in the situation and escalates the way he intervenes in the situation. This dependency of third-party behavior on the behavior of other individuals in the situation underscores the interactive nature of conflict situations. What third parties do in these situations is not just based on their dispositions that they have and their personal characteristics, but also developments within the situation. While Ruben does intervene forcefully at some point throughout the situation, this is not the only way he intervenes. A categorization of his behavior on a situational level would not allow us to document these changes. There is thus a contrast between the existing research literature and the interactionist conception of behavior or more concretely with the behavior of Ruben in front of the grocery store. In the current research project, I document and analyze the behaviors of the third parties on a level that allows us to see the variation in how they intervene throughout the different phases of the conflict situations.

## *The influence of third-party behavior on situational development*

While the change in the behavior of Ruben exemplified how third parties react to conflict developments, the interactionist conception of interpersonal conflicts works in both directions. This means that just like the third parties react to the behavior of the antagonists in the

situation, the antagonists also react to the behavior of the third parties in the situation. In other words, following the interactionist conception of conflict, third parties may influence the development and outcome of violent interactions (Felson & Steadman 1983). This influence by the third parties is typically ascribed to an assessment of the current development of the situation. Luckenbill describes how the third parties of a conflict can take a position to the conflict behavior and this will influence the subsequent moves of the antagonists (Luckenbill, 1977). He goes on to argue that a position of disapproval by the third parties often stops conflicts from escalating and make the conflict parties stand down.

This expression of sentiment in regards to the conflict development is argued to influence the conflict, because conflicts are attempts to save face by the antagonists. Antagonists are competing to come out of the conflict situation on top, to remain steady in the face of adversity (Luckenbill, 1977). Each move by an antagonist, according to this conception, brings a challenge to the opponent's face, casting him or her in an unfavorable role. By responding to the act of the opponent, the antagonist attempts to alter-cast themselves in a different role and at the same time recasts the opponent in a less favorable situational role. This struggle to save face allows the third parties of the conflict to influence the antagonists by expressing what kind of behavior they approve of. If the antagonist attempts to save face by acting violently and physically dominating the other part, but the third parties show a disregard for this behavior, this might discourage the antagonist from using this kind of behavior. The disapproval of the third parties means that the attempt to save face has backfired and now entails losing face in the eyes of (some of) the people present. The disapproval of the third parties thus sets the boundaries for what behavior is legitimate in the struggle to save face and what behavior is not (R. B. Felson, 1982).

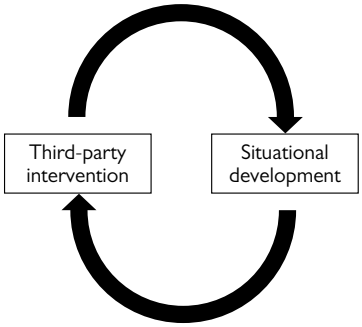
The studies that have addressed the effect of intervention on conflict development generally find that intervention works (R. B. Felson, 1982; Levine et al., 2011; Planty, 2002; Wells & Graham, 1999). When third parties actively intervene in a conflict situation this shapes how it develops (note, however Felson & Steadman, 1983 find no effect of mediation). This means that the influence of third parties on conflict development is not just something we can identify on a theoretical level, but also something that has been found empirically. However, the studies that have investigated the influence of third parties on the conflict development typically measure the influence on a situational level, which means that the explanations end up being whether situations with third parties present or intervening are more or less aggressive than those without third parties (or the opposite, as found by Felson, 1982). This means that the studies do not allow us to differentiate between whether it is the situational development that influences the behavior of the third parties or vice versa. These

studies thus end up being more about different types of situations instead of how the intervention of third parties influences the development of a conflict situation.

## *Disentangling the Gordian knot*

An interactionist conception of interpersonal conflicts thus leaves us with a difficult problem to solve in order to study the behavior of third parties. This conception of conflicts means that we acknowledge that third parties are an integrated part of the interpersonal conflict. The trouble is that this means that the behavior of third parties both shape and is shaped by the conflict development. This amounts to a bi-directional influence between the third-party behavior and the conflict development shown in Figure 1. One way to deal with this mutual influence is to ignore it and describe different types of situations, similar to what has been done in previous studies. This means e.g. describing that situations with severe violence have many third parties intervening. This approach, however, will not let us disentangle if the violence is the cause or the effect of the intervention behavior.

**Figure 1.** The bi-directional relationship between third-party intervention and the situational development

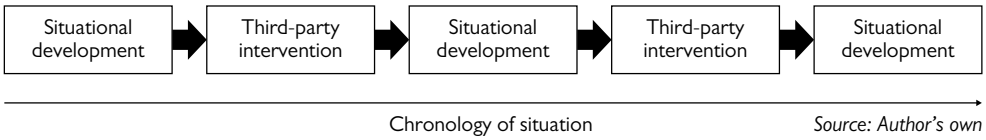



*Source: Author's own*

In the current research project, I am attempting to untie this Gordian knot of third-party intervention by taking the chronology of the situation into account. While the intervention behavior of third parties and situational development are both mutually influencing each other, they do so in a certain direction. The behavior of the third party is thus not influenced by the following conflict development, but rather by what has transpired in the situation up to that point in time. The same applies to the conflict development, which is only influenced by the preceding intervention behaviors of the third parties of the situation. While third-party intervention behavior and the situational development influence each other, they do so in a temporally chronologic fashion. We can thus get closer to separating the two factors in figure

1, if we take the chronology of the conflict situations into account. The inclusion of the temporal development of the conflict situation in the analysis would turn the circular influence of Figure 1 into a chronological chain of influences as shown in Figure 2.

**Figure 2.** Chronological influence between third-party interventions and situational development




*Source: Author's own*

Whereas the situational development and third-party intervention behavior are difficult to disentangle on the situational level (as is illustrated in Figure 1) the two become more accessible to us when they are viewed chronologically (as is illustrated in Figure 2). This allows us to measure any one of the behaviors and look at how the preceding behavior(s) influences this behavior. We can thus make a cut-point at a specific point during the conflict and look at the things leading up to this particular point and how they might help us understand it. This deconstruction of the conflict situations will thus help us get closer to disentangling the Gordian knot of third-party behavior.

The ambition of the current project is to use the chronology of conflict situations to see how third parties influence the conflict development and how the situational development influences the third-party behavior. In this research project, two chapters will address each of the two arrows of Figure 1. In chapter 2 and 3, I thus ask the question "*How are third parties responding to the conflict development?*" In these two chapters, I address the way the situational developments influence the third-party intervention behavior. The two chapters following afterwards - chapter 4 and 5 - address the question "*how do third parties influence the conflict development?*" These chapters thus address the way the third parties influence the development of interpersonal conflict situations. This also means that while all four chapters include both parts of the figure, the focus of the chapters differ in the direction of influence they focus on.

If the situation influences the behavior of third parties as argued above, while the behavior of third parties also influences the situational development we need a way to investigate third parties that allows us to disentangle these two opposite forces. This is difficult to do through traditional methodological approaches such as interviews, surveys, or document analysis of e.g. police reports or court documents, because these methods rarely afford a level of measurement that allows us to reliably break the situation down into smaller parts.

In the current study I use CCTV-footage to overcome this limitation of traditional research methods.

## Video Footage

In an attempt at getting closer to separating how the conflict situation shapes the intervention behavior and how the intervention behavior shapes the conflict situation, the project aims to take the chronology of the situations into account. The current research project is able to reliably measure the development of the situations because it is based on the systematic analysis of video recordings of real-life interpersonal conflicts (Lindegaard & Bernasco, 2018). This empirical approach of the study affords a very high resolution of the interpersonal conflict situations as they develop, and where everything is recorded at an unmatched level of detail and where the exact temporal order of events is readily available.

One of the main challenges of the interactional approach to violence is that researchers have struggled to actually observe conflicts as they take place in the real world. Conflicts happen suddenly and are typically brief, which means that observing a conflict is difficult (Lindegaard & Bernasco, 2018). This has led researchers to investigate conflicts using indirect sources. These empirical approaches are typically justified from a pragmatic point of view. One study e.g. writes "*observing third parties would necessitate multiple observers, and because the timing and location of conflicts are hard to predict, would require an enormous investment of research time for each conflict observed.*" (Phillips & Cooney, 2005, p. 351). This inaccessibility of conflict means that many researchers have relied on sources that grant easier access to the topic of interest. An exception to this is a Canadian research project where observers went to bars waited to observe any conflicts that might erupt (Wells & Graham, 1999). For most researchers this approach is, however, beyond the means of their projects. Furthermore, the observers might get to see a conflict, but it might still be difficult to see it as the conflict takes place in a crowded bar room and they might miss the initial exchange as this part draws less attention in the noisy, crowded space of a bar. The complexity of interpersonal conflicts and the chronology of how things transpire can easily slip the observers memory and limits the possible granularity through this methodological approach.

Researchers have typically obtained information about the behavior in interpersonal conflicts indirectly through someone who was present in these situations. These second hand accounts are typically obtained through criminal records (e.g. Felson & Steadman, 1983; Luckenbill, 1977), interviews with individuals convicted of assault (e.g. Felson, 1982; Lin-

degaard, 2013; Phillips & Cooney, 2005), and victimization surveys (e.g. Planty, 2002). A new line of research originating in the last decade is relying not on a human observer being present at the scene of the conflict, but rather a camera recording the situation. This line of research thus relies on conflicts happening in areas that are under video surveillance. The researchers can then later analyze the resulting recordings of the conflicts. This methodological approach to studying violence and conflict was introduced by researchers from the United Kingdom (Levine 2011) but has later been adopted and adapted by researchers internationally (e.g. Friis et al., 2020; Liebst et al., 2018; Lindegaard et al., 2017; Nassauer & Legewie, 2018).

The use of video footage does not simply allow researchers to see conflicts as they play out. It allows them to re-watch the video as many times as necessary. It allows them to have someone else observe and code the same situation. The video-files are thus suitable for systematic tests of reliability of coding procedures and for the researcher to review the material multiple times throughout the process to confirm codes if necessary. It thus allows a measurement process that is more stringent compared to observations in the field that often faces constraints on methodological replicability (Nassauer & Legewie, 2018; Philpot, Liebst, Møller, et al., 2019).

While the CCTV-footage offers high resolution of the behavior that transpires throughout the situation, it is important to acknowledge that it is an indirect way to observe the conflict situations. While a video camera is in many ways a reliable informant about many aspects of the situation, we are still seeing the conflicts play out second hand. The view afforded by the video cameras thus constructs a certain type of reality and privilege and a certain type of gaze. On the most basic level the videos construct a two-dimensional image that our brain interprets as a three-dimensional landscape, as if we were viewing something play out in front of us. This representation shows, in oftentimes reasonably high resolution, what behaviors the involved parties perform and the development of the situation in general.

While the cameras give us a high resolution visually, it lacks in other sensory input. The videos have no sound, and we thus cannot hear what is said or hear the screams of anger or pain that might take place during the conflicts. We also cannot hear any background noise or music there might be at the location. Furthermore, we also cannot smell what the situation or the opponents' sweaty bodies smell like. The camera view is thus giving us a single sensory input, the visual sense.

Furthermore, the gaze of the surveillance cameras used in this study is not at the same level as the people involved. The surveillance cameras are usually placed at four to five meters height. This means that the view is not at eye-level like for the parties present in the conflict, but rather seen more or less from above (depending on how far the conflict happens from the camera, the viewing-angle will be flattened). This birds-eye view of the situations makes it easier to see what happens, because the view is not blocked as easily, but also differs significantly from the experience of being involved in the conflict. It becomes less hectic and more orderly when seen from above. This also means that these videos are good for certain kinds of investigation. They allow us to observe what objectively takes place. Who hits whom in the face. Who intervenes by holding back an antagonist. Who starts shoving someone after trying to hold them back. The videos, on the other hand, do not allow us to understand the experience of being in these situations. The rush, the fear, the smell, the overwhelming pace of everything. These central aspects of conflicts are all beyond what the videos allow us to understand. For this reason, the current research project focuses on the behavioral exchanges that take place throughout the situations rather than the experience of being part of those exchanges. The goal of the current research project is thus less one of phenomenology but rather one of investigating developments in what is observable.

Previous research has argued that the presence of cameras might influence the way third parties behave (van Bommel et al., 2014). These studies, however, typically rely on informing the individuals under investigation of the presence of a camera or making them aware of the camera in some way. The cameras used in the current study are placed high above eyesight and do not draw much attention. While the surveillance cameras thus are less apparent, I cannot completely rule out that their presence might influence the way people behave in some way. It is, however, worth noticing that I saw no clear signs of awareness of the cameras by the observed individuals. There are thus no examples of people gazing, signing, or gesturing towards the cameras in the video material.

On a more pragmatic level, the question is whether surveillance cameras are not the least intrusive method of observation. An alternative would be to have an observer in the field, similar to what Graham et al. (1999) did in their study on barroom aggression. The conflicts in the public spaces are, however, oftentimes much less crowded than bars. This means that the presence of an observer in some cases will be the only person present or one out of a few third parties. From the bystander effect we know this presence of a passive observer will influence the other people present in the situation (Darley & Latané, 1968) and having an observer present at a sometimes violent conflict and do nothing is also ethically questionable. This approach to observing what transpires throughout the situation thus seems problematic.

While no method of observation can be said to be the completely neutral fly on the wall, the cameras (on the wall) are not too far removed from this ideal.

In this research project, the clips are taken at face value. This means that in this research project I am to some extent a naïve user of the video footage, while media studies and social science research often focus on the social context of production and framing of a video clip (Lindegaard & Bernasco, 2018; Nassauer & Legewie, 2018). The cameras in the current study thus serve a rather pragmatic purpose of efficiently documenting extremely complex interactions in an unmatchable high resolution. This approach of studying what is in the videos, rather than critically studying the production of the videos and the reality they construct, can for some researchers appear lacking. It is here important to emphasize that besides the panning and zooming done by the camera observers, the video footage that I analyze is completely unedited. The approach, thus, does not differ radically from other observational methods with human observers such as used by Wells and colleagues (1999). The biggest difference is the efficiency of recording and ability of recollection. In both of these areas, cameras outperform human observers tremendously.

## *Situational Roles*

The context of viewing the videos also influences the way we categorize the situations. While the situation for the people involved in it, has a chronological flow where it starts at a certain time, takes place for a number of seconds and minutes and then is over, we can watch and re-watch the video as many times as we want. We can also watch it frame by frame, or even backwards if we please so. This ability to control the flow of time is convenient for noticing all the small details of the situation and is one of the great benefits of using the video footage to document the conflict situations (Nassauer & Legewie, 2018). This ability to travel in time, however, can also influence how the videos are understood. While the people involved in the situation are unsure of how the situation will turn out, we, as researchers, can re-watch it again and again and thus already know how the situation will develop. We know whether the situation eventually turns violence, how the situation re-escalates, and who wins the fight in the end. This knowledge is a privilege, but also an obstruction because it does not correspond to how the situation was lived by the people in the conflict situation. While thus having the privilege of rewinding time, we have to try to bracket this knowledge in our analytical categorizations, or else we might end up with explanations or ideas about individuals that are teleological. This can sometimes be seen in the application of situational roles. Many studies use a situational role for each of the individuals in the situation, but sometimes these situational roles are based on factors that are only revealed after the conflict situation is over.

Some studies based on police reports define the perpetrator as the person charged with assault by the police (e.g. Felson et al., 1984; Felson & Steadman, 1983). The information used to structure these events is thus information that is only available after the conflict is over. This means that these categorizations are not emergent at the time of people taking action within the situation. The third parties are not intervening towards someone charged with assault, they are intervening towards a person involved in a conflict. If we expect these social roles to be relevant for the way the situation develops we should, therefore, try to make analytical categories that fit the conflict situations develop as they develop.

In order to do this, I allow for the social roles of the participants to develop throughout the situation in the current study. I do this by abstaining from defining who is an antagonist and who is a third party on a situational level, but let the roles change throughout the situation. For each behavior I thus identify whether this behavior is towards someone the actor is engaged in a conflict with or if it is an intervention behavior towards someone engaged in a conflict with someone else than the person performing the behavior. This decision to make the roles of the situation variable is based on previous research that has struggled to apply these roles on a situational level. One study notes that "*in about half the cases where third parties are active (48 percent), third parties were originally one of the main antagonists and either the victim or offender interceded*" (Felson et al. 1984:457). Another study notes that "… *"offender" and "victim" are heuristic labels for the statuses that either emerge in the transaction or are an artifact of the battle.*" (Luckenbill, 1977, p. 179). These descriptions of roles changing throughout conflict situations corresponded to what I saw myself as I reviewed the empirical material. The roles of the conflicts are thus emergent artifacts of the conflict situation that can change throughout the situation. In order to accommodate this, I allow the roles to change throughout the situation. This change in roles throughout the situation also emphasizes the interactional component of the interpersonal conflicts. Compared to situations such as robberies where the roles are more clearly defined (or at least rarely change throughout the situation), roles such as perpetrator, victim, aggressor, third party, bystander etc. are all roles that are up for (re)negotiation throughout the interpersonal conflict situations.

## *Collecting the videos*

In this research project, I analyze video footage of interpersonal conflicts from the streets of Amsterdam recorded by surveillance cameras. The footage was collected in collaboration with my research group at the NSCR (Netherlands Institute for the Study of Crime and Law Enforcement). The data collection spanned from April to August 2017. In this period, all

identified interpersonal conflicts were given to the research group. This amounted to 165 video clips. The Dutch Ministry of Public Affairs and the Amsterdam Police granted us access to the videos. The footage was collected in collaboration with the Municipality of Amsterdam and the Amsterdam Police Department. The surveillance cameras are located throughout the city of Amsterdam on streets and squares that the Mayor of Amsterdam's office has identified as hot spots of crime and disorder. The closed-circuit system automatically records and saves all recordings for 28 days. This means that there is a 24-hour feed from every camera of the city stored for 28 days, after which it is automatically deleted.

The conflicts were identified in the continuous stream of footage by camera operators employed by the municipality of Amsterdam to watch the live-streaming footage from the public surveillance cameras. These operators watch the live-streaming footage 24 hours a day, seven days a week from a control room in Amsterdam. The operators can control the cameras from the control room with a joystick and they can zoom in on part of the scene when needed. This means that if an operator spots a (potential) conflict they can follow the people involved with the camera or zoom in on the conflict so it is easier to see what transpires. The operators browse the live-streaming feed of video from a surveillance camera, rotate the camera and zoom in on anything that might catch their attention and see what is going on at that specific location. If nothing of interest is going on, they move on to a new camera.

The usual practice of the camera operators is to note down the time and location of legal transgressions in the footage (including violent conflicts) so this footage can be identified and saved in case it is needed for legal prosecution or as evidence in some other capacity. By only analyzing violent conflicts, we would potentially miss situations where the third parties manage to successfully de-escalate the conflict before it escalates to violence. This is a challenge faced by previous research that analyze police casefiles (e.g. Suonperä Liebst et al., 2020). In these projects, only cases that escalate to illegal violence are included in the sample, which means that this approach only investigates situations where any present third parties failed to de-escalate the conflict before it escalated to this level. Therefore, in addition to their usual practices, we trained and instructed the camera operators to record the occurrence of non-violent conflicts too. First, we spend a week sitting next to ten different camera operators to learn about their ordinary selection procedures. Second, we discussed those criteria with the group of camera operators during a meeting. Third, we described those criteria in a document, and presented them to the group of operators. Fourth, we visited the group most weeks with cake and snacks to remind them engaged and motivated in the project thus keep noticing situations according to our selection criteria.

The criteria we asked the camera operators to pay attention to were the following: 1. People argue or talk agitated. You can see that from their facial expressions and busy hand gestures. 2. People talk, walk away, and come back again. 3. People point the index finger at each other's face, or make "come on" or "go away" hand gestures. 4. People stand close to each other, push or grab each other, or grab each other's clothes. 5. People take off their jacket or sweater. 6. More serious forms of violence, such as hitting or kicking. We furthermore instructed the camera operators to collect as much footage as possible leading up to and following the conflict situation. These selection criteria were based on the selection criteria and findings of previous research (Levine et al., 2011; Suonperä Liebst et al., 2020) and the review of numerous video clips of interpersonal conflicts for behavioral cues of imminent conflict.

The conflicts sampled for this research project have to be visually apparent in some way in order to be sampled. While we asked the camera operators to save any conflict, only conflicts that are visible to outsiders are part of the empirical material. This means that there has to be some behavioral cues that reveal to the observers that a conflict is taking place. If two people are engaged in a verbal conflict, but remain calm and collected throughout this conflict is thus not included in the current study. While the conflicts that are controlled or strictly verbal are thus missed, these conflicts, even if recorded, would be difficult to analyze since the videos contain no sound. The analyses of this project are limited to behavioral interactions, so if the conflict were not showing in the bodily behavior it would escape the analysis too, even if the video material was available. These more downplayed interactions would not just require another kind of data collection but also a different kind of analysis – this approach could be similar to that of Emerson (2015), which focuses on the subjectively perceived as well as the observable parts of the conflicts. This type of analysis would thus entail a move towards are more phenomological analysis of the conflicts. As detailed above, the current research project does not embark on this kind of investigation but rather remains in the area of the directly observable.

## *Analysis of the videos*

While the videos offer detailed descriptions of what takes place during the conflict situations, it is not possible to use the videos directly in the analysis. For the analyses of this project, the videos are only digestible after they have been translated into more conventional formats. In the current research project, this transformation is done by translating the videos into either text or numbers. Chapter 5 describes the results of a qualitative analysis of the videos. In this chapter, the videos are reviewed and then the situational development is tran-

scribed into a written text, which is analyzed and presented in the text as a way to quote the material. For the three chapters that apply quantitative methodology (Chapter 2, 3, and 4), the videos need to be translated into numbers before they can be digested by the statistical models used in the analyses. In order to translate the videos into numbers, we need a reliable translator of the behaviors displayed in the videos. This means a methodology that allows me to code specific behavior and on a level of analysis that uses the high resolution of the videos. In the social sciences, systematic analysis of behavioral interactions is not a very widespread. Especially not on the level of analysis of the current research project. Another field of research that worked with the systematic encoding of behavior for decades is the field of ethology. This subdiscipline of biology analyses the behavior of animals and has developed a methodology for the analysis of behavior that corresponds to the ambition of the current study. This approach to turning behavior into observable units does not necessarily rely on the behavior being recorded on video, but having video recordings makes it easier and more convenient. The first step of this method is to develop what ethologist term an *ethogram*. This corresponds to what in the social sciences is often called a codebook, code list, list of definitions, etc. It is a list of all the behaviors of interest of a specific animal. In biology, an example of this could be grooming behavior of dogs or scavenging behavior of ravens. For the current study the specific behaviors of interest are detailed in the ethogram in appendix 1. An ethogram is developed by watching a subsection of the material a number of times and noting down all distinct behaviors of interest. This ethogram thus contains conflict and intervention behaviors that I observed in a subsample of the conflict situations and in ethograms used in previous studies on the topic (Liebst, Philpot, Bernasco, et al., 2019; Lindegaard et al., 2017; Philpot, 2017). Based on the ethogram, I coded the presence of behaviors throughout each of the situations recorded by the surveillance cameras. The footage was coded using BORIS (Behavioral Observation Research Interactive Software) (Friard & Gamba, 2016). This software allows me to systematically encode the videos with time stamps, so the chronology of the situations is preserved down to the second. In each of the three chapters that carry out quantitative analysis of the material, the encoded videos are approached in different ways, which are specified in detail in the beginning of each chapter.

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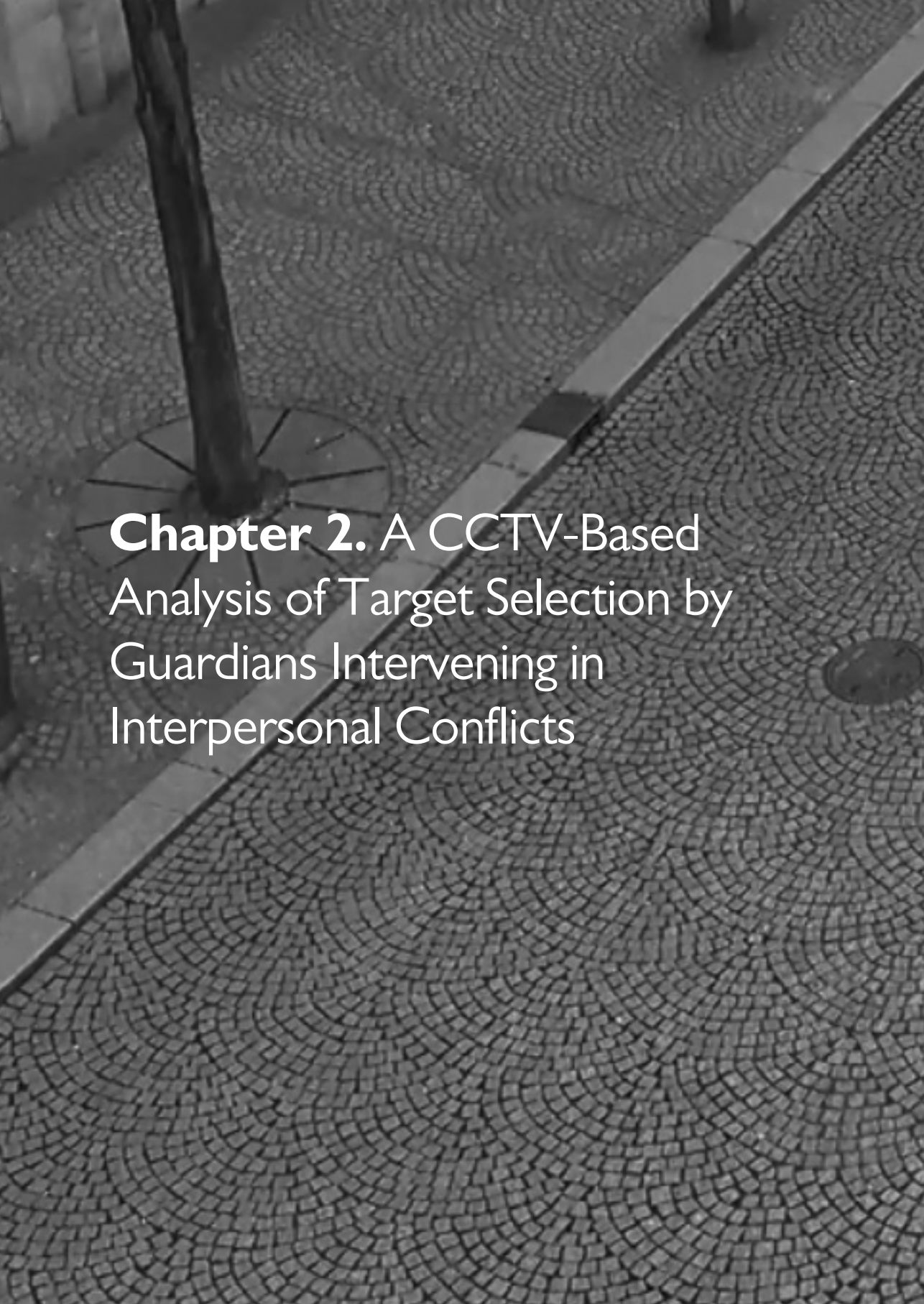

# **Chapter 2.** A CCTV-Based Analysis of Target Selection by Guardians Intervening in Interpersonal Conflicts

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*PE conceived the research, performed the analysis and wrote the text. MRL and WB provided feedback on intermediate drafts of the final manuscript.*

## Abstract

Guardians are a potential resource of conflict de-escalation but we still know little about their actual behaviour. In this article we investigate whom among the antagonists a guardian selects as a target when they intervene in an interpersonal conflict. We investigate this using CCTV footage from Amsterdam (the Netherlands) of 46 interpersonal conflicts in public spaces involving 641 interventions by 176 individuals. We find that guardians are more likely to target antagonists: (1) who have performed the most aggressive behaviours, (2) who are not simultaneously targeted by other guardians, (3) who are from their own social group, (4) who are men. The analysis shows that the behaviour of intervening guardians is shaped by multiple aspects of the complex and often ambiguous conflict situations.

**Keywords.** *Third-party intervention, guardianship, systematic video analysis, interpersonal conflicts, violence*

## Introduction

A growing amount of empirical research testifies that, if we want to understand interpersonal conflicts and violence, we must first understand how third parties behave in these situations (Levine et al., 2011; Phillips and Cooney, 2005; Planty, 2002; Shotland and Goodstein, 1984; Wells and Graham, 1999). Within the field of criminology, the importance of third parties has been addressed more generally by the routine activity theory. This theory asserts that one of the necessary situational conditions for a crime to take place is the absence of capable guardians (Cohen and Felson, 1979). The routine activity theory has led criminologists to investigate whether the mere presence of guardians serves as a deterrent to crime (Hollis-Peel et al., 2011). However, this passive deterrence of crime is just one aspect of what a capable guardian can do. Although some crimes are deterred by the presence of guardians, in other situations the mere presence is not enough. In these situations, guardians perform 'the ultimate act of guardianship' (Reynald, 2009:4) – intervention in the conflict.

Observational studies have found that, in interpersonal conflicts, this ultimate act of guardianship seems to be the rule rather than the exception. The vast majority of assaults happen in the presence of someone who is not directly involved in the conflict (Planty, 2002), and, when present, these third parties often intervene as active guardians. The frequency of interventions by third parties in conflicts varies from about half of the observed incidents of aggression in a barroom setting (Wells and Graham, 1999) to a staggering 90 percent in a recent study analysing CCTV footage of conflicts and fights on public streets (Philpot et al., 2019a)[1]

When guardians intervene in interpersonal conflicts they are faced with an additional challenge compared with guardians intervening in other types of crime, because the distinction between victim and perpetrator is oftentimes not naturally given in this type of interaction. A large proportion of these situations appears chaotic and consists of a series of mutual escalations where the primary opposing conflict parties, henceforth referred to as the antagonists, appear to be simultaneously perpetrator and victim (Collins, 2008; Luckenbill, 1977; Parks et al., 2013). This has led researchers, from the tradition of symbolic interaction-

[1] These percentages are in line with those reported in field experiments on third-party intervention in non-violent emergencies. For example, in a field experiment conducted in the subway, Piliavin et al. (1969) found that a large majority of research confederates, who were instructed by the researchers to fake they collapsed, were helped by third parties.

ism, to argue that roles such as 'victim' and 'perpetrator' function only as heuristic labels (Luckenbill, 1977) and might change in the course of a conflict (Felson et al., 1984). Guardians intervening in interpersonal conflicts thus have to make sense of the changing actions and reactions and assess whom among the antagonists they target when they intervene.

Even though guardians thus empirically appear to take an active role in real-life conflicts and have been part of the criminological theoretical canon for decades, the empirical research on what guardians actually do in interpersonal conflict situations is sparse and continues to have blind spots (Levine et al., 2011; Phillips and Cooney, 2005; Reynald, 2009, 2010). The purpose of the current article is to address this gap in the literature by investigating which characteristics influence the target selection of guardians when they intervene in interpersonal conflicts. The analysis is based on a systematic behavioural analysis of CCTV footage of conflicts recorded in the streets of Amsterdam. The analysis of the CCTV footage shows that when guardians intervene they are more likely to target antagonists: (1) who have performed the most aggressive behaviours, (2) who are not simultaneously targeted by other guardians, (3) with whom they have a pre-existing social relationship, and (4) who are male.

## Target selection of guardians in interpersonal conflicts

The necessary steps guardians go through before an intervention have been detailed in a script of guardian intervention developed by Leclerc and Reynald (2015). This script lays out six preconditions that precede intervention. These steps are: (1) availability to intervene, (2) capacity to intervene, (3) noticing the offence, (4) monitoring the ongoing situation, (5) taking responsibility, and (6) deciding to intervene. These six preconditions are similar to the 'decision tree' that Latané and Darley (1968) formulated to describe the necessary cognitive and behavioural steps that bystanders must go through if they are to intervene: they must notice the event, interpret it as an emergency, feel personally responsible for dealing with it, and possess the skills and resources to intervene successfully. Although both models lay out multiple steps that guardians or third parties must go through before intervening, they do not describe the target selection as part of this process.

Whereas neither of the theoretical models explicitly addresses the target selection of guardians, empirical studies have documented this aspect of intervention. This research aims to document the variations in intervention behaviours and finds that guardians sometimes target the perpetrator and at other times focus on the victim of interpersonal violence (Banyard, 2015; Berkowitz, 2009; Frye et al., 2012; McMahon et al., 2013). These studies

outline that guardians sometimes target the victim in order to protect them from the perpetrator and at other times target the perpetrator to stop their offensive behaviour.

The often ambiguous nature of the division of roles in interpersonal conflicts (Collins, 2008; Felson et al., 1984; Luckenbill, 1977) entails that guardians here are faced with the challenge of identifying who they should try to stop when they intervene. In situations such as sexual assaults or burglaries, victim and perpetrator roles might appear to fit the conflict situations readily. However, the assignment of these roles is not easily applicable in all interpersonal conflict situations. Rather, they are the product of interpretation and can sometimes be re-evaluated during a conflict situation (Emerson, 2015; Emerson and Messinger, 1977). Although most guardians probably agree that a victim should be helped and a perpetrator should be stopped and sanctioned, the application of *who* qualifies as a victim and *who* qualifies as a perpetrator is not always straightforward. Empirical research thus has shown that directly intervening guardians must decide whom among the antagonists they target, but the assessment of which situational factors might shape this target selection is, to our knowledge, not addressed in any scientific study.

In the current study, we investigate whom of the antagonists a guardian targets when he or she intervenes in an interpersonal conflict. Thus, in this study we do not investigate who intervenes in a conflict but rather focus on the behaviour of the guardians who actually do intervene. Since the characteristics of both the situation and the person intervening in the conflict are constant across the potential targets of intervention, these variables cannot explain the variation in whom guardians actually target. In order to explain whom guardians target with their intervention we thus turn our analytical gaze towards the behaviour and individual characteristics of the potential targets of intervention, that is, the antagonists. This focus aligns with the arguments of scholars who have argued that, to understand how individuals act in interpersonal conflicts, we should consider not only the individual dispositions of the people acting but also the behaviours and characteristics of the other people in the situation (Felson and Steadman, 1983; Jackson-Jacobs, 2013; Luckenbill, 1977). This interactional approach to crime was developed by Luckenbill, who showed the potential of studying interpersonal crimes as situational transactions where the behaviour of one individual is seen as a reaction to aspects of the situation (Luckenbill, 1977, 1980, 1981, 1982).

Inspired by this interactional approach, we have identified four situational factors – two behaviours and two individual characteristics of the potential targets – which we expect to influence whom guardians target when they intervene in an interpersonal conflict.

## *Behaviour of potential targets and other guardians*

*Aggressive behaviour of the antagonists.* The first factor we expect to influence the target selection of guardians intervening in interpersonal conflicts is the relative number of aggressive behaviours performed by the antagonists. Whereas some interpersonal conflicts are characterized by mutual acts of aggression, other situations are more unidirectional (Luckenbill, 1977; Parks et al., 2013). The larger the difference between the number of aggressive behaviours performed by the antagonists, the easier we expect it to be for the guardians to unambiguously designate the perpetrator role. Following this, we expect that intervening guardians are more likely to target the antagonist who has performed the most aggressive behaviours.

However, the literature on guardianship suggests that guardians are sometimes hesitant to intervene in very violent conflicts in order to avoid personal injuries (Huston et al., 1981; Reynald, 2010). This concern for personal safety could engender the opposite effect, and thus lead guardians to target the lesser aggressor of the conflict to avoid endangering themselves. Although the literature thus agrees that the aggressive behaviours of the antagonists are relevant, it is equivocal about *how* it might influence the target selection of guardians.

Whereas one antagonist might be more aggressive at the beginning of an interaction, the other might be the main aggressor by the end. To accommodate this, we count the total number of aggressive behaviours performed by each antagonist prior to each intervention behaviour. The first factor we thus expect to influence the target selection of guardians is the relative number of aggressive behaviours performed by the antagonists of the conflict (H1).

*Intervention by other guardians.* A large literature originating from social psychology has found that 'the individual's likelihood to intervene decreases when passive bystanders are present in a critical situation' (Fischer et al., 2011: 517). On a more general level, this line of research illustrates that the behaviour of the individual guardian is influenced by the actions of other guardians, or absence thereof. Although this so-called bystander effect details the inhibitory effect of the passivity of other guardians, much less research has investigated how active guardians might influence each other. A recent qualitative study found that guardians coordinate their helping behaviour with a division of labour where each guardian takes on a different task. This study, however, focused on the coordination of the helping behaviour that happens in the aftermath of conflicts (Bloch et al., 2018). Although no empirical study, to our knowledge, has investigated the coordination of guardians intervening in an ongoing conflict,

the studies on passivity and helping in post-conflict settings all indicate that the target selection of guardians is influenced by what other guardians do.

We hypothesize that the actions of other guardians influence the target selection similarly to the division of labour observed in the post-conflict. The second hypothesis thus states that guardians are more likely to target an antagonist who is not simultaneously the target of other guardians than one who is being simultaneously targeted by other active guardians (H2).

## *Individual characteristics of potential targets*

*Social relationship.* Guardians sometimes act as what Eck has termed 'handlers' (Eck, 1994). This term denotes a distinct type of guardian who has a relationship to a perpetrator and uses this handle to stop them from committing further offences (Eck, 1994; Hollis-Peel et al., 2011). The relevance of a relationship between a guardian and an antagonist has been corroborated in empirical studies that consistently have found that a social relationship to an antagonist drastically increases the likelihood of direct intervention in a conflict (Fischer et al., 2011; Liebst et al., 2019; Phillips and Cooney, 2005). This increased likelihood is often explained by the handlers feeling responsible for the actions performed by individuals to whom they have a social relationship (Felson, 1995; Fiske and Rai, 2015; Levine et al., 2011). Although these studies do not explicitly deal with the target selection of guardians, it follows from the explanation that they intervene to stop the offences of the antagonist with whom they share a social relationship. Following this, we expect that guardians will act as handlers and take responsibility for the behaviour of their peers. The third hypothesis thus states that guardians are more likely to target antagonists with whom they have a social relationship than antagonists with whom they do not have a social relationship (H3).[2]

*Gender.* Previous research indicates that the gender composition of the antagonists might influence whom guardians target when they intervene in an interpersonal conflict. There is general consensus in the scientific literature that aggressive behaviour from a man towards a woman is judged more harshly than the aggressive behaviour from a woman towards a man (Allen and Bradley, 2018; Harris, 1991; Rogers et al., 2019; Sorenson and Taylor, 2005). This pattern has been explained with the *chivalry norm*, which prescribes that men should not act aggressively towards women. This norm not only discourages men from harming women but also encourages others to protect them. The norm thus leads respondents to indicate a higher

[2] It is important to note that, if the study had focused on violent interventions, this direction might have been reversed (Liebst et al., 2019).

willingness to intervene on a woman's behalf (Felson and Feld, 2009) and to intervene when the perpetrator is a man (Sorenson and Taylor, 2005). Following this, the fourth hypothesis states that guardians are more likely to target men than women (H4).

## Materials and methods

The empirical foundation of this article consists of CCTV footage of interpersonal conflicts collected from April to August 2017. The research group was granted access to CCTV files by the Dutch Ministry of Justice. The footage was recorded by camera operators employed by the municipality who watch the live streaming footage 24 hours a day every day of the week. The cameras are located throughout the city of Amsterdam on streets and squares that the mayor of Amsterdam's office has selected as hot spots of crime and disorder. These areas typically include the most popular night-life zones, spots with a history of drug dealing, and known hangout spots for delinquent youths.

As part of their usual practice, the operators record any kind of violent conflict, which can be used to identify perpetrators and later as evidence in court. In addition to their usual recording practices, we instructed the operators to record any quarrel they observed irrespective of whether or not the conflict escalated into physical violence. This includes agitated verbal conflicts where the antagonists never make physical contact. The implementation of this new recording practice is apparent in the empirical material since a substantial proportion (33 percent) of the recorded conflicts contained no physical aggression.

In total, we collected CCTV footage depicting 165 conflict situations. We assessed the footage of each situation for its utility for the study. Only files that conform to the following criteria are included in the final sample:

1. An interpersonal conflict is visible in the recorded footage

2. The quality of the video (resolution, brightness and frames per second) is sufficiently high to allow the coding.

3. There are no or only negligible breaks in the recording.

4. There is at least one guardian intervening in the conflict.

Out of the original sample of 165 situations, 25 did not depict a conflict, 36 lacked sufficiently high resolution, and 72 had parts of the conflict missing (the categories are not mutually exclusive). Of the remaining 62 codable situations, 16 did not have any guardians intervene in the conflict, resulting in a final sample of 46 situations. The final analysis thus only uses 28 percent of the material originally collected. Although this is a high loss of data, it is comparable to other studies analysing CCTV footage of interpersonal conflicts (Philpot et al., 2019b).

In order to assess whether the final sample is comparable to the original sample, we compared information on time of day and day of week for the used and discarded material and found that the material used for the analysis is statistically similar to the discarded material in regard to time and place (see Appendix 2 in the online Supplemental Material). This shows that the analysed videos are, at least as regards the temporal and spatial circumstances, comparable to the original sample.

The analysed footage contains 671 interventions, of which 30 (4.5 percent) were excluded from the analysis because at the exact time of the intervention the coder could not unambiguously identify a conflict dyad. An example of the excluded interventions is an intervention against an antagonist who performs aggressive gestures in a general direction or towards a group of people rather than towards a specific individual. The final sample thus comprises only conflicts that at the time of intervention are between two clearly identifiable antagonists. We applied this selection criterion to simplify the analysis and interpretation of data and because the sample contained very few cases where the intervention was not in a conflict between a clearly identifiable dyad. As a result of applying this selection criterion, all interventions in the analysis are interventions in clearly visible antagonistic dyads. The final sample comprises 46 situations containing 176 guardians performing 641 intervention behaviours.

## *Coding of CCTV footage*

The coding of the CCTV footage grouped two different types of information. The first kind of information relates to *behaviour*. The behavioural codes describe the interactions in the situation and how these develop over the course of the conflict. The behavioural coding approach was used to gather information on the number of aggressive behaviours performed by antagonists (H1) and the simultaneous interventions by other guardians (H2). The second kind of information is the individual characteristics of the potential targets. This type of information describes characteristics that do not change throughout the course of the situation. This coding approach was used to gather information about social relationships (H3) and the gender of the antagonists (H4).

The behavioural coding is based on a coding scheme (see Appendix 1 in the online Supplemental Material) detailing definitions of relevant conflict and intervention behaviours. The coding scheme was developed through careful inductive examination of the CCTV footage identifying and defining the relevant conflict and intervention behaviours and in conversation with previously developed coding schemes used to analyse antagonist and third-party behaviours (Liebst et al., 2018; Lindegaard et al., 2017; Philpot, 2017).

The CCTV clips were coded using Behavioural Observation Research Interactive Software (BORIS) (Friard and Gamba, 2016). This program allows us to code not only the observed behaviours but also their timing. Furthermore, each behaviour is coded with an actor and a target and categorized according to whether it is an intervention or a conflict behaviour. In this study, we thus conceptualize being a guardian not as a situationally fixed role, but rather as something that can change in the course of the conflict depending on the actual behaviour. This differs from how most studies have conceptualized being a guardian, where roles are fixed for the duration of the conflict situation (for example, Felson et al., 1984; Liebst et al., 2018; Wells and Graham, 1999). Although this approach is new to the study of guardians, researchers have noted that, 'in about half the cases where third parties are active (48 percent), third parties were originally one of the main antagonists and either the victim or offender interceded' (Felson et al., 1984: 457). This shows that individuals often shift roles during a conflict.

These changes in roles are visible on the CCTV footage when an antagonist grows tired of the persistent interventions of a guardian and starts attacking them instead of the original target of their anger. Another example of this from the footage is a peaceful guardian who becomes increasingly frustrated with the non-acquiescence of an antagonist and eventually turns aggressive or even violent towards this person.

To allow individuals to switch roles in the course of the conflict, we scored each behaviour according to whether it was an intervention behaviour or a conflict behaviour rather than attributing fixed roles to individuals. For a behaviour to qualify as an intervention in the analysis it must live up to two criteria. First, it must be performed by individual A towards individual B who is engaged in a conflict with someone other than individual A. Second, it must be one of the following behaviours: calming hand gestures, aggressive hand gestures, non-forceful touching, blocking or holding a person back, pushing, or hauling a person off (see Appendix 1 in the online Supplemental Material for behavioural definitions). This means that in this study, every time someone performs one of these behaviours directed towards an antagonist engaged in a conflict with someone other than the person performing the be-

haviour, it is classified as an intervention. If a guardian performs the same behaviour towards the two antagonists at the same time, this is coded as two separate behaviours. This type of behaviour accounts for 5.8 percent of the observed interventions. We chose this operationalization because intervening towards both antagonists at the same time shows that none of the investigated factors makes the guardian select one antagonist over the other.

We also coded two *individual characteristics* of the potential targets. The first of these is the gender of the antagonists. This measure is based on the clothes, facial features, hair and body type of the individuals. The second individual characteristic is the social relationship between the guardian and the antagonists. This measure is based on the observed tie signals among the individuals. When humans move in public spaces, they send signs to their surroundings about their social ties. The visual appearance of social relationships has been described by Goffman (1971) and Hall (1966), who argued that the physical proximity of individuals in public spaces correlates with the social proximity of the individuals. This has since been corroborated in empirical studies observing pedestrian behaviour (Ge et al., 2012; McPhail and Wohlstein, 1982; Solera et al., 2013) and in conflict situations (Liebst et al., 2018).

Since most of the videos include footage of the antagonists arriving at and leaving the scene of a conflict, we use this information as a cue for a social relationship when it is available. If two individuals arrive at or leave the scene in proximity to each other, we take it as an indicator that they have a social relationship. Furthermore, we draw on other social signifiers such as groups wearing matching clothes or uniforms, standing close to one another, being engaged in casual conversation, holding hands, or similar signs when we assess the social relationships.

## *Assessment of reliability*

The CCTV footage was encoded by the first author of the article. In order to estimate the reliability of the encoding of the videos, a trained graduate student independently coded all behaviours in 11 situations (24 percent). Any disagreements between the coders were resolved individually prior to the analysis. We calculated Cohen's Kappa ($\kappa$) in order to estimate the extent of agreement in the double coded situations. In order to make the codes comparable, we gave each individual in each situation a unique identifier to allow both coders to identify the same individual in the videos. Agreement was defined as both coders identifying the same type of behaviour performed by the same actor towards the same target within the same one-second window.

The reliability should be calculated on the same level of measurement as is used in the analysis (Krippendorff, 2004).[3] When the intervention behaviours are aggregated they obtain a substantial interrater agreement ($\kappa_{\text{intervent beh}} = 0.62$). The aggregated aggressive behaviours (hitting, kicking, pushing, throwing or aggressive pulling, wrestling/grappling, striking with an object or weapon, hauling person off, aggressive gestures, invading space) also obtain a substantial interrater reliability ($\kappa_{\text{aggressive behaviours}} = 0.68$). The variables measuring the individual characteristics of the potential targets obtain complete and almost complete agreement for gender and social relationship, respectively ($\kappa_{\text{gender}} = 1$ and $\kappa_{\text{social relation}} = 0.89$). In sum, these results demonstrate that our main findings are based on reliable observations (Landis and Koch, 1977).

## *Statistical model*

In order to estimate the target selection of guardians intervening in a conflict we use a conditional logit model. The conditional logit model is a regression model that estimates the probability of selecting a specific target based on the characteristics of the available alternatives (McFadden, 1973). This estimation method compares the characteristics of the individual selected as the target of an intervention with those of the individual who was also part of the conflict dyad but was not selected as a target of intervention. The conditional logit model suits the purpose of the current article since all four hypotheses aim to understand how the characteristics of the potential targets influence the probability that a guardian targets this particular antagonist.

Since the same individuals can intervene multiple times within a conflict (that is, interventions are nested in individuals) and the individuals are sampled from the same situations (that is, individuals are nested in situations), we estimate the model with cluster corrected standard errors to correct for potential interdependences between the observations. Following the recommendation of the literature, we correct on the highest level of interdependence (the situation) to ensure that the identified clusters are independent of each other (Cameron et al., 2011). We used the clogit function in STATA to estimate the model.

## *Descriptive statistics*

The point of departure for the current study was that interpersonal conflicts often do not have an unambiguous perpetrator. The empirical material corroborates this since only 38 percent

[3] The exact reliability scores for each of the observed behaviours are in Appendix 1 in the online Supplemental Material.

of the guardians are intervening in conflict dyads where just one of the two antagonists has performed aggressive behaviours. This proportion is comparable to a survey finding that approximately 40 percent of conflicts are clearly one-sided (Graham and Wells, 2002). For the majority of guardians intervening there is thus a potential ambiguousness in the distinction between who is a perpetrator and who is a victim because either both or neither of the antagonists have performed aggressive behaviours.

Of the total 176 intervening guardians, 71 change the target of intervention in the course of the conflict. This shift in target selection of approximately 40 percent of the guardians indicates that something during a conflict influences their target selection. The fact that a substantial proportion of the intervening guardians change their target during the conflict emphasizes the necessity of allowing target selection to vary throughout the situation.

**Table 1.** Descriptive Statistics (N = 1,282)

| Variable | Mean | Median | Min. | Max. | Standard deviation |
|---|---|---|---|---|---|
| (1) Number of aggressive behaviors | 2.72 | 2.00 | 0 | 23.00 | 3.46 |
| (2) Number of concurrent interventions | 0.34 | 0 | 0 | 4.00 | 0.68 |
| (3) Social relation | 0.45 | 0 | 0 | 1.00 | 0.50 |
| (4) Male | 0.91 | 1.00 | 0 | 1.00 | 0.28 |
| (5) Previously targeted | 1.44 | 0 | 0 | 13.00 | 2.20 |

*Source: Author's own*

Table 1 shows the descriptive statistics for the variables included in the model. The table gives information on 641 chosen targets and 641 non-chosen targets, and thus 1282 observations. The unit of measurement of the table is the characteristics of each potential target measured at the point in time when each intervention behaviour takes place.

The first variable in the table is the number of aggressive behaviours performed by the potential targets prior to the intervention (see Appendix 1 for the definitions of each sub-behaviour). More than half of the potential targets of intervention have performed two aggressive behaviours or fewer prior to the point of intervention. The highest number of aggressive behaviours performed by an antagonist prior to the point of intervention is a staggering 23 behaviours. The average number of aggressive behaviours performed by antagonists is 2.7.

The second variable in Table 1 measures whether other guardians have intervened towards a potential target within the three seconds leading up to the intervention. For more than half of the interventions no one is intervening in the conflict simultaneously and the

median value for this variable is therefore zero. However, about 25 percent of the potential targets are simultaneously targeted by another guardian and in some cases by more than one person. The highest number of simultaneous interventions is four.

The third variable in Table 1 shows that the guardians have a social relationship to 45 percent of the potential targets of intervention. There are thus more potential targets who are strangers to guardians than there are potential targets with whom they have a social relationship. The fourth variable in the table shows that 91 percent of the potential targets are male whereas only 9 percent are female.

The fifth variable in Table 1 is a count variable measuring the number of previous interventions by a guardian towards a specific antagonist. Although this variable is not among the hypothesized variables, it is included in the multivariate conditional logit model as a control variable. This variable is included in order to take into account that some interventions follow each other as a consequence of the same intervention. An example of this is a guardian who intervenes by briefly holding an antagonist back and then starts hauling this person away from the other antagonist. This would be encoded as two distinct intervention behaviours (holding back and hauling off), even though it appears as a single continuous action. As illustrated by the median value, most guardians have not previously intervened towards the potential targets of intervention. The highest number of previous interventions towards a potential target is 13, and the average number of previous interventions towards potential targets is 1.44.

## Results

### *Multivariate conditional logit analysis*

We construct a model that includes all the hypothesized and control variables. This multivariate conditional logit analysis allows for an analysis of the target selection where all variables are taken into account simultaneously. The results from the analysis are presented Table 2.

*Aggressive behaviours.* Table 2 shows that the effect of the relative number of aggressive behaviours performed by an antagonist prior to the intervention has a statistically significant influence on the target selection of an intervening guardian ($p = .001$). The analysis shows that the likelihood that a guardian targets a specific antagonist increases when this antagonist has performed more aggressive behaviours than the other antagonist in the

situation. The model estimates that, when an antagonist has performed one more aggressive behaviour than his or her opponent, this increases the odds that this antagonist will be targeted by the intervention by 11.3 percent. In sum, the empirical investigation corroborates the first empirical hypothesis, which states that the target selection of guardians is influenced by the relative number of aggressive behaviours of the antagonists.

**Table 2.** Multivariate (fixed effect) Conditional Logit Analysis of Third-Party Target Selection

(N 1,282 Potential Targets of 641 Interventions by 176 Third Parties in 46 Situations)

| Variable | Odds Ratio | p value | 95% Confidence interval | |
|---|---|---|---|---|
| Number of aggressive behaviors | 1.113 | 0.001 | 1.047 | 1.183 |
| Number of concurrent interventions | 0.762 | 0.017 | 0.610 | 0.953 |
| Same social group | 1.564 | 0.006 | 1.134 | 2.156 |
| Male | 2.292 | 0.002 | 1.357 | 3.871 |
| Previously targeted | 1.267 | 0.001 | 1.101 | 1.458 |

*Source: Author's own*

*Intervention by other guardians.* Table 2 also shows that concurrent intervention by other guardians has a statistically significant effect ($p = .017$) on whom guardians select as a target for their intervention (note, however, that this measure is not significant if the control variable is omitted from the model). The odds that a guardian will target a specific individual is approximately 25 percent smaller when another guardian is already targeting that individual. Thus, the model substantiates the second hypothesis, which states that guardians were more likely to target antagonists who are not simultaneously targeted by other guardians.

*Social relationship.* According to Table 2, when a guardian has a social relationship with one of the antagonists, the odds are more than 50 percent larger that the intervening guardian will target the antagonist with whom they have a social relationship. This effect of social relationship on the target selection of the guardian is statistically significant ($p = .006$). The result confirms the third hypothesis, which states that guardians are more likely to target individuals with whom they share a social relationship.

*Gender.* Table 2 furthermore shows that the gender composition of the antagonists has a statistically significant effect ($p = .002$) on the target selection by guardians. When a man and a woman are engaged in a conflict, the odds are more than twice as large that a guardian will target the man rather than the woman. The multivariate analysis thus confirms the fourth hypothesis stating that guardians are more likely to target men than women.

*Previous interventions.* The control variable counting the number of previous interventions by the guardian towards the antagonists is a significant predictor of the target selection by guardians ($p = .001$). Figure 1 shows how, once a guardian has intervened towards an antagonist in the conflict, they are likely to stick with this choice in later interventions. To verify the need to control for whether or not an antagonist had been previously targeted (the control variable), we also estimate the model without this variable, that is, including only the four theoretically motivated key variables. When the control variable is excluded, the sizes of the other estimates of the key variables change only slightly. However, and underlining the need for the control, when the control variable is excluded from the model, *Number of concurrent interventions* fails to reach statistical significance at $p < .05$ two-sided (see the estimates for the model with only the hypothesized variables in Appendix 3 in the online Supplemental Material).

The change in statistical significance of *concurrent interventions* indicates that this variable is influenced by an omitted variable bias when the model is not adjusted for the variation of *previous interventions*. There can be many reasons for such a bias, but a potential substantial explanation for this change in statistical significance is that guardians who are in the middle of a string of intervention behaviours are less likely to be influenced by the concurrent intervention of other guardians.

## *Robustness of the model*

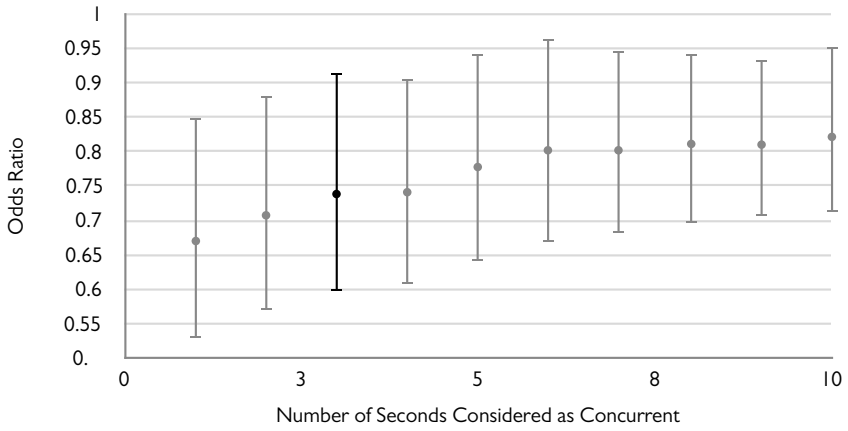
In the construction of the dataset for the empirical investigation we were faced with choices among a set of viable empirical operationalizations of the hypotheses. In order to provide transparency of the process and check the robustness of the findings across these alternative operationalizations, the current section presents these alternative operationalizations.

The first hypothesis was operationalized as the relative number of aggressive behaviours by the antagonists. Another valid operationalization of this hypothesis would have been to include only the violent behaviours. This excludes aggressive gestures and invading space from the variable. This alternative operationalization does not change the significance of the measure and the odds ratio remains approximately the same (see Appendix 4 in the online Supplemental Material). This change does, however, influence the significance for the effect of interventions by other guardians. This variable becomes insignificant ($p = .06$) when the first variable measures violent rather than aggressive behaviours.

A second alternative operationalization would be to use a binary measure indicating which antagonist performs the most aggressive behaviours. Here again the measure remains a significant explanatory factor and the odds ratio increases (see Appendix 5 in the online Supplemental Material), which is to be expected since the measure is converted from continuous to binary.

A third alternative operationalization would be to use a binary measure indicating which antagonist performed the first aggressive behaviour, and thus started the conflict. This measure, however, does not have a significant influence on the target selection of guardians (see Appendix 6 in the online Supplemental Material). The aggressiveness of the potential targets thus proves to be robust in its influence on target selection across the first two alternative operationalizations but not in the third.

**Figure 1.** Effect Size of Number of Concurrent Interventions with a Varying Number of Seconds Qualifying as Concurrent (N= 1,282)




Notes: The black marker shows the operationalization used in the model estimates in Figure 1 and Appendix 2 in the online material. The grey markers show the effects sizes for alternative operationalizations.

*Source: Author's own*

In the investigation of the second hypothesis, we operationalized concurrent intervention as an intervention that happens within the preceding three seconds. However, this number is a somewhat arbitrary decision. In order to investigate whether this choice is consequential, we ran the multivariate analysis with a varying definition of what qualifies as concurrent interventions (presented in Figure 1). This explorative analysis shows that the variable is consistently significant across all but the six second delay. It appears from visual inspection of Figure 1 that the effect size of the variable increases (moves closer to zero) when the time frame is reduced.

## Discussion

The aim of this study was to investigate which factors influence the target selection of guardians performing *the ultimate act of guardianship*: intervention in a conflict. Whereas most research on guardianship has assumed the target selection of guardians to be self-evident, we investigated this assessment in the often ambiguous interpersonal conflicts in public spaces. We combined insights from the routine activity perspective, symbolic interactionism, and guardian script analysis to formulate four hypotheses about the influence of the behaviour and individual characteristics of the antagonists for the target selection of intervening guardians. The relevance of the hypothesized factors was empirically tested through a systematic coding and analysis of CCTV footage of a sample of interpersonal conflicts from the streets of Amsterdam.

The empirical investigation showed how the target selection of guardians intervening in interpersonal conflicts is influenced not only by the behaviour of the antagonists in the conflict but also by the behaviour of other guardians in the conflict, the social relationship between the guardian and the antagonists, and the gender of the antagonists. These results bring to the fore the complexity of the information guardians draw on when they intervene in an interpersonal conflict. To understand how guardians act in interpersonal conflict situations we thus have to take the dynamic nature of interpersonal conflicts into account.

Two types of behaviours were hypothesized to influence the target selection of guardians. The first is the behaviour of the antagonists. In the empirical model we find that an increase in the relative number of aggressive behaviours performed by an antagonist prior to the point of intervention increases the likelihood that a guardian will target this antagonist. The model thus confirms the first hypothesis stating that the number of aggressive behaviours by the antagonists influences the target selection of guardians (H1). This means that, if a guardian intervenes in a conflict where antagonist A has been hitting and kicking antagonist B multiple times while antagonist B has pushed antagonist A once, the guardian is more likely to target antagonist A, who has been the most aggressive at the time of the intervention.

The literature on guardianship was not unanimous about whether the number of aggressive behaviours would make intervening guardians more or less likely to target a specific antagonist. The empirical model shows that guardians typically target the antagonists who behave most aggressively and thus more readily fit into the role of perpetrator. This means, on the other hand, that the empirical results do not support literature suggesting that guardians target the least aggressive antagonist in order to protect their own safety.

However, the effect size of this factor is quite small. The number of aggressive behaviours by the antagonists thus seems to be an influential factor in the target selection of guardians only when one party is much more aggressive than the other. In interpersonal conflicts where the two antagonists perform almost the same number of aggressive behaviours, they have little influence on the target selection of the intervening guardians. It thus appears that guardians use the behaviours of the antagonists in their assessment of whom to target in asymmetrical conflicts only where one antagonist clearly is the main aggressor of the conflict. When the aggressive behaviours are more evenly distributed between the antagonists, and the conflict thus is more ambiguous, the behaviours of the antagonists are less influential in the assessment of the guardians.

The second behaviour we expect to influence the target selection of guardians is simultaneous intervention by other guardians. The empirical model shows that concurrent intervention by a guardian towards an antagonist reduces the likelihood that another guardian will target that same antagonist. This finding confirms the second hypothesis (H2) and the results from the previous literature that guardians influence each other, which brings about a sort of division of labour. For example, when a guardian intervenes in a conflict between antagonist A and antagonist B, he or she is more likely to target antagonist B with the intervention if another guardian is already holding back antagonist A.

Although it was apparent in the analysis of the first factor that guardians targeted the most aggressive antagonist in asymmetrical conflicts, the influence of the behaviour of other guardians shows how multiple guardians handle ambiguous conflicts. When there is no unambiguous perpetrator and victim the guardians might apply this coordination, which allows them to target multiple aggressors simultaneously and thus handle the surplus of perpetrators.

Besides the influence of the behaviours within the situation, the analysis also identified two individual characteristics of the potential targets that influence the target selection of guardians. Whereas the first two variables of the model thus show how the sequential developments of behaviour within the conflict shape the target selection of guardians, the last two factors are constant for each individual throughout the situation.

The first individual characteristic of the potential targets in the empirical model is the social relationships between the guardians and the antagonists of the conflict. The model shows that guardians are more likely to target individuals with whom they have a social relationship compared with individuals with whom they do not share a social tie. This means that, if a guardian who is a friend of antagonist A but a stranger to antagonist B intervenes in

a conflict between antagonist A and antagonist B, this guardian is more likely to target antagonist A with their intervention. This finding confirms the third hypothesis (H3), which states that guardians act as handlers and take responsibility for the behaviour of antagonists with whom they have a social relationship and try to contain their offences.

Previous studies have found that social relationships between guardians and antagonists increase the chance of intervention in a conflict (Fischer et al., 2011; Levine et al., 2011; Phillips and Cooney, 2005). However, the increased likelihood of intervention shown in previous research could also be an expression of guardians intervening to protect the antagonists with whom they share a social relationship. The current study shows for the first time that guardians are more likely to target antagonists with whom they have a social relationship and to try to stop them from performing further aggressive behaviours. Although, as argued by Reicher (1996), there has historically been a tendency in the scientific literature to view groups as a source of violence and conflict escalation, this finding substantiates an understanding of social groups as self-regulating.

The second individual characteristic of the potential targets in the empirical model is the gender of the antagonists. We found that when a man and a woman are engaged in conflict it is more likely that a guardian will target the man over the woman. If a guardian intervenes in a conflict between a male antagonist and a female antagonist, the guardian is more likely to target the male antagonist. This empirical finding substantiates the fourth hypothesis (H4) and supports the chivalry norm described by the existing literature.

One interpretation of the pattern is that guardians operate out of a sort of benevolent sexism that is inherent in the chivalry norm. Following this interpretation, the norm enforces traditional gender roles, with men protecting fragile women (Felson and Feld, 2009). A contesting interpretation is that the influence of gender found in the empirical model is actually a consequence of the way the model was constructed. In the current investigation we counted the number of behaviours performed by antagonists and used this as a measure of the amount of aggression performed by the antagonists. Counting the number of behaviours is attractive in its simplicity, it but creates an equivalence that might be unreasonable. Guardians might react differently to punches by men and women because of differences in the average physical size and strength of men and women (Felson and Feld, 2009). This difference could lead to a bias that could create a pattern similar to what we see in the model. Although there thus appears to be a gender bias in the target selection of guardians, the effect of gender in the model might in fact be a question of physical strength and therefore potential danger. However, a recent study finds that, even when controlling for physical size, the gender of the antagonists still influences the side-taking of guardians (Rogers et al., 2019).

The finding that these four factors all influence the target selection of guardians shows the complexity of the assessments that precede the intervention in an interpersonal conflict in public spaces. This adds a new dimension to the script of guardian intervention (Leclerc and Reynald, 2015). Although the script details how detecting and monitoring of the situation is a necessity for intervention, the current study shows some of the work that guardians do to *make sense* of conflict situations. The application of the juridical terms of 'perpetrator' and 'victim' does not easily fit many of these situations and this leaves the guardians with a complex analytical task. This sense-making draws on a wide range of information within the conflicts in order to decide the most appropriate target of intervention.

The analytical challenge face by guardians when intervening in interpersonal conflicts also points towards a limitation of the grand theories of crime. Whereas routine activity theory has advanced the study of crime by offering a universal framework, it also limits our gaze to focus only on what is shared across different types of crime. The current study shows how the challenges guardians face in interpersonal conflicts might be different from the universal conditions offered in the script for guardianship. Although a uniting framework offers possibilities, the current study is an example of how different types of offences entail different social processes, which call for specialized offence-specific analytical frameworks.

A limitation of the current study is the sole reliance on visual information from the CCTV footage. This seems especially pertinent for the measurement of social relationships between individuals. Although the variable had a very high interrater reliability, this measure must still be interpreted with some caution until future studies have investigated the tie signs revealing social relationships in conflict situations. Furthermore, some conflicts may, unbeknownst to us, have started or continued afterwards outside the view of the camera. In these cases, the recorded interactions do not cover the complete chain of interactions between the parties involved because any interactions outside the view of the camera necessarily remain unobserved by us.

Another drawback of basing the analysis on the visual material is that we are limited to the realized intervention behaviours. The script of guardian intervention details six necessary preconditions for intervention (Leclerc and Reynald, 2015). Because we observe the target selection of the guardians who actually intervene, we are limited to the target selection of the guardians who meet all the preconditions detailed in the script. This is a limitation of the current study, since some guardians might, for example, not be capable of intervening, and thus not meet the second precondition in the script. Other potential guardians might not take responsibility for the situation and thus not pass the fifth step in the script. However, this

does not mean that these potential guardians do not make an assessment of the situation. The current investigation is thus limited to the guardians who actually intervene. To address this limitation of the current study, future studies, drawing on different data sources, might ask passive bystanders about their assessment of the situation.

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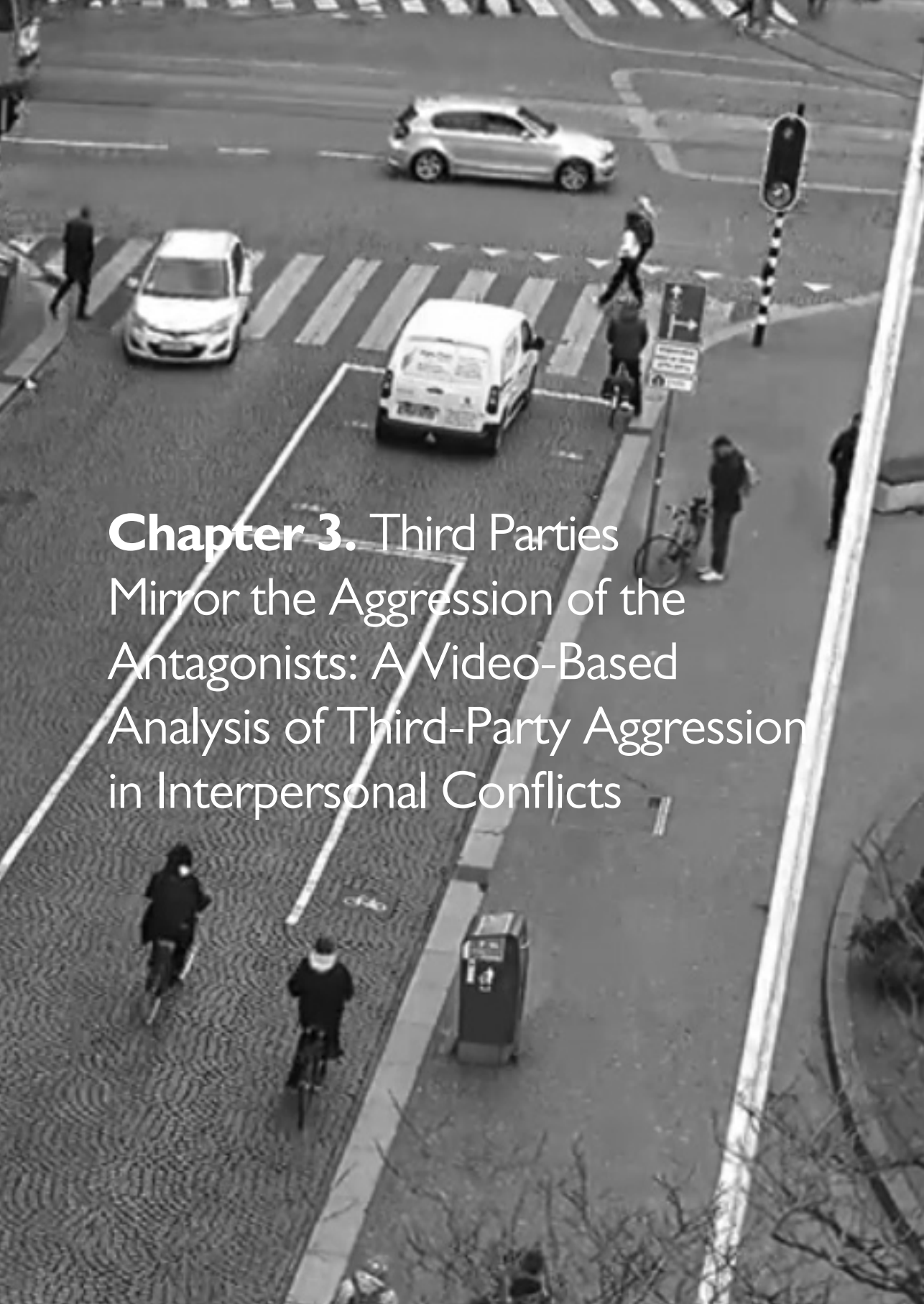

# **Chapter 3.** Third Parties Mirror the Aggression of the Antagonists: A Video-Based Analysis of Third-Party Aggression in Interpersonal Conflicts

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*PE conceived the research, performed the analysis and wrote the text. MRL and WB provided feedback on intermediate drafts of the final manuscript.*

## Abstract

Third parties tend to take an active role and intervene in interpersonal conflicts in public. Previous research has shown that the level of aggression of these interventions determines how they influence the conflict. No previous study has, however, systematically investigated whether the aggression of third-party interventions is influenced by the development of the conflict situation. The objective of this study is twofold. First, the study determines the extent to which the aggression level of intervening third parties changes during the course of interpersonal conflicts. Second, the study identifies and investigates the factors that affect the aggression levels displayed by intervening third parties. We systematically observed and coded CCTV footage of 46 interpersonal conflicts in public space, recorded by surveillance cameras in Amsterdam, the Netherlands. The data included 565 intervention behaviors by 125 third parties. We recorded the levels of aggression of the individuals involved in the conflict and conducted a multinomial logistic regression analysis to investigate what influenced the aggression level of the third-party interventions. We found that the aggression levels of the preceding intervention behaviors by the third parties predict aggression levels of their subsequent interventions. This shows a consistency in third-party interventions over the course of a conflict. We also found that the aggression levels of the conflict parties that are the targets of the interventions influence the aggression levels of third-party intervention. This finding demonstrates that the development of the conflict situation influences how aggressive the third parties are. Our study emphasizes the importance of taking the interactional dynamics of interpersonal conflicts into consideration when explaining third-party behavior.


**Keywords.** *criminology, violence exposure, violent offenders*

## Introduction

A number of empirical studies have found that third parties are present and actively intervene in a large proportion of real-life assaults and interpersonal conflicts (Felson et al., 1984; Philpot et al., 2018; Planty, 2002; Wells & Graham, 1999). These interventions are, however, not a uniform phenomenon. Intervention behaviors span from calm mediators gesturing softly to third parties that act as partisans and join a conflict as reinforcements to one of the antagonists (Black & Baumgartner, 1983; Phillips & Cooney, 2005). Some interventions are thus mild and nonaggressive, whereas others are physically forceful, or even violent.

Previous literature has found that the level of aggression of an intervention behavior is a key factor in explaining the impact it has on the conflict development. While nonaggressive interventions tend to decrease the violence of a conflict, more aggressive interventions seem to have the opposite effect (Levine et al., 2011; Parks et al., 2013; Phillips & Cooney, 2005). Third parties thus appear Janus-faced: On the one hand they hold the potential to reduce the severity or even end conflicts, but on the other hand they pose a risk of escalation as they might join the fight and turn it into a group brawl (Levine et al., 2011; Wells & Graham, 1999). Knowing what makes a third party intervene at a specific level of aggression is thus of the utmost importance if we want to understand how interventions by third parties impact the trajectory of interpersonal conflicts.

While the literature on third-party aggression thus finds that the aggressiveness of third-party interventions influences the development of an interpersonal conflict, it typically assumes this influence to be unidirectional. Felson et al. (1984, p. 457), e.g., write that they assume "*third parties influence the offender and victim and not the reverse.*" Recent empirical studies, however, indicate that third parties are not necessarily consistent in their intervention manners and sometimes change the level of aggression of their intervention throughout the situation (Levine et al., 2011; Liebst et al., 2019a).

This change in the intervention behavior indicates that something within the situation makes the third parties change in aggressiveness. Since previous research finds the aggressiveness of third-party interventions plays a key role in the overall severity of the conflict (Levine et al., 2011; Parks et al., 2013; Phillips & Cooney, 2005), it is essential to investigate which situational developments make the third parties change their behavior. Furthering the

understanding of third-party intervention is thus furthering the understanding of the dynamics that lead to interpersonal violence or prevent it.

This article investigates the aggression of third-party intervention in two steps. First, the article explores whether a behavioral analysis of the sequences of third-party intervention behaviors corroborates the finding from the observational studies that some third parties intervene at varying levels of aggression throughout a conflict situation, i.e., that they are not always consistent. Second, the study investigates whether the development of the conflict situation can explain the changes in aggression of third-party interventions. In order to do this, we carry out a systematic behavioral analysis of CCTV footage of real-life conflicts from the streets of Amsterdam. First, we find that even though consecutive intervention behaviors are mostly at the same level of aggression, third parties sometimes change their level of aggression. Second, we find that an increase in the number of violent behaviors performed by the antagonist targeted with the intervention behavior significantly increases the chance that an intervention behavior will be more aggressive. This finding indicates that third parties respond to the behavior of antagonists by mirroring the aggressiveness of the individual they target, which in turn could lead to a polarization of interpersonal conflicts.

## *Consistency or Adaptation of Third Parties*

The scientific literature typically typologizes third parties into mutually exclusive roles or categories. These typologies have been given a multitude of names, such as: *aggressive* vs. *nonaggressive* (Wells & Graham, 1999), *mediator* vs. *partisan* (Cooney, 1998), *mediate* vs. *engage* (Felson et al., 1984), and *surrogates* vs. *facilitators* vs. *precipitators* vs. *bystanders* vs. *incapable guardians* (Decker, 1995). While they differ in their definitions and the number of roles they identify, these typologies all share the assumption that a third party will fit one category for the duration of a conflict (note, however, that Decker (1995) specifies that third-party roles are to be seen more as ideal types than as discrete categories). This assumption of consistency entails that a third party will not change his or her style of intervention during the conflict.

A possible explanation of this assumption of consistency of third-party behavior is that it is a product of the methodology used in the research. Researchers investigating third-party aggression have approached the subject with a number of empirical approaches, such as retrospective interviews (Phillips & Cooney, 2005), document analysis (Decker, 1995; Felson et al., 1984), naturalistic observation (Parks et al., 2013; Reynald, 2009), and observation of CCTV footage of conflicts (Levine et al., 2011; Liebst et al., 2019a). With

the exception of the observation of CCTV footage, all of these approaches share the premise that they depend on the observer to record or recollect what happens throughout the conflict in real-time (Philpot et al., 2019). Since interpersonal conflicts are complex and typically erupt and end quickly, the reliability of recollection or real-time observation of interpersonal conflicts has been questioned (Collins, 2008; Philpot et al., 2019). This is especially pertinent in the study of third parties, since they are rarely awarded much attention in interpersonal conflicts: their behavior is rarely documented in official documents (Phillips & Cooney, 2005) and antagonists of conflicts have been found to have trouble recalling their presence (Bernasco et al., 2013). The assumed consistency of third-party behavior thus might be a methodological convenience to reduce the complexity researchers face carrying out real-time observations in the seemingly chaotic conflict situations.

This interpretation is substantiated through the findings of two studies that are based on CCTV footage. Out of the existing literature, these are the only studies that do not rely on observing or recalling the behavior in real time. The descriptive statistics of these studies indicate that most of the time third parties conform to performing either aggressive or nonaggressive behaviors. However, these studies also identify a number of third parties that performs *both* aggressive and nonaggressive intervention behaviors (Levine et al., 2011; Liebst et al., 2019a). This overlap between aggressive and nonaggressive behaviors contradicts the consistency assumption and begets the question of what engenders this change in the behavior of the third parties.

## *The Social Context of Violence*

In order to understand the role that behavior of third parties play in interpersonal conflicts, it is important to understand that violence is, like all other interpersonal behavior, constructed by the people present in the situation (Hepburn, 1973). As detailed in the introduction, these situations typically involve not only the antagonists of the conflict, but also a number of third parties. Within these situations, third parties can act in ways that create "*a definition of circumstances, actions, and individuals that enables violence to occur*" (Decker, 1995, p. 441). Third parties can influence the conflict development through their actions within the situation by promoting or discouraging violence. They can, e.g., try to mediate the conflict which allows the antagonists to back down without losing face or act aggressively themselves as adversaries of one of the conflict parties and escalate the conflict further.

The interactionist theory of violence (Tedeschi & Felson, 1994) describes how conflict behavior is a reaction to the previous behaviors in the situation. If we want to understand

how individuals act, we should therefore look toward the previous behaviors within the conflict. This theoretical conceptualization of interpersonal conflicts insists that, while genetics and previous personal experiences might be central in selecting who gets involved in a conflict, we must also look toward the behavior of other people in the conflict to understand how a conflict develops (Felson et al., 1984; Felson. & Tedeschi, 1993; Jackson-Jacobs, 2013; Luckenbill, 1977; Tedeschi & Felson, 1994).

The interactionist theory has previously been used to investigate how the antagonists of interpersonal conflicts influence each other (Felson & Tedeschi, 1993; Luckenbill, 1977). In this article, we use this theory to understand the interventions of third parties. We propose that the changes in aggression of third-party intervention behaviors are reactions to the behavior of the antagonists in the situation. The aggressiveness of the antagonists in a conflict situation might influence the aggressiveness of third-party interventions in three different ways:

First, third parties might use aggression as a means to stop the aggression of an antagonist (Levine et al., 2011). In this case, the intervening third party uses aggression not as a goal in itself, but rather as a tool to change the trajectory of the conflict situation (Tedeschi & Felson, 1994). If a third party wants to stop a very violent antagonist, the less aggressive forms of intervention might be too subtle to be noticed or effective. The least aggressive interventions, such as nonforceful touching, might simply be insufficiently forceful to get noticed by an antagonist engaged in a physical fight. However, if an intervening third party wants to influence an antagonist that has performed few or no violent behaviors these milder and almost symbolic interventions might suffice. Following this, we expect third parties to intervene more aggressively when the preceding level of aggression by the antagonist is high as a way to forcefully change the course of the conflict.

The second way the behavior of an antagonist might influence the level of aggression of a third-party intervention is when a third party intervenes in a conflict to punish an antagonist for wrongdoing (Tedeschi & Felson, 1994). Here, the third party is not using aggression to influence the trajectory of the conflict, but rather to make things right. The antagonist has—from the perspective of the third party—overstepped some boundaries and must be punished for these transgressions. We expect that a high preceding level of aggression by the antagonist will engender more aggressive interventions by the third party, since it seems reasonable to assume that the larger the transgression, the harsher the punishment.

The third way the behavior of an antagonist might influence the aggression of a third-party intervention is through emotional contagion. Emotional contagion is "*the tenden-*

*cy to automatically mimic and synchronize expressions, vocalizations, postures, and movements with those of another person's and, consequently, to converge emotionally*" (Hatfield et al., 1993, p. 96). Emotions thus rub off on individuals that are interacting with each other (Collins, 2014). A recent metareview has argued that emotional contagion is a central factor influencing when third parties intervene in interpersonal conflicts (Fischer et al., 2011). No research has, to our knowledge, looked into how emotional contagion might influence the aggressiveness of an intervention. However, following the definition of emotional contagion it seems plausible that if aggression is contagious, then more aggressive expressions of emotion by an antagonist will engender more aggression by the intervening third parties. Following this third path of influence we thus again expect that third parties will intervene more aggressively when the preceding level of aggression by the antagonists is high.

All three paths through which antagonist behavior might influence the level of aggression of third-party interventions thus predict a positive correlation between the two: a higher level of aggression by the antagonists will engender more aggressive intervention behaviors by the third parties. This pattern is supported by an analysis of third-party aggression on the situational level by Parks et al. (2013). They argue that more aggressive and dangerous situations increase the likelihood that third parties will intervene aggressively (Parks et al., 2013). This study, however, does not take the development of the situation into account, but rather measures the level of aggression as a situational characteristic.

To sum up, in order to investigate the nature of third-party aggression in interpersonal conflicts, the two-part research question of this article is as follows: *Do third parties change the level of aggression of their interventions throughout a conflict?* And if so*, are these changes in level of aggression of third-party interventions shaped by the aggressiveness of the targeted antagonist?*

## Data and Methods

### *Collecting the Video Footage*

The analysis is based on CCTV footage of interpersonal conflicts from Amsterdam. The authors were granted access to CCTV files by the Dutch ministry of justice and the footage was collected in collaboration with the Amsterdam Police Department and the Municipality of Amsterdam. The conflicts were recorded by camera operators watching the live-streaming footage 24 hours a day, 7 days a week. The data collection began in April 2017 and ended in

August the same year. The CCTV cameras are located throughout the city of Amsterdam on streets and squares that the Mayor of Amsterdam's office has identified as hot spots of crime and disorder.

As part of their usual working practice, the operators record any kind of violent conflict. In addition to their usual practices, we instructed the operators to record nonviolent conflicts. We instructed the operators to keep an eye out for behavioral indicators such as people having heated arguments, pushing and/or pulling each other, taking of their shirts or jumpers, and restless groups of people. We furthermore instructed the operators to collect as much footage as possible of the involved parties before and after the conflicts.

## *Definition of a Third Party*

In this study, we do not conceptualize being a third party as a situationally fixed role, but rather as a type of behavior. For a behavior to qualify as an intervention behavior in the analysis it must be performed by individual A (third party) toward individual B (Antagonist 1) who is engaged in a conflict with individual C (Antagonist 2). This classification is made irrespective of whether individual A has previously been directly involved in the conflict as an antagonist, or not.

Since intervention is a type of behavior and not a situational role, the same individual can initially intervene as a third party and later become an antagonist, or vice versa. Previous studies exemplify that the ascribed roles in conflict situations are dynamic and oftentimes change throughout the situation. Luckenbill (1977) has argued that categories such as victim and perpetrator are "*heuristic labels*" that might change throughout the conflict. Similarly, Felson et al. note that "*in about half the cases where third parties are active (48 percent), third parties were originally one of the main antagonists and either the victim or offender interceded*" (Felson et al., 1984, p. 457). Based on these insights, we find it preferable to classify each behavior according to what role it has in the situation, rather than classifying each individual.

## *Selection Criteria*

In this article, we investigate the consistency in aggression of third-party interventions. To do this, we record all intervention behaviors across the videos where the preceding behavior by the same individual is also an intervention behavior. In other words, the units of analysis are all interventions that are not an individual's first intervention in the conflict. The exclusion

of the first intervention was necessary because we need at least two behaviors per individual to investigate the consistency of their behavior. This implies that individuals who only made a single intervention were excluded.

In total, we collected CCTV footage depicting 165 conflict situations. We audited each recording for its utility for the study. Only files that conform to the following criteria are part of the final sample:

1. An interpersonal conflict is visible in the recorded footage

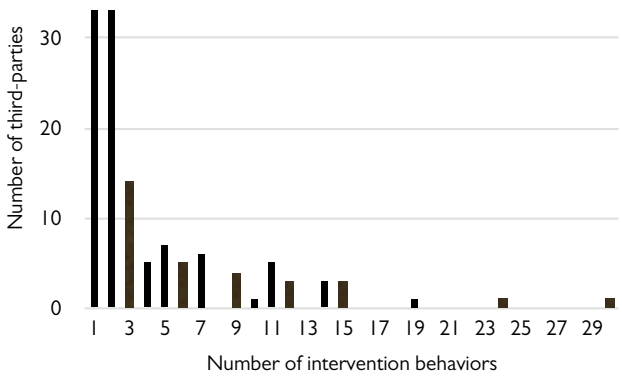
2. The quality of the video (resolution, brightness, and frames per second) is sufficiently high to allow the coding

3. There are no or only negligible breaks in the recording

4. There is at least one third party performing two consecutive intervention behaviors in the conflict

Out of the original sample of 165 situations, 25 of the videos did not depict a conflict, 36 of the videos were too low resolution to be coded, and 72 of the videos had substantial parts of the conflict missing (the categories are not mutually exclusive). Another 16 of the remaining 62 situations only had third parties who intervened only once or not at all, resulting in a final sample of 46 situations. 28 of the intervention behaviors in the material were directed toward more than one antagonist at the same time. These interventions were excluded from the material.

**Figure 1.** Number of Third Parties by Number of Intervention Behaviors They Perform (N = 125)




*Source: Author's own*

The final sample comprises 46 situations containing 125 third parties performing 565 intervention behaviors where their immediately preceding behavior was another intervention behavior. Figure 1 shows the distribution of interventions per third party. The majority of observed individuals perform either 1 or 2 intervention behaviors[4] and the number of individuals decreases as the number of intervention behaviors increases. The highest number of interventions by the same individual is a staggering 30.

## *Coding the Video Footage*

The CCTV clips were coded using BORIS (Behavioral Observation Research Interactive Software) (Friard & Gamba, 2016). This program allows users to simultaneously watch the CCTV footage and code the observed behaviors. The program adds a timestamp for each code corresponding to the time the behavior occurs in the observed footage, which allows us to keep the chronology of the observed behaviors. We code the actor and a target of each behavior and whether the behavior is an intervention or a conflict behavior.

The variables of this study are based on a coding scheme (Appendix 1) detailing definitions of the coded conflict behaviors. The coding scheme was developed by watching a subsample of the collected footage numerous times and after reviewing other coding schemes used to analyze antagonist and third-party behaviors (Liebst et al., 2018; Lindegaard et al., 2017; Philpot, 2017).

## *Measurement*

The dependent variable of the study measures the level of aggression of each intervention behavior in the conflict situations (where the preceding behavior by the same individual is also an intervention behavior). To code the level of aggression of these interventions, we use the scale of aggression developed by Parks et al. (2013). While this scale originally has eight levels (0-7), we reduced the number of levels to three. We did this to reduce the complexity of the measure and because the videos do not contain sound which makes some of the levels obsolete. Table 1 summarizes the three levels of aggression used in this study, their corresponding levels in the original eight-level scale by Parks et al. (2013), and the corresponding behaviors from the coding scheme. The three-level scale used for this study spans from *low aggression* (soft and nonaggressive intervention behaviors), over *medium aggression* (aggressive but nonviolent behaviors), to *high aggression* (violent behaviors).

[4] As explained, this is excluding each individual's first intervention in the conflict, because the first intervention cannot be compared with a previous intervention.

**Table 1.** Scale of Levels of Aggression and the Corresponding Behaviors

| Level of Aggression | Corresponding Levels on Parks et al. (2013) Scale | Behaviors |
|---|---|---|
| Low | 0, 1 | non-forceful touching and calm hand gestures |
| Medium | 2, 3, 4, 5, 6 | Holding back, blocking, hauling a person off, push, aggressive gesturing, and invading space |
| High | 7 | Kicking, hitting, striking with an object, throwing or aggressive pulling, and wrestling or grappling |

*Source: Author's own*

The first independent variable measures the level of aggression of the intervention behavior that precedes the dependent variable. This variable thus measures the level of aggression by the third party before the intervention recorded by the dependent variable and thereby allows us to investigate whether the intervention has changed in aggression or remained the same. To code this variable, we used the same aggression scale as used for the dependent variable. The second independent variable of the study measures the cumulative number of violent behaviors (the high level on the aggression scale presented in Table 1) by the antagonist at the time of intervention.

## *Control Variables: Social Relationship and Gender*

We also code two control variables based on the video footage: the gender of the third party and social relationships between the antagonists and the third parties. We include the two control variables because previous studies find they influence the likelihood that a third party will intervene aggressively (Parks et al., 2013; Phillips & Cooney, 2005; Tedeschi & Felson, 1994). While these factors are not of primary interest to the research questions of this article, we include them in the analysis to avoid bias by omitting relevant variables.

We code the gender of the individuals observed in the footage based on their clothes, facial features, hair, and body type. We infer the social relationships of the involved parties of the conflict based on the observed tie signals among the actors in the footage. The visual apparency of social relationships has been described by Goffman (1971) and Hall (1966) who argue that the physical proximity between individuals in public spaces correlates with the social proximity of the individuals. This has later been corroborated in empirical studies observing pedestrian behavior (Ge et al., 2012; McPhail & Wohlstein, 1982; Solera et al., 2013) and in conflict situations (Liebst et al., 2018).

Since most of the videos include footage of the antagonists arriving at and leaving the conflict, we use this information as a cue of a social relationship when it was available. If two individuals arrive at or leave the scene in proximity to each other, this is taken as an indicator that they have a social relationship. Furthermore, we also draw on other social signifiers such as groups wearing matching clothes or uniforms, standing close to one another, being engaged in casual conversation, holding hands, or similar signs when we assess the social relationships. In this study, we do not discriminate between different kinds of social relationships and all relationships are assumed to be symmetrical, so that if person A has a social relationship to person B, person B also has a social relationship to person A.

## *Assessment of Reliability*

The CCTV footage was encoded by the P.E. of this article. In order to estimate the reliability of the encoding of the videos a trained graduate student independently coded approximately 20% of the material. Any disagreements between the coders were resolved prior to the analysis. We calculated Cohen's Kappa ($\kappa$) to estimate the extent of agreement in the double coded situations. In order to make the codes comparable, each individual in each situation was given a unique identifier to allow both coders to identify the same individual in the videos. Agreement was defined as both coders identifying the same type of behavior performed by the same actor toward the same target within a one-second window. Following the literature on interrater reliability we calculate the agreement for the measures as they are used in the analysis (Krippendorff, 2004). All three levels of aggression have an interrater reliability that falls within the "moderate" or "substantial" agreement ($\kappa_{\text{low aggression}} = 0.539$, $\kappa_{\text{medium aggression}} = 0.618$, and $\kappa_{\text{high aggression}} = 0.671$) and the interrater reliability scores for gender and social relations are almost perfect ($\kappa_{\text{gender}} = 1$ and $\kappa_{\text{social relation}} = 0.89$) (Landis & Koch, 1977).

## *Estimation Methods*

In the analysis we use a hierarchical, multinomial logistic regression to estimate the model. The strength of the multinomial model is that it allows us to estimate a logistic regression with a dependent variable that has three outcomes rather than the usual two. This is necessary in this study because the dependent variable measures the three levels of aggression of the third-party interventions. We use a multilevel model in order to take into account that we have multiple observations for some of the third parties. In order to take into account that the observations are nested in situations (because some conflict situations involve multiple intervening third parties), we estimate the model with cluster corrected standard errors. We run the model in STATA 14 using the GSEM package.

# Results

## *Descriptive Statistics*

Table 2 shows the descriptive statistics for all the variables of the analysis. The dependent variable measures the level of aggression of intervention behaviors where the immediately preceding behavior by the same individual was also an intervention behavior. This variable is an ordinal variable with three outcomes. The table shows that 25% of the intervention behaviors are on the lowest level of aggression, 71% are on the medium level of aggression, and just 4% are on the highest level of aggression.

The first explanatory variable (Q1) measures the level of aggression of the intervention behaviors that precedes the dependent variable. As shown in Table 2, 24% of the preceding intervention behaviors are on the low level of aggression, 73% are on the medium level of aggression, and only 4% are on the highest level of aggression.

The second hypothesized explanatory variable (Q2) measures the number of violent behaviors performed by the antagonist before being targeted with the intervention behavior. The highest number of violent behaviors performed by an antagonist in the empirical material is 12 behaviors. The lowest is none. On average, the targeted antagonists have performed 1.7 violent behaviors prior to being targeted with the intervention behavior.

The last two variables in Table 2 are the control variables. The first control variable is the social relationship between the third party and the antagonist targeted with the intervention behavior (the dependent variable). This variable shows that 49% of the third parties have a social relation to the person they target. The second control variable is a dummy designating the gender of the third party performing the intervention. Table 2 shows that the majority of interventions (81%) in the material are performed by men and only one in five (19%) are performed by women.

**Table 2.** Descriptive Statistics of Intervention Behaviors (N = 565)

| | Variable | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| Dependent variable | Aggression level of intervention behavior: | | | | |
| | • Low | 0.25 | 0.44 | 0 | 1 |
| | • Medium | 0.71 | 0.46 | 0 | 1 |
| | • High | 0.04 | 0.19 | 0 | 1 |
| Hypothesized explanatory variables | (Q1) Aggression-level of the preceding intervention behavior: | | | | |
| | • Low | 0.24 | 0.42 | 0 | 1 |
| | • Medium | 0.73 | 0.45 | 0 | 1 |
| | • High | 0.04 | 0.19 | 0 | 1 |
| | (Q2) No. aggressive behaviors by antagonist | 1.70 | 2.36 | 0 | 12 |
| Control variables | Social relationship | 0.49 | 0.50 | 0 | 1 |
| | Female third party | 0.19 | 0.40 | 0 | 1 |

*Source: Author's own*

Table 3 shows the transitions in aggression of the coded intervention behaviors. In this table, the rows denote the intervention behaviors immediately preceding the intervention behaviors in the columns, and the columns denote the intervention behaviors that follow those in the rows. The columns and rows are thus the dependent variable and the first independent variable (Q1) presented in Table 2, respectively. The transitions to the same level of aggression are found on the diagonal of Table 3. The table thus shows that approximately 70% of the coded intervention behaviors (393 observations) are preceded by an intervention behavior on the same level of aggression. Two consecutive interventions are thus typically on the same level of aggression.

**Table 3.** Transition Matrix of Intervention Behaviors (First Behavior) and the Subsequent Behavior by the Same Individual (Second Behavior) (N= 565)

| Level of Aggression of Preceding Intervention Behavior (First Behavior) | Level of Aggression of Intervention Behavior with a Preceding Intervention Behavior (Second Behavior) | | | |
|---|---|---|---|---|
| | Low | Medium | High | Total |
| Low | 64 | 68 | 1 | 133 |
| Medium | 77 | 321 | 13 | 411 |
| High | 3 | 10 | 8 | 21 |
| Total | 144 | 399 | 22 | 565 |

*Source: Author's own*

Among the remaining approximately 30% of the transitions in the empirical material there are only 4 observed cases of intervention behaviors that are followed by an intervention behavior two levels of aggression above or below the first behavior. The remaining 29.5% of intervention behaviors are followed by a behavior that is either one level above or below the level of aggression of the preceding intervention. Table 3 thus shows that while most intervention behaviors are followed by equally aggressive behaviors, more than a quarter are not, and these shifts indicate a change in intervention behavior. This is similar to what have been observed in previous studies (Levine et al., 2011; Liebst et al., 2019a).

## *Adaptive Intervention Behavior*

The aim of the analysis is to investigate whether the behavior of the antagonists influences the level of aggression of the intervention behaviors of third parties when the preceding behavior by the third party is taken into account. We investigate this using a multilevel, multinomial logistic regression with cluster corrected standard errors. We use a multilevel model to account for how some third parties perform multiple interventions and cluster corrected standard errors to account for how some conflicts involve multiple third parties.

Table 4 shows the results from the analysis. The table is divided in two overall sections; Section (1) and (2). The first section shows the logistic estimation of the likelihood that the intervention behavior will be on the low level of aggression and the second section shows the likelihood that an intervention behavior will be on the high level of aggression. The reference category, and thus the level of comparison, is the medium level of aggression.

The first section of Table 4 shows the results for the estimation of the likelihood that an intervention behavior is on the low level of aggression. The first explanatory variable is the number of violent behaviors performed by the targeted antagonist prior to the intervention. The estimated odds ratio is 0.79 and is statistically significant ($p = .001$). This means that an increase in the number of violent behaviors by the targeted antagonist engenders a reduced likelihood that the intervention behavior will be on the low level of aggression. Each additional violent behavior by the targeted antagonist thus reduces the odds of a low-aggression intervention by a factor .79. This means that three violent behaviors by the antagonist reduce the odds of a low-aggression intervention to half ($(.793)^3 = .50$) and 12 violent behaviors (which is the highest observed number in the videos) is equal to an odds ratio of 0.06 ($(.793)^{12} = 0.06$).

The second variable in the table is the binary variable measuring whether the preceding intervention behavior was on the low level of aggression. This independent variable is a statistically significant predictor ($p < .005$) and has a medium effect size with an odds ratio of 2.4 (Sullivan & Feinn, 2012). This shows that when the preceding behavior is on the low level of aggression the odds is 2.4 times larger than the subsequent behavior will be on the same level of aggression. The variable measuring if the previous behavior was on the high level of aggression is not statistically significant. There is thus not a statistically significant difference between the odds that an intervention behavior on the low level of aggression was preceded by a behavior on the high level compared to the reference category (the medium level of aggression). None of the control variables are statistically significant in the estimation of the likelihood that the following behavior is on the low level of aggression. The second section of Table 4 shows the model for estimating the likelihood that an intervention behavior is on the high level of aggression. The first variable in this section is the number of violent behaviors performed by the targeted antagonist prior to the intervention. This variable is statistically significant ($p < .001$). The odds that an intervention behavior is on the high level of aggression is thus 1.26 higher when the targeted antagonist has performed one violent behavior (this variable is a count variable and when the targeted antagonist has performed more aggressive behaviors this factor will be more influential).

The second variable indicates when the preceding intervention behavior is on the low level of aggression. This variable is not statistically significant. There is thus not a statistically significant difference in the odds that an intervention behavior on the high level of aggression was preceded by a behavior on the low level compared to the reference category (the medium level of aggression).

The third variable in the second section of Table 4 is a binary variable measuring if the previous intervention behavior by the same third party was on the high level of aggression. This variable is statistically significant ($p = .004$) and has a very large effect size with an odds ratio of 7.5 (Sullivan & Feinn, 2012). It is thus apparent that when the preceding intervention is on the high level of aggression the odds that the subsequent behavior will be on the same level is more than seven times larger.

The control variable measuring if the third party and the antagonist targeted with the intervention behavior are from the same social group is also statistically significant ($p = .019$) and has a very large effect size (0.13). It is thus much less likely, everything else being equal, that an intervention behavior will be on the high level of aggression if the third party has a social relation to the target of the intervention. The gender of the third party is not statistically

significant. We thus do not find a difference between men and women in the likelihood that the intervention behavior will be one the high level of aggression.

**Table 4.** The Results of the (Hierarchical) Multinomial Logistic Regression (N= 565)

| Outcome on Dependent Variable | Variable | B | Robust SE | Z | p Value | Odds Ratio |
|---|---|---|---|---|---|---|
| (1) Low Aggression | No. of aggressive behaviors by antagonist | -0.232 | 0.073 | -3.190 | 0.001 | 0.793 |
| | Preceding intervention behavior: low aggression | 0.855 | 0.304 | 2.820 | 0.005 | 2.351 |
| | Preceding intervention behavior: medium aggression (reference) | 0 | | | | 1 |
| | Preceding intervention behavior: high aggression | 0.643 | 0.811 | 0.790 | 0.428 | 1.903 |
| | Social relationship | -0.113 | 0.255 | -0.440 | 0.659 | 0.894 |
| | Female | -0.496 | 0.392 | -1.270 | 0.206 | 0.609 |
| (2) High Aggression | No. of aggressive behaviors by antagonist | 0.360 | 0.091 | 3.940 | <0.001 | 1.434 |
| | Preceding intervention behavior: low aggression | -1.139 | 1.066 | -1.070 | 0.286 | 0.320 |
| | Preceding intervention behavior: medium aggression (reference) | 0 | | | | 1 |
| | Preceding intervention behavior: high aggression | 2.025 | 0.700 | 2.890 | 0.004 | 7.573 |
| | Social relationship | -1.971 | 0.848 | -2.330 | 0.020 | 0.139 |
| | Female | -0.099 | 0.674 | -0.150 | 0.883 | 0.905 |

*Source: Author's own*

## Discussion

This study investigated the changes in aggression of third parties intervening into interpersonal conflicts. This study contributes to our understanding of interpersonal violence, since previous research has shown that the aggression of third-party intervention determines how the intervention influences the development of the conflict. Understanding how situational

factors influence the aggression of intervention is thus a key aspect of understanding when interpersonal conflicts escalate. This study shows for the first time how the aggression of intervention is not always fixed, but rather something that can change throughout the situation and is influenced by the behavior of the antagonists.

Based on the previous research we formulated a two-stage research question: First, we asked if third parties intervene in a consistent manner throughout a conflict situation. We investigated the consistency of the intervention of third parties in two different ways. First, we constructed a transition matrix of the actual transitions between the different levels of aggression in two consecutive intervention behaviors performed by the same third party. Here, the overall pattern was that an intervention behavior typically is followed by another behavior on the same level of aggression. However, while this was the overall trend, this analysis also showed that 30% of the observed intervention behaviors are preceded by an intervention on a different level of aggression.

Second, and to further qualify this initial finding; we estimated a multivariate model to see if the preceding behavior was an influential predictor when other aspects of the situation were taken into account. The multivariate statistical model corroborated the findings from the transition matrix and showed that the consistency assumption of the scientific literature has some warrant. The analysis thus shows that third parties, everything else being equal, are more likely to intervene at consistent levels of aggression. The consistency in the level of aggressive behavior shows that the mutually exclusive categorizations of third parties typically used in the empirical literature – such as *aggressive* vs. *nonaggressive* (Wells & Graham, 1999), *mediator* vs. *partisan* (Cooney, 1998), and *mediate* vs. *engage* (Felson et al., 1984)—appear to fit the majority of behavioral transitions in the empirical material.

Furthermore, the transitional matrix showed that there are few observed radical changes in aggression. While 3 out of 10 intervention behaviors follow an intervention behavior on a different level of aggression, these changes are typically only slightly more or less aggressive than the preceding behavior. This pattern was, however, not corroborated in the multivariate model. In the statistical model, we found that only preceding behaviors on the same level influenced the subsequent behavior. The model, thus, did not find a significant difference between the likelihood that intervention behaviors on the low and medium level of aggression are followed by an intervention on the high level of aggression.[5]

[5] Note, however, that the data poses a structural constraint on big changes since the high aggression levels are very rare. This means that the statistical test of the radical transitions might be a product on too few observations of these transitions. This result should thus be interpreted with caution.

While the majority of the intervention behaviors conform to the expectation of consistency, we also found that the third parties mirror the aggressiveness of the antagonists. The multivariate model shows that an intervention toward an antagonist who has been very aggressive prior to the intervention is more likely to be more aggressive as well, even when the preceding behavior of the third party is accounted for. Inversely, an increase in the number of violent behaviors by the targeted antagonist reduces the likelihood that the intervention behavior will be on the low level of aggression.

Just as previous research has found that the dangerousness of a situation influences how likely it is that a third party will intervene (Fischer & Greitemeyer, 2013), this study finds that the dangerousness also influences *how* a third party intervenes. An antagonist who has performed more violent behaviors will be targeted with more aggressive interventions—third parties fight fire with fire. This influence of the behavior of the antagonist shows how there is a bidirectional influence between the aggressiveness of the intervening third parties and the antagonists of the conflict. Previous research has shown that the level of aggression of intervention behaviors impacts the aggressiveness of the antagonists (Levine et al., 2011; Parks et al., 2013; Phillips & Cooney, 2005). This article shows that the opposite is true as well: The aggressiveness of the antagonist influences the level of aggressiveness of the intervention behaviors.

This interconnectedness corroborates the importance of drawing on an interactionist framework in the analysis of third-party interventions. While this perspective previously has been used to study the antagonists of interpersonal conflicts in the scientific literature, this study shows how a similar framework is beneficial in the study of third-party behaviors. The interactionist conception of third-party behavior allows us to see that these behaviors are not only predetermined qua individual background of the third parties, but also adapted to the behavior of the other people in the situation the third parties are responding to the development of conflict situations.

The bidirectional influence between the aggressiveness of antagonists and third-party interventions implies that the third parties have a polarizing effect: In conflicts where the antagonists are not very aggressive, a third party will be more likely to intervene on a lower level of aggression. This intervention will—according to previous research (Levine et al., 2011; Parks et al., 2013; Phillips & Cooney, 2005)—be more likely to de-escalate the conflict and placate the antagonists further. Conflicts with very aggressive antagonists will inversely increase the likelihood that third parties will intervene more aggressively and in turn increase the risk that the conflict will escalate even further.

This polarizing effect has implications for both real-life conflict prevention and scientific research. While third parties are a potential source of violence prevention (Levine et al., 2011; Liebst et al., 2019b), this study shows that third parties might be best at deescalating the less aggressive conflicts where they are the least likely to act aggressively themselves. This could imply that the severe conflicts are better left with the professional interveners—such as policemen or security personnel—that have the training and experience to handle these stressful and dangerous situations.

Bystander intervention programs can overcome this polarizing effect in two ways. The first way is to implement an upper limit of severity after which lay-persons are recommended to search for a professional rather than take action themselves. The other option is to inform third parties about the danger of mirroring the aggression of the antagonists and the necessity of remaining calm in heated conflict situations, even though their first impulse might be otherwise. Both of these options have their shortcomings. The first, because formal guardians are rarely readily available in the conflict situations and the second because this kind of self-control probably requires training and experience that is beyond most lay-persons.

The analysis shows that a social relationship between the intervening third party and the antagonist decreases the likelihood of the third party becoming very aggressive. Previous research argues that the degree of intimacy might inhibit the use of violence out of fear for the consequences this might have on the relationship (Tedeschi & Felson, 1994). This finding indicates that this group might be worth targeting specifically in violence prevention programs. The previous research has found that third parties take responsibility for the actions of their peers and that people with social relationships have "handles" on antagonists that allow them to more effectively influence their behavior (Ejbye-Ernst et al., 2020; Felson, 1995). The current research adds to this, by showing that this group also has a lower risk of becoming violent themselves and thus potentially escalating the conflict further.

The findings of this study also have implications for the study of interpersonal conflicts in general. The interconnectedness between the behaviors of the antagonists and third parties of the conflicts shows the necessity of looking at the entire social context when studying interpersonal conflict or violence. The behavior of each of the individuals in the conflict depends on the preceding behavior by everyone in the situation. This means that we cannot understand the violence of an antagonist without looking at the preceding behavior of third parties, but also, that we cannot understand the behavior of the third parties without taking the behavior of the preceding antagonist into account. Isolating one part of this system means only getting half the story.

The bidirectional relationship between the aggressiveness of the antagonists and the intervention behaviors of third parties also has implications for future research. This is especially pertinent for studies investigating the effect of third-party interventions. These studies have typically assumed that third-party behavior is constant (Parks et al., 2013; Phillips & Cooney, 2005) and thus overlook that the aggressiveness of third-party intervention is shaped by the aggressiveness of the antagonists. Future inquiries investigating the effect of third-party interventions must account for this feedback effect. Any inquiry that does not account for the bidirectionality in some way will be left guessing whether a correlation between intervention behavior and conflict development is due to the intervention behaviors influencing the conflict or the third party adjusting their behavior to the conflict. This means that using situationally fixed roles, such as aggressive and nonaggressive third parties, do not allow researchers to see the complex interactions and developments that arise throughout the conflict situations. Based on the findings of this study, future research on interpersonal conflicts should therefore allow for third parties to change between different roles as they react to the conflict development.

The study faces three limitations. First, the lack of sound on the videos might have impacted the categorization of the behaviors according to aggression. The scale used to categorize the aggressiveness of the behaviors in the videos was reduced in complexity in this study from the original scale developed by Parks et al. (2013). This reduction in complexity was necessary because the videos lack audio. This means that we can only observe the behaviors of the involved parties, but are left at a loss when it comes to the content of the conflicts and the verbal acts that might take part during the conflict.

Second, the sole reliance on CCTV footage limits the investigation to behavioral aspects of the conflicts. The CCTV footage allow us to view the behavior of the conflicts in very fine detail, but it leaves us empty handed when it comes to the feelings, thoughts, and motivations of the involved parties. This is a limitation for this study since the motivation might be a central factor in whether third parties are influenced by situational changes or not.

Third, while the use of CCTV footage offers insights into the development of interpersonal conflicts that are difficult to reach through conventional methods, the recording of conflicts through CCTV cameras might be limited or biased in certain ways. The conflicts under scrutiny in this study all happen in public spaces. This means that conflicts that are confined to private spaces are outside the scope of this study. Furthermore, the data might be influenced by a latent bias in what constitutes a potential conflict situation. Latent ethnic and racial biases among police officers has received much attention (Antonopoulos, 2003; Engel

et al., 2002), and we cannot rule out that similar biases might influence the gaze of the operators recording the conflict situations for this study. We tried to counteract this potential bias by supplying the operators with a list of behavioral indicators that a conflict was emerging (as described in the methods section).

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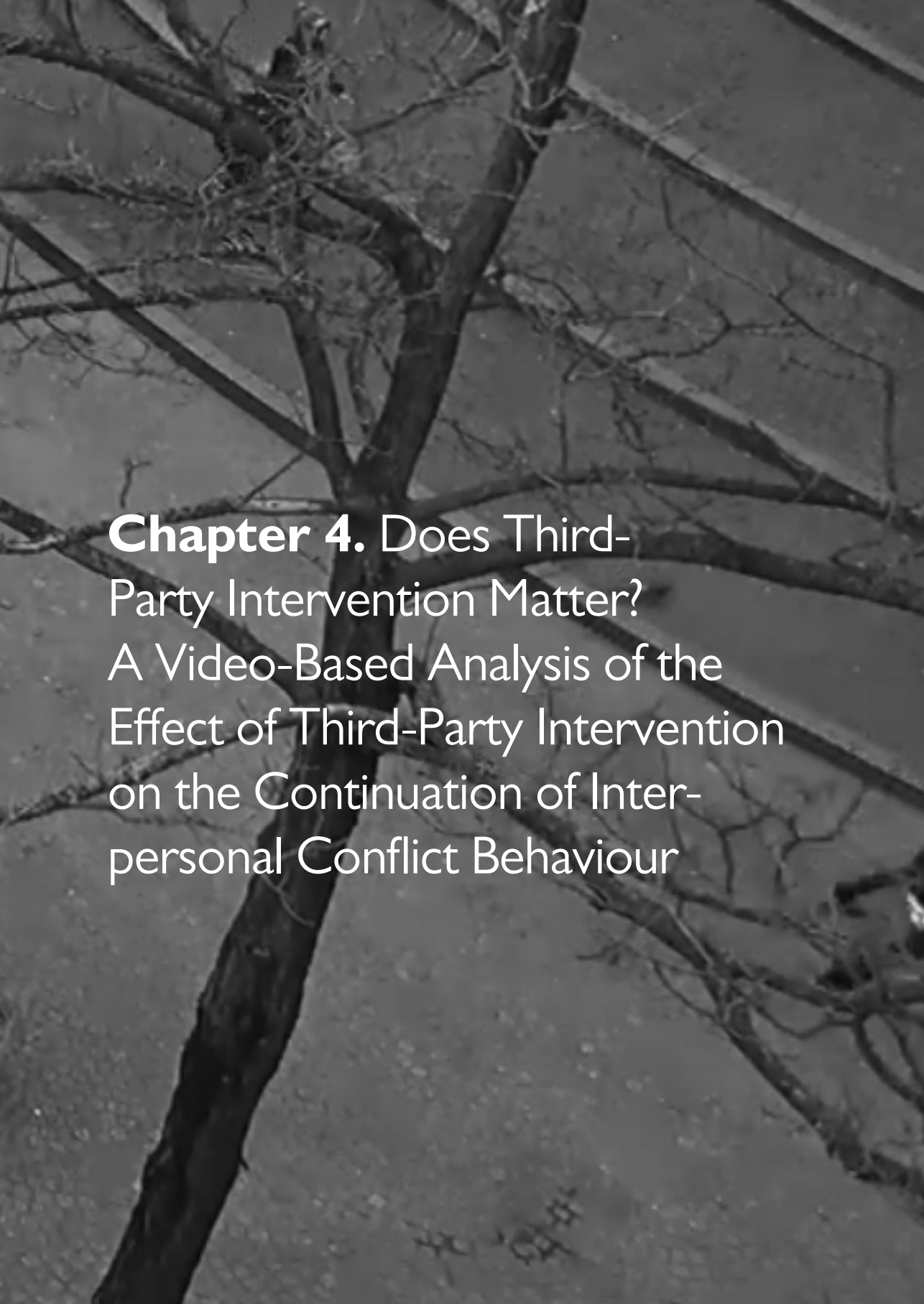

# **Chapter 4.** Does Third-Party Intervention Matter? A Video-Based Analysis of the Effect of Third-Party Intervention on the Continuation of Inter-personal Conflict Behaviour

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## Abstract

The paper investigates whether third-party intervention influences the continuation of antagonist conflict behaviour in interpersonal conflicts. The analysis is based on a systematic coding of video-footage of real-life conflicts from the streets of Amsterdam. A panel data analysis shows that intervention leads to discontinuation of conflict behaviour. The analysis furthermore finds that while physically forceful intervention stops conflict behaviour, expressions of disapproval have no noticeable effect. The social relationship between third parties and antagonists does not appear to matter for this effect. Third parties thus play an integral part in the development of interpersonal conflicts but this influence depends on how they intervene. Future preventive efforts should emphasize that intervention works but must be performed in certain ways to be effective.


**Keywords.** *Intervention, Third-party Intervention, Interpersonal Conflicts, Violence, Video Analysis,*

## Introduction

When an interpersonal conflict erupts in a public space, there are often third parties present (Planty, 2002) and they will typically try to de-escalate the conflict (Philpot, Liebst, Levine, et al., 2019). The antagonists of the conflict, however, might not simply abide to this interference. Rubin details how: "*All too often, students of third-party roles seem to have made the assumption that disputants welcome outside intervention, that they view themselves as victims awaiting rescue by a white knight on a speeding charger. Perhaps they do not*." (1980, p. 389). Third-party intervention, thus, does not necessarily de-escalate a conflict. The antagonists of the conflict might disregard the interventions and attempt to carry on unfazed by the actions of the third parties.

The frequent interventions thus show the courage of the third parties and their willingness to intervene, but also begs the question of whether these interventions actually manage to de-escalate the on-going conflicts. While the circumstances under which a third party takes action has received a lot of attention (for a review of this literature, see Fischer and colleagues (2011)), the effect of the interventions on the development of interpersonal conflicts remains comparatively underexplored. This is especially relevant to investigate since intervention comes at a cost for the third parties: intervention in an interpersonal conflict or fight is a stressful and potentially even dangerous undertaking (Liebst et al., 2018). If intervention does not influence the development of the interpersonal conflicts, it would thus mean that the intervening third parties are exposed to an unnecessary risk.

The ambition of the current study is to investigate whether interventions by third parties influence the continuation of conflict behaviour by an antagonist already engaged in an interpersonal conflict. Furthermore, the study investigates the influence of different subtypes of intervention. The current study investigates this by way of video footage of naturally occurring conflicts. The use of video footage makes it possible to measure the influence of third-party interventions on a level that would be unreliable or even impossible through other empirical approaches (Lindegaard & Bernasco, 2018; Phillips & Cooney, 2005). This allows – for the first time - an investigation of how intervention shapes the second-by-second development of conflict situations and a subdivision of types of intervention behaviours. This study thus brings us closer to an understanding of how third parties influence the development of interpersonal conflicts and whether this influence depends on the type of intervention.

The analysis shows that third-party intervention decreases the likelihood that an antagonist will continue to engage in conflict behaviour. The analysis furthermore finds that it is the physically forceful intervention that brings an end to the conflict behaviours. Expressed disapproval, on the other hand, does not appear to have any effect. This applies to third parties from both the in- and out-group of the antagonists.

## *Measuring the Effect of Intervention*

While it continues to be an under-researched topic, the effect of third-party intervention on interpersonal conflicts has been addressed by a few empirical studies. The overall consensus among these studies seems to be that third-party intervention shapes the development of interpersonal conflicts (R. B. Felson, 1982, 1984; Levine et al., 2011; Phillips & Cooney, 2005; Planty, 2002; Wells & Graham, 1999). When third parties try to stop a conflict, they typically succeed in this endeavour (note, however, Felson & Steadman (1983) find no effect of intervention on the outcome of conflicts). While thus reaching a similar overall conclusion, these studies measure the effect of intervention in two different ways. Some studies use a between-conflict measure of the effect of third-party interventions while others use a within-conflict measure.

The studies that use a between-conflict measure of the effect of intervention use the overall situational severity to measure the effect of the intervention. These studies measure whether there is a connection between the presence of intervention by third parties and the likelihood that an interpersonal conflict reaches a certain level of severity. They are therefore investigating if third-party intervention prevents conflicts from reaching certain levels of severity. The level of severity is conceptualized in different ways across the studies. Felson and Steadman make a distinction between assault and homicide (R. B. Felson & Steadman, 1983). Two studies conceptualize severe situations as conflicts that turn violent compared to situations that do not escalate to violence (Levine et al., 2011; Phillips & Cooney, 2005). Lastly, two studies use ordinal scales with multiple levels of severity that measure either the violence by the offender across the situation (R. B. Felson et al., 1984a) or the severity of the situation overall (R. B. Felson, 1982). Despite the diverging definitions of what constitutes a severe conflict, these studies all share the premise that a single measure of severity summarizes the entire situation.

The between-conflict measure of the effect of intervention, however, has a central drawback. Since these studies measure the highest severity across the situation, it means that once the situation has reached a certain level of aggression it does not matter

how the situation develops afterwards. In some situations, the highest level of severity might be reached before the third parties have taken action at all. In that case, the behaviour of the antagonist is explained with intervention behaviours that happen later in the conflict.

This issue is exacerbated by the fact that the severity of the conflict seems to influence the likelihood that third parties take action (Parks et al., 2013). In a study by Felson (1982), he, contrary to the hypothesis of the study, finds that there is a positive relationship between third-party intervention and the severity of the situation. He elaborates: "*However, the results in general indicate a positive rather than a negative relationship between mediation and severity, suggesting that mediating behavior is affected by the severity of the incident rather than the reverse*" (R. B. Felson, 1982, p. 250). Intervention is thus more frequent in severe situations, not because the intervention escalates the situation, but because the severity of the situation makes the third parties intervene. This influence of conflict severity on third-party behaviour is corroborated by a meta-analytical review (Fischer et al., 2011). In order to overcome this bidirectional influence between the conflict severity and the intervention by third parties, it is necessary to look at the development within the conflict rather than the overall severity.

The second way to measure the effect of third-party intervention is within-conflict. This measure does not focus on the situational level of severity, but rather if third-party interventions lead to de-escalation within the conflict. It is not based on preventing the situation from reaching a certain level of severity, but whether or not intervention leads to a less aggression compared to how the situation was or would otherwise have been. Since de-escalation is a relative concept, this measure typically requires something within the situation to compare the conflict development to in order to determine if the conflict has de-escalated or not. This need for comparison is approached in different ways in the existing research.

In an observational study of conflicts in bars, trained observers are asked to estimate whether there is: "*less aggression after third-party involvement compared with the level of aggression before third-party involvement*" (Wells & Graham, 1999, p. 464). This study thus compares the change in aggression before and after the intervention. Another study measuring the effect of intervention within the conflict is the previously mentioned study by Felson (1982). After finding a positive correlation between intervention and the overall severity of the conflict, he conducts an auxiliary analysis to overcome the bidirectional influence biasing the first approach. To do this, he records the behaviour-by-behaviour development of conflict situations through interviews with conflict parties. This analysis shows that the behaviour that follows after a mediating intervention is less likely to be aggressive

compared to the likelihood across the situation at large. Lastly, a survey-based study asks respondents whether the involvement of third parties helped or worsened the conflict situation (Planty, 2002). While appealing in its simplicity, this approach lacks clear definitions of what helped or worsened means. It does not point explicitly towards any comparison, but rather leaves this to the respondents of the survey to figure out on their own.

The need for comparison for the within-conflict measure leads to some methodological challenges because this requires a high resolution of what transpires throughout the conflict situation. If we are to investigate whether a situation improves when a third-party intervention takes place, we need to know not just when the interventions takes place but also what the conflict situation was like before and after the intervention. It is not easy to obtain descriptions this minute for an interpersonal conflict. Conflicts typically happen fast and are difficult for the involved parties to remember. Antagonists struggle to recall even the presence of third parties (Bernasco et al., 2013; Phillips & Cooney, 2005) and the need to record the chronology of the situation only complicates matters further. Furthermore, research has shown that observing social behaviour in-situ can lead to issues of reliability (Morrison et al., 2016).

The ambition of this paper is to investigate if third-party intervention has an effect on the continuation of conflict behaviour by antagonists of interpersonal conflicts. The effect of intervention is conceptualized as whether the likelihood that antagonists continue to engage in conflict behaviour decreases after a third party intervenes. This means that the current study uses a within-conflict measure, since it does not measure the situational severity overall, but rather compares the development after an intervention happens to other similar periods of the conflict without intervention. In order to limit the bidirectional influence between intervention behaviour and the antagonist behaviour, I use a time-lagged version of intervention in the analysis. The analysis, thus, investigates whether intervention behaviour influences the antagonist behaviour just after the intervention has taken place.

## *Expressed Disapproval and Physically Forceful Intervention*

The influence of third-party intervention on interpersonal conflict is oftentimes explained with the theory of impression management (R. B. Felson & Steadman, 1983). This theory reasons that the way we act in social encounters is constructed to make other people perceive us in a favourable way. For interpersonal conflicts, this means that individuals regulate their aggressive behaviour in order to make it acceptable to the other people present in the situation, including the third parties (R. B. Felson, 1978). Luckenbill, for example, emphasizes

the central position of the third parties in his analysis of criminal homicide (1977). He argues that transactions resulting in homicide are character contests between the antagonists to gain a favourable situational identity. In order to obtain this identity, the antagonists not only pay attention to each other, but also to the third parties present in the situation. According to Luckenbill's analysis, homicide happens when the antagonists have reached a consensus that "*violence was a suitable if not required means for settling the contest*" (Luckenbill, 1977, p. 177). The third parties present in the situation can, however, oppose this agreement and thereby challenge what means are legitimate for the antagonists in their pursuit of a favourable situational identity. In other words, if the third parties make it clear that violence or aggression is unacceptable, this will prove a less obvious path to a desired situational identity (R. B. Felson, 1982).

While some interventions rely solely on the expression of disapproval, other intervention behaviours have a physically forceful component as well. With the physically forceful intervention behaviours, the third parties are in some way trying to restrain or remove an antagonist through the use of their own bodies. This could be a third party grabbing onto an antagonist and pulling the person backwards away from the conflict. The interventions that rely solely on expressed disapproval, on the other hand, are not physically forcing the antagonist to do anything but relying on the influence described by the impression management theory. This could be a third party holding up a hand with the palm turned towards an antagonist signalling for them to halt or pointing forcefully at an antagonist who is approaching another antagonist. In addition to investigating whether intervention in general influences the likelihood that an antagonist continues to perform conflict behaviour, the analysis also examines the effect of physically forceful interventions and expressed disapproval, respectively.

## *In-group and Out-group Intervention*

According to the theory of impression management, the impressions different people have of us are not equally important to us. While all people might influence us, the impression of some people matters more than the impression of others. This difference in the importance of impressions means that some third parties have more power to influence antagonists than others. Hepburn describes how "*Individuals attracted to the audience (family, friends, spouse) are more susceptible to the influence of the audience*" (1973, p. 426). A similar influence has been proposed by the criminological research on *Handlers* and the way they can prevent crime. This line of research proposes that third parties with a social relationship to an antagonist have a "handle" to influence this person that makes the intervention more effective (M. Felson, 1995; Tillyer & Eck, 2011). Through knowing the antagonist, third parties will thus

know what to do to calm the antagonist down more effectively. Following this, it seems third parties that have a social relationship to an antagonist are better equipped to influence an interpersonal conflict than someone who does not have this social bond.

In sum, the paper first investigates if intervention by third parties de-escalates an ongoing conflict. Following this, it looks at subtypes of intervention and their influence on the conflict development. More specifically, it investigates the effect of expressed disapproval and physically forceful intervention and how the social relationship between the third party and antagonist might influence the effect of the intervention.

## Materials and Methods

### *Collecting the Video Footage*

The video footage used for the analysis was collected from April to August 2017. The researcher was granted access to the video files by the Dutch ministry of justice. The footage was recorded by camera operators employed by the municipality of Amsterdam who watch live-streaming footage 24 hours a day from surveillance cameras placed in public spaces that the mayor of Amsterdam's office has selected as hot spots of crime and disorder. The camera operators were instructed to record any conflict they observed - irrespective of whether the conflict escalated to physical violence or not. In total, this amounted to 165 video recordings. The footage of each situation was assessed for its utility for the study. Only videos that conform to the following criteria are included in the analysis:

1. An interpersonal conflict is visible in the recorded footage

2. The quality of the video (resolution, brightness, and frames per second) is sufficiently high to allow the coding

3. There are no or only negligible breaks in the recording

Out of the original sample of 165 situations, 25 did not depict a conflict, 36 lacked sufficiently high resolution, and 72 had parts of the conflict missing (the categories are not mutually exclusive). This results in a final sample of 52 situations. The final analysis, thus, utilizes 31 % of the collected videos. This level of data utilization is comparable to previous research based on video footage of interpersonal conflicts (Philpot, Liebst, Møller, et al., 2019).

## *Coding the Video Footage*

The video footage was coded using Behavioral Observation Research Interactive Software (BORIS) (Friard & Gamba, 2016). This program allows one to code observed behaviours and their exact timing. The current study investigates the developments of the antagonist behaviour. In the analysis, anybody who is directly engaged in conflict behaviour at some point during the video is defined as an antagonist. This definition of an antagonist encompasses individuals who have intervened as third parties first and then later get directly involved in the conflict (or vice versa). I chose this inclusive definition because previous research has argued that role-changes are common in interpersonal conflicts (R. B. Felson et al., 1984a).

For each of the antagonists, I coded the conflict behaviours of this individual throughout the conflict situation. The coding of the current study is based on a coding scheme available in Appendix 1 developed through watching a small subsample of the video footage and in conversation with existing coding schemes used to analyse antagonist and third-party behaviours (Liebst et al. 2018; Lindegaard et al. 2017; Philpot 2017). The conflict behaviours include both physical and non-physical behaviours (see Appendix 1 for more information). Each behaviour was coded with a time-stamp, which shows exactly when the behaviour happened in the chronology of the conflict situation.

Since the aim of the current study is to see how the intervention of third parties shape the behaviour of antagonists, I also coded the third-party intervention behaviours towards each antagonist. Every non-violent behaviour that is directed towards an antagonist by someone who the antagonist is not engaged in a conflict with is coded as a third-party intervention behaviour. The intervention behaviours are coded with a time-stamp to know exactly when each intervention behaviour happens in the development of the conflict. Furthermore, I also coded whether the intervention behaviour is physically forceful (pushing, holding back, hauling off, and blocking movement) or expressing disapproval (calming hand gestures, non-forceful touching, and aggressive gestures). It is worth noting that the videos have no sound, which means that the behaviours are strictly based on what is observable.

Lastly, the social relationship between the intervening third parties and the antagonists was coded. This measure is based on the display of tie signs visible in the videos. The visibility of social relationships in public behaviour have been observed in both qualitative (Goffman, 2009; Hall, 1966) and quantitative research (Ge et al., 2012a; Liebst et al., 2018; McPhail & Wohlstein, 1982; Solera et al., 2013). Based on this literature, I inferred the social relationships based on physical proximity, people arriving and leaving the scene

together, people wearing matching clothes or uniforms, and people standing close together engaged in casual conversation, holding hands, or similar tie signs.

## *Data Structure*

In order to analyse the interpersonal conflicts, each situation is divided into a number of three second time segments (the findings based on 3-second segments overall seem to generalize to shorter and longer segment durations as discussed below). For example, if a conflict situation has a time span of 15 seconds it will be divided into five time segments each referring to a specific 3-second period of the situation. The time segments are then encoded for each antagonist of the conflict. Since the ambition of the current paper is to study the continuation of conflict, the analysis is only based on time segments directly preceded by conflict behaviour by the same antagonist. From the coded material, I thus select all time segments where an antagonist performs a conflict behaviour in the previous time segment. For each of these segments, I first record the presence or absence of conflict behaviour by that specific antagonist within the time segment. This variable thus measures the continuation or discontinuation of conflict behaviour. Second, for each of the selected time segments I register whether there is an intervention towards the antagonist in the preceding time segment and the subtype of this intervention. This variable is used to investigate if third-party intervention influences the chance of the continuation of conflict behaviour. I use the preceding time segment to limit the bidirectional influence of the antagonist behaviour on intervention behaviour, as detailed above.

Since the current study investigates the influence of intervention on the continuation of conflict behaviour, there must be at least one instance with conflict behaviour in two consecutive time segments. If that is not the case, there are no observations of continued engagement in the conflict and it is impossible to measure whether the intervention influences the likelihood that the antagonist continues to engage in the conflict or not. In other words, antagonists that only perform isolated acts of conflict behaviour are excluded from the analysis[6]. This amounts the exclusion of 18 antagonists out of the original 140 of the coded empirical material. Half of the excluded antagonists only perform conflict behaviours in a single time segment and more than 80 % of the excluded antagonists perform conflict behaviours in no more than two (non-consecutive) time segments or less across the conflict situation.

[6] This is the reason that two is the lowest number of observations per antagonist in Figure 1.

## *Assessment of Reliability*

The video footage was coded by the author of the paper. To estimate the reliability of the codes, a trained graduate student independently coded 11 videos. Cohen's Kappa (κ) was used to estimate the agreement between the two coders. Agreement was defined as both coders identifying the same behaviour performed by the same actor towards the same target within three seconds. All of the measures used in the analysis reach a substantial interrater agreement with a kappa above 0.6 ($\kappa_{\text{intervention behaviour}} = 0.71$, $\kappa_{\text{phys. forceful int.}} = 0.69$, $\kappa_{\text{exp. disappr.}} = 0.63$, $\kappa_{\text{antagonist behaviour}} = 0.72$, $\kappa_{\text{social relation}} = 0.89$). These results demonstrate that the analysis is based on reliable observations (Landis & Koch, 1977).

## *Statistical Model*

The paper investigates if third-party intervention influences the continuation of conflict behaviour by an antagonist. To investigate this, I use repeated observations of each antagonist across the conflict situations. The number of observations for an antagonist is the same as the number of time segments where the antagonist performs conflict behaviour. This means that the number of observations varies from one antagonist to the other. The data for the current study is therefore an unbalanced panel. In order to analyse the data, I use a fixed-effect panel data model with a logit link since the dependent variable is a binary variable measuring if the antagonist continues the conflict behaviour or not.

The strength of panel data model is that it removes all time-constant within-person bias from the observations. This means that stable confounding factors that might bias the results are automatically taken into account in the estimation of the model[7]. This includes both observed (e.g. gender of the antagonist) and unobserved (e.g. genetic disposition) variables (Halaby, 2004). Since some of the antagonists are from the same situations (i.e. the antagonists are nested in situations), I estimate the model with cluster-corrected standard errors to correct for any potential interdependences between the observations.

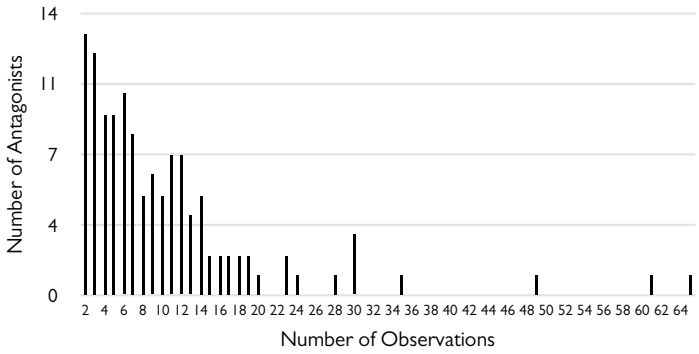
## *Descriptive Statistics*

The current analysis is based on a varying number of repeated observations per antagonist

[7] Here it is worth noting that while the social relationship between a third party and an antagonist does not change throughout the situation, this variable is not necessarily stable across the situation because more than one third party can intervene towards an antagonist throughout the conflict. While each relationship thus remains the same, an antagonist can be the target of intervention by third parties from both their in- and out-group within the same situation.

from the observed conflict situations. Across the 52 situations investigated, there are 1274 observations of 122 antagonists. This means that there are on average are 10.4 observations per antagonist. Figure 1 shows how the antagonists in the empirical material (y-axis) are distributed across the number of observations (x-axis).

**Figure 1.** Number of Antagonists per Number of Observations in the Data Frame




*Source: Author's own*

Figure 1 shows that the lowest number of observations for an antagonist is two (the model requires variation on the outcome variable and thus necessitates at least two observations) and the highest number of observations for an antagonist is 65. The most frequent number of observations per antagonist is two. There are 13 antagonists with two observations in the sample. The general trend of the figure appears to be, that the higher the number of observations, the fewer antagonists.

The dependent variable of the analysis is a binary variable measuring the presence of absence of continued conflict behaviour (conflict behaviour in the time segment following another time segment with conflict behaviour). 478 of the 1274 observations in the data are instances of continued conflict behaviour. The first independent variable of the analysis is intervention towards the antagonist in the preceding time segment. In the data there are intervention preceding the outcome variable in 234 out of 1274 observations. Out of the 1274 observations, there are 108 observations where an in-group third party makes a physically forceful intervention. There are 88 observations where an out-group third party makes a physically forceful intervention. Furthermore, there are 32 observations where an in-group third party expresses disapproval and 38 observations of an out-group third party expressing disapproval.

## Results

Based on the fixed-effects panel data analysis, this section first reports whether intervention in general influences the likelihood that an antagonist continues to engage in a conflict behaviour. After this, the results of how the different subtypes of intervention behaviour influence the continuation of conflict behaviour will be presented. Table 1 shows the influence of intervention on the likelihood of continuation of conflict behaviour.

**Table 1.** Fixed-Effects Panel Data Regression with Cluster-Corrected Standard Errors of the Influence of Intervention on the Continuation of Conflict Behaviour

| | Odds Ratio | Standard Error | p value | 95% Conf. Interval | |
|---|---|---|---|---|---|
| Intervention | 0.512 | 0.088 | <0.001 | 0.366 | 0.716 |

*Source: Author's own*

Table 1 shows that there is a decreased likelihood that the conflict behaviour of the antagonist will continue after a third party has intervened towards this person. The influence of the third-party intervention on the behaviour of the antagonist in the following time segment is statistically significant ($p < 0.001$). The odds ratio of the panel data regression shows that the odds that the aggression of the antagonist will continue when there is no intervention is almost twice the size compared to when there is an intervention. This indicates that intervention towards an antagonist negatively influences the likelihood that the antagonist continues to engage in conflict behaviour.

Table 2 shows a panel data fixed-effects model when intervention is divided into physically forceful intervention and expressed disapproval performed by a third party from either the in-group and out group of the antagonist. In this model, the intervention is thus divided in four subgroups: expressed disapproval by an in-group member, physically forceful intervention by an in-group member, expressed disapproval by an out-group member, and lastly physically forceful intervention by an out-group member.

The first independent variable in Table 2 is expressed disapproval by an in-group third party. This variable does not have a statistically significant influence on the outcome variable. The second independent variable is the in-group physically forceful intervention. This variable has a statistically significant influence on the outcome variable ($p=0.001$). The odds ratio for this variable shows that when there is a physically forceful intervention by an in-group member the odds that the conflict will continue in the following time segment is less than half the size of when there is no intervention.

The third variable in Table 2 is the expressed disapproval by out-group third parties. This variable does not have a statistically significant relationship with the outcome variable. The fourth and last of the independent variables is the physically forceful intervention by an out-group third party. This variable is statistically significant (p=0.015). This type of intervention has an odds ratio of 0.467, which indicates the odds that an antagonist continues the conflict behaviour in a time segment following a physically forceful intervention by an out-group third party is just below half the size of segments where this type of intervention does not happen.

**Table 2.** Fixed-Effects Panel Data Regression with Cluster-Corrected Standard Errors of the Influence of Subtypes of Intervention on the Continuation of Conflict Behaviour

| | Odds Ratio | Standard Error | p value | 95% Conf. Interval | |
|---|---|---|---|---|---|
| Expressed disapproval by in-group | 0.815 | 0.307 | 0.587 | 0.389 | 1.705 |
| Physically forceful in-group intervention | 0.458 | 0.106 | 0.001 | 0.291 | 0.720 |
| Expressed disapproval by out-group | 1.716 | 0.618 | 0.134 | 0.847 | 3.477 |
| Physically forceful out-group intervention | 0.467 | 0.146 | 0.015 | 0.253 | 0.863 |

*Source: Author's own*

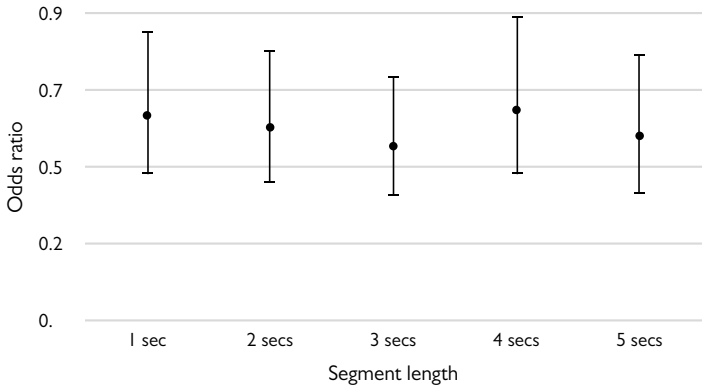
Overall, the model with the subtypes of intervention behaviour presented in Table 2 shows that irrespective of the social relationship between the antagonist and the third party, it appears that the physically forceful interventions decrease the likelihood of continued conflict behaviour, while there is no evidence that interventions relying solely on expressed disapproval influence the dependent variable.

## *Robustness of Findings*

A central decision of the analysis is the delimitation of the conflict into three-second time segments. This is, however, to a certain extent, an arbitrary duration. The segments could also have been two seconds or four seconds in length. In order to investigate if this decision is decisive for the results of the analysis, I reran the analysis with varying durations of time segments spanning from one to five seconds. The results of these estimations can be seen in Figure 2.

Figure 2 shows that the odds ratio for intervention on the continuation of conflict across the five different durations of time segments. This figure shows no major changes in the odds ratio across the different lengths of time segments and that the confidence intervals consistently fall below one, which means that intervention remains statistically significant across the configurations.

**Figure 2.** The Influence (Odds Ratio) of Intervention on the Continuation of Conflict Behaviour with Varying Lengths of Time Segments




*Source: Author's own*

The odds ratio for the physically forceful intervention subtypes across the different lengths of time segments are shown in Appendix 2. This shows that the in-group physically forceful intervention is consistently statistically significant and only shows small variations in odds ratio across the different configurations. The out-group physically forceful intervention, however, is only statistically significant when the time segments are 3 seconds or longer. Furthermore, there appears to be an increase in the odds ratio for this variable as the time segments increase in length. Neither of the subtypes of expressing disapproval reach statistical significance across the various segment durations.

A second aspect of the analysis that might influence the conclusion of the study is the fact that there are relatively few observations of the subtypes of expressed disapproval in the empirical material. A way to increase the number of observations of expressed disapproval is to aggregate the in-group and out-group interventions. When the in-group and out-group categories are pooled, the conclusion of the study remains unchanged (See Appendix 2 for regression output). The physically forceful intervention has a statistically significant influence on the continuation of conflict behaviour ($p < 0.001$), while the expression of disapproval remains not statistically significant ($p = 0.664$).

A third decision of the analysis that might influence the outcome is that the dependent variable includes all conflict behaviours by the antagonist, whether physical or not. Another option would have been to only look at the violent behaviours of the antagonist. The results of this analysis can be seen in table 3.

**Table 3.** Fixed-effects Panel Data Regression with Cluster-Corrected Standard Errors of the Influence of Intervention on the Continuation of Violent Behaviour

| | Odds Ratio | Standard Error | p value | 95% Conf. Interval | |
|---|---|---|---|---|---|
| Intervention | 0.492 | 0.171 | 0.041 | 0.249 | 0.972 |

*Source: Author's own*

This model yields similar results to the model investigating the influence of intervention on conflict behaviour in general[8]. The intervention makes it approximately half as likely that the violent behaviour will continue and this measure remains statistically significant (p=0.041) with the alternative specification of the dependent variable.

Lastly, an assumption of the current model is that it is intervention in the time segment preceding the outcome variable that influences the continuation of conflict. I included a time lag in order to limit the bidirectional influence between intervention behaviour and conflict behaviour. In order to investigate if this decision is consequential for the findings of the study, I reran the analysis with a variable measuring intervention by third parties in the same time-segment as the dependent variable. The results of this analysis show that the concurrent intervention does not have a statistically significant influence on the continuation of conflict behaviour (See Appendix 2 for regression output). It thus appears that the decision to lag the intervention variable is decisive for the outcome of the analysis.

## Discussion

The paper investigated the effect of third-party intervention on the continuation of conflict behaviour. Based on video-footage of real-life interpersonal conflicts, I used a fixed-effect panel data model with cluster-corrected standard errors to estimate if intervention behaviour

[8] This alternative specification reduces the number of observations in the analysis, because the number of observations here is limited to the number of segments preceded by violent behaviours instead of conflict behaviour in general. For this reason, the effect the behavioural subtypes are not investigated further.

influences whether antagonists continue to engage in an already ongoing conflict. The analysis showed that the odds that an antagonist continues to engage in conflict behaviour is almost twice as high when there is no intervention compared to when there is. The overall finding of the paper converges with the general finding in the empirical literature that intervention makes a difference. This study extends this finding to the second-by-second development of conflicts. Furthermore, when intervention is divided into subtypes, the analysis shows that the physically forceful intervention (interventions where the third parties in some way use their body to forcefully withhold, restrain, or remove an antagonist) influences the odds that conflict behaviour will continue, while the expression of disapproval (interventions where a third party expresses disapproval of the situation by e.g. gently touching, holding a hand in front of, or making calming hand gestures towards an antagonist) does not have any observable effect. This applies to third parties from both the in- and the out-group of the antagonists.

The analysis of this study thus shows that interventions are not only frequent in interpersonal conflicts, as shown by previous research (Philpot, Liebst, Levine, et al., 2019), but also appear to influence the behaviour of the antagonists engaged in conflict behaviour. It is thus not too late to intervene in a conflict that has already started. Quite on the contrary, it appears that interventions have a clear de-escalatory influence on the behaviour of the antagonist. This means that the actively intervening third parties are not acting in vain, but rather shape the way conflicts develop and help restore order when a situation has gone awry. These findings underline the integral role that third parties often play in the step-by-step development of interpersonal conflicts.

The current study also casts new light on the way third parties can influence a conflict. The influence of third-party intervention is often explained through third parties communicating to the antagonists how to obtain a favourable situational identity (R. B. Felson, 1978). While all intervention behaviour arguably expresses disapproval of the current behaviour, the analysis only finds that physical forcefulness makes the antagonists discontinue the conflict behaviour. The results of the current study, thus, indicate that in order to de-escalate an ongoing conflict, the third parties might have to use their bodies and get physically involved in the conflict themselves.

The current study focuses on whether intervention influences the likelihood that conflict behaviour continues. Previous research, however, argues that the processes that lead to the initiation and continuation of a conflict are distinct (R. B. Felson, 1984). If the processes that lead to initiation and continuation of a conflict are different, this could mean that the way third parties can influence these processes differ, too. Expressed disapproval

could play a role in preventing the initiation of conflict, even though the current study does not find any evidence of its influence on the (dis)continuation of conflict.

Following the existing literature, I expected that the influence of third-party intervention would be stronger for in-group third parties compared to out-group third parties. Previous literature argues that we care more about the impression we leave on people we know and that in-group third parties also will know which "handles" to use when trying to influence the antagonists (Hepburn, 1973; Tillyer & Eck, 2011). The findings for the in-group and out-group interventions in the analysis are, however, similar. For both groups the physically forceful intervention has a negative effect on the continuation of the conflict while the expressed disapproval does not have any observable influence. The physically forceful intervention furthermore has a similar effect-size for the two groups. We therefore do not see the expected difference in effect based on social group. It appears that when the conflict has started the effect of a third party from the in-group and the out-group intervening in the same way has a similar effect.

While previous research thus argues that social relationships give third parties "handles" to know how to de-escalate an antagonist and make their disapproval more important to the antagonists, the current analysis does not find evidence that this group is more successful in influencing the behaviour of the antagonist compared to the influence of the out-group third parties. Rather, the effect appears to be almost identical between the two. This means that while third parties are more likely to intervene when they know someone involved in a conflict (Liebst, Philpot, Bernasco, et al., 2019; Phillips & Cooney, 2005), are more likely to target an antagonist they have a social relationship to (Ejbye-Ernst et al., 2020), and more likely to be victimized themselves if they know someone who has been victimized in the conflict (Liebst et al., 2018), it does not appear that the effect of intervention by a third party with a social relationship to an antagonist is different from that of someone who does not have such a relationship. Social relationships thus structure and influence many aspects of third-party behaviour, but from the current analysis it does not seem that the effect of intervention on on-going conflict is one of them. When it comes to stopping conflict behaviour, it thus appears to be more about *what* you do than *who* you are.

The findings of the current study have consequences for the prevention of conflict and violence. One of the circumstances that lead third parties to hesitate to intervene in a conflict is that they do not feel confident that they have the skills to intervene effectively (Latané & Darley, 1968). The current study shows, however, that third-party intervention makes a difference in the continuation of interpersonal conflicts. Furthermore, the current

study shows for the first time that when third parties intervene with their body and physically withhold or separate the antagonists, their intervention influence the continuation of conflict behaviour. The study does, on the other hand, not find any evidence for the influence of the expression of disapproval on the conflict development. The current study thus brings us a step closer to providing concrete information for third parties wanting to stop an ongoing conflict. The study furthermore shows that no matter the social relationship of the third parties they have the capacity to deescalate a conflict situation.

Previous studies on third-party intervention have indicated that there is a bi-directional relationship between third-party intervention and the behaviour of the antagonist: conflict behaviour by the antagonist motivates third-party intervention, while intervention influences the conflict behaviour. While the primary investigation of this study looks at intervention in the preceding time segment, the effect of concurrent intervention was investigated in the robustness check of the model. This analysis showed that while preceding intervention lowers the likelihood of the continuation of conflict, the concurrent intervention does not appear to influence the continuation of the conflict. This difference is probably an expression of the bidirectional influence between third-party intervention behaviour and antagonist conflict behaviour. The concurrent intervention does not have significant influence because it is both reducing the severity of the conflict, but also motivated by it[9].

This finding underlines the complex relationship between third-party intervention and antagonist conflict behaviour. This corroborates findings from previous research (R. B. Felson, 1982) and shows the necessity of taking this bi-directional influence into account when investigating the influence of third-party behaviour on interpersonal conflicts. Not only do the two variables influence each other but they do so in opposite directions, which could cancel out or even reverse the effect of intervention if not treated with care. This underscores the necessity of using a within-conflict measure of the effect of intervention that accounts for this bidirectional influence. Only by accounting for the development within the conflict is it possible to understand how some situations get out of control while others do not. This also emphasizes the shortcoming of the studies that use a between-conflict measure of the effect of intervention. These studies might find a correlation between intervention and overall situational severity, but we are not able to discern how much of it can be attributed to the effect intervention has on the behaviour of the antagonists and how much can be attributed to the reversed influence.

[9] An alternative explanation for this missing connection between concurrent intervention and conflict continuation is that the effect of intervention is not immediate, but rather takes a few seconds to take effect.

A limitation of the current study is that it only investigates the immediate effect of intervention. The outcome of the analysis only measures the effect of intervention on antagonist behaviour in a single segment. This means that the analysis is limited to investigations of how the intervention shapes the immediate development of the antagonist behaviour. It might be that the conflict later re-escalates, even though the intervention de-escalates the antagonist behaviour just after the intervention. While the "long term" situational effect of intervention thus is beyond the current study, the robustness check of the model shows that at the influence of the interventions remains significant when the time segments are extended in duration from three to five seconds. This shows that while the current study investigates the immediate effect of intervention it is not limited to a three-second period following the intervention.

Another limitation of the current analysis is the lack of sound. While the video footage offers a high resolution of the behaviour that transpires throughout the conflict situation, it does not have any sound. This means that the types of intervention included in the current analysis are limited to the visible behaviours of the third parties. Any interventions that are based solely on the third parties speaking or shouting are thus not included in the analysis. These types of behaviour are beyond the current study and require videos that contain sound or an alternative data source to investigate further.

This paper has showed how third-party interventions matter and help deescalate ongoing conflicts in public spaces. Future studies might investigate this further by looking at whether third-party interventions also influence interpersonal conflicts that happen in private spaces. The study also found that physically forceful intervention deescalates ongoing conflicts. Future studies might investigate if physically forceful intervention also poses a higher risk of victimization for the third-party intervening compared to expressing disapproval. The results of the analysis did not show any noticeable difference in the effect of intervention by third parties from the in-group and the out-group on the continuation of conflict. Future studies might investigate this further by examining if this also holds true for the initiation of conflict.

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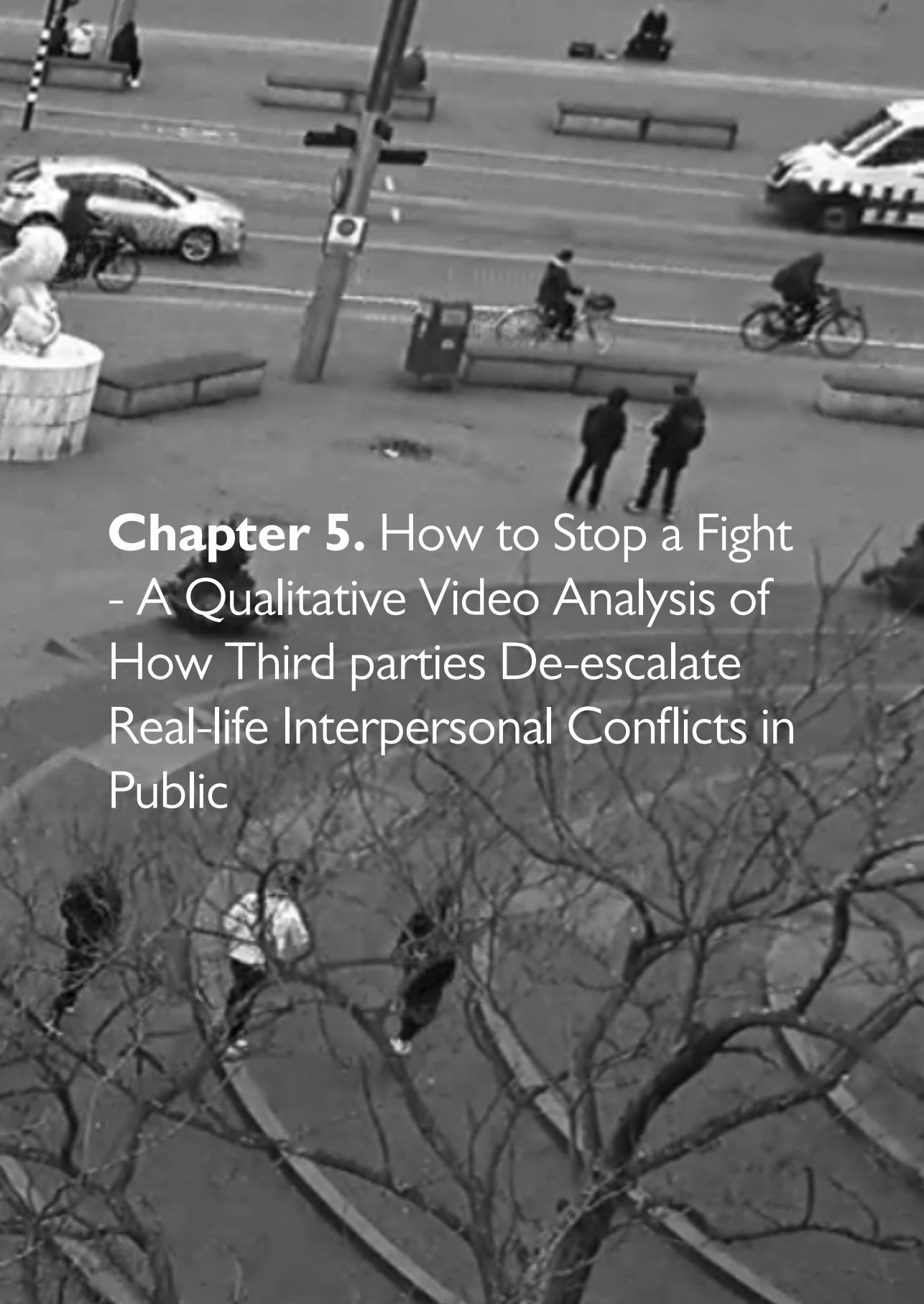

# **Chapter 5.** How to Stop a Fight - A Qualitative Video Analysis of How Third parties De-escalate Real-life Interpersonal Conflicts in Public

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*PE conceived the research, performed the analysis and wrote the text. MRL and WB provided feedback on intermediate drafts of the final manuscript.*

## Abstract

**Objective:** While previous research agrees that third parties often manage to de-escalate interpersonal conflicts when they intervene, we still know little about how they achieve this influence. The aim of the current study is to address this gap in the literature by investigating how third parties de-escalate conflicts. **Method:** We conduct a two-part qualitative analysis of CCTV footage of 48 real-life conflicts from the streets of Amsterdam. The first part consists of an inductive analysis of CCTV-footage investigating the typical sequence of de-escalatory interventions. The second part consists of a deductive coding based on the findings from part 1 of the analysis. **Results:** We identify an ideal-typical model of de-escalation consisting of three phases: objection, separation, and placation. This model describes how third parties adapt their intervention to the reaction of the antagonists of the conflict through a contingency principle: when the current phase of intervention fails to de-escalate the conflict, the third party proceeds to the following phase of the model. We also identify observable intervention behaviors that are characteristic of each of the three phases. **Conclusions:** The findings demonstrate that there is not one way to de-escalate a conflict, but rather that third parties are successful because they adapt their intervention to the situation at hand. The findings of this study imply that if we want to get closer to understanding when third-party interventions are effective, we need to acknowledge the complexity of these interventions and move beyond the action/inaction dichotomy.


**Keywords.** *Conflict De-escalation; Third-party Intervention; violence; Video Analysis; Bystander Behavior*

## Introduction

Conflict and violence remains an ubiquitous aspect of modern life (Cole & Flanagin, 1998), but studies indicate that efforts to de-escalate these conflicts are almost equally widespread. These studies show that there are typically more individuals present in an interpersonal conflict in public than the antagonists of the situation (R. B. Felson, 1982; Planty, 2002). And when present, these individuals - hereinafter referred to as third parties - typically intervene and try to de-escalate the conflict (Liebst, Philpot, Bernasco, et al., 2019; Philpot, Liebst, Levine, et al., 2019). Furthermore, research shows that when third parties intervene in an interpersonal conflict they often manage to de-escalate it (R. B. Felson, 1982; Levine et al., 2011; Planty, 2002; Wells & Graham, 1999). This means that third parties are not just a *potential* resource of crime prevention, as suggested by previous research (Liebst, Philpot, Heinskou, et al., 2019), but rather that third parties *already* are de-escalating conflicts and stopping fights throughout society.

However, we still know little about how third parties manage to influence the conflict development. The vast majority of empirical research on third-party interventions draws on a set of predefined behavioral categories (Bloch et al., 2018) and rarely observes the intervention behavior directly (Labhardt et al., 2017). The studies that investigate how third-party interventions influence the conflict development often simply count either the number or presence of third parties that intervene in a conflict and investigate if this variable is correlated with the outcome of the conflict (e.g. Felson, 1982; Planty, 2002; Wells & Graham, 1999). This approach has allowed researchers to show that the interventions by third parties are effective in de-escalating a conflict, but does not reveal much about what these intervening third parties actually do. We are thus left with a black box of third-party intervention behavior that appears to work, but of which we know little other than its effectiveness. This knowledge gap prompted the still unanswered call "*to identify third-party strategies that are effective in reducing aggression*" (Wells & Graham, 1999, p. 475) 20 years ago.

The ambition of the current study is to open up this black box and investigate how third parties de-escalate interpersonal conflicts. To do this, we conduct a qualitative analysis of CCTV-footage of real-life interpersonal conflicts. The use of CCTV-footage allows us to take a closer look at the conflict situations, which usually are short and complex interactions with multiple parties acting simultaneously. It allows us to move beyond measuring the

mere number or presence of third parties in a situation, and instead take a closer look at the behavior of the third parties as they influence the development of the conflict. In the current study, de-escalation is operationalized as the placation of the situation to a level where the antagonists of the conflict stop performing violent and conflict behaviors such as aggressive gesturing, pushing, showing, and hitting.

## *Behavior of Third Parties*

While we still know little about how third parties manage to deescalate interpersonal conflicts, the scientific literature on third-party interventions offers various categorizations of third-party behavior. Most of the empirical studies investigating the intervention by third parties in interpersonal conflicts use a distinction between third parties who join the conflict or and those who try stop it. One study e.g. discriminates between aggressive and non-aggressive intervention (Parks et al., 2013), a second study categorizes intervention as either escalatory or conciliatory acts (Levine et al., 2011) and a third study similarly categorizes third-party behavior as escalatory or de-escalatory (Liebst, Philpot, Bernasco, et al., 2019). Along the same lines, Felson and Steadman (1983) describe how third parties can intervene as either mediator, partisan, or instigator in a conflict and thus distinguish between two ways of furthering aggression. Black and Baumgartner (1983) use ethnographic literature and other empirical studies to identify 12 third-party roles. These roles are arranged in two over-all categories of supporting roles and settlement roles, which is similar to the distinction described above. The five settlement roles are ranked according to forcefulness. With *Friendly peacemaker* being the least forceful settlement role, then comes *mediator*, followed by *arbitrator*, then *judge,* and finally *repressive peacemaker* is the most forceful.

A qualitative study by Bloch and colleagues (2018) approaches the intervention by third parties inductively in order to challenge the typical classification of third-party behavior. This study details a number of third-party behaviors that are often classified as passivity, such as *actions expressing distance* and *actions expressing ambivalence*. While thus adding nuance to the categories used to measure third-party behavior in conflict situations, the study by Bloch and colleagues only briefly addresses the intervention behavior that targets the antagonist in order to stop the violence, which is the focus of the current study.

The literature on sexual assault similarly details a number of intervention behaviors. A review (Labhardt et al., 2017) of the literature finds that these studies often measure bystander behavior using the Bystander Behavior Scale (BBS). The BBS details potential intervention behaviors both before, during, and after the sexual assault takes place. These

behaviors range from calling the police, to asking someone if they need help, or calling a crisis center if a friend has been assaulted (Banyard et al., 2005).

A study that leaves the definition of the intervention behavior open for investigation is a vignette-based study of situations of sexual assault by McMahon and colleagues (2013). In this study, the authors find that the interventions proposed by college students mostly fit in the categories of direct and indirect intervention. The direct interventions address the perpetrator and/or victim or the grievance in some way, while indirect intervention is a behavior that attempts to solve the situation without directly addressing the behavior or situation. The study finds that indirect intervention is the most frequently mentioned intervention behavior amounting to almost 70 % of the proposed interventions during the sexual assault. Another study that aims to investigate intervention in sexual assault inductively is a laboratory investigation by Parrott and colleagues (2020). Here, intervention is conceptualized as the intervention towards someone exposing a woman to a sexually explicit clip against her will. The researchers of this study coded verbal interventions in four inductively generated categories: "objective consideration", "moral justification", "gender stereotypes" and "clip quality".

As shown above, the existing literature offers a number of different categorizations for third-party intervention. These inquiries, however, suffer from at least one of two potential ailments[10]. First, as argued by Bloch et al. (2018), some studies approach the measurement of intervention behavior with predefined behavioral categories, identifying what the researchers expect are relevant types of behavior before the empirical investigation is commenced. This could lead researchers to overlook aspects of the phenomenon under scrutiny or to misrepresent the behavior of third parties if these categorizations are not based on thorough observations of actual behavior (Dawkins, 2007).

Second, some studies rely on retrospective self-reports or hypothetical responses to vignettes prone to social desirability bias (King & Bruner, 2000), memory failure (Labhardt et al., 2017) and a discrepancy between what we say we do and what we actually do (Jerolmack & Khan, 2014).

As a response to these short-comings, the current study follows the recommendation that "*ideally, it would be best to measure actual intervening behavior as it occurs (...) to get the best representation of bystander behavior*" (Labhardt et al., 2017, p. 16). We draw on CCTV-footage that allows us to observe how third parties manage to de-escalate real-life

[10] With the exception of the studies by Bloch and colleagues (2018) and Parrot and colleagues (2020)

conflicts. This gives us a privileged insight into what third parties actually do, rather than what they say they have done or think they would do in such a situation. Furthermore, we approach the empirical material inductively and thus avoid using our pre-defined categorizations and concepts about what we as researchers expect third parties to do. Instead, we attempt to describe what third parties actually do when they de-escalate an interpersonal conflict. Another way to measure intervention behavior directly is to create a situational analogue calling for intervention in a laboratory setting , similar to Parrott and colleagues (2020). A benefit of this approach is that it gives a strong control over confounding factors and thus strengthens the internal validity of the study. The strength of using video footage of real-life conflicts, on the other hand, is the high ecological validity of these data, because we know that what we are studying actually corresponds to real-life conflicts.

## *Intervention as Interaction*

The interactionist theory of violence argues that while the initiation of a conflict might have to do with a grievance between the conflict parties, the development of a conflict after the initiation is shaped by factors within the conflict (R. B. Felson, 1984). Conflicts are thus not predetermined based on intrinsic motivations, but are rather co-created between the parties of the situation through actions and reactions to the development of the situation. An example of this is a study by Luckenbill (1977) that finds that homicides happen when the conflict parties reach an agreement that violence is a legitimate way of solving a grievance, and a study by Felson (1982) that finds that the behavior of the opposing party is a predictor of antagonist behavior.

Following the interactionist theory of conflict, we thus believe that in order to understand how third parties influence the development of interpersonal conflicts, we have to approach the situation as an interaction between people. Conflict parties are not acting as isolated individuals, but rather are interacting as a response to the actions of other people in the conflict situation. This means that the behavior of an antagonist of a conflict can - at least in part - be explained by the preceding behavior of the other people in the situation (R. B. Felson & Tedeschi, 1993). Similarly, we argue, that the behavior of third parties is dependent not just on e.g., their willingness to intervene or their previous experiences with conflict management but also the way their behavior is received by the target of the intervention – they are thus reacting to the way the antagonists have responded to their preceding behavior.

Based on the interactionist conception of interpersonal conflict, the use of video footage of real-life conflicts allows us to further our understanding of the influence of third-

party intervention, because it allows us to see the ways these situations develop second-by-second. The use of video-footage thus allows us to observe how the behavior of third parties adjusts, modifies, or accommodates the development of the situation and how this in turn lets them influence the conflict. The research questions of the paper are: 1) what behaviors do third parties perform to de-escalate an interpersonal conflict? 2) What strategies do third parties use to successfully de-escalate a conflict? Understanding how third parties manage to de-escalate conflicts will bring us closer to understanding how conflicts are stopped and thus help us getting closer to understanding how everyday people successfully manage to prevent a major health threat. These insights will in turn allow us to build better preventive programs inspired by what actually works in real-life conflicts. Understanding how third parties de-escalate conflicts thus serves both an academic and preventive purpose.

## Method

### *Data collection*

In this study, we analyze video footage of street fights and interpersonal conflicts from the streets of Amsterdam recorded by surveillance cameras. The authors were granted access to the videos by the Dutch Ministry of Public Affairs and the Amsterdam Police. The footage was collected in collaboration with the Municipality of Amsterdam and the Amsterdam Police Department. The surveillance cameras are located throughout the city of Amsterdam on streets and squares that the Mayor of Amsterdam's office has identified as hot spots of crime and disorder. The conflicts were identified by camera operators employed by the municipality of Amsterdam to watch the live-streaming footage from the public surveillance cameras.

The footage from the cameras is automatically recorded and saved on the servers of the Dutch police for 28 days. The usual practice of the camera operators is to note down the time and location of legal transgressions in the footage, (including violent conflicts) so this footage can be identified and retrieved by the police in case it is needed for legal prosecution or as evidence in some other capacity. By only analyzing violent conflicts, we would potentially miss situations where the third parties manage to successfully stop the conflict before it escalates to violence. Therefore, in addition to their usual practices, we trained and instructed the operators to note down the occurrence of non-violent conflicts too. First, we spent a week sitting next to different operators to learn about their ordinary selection procedures. Second, we discussed those selection criteria with the group of operators. Third, we detailed the selection criteria for this project in a document, and presented them to the group.

Fourth, we visited the group weekly to remind them to keep noticing situations according to the selection criteria. The behavioral cues we asked the operators to pay attention to were: 1. People argue or talk agitated. You see that from their facial expressions and fast hand gestures. 2. People talk, walk away, and come back again. 3. People point their index finger at someone's face, or make "come on" or "go away" hand gestures. 4. People stand close to each other, push or grab each other, or grab each other's clothes. 5. People take off their jacket or jumper. 6. More serious forms of violence, such as hitting or kicking. We furthermore instructed the operators to collect as much footage as possible leading up to and following the conflict situation. These selection criteria are based on previous research (Levine et al., 2011; Suonperä Liebst et al., 2020) and the review of numerous video clips of interpersonal conflicts for behavioral cues of imminent conflict.

Since the current study is based on visual material collected through CCTV-cameras, the conflicts analyzed for the current study are only those that are visually apparent in some way. While the camera operators were asked to save any visible conflict, only conflicts that are visible to outsiders are part of the empirical material. This means that there have to be some behavioral cues that reveal to the observers that a conflict is taking place. If two people are engaged in a verbal conflict, but remain calm and collected throughout this conflict, the conflict is thus not part of the current study.

The data collection spanned from April to August 2017. In this period, all interpersonal conflicts identified by the camera operators were given to the research group. This amounted to a total of 165 video clips. For the empirical analysis of this paper, we first watched the entirety of the footage and identified the clips suitable for further research. In a number of videos, the conflict is only partly visible, very low resolution, or not visible at all. Only files that show a conflict in sufficiently high resolution to see what transpires, where there are only minor breaks in the recording, and a third party intervenes at some point were selected in the further analysis. For the current analysis, any non-violent behavior directed towards someone engaged in a conflict with someone else than the person performing the behavior is considered to be an intervention behavior. Application of the selection criteria resulted in a final sample of 48 videos for further analysis.

In the final sample, we include both situations where third parties manage to de-escalate the conflicts and where they give up or fail to de-escalate the conflict. A successful third-party intervention is defined as a situation where the third parties manage to make the antagonist(s) stand down and abandon the conflict. In order to determine if the intervention de-escalates the conflict, we look at the reactions of the antagonist to the intervention of the

third party. When a third party intervenes, the antagonist can either (attempt to) continue the conflict or in some way disengage or calm down. When this reaction is to stand down and disengage from the conflict, we count the intervention in the situation as a success. When a conflict ends because either of the antagonists dominates the other and then leaves, or simply leaves on their own accord (and thus not as a reaction to an intervention), the third-party interventions are seen as failing to de-escalate the conflict. Conflict situations where the police or other formal guardians show up and de-escalate the conflict were not included in the successful third-party interventions.

## *Analysis plan*

The encoding of the videos was done by the first author of the paper. The analysis of the videos consisted of two parts. Through both parts of the coding process, the second author of the paper watched the CCTV-footage and discussed the analytical approach and findings with the first author to ensure the credibility, dependability, and confirmability of the findings (Guba, 1981).

The first part of the coding consisted of observing the behavior of the individuals in each video of the final sample. We re-watched the same conflict until we reached point where no new individuals or actions were identified upon watching the video. Reaching this point often required re-watching the material numerous times. As a rule of thumb, we would watch the clips at least once per individual involved in the conflict. This allowed us to follow each individual's trajectory throughout the conflict situation. This approach draws inspiration from the focal observation technique developed by ethologists studying animal behavior (Dawkins, 2007). After reaching this point of saturation, we transcribe the behavior performed in each situation to a written chronological narrative.

CCTV-footage offers substantial advantages over other empirical sources, such as police case files, interviews with offenders, or observational studies, because the CCTV-footage lets us investigate the behavior of the third parties at a much higher granularity than these other empirical approaches. Using video recordings to analyze the interpersonal conflict situations allows us to pause, rewind, and replay the conflict situations as many times as needed (Lindegaard & Bernasco, 2018; Nassauer & Legewie, 2018). Had the study been based on in-field observations - previously used in the study of third-party behavior (e.g. Wells & Graham, 1999) – we would have based the analysis on watching the situation play out only once. Watching the videos multiple times yielded additional information for every single video in the empirical material. Sometimes we noticed additional intervention

behaviors overlooked at first, at other times we noticed additional individuals that did not catch our attention in the first viewing. Rewatching the conflict is especially relevant for the current study, since some intervention behaviors are gentle and do not draw much attention.

Since the videos do not have any sound, the analysis relies solely on the non-verbal actions of individuals. We do, however, include observations of individuals talking to or screaming at each other when this is visible on the footage. While verbal interactions thus are noted in the transcriptions when observed, the content of these conversations is not available for analysis.

As we proceeded, first observing and then transcribing the videos of the empirical material, various behavioral patterns emerged in the way third parties de-escalated conflicts. While watching the videos, we noted down the observed behaviors and intervention patterns of each video. While the patterns and behaviors seen in previous videos informed how later videos were seen, the analysis of new videos added new nuances and additional behaviors. This inductive coding approach is inspired by grounded theory (Charmaz & Belgrave, 2007).

After reviewing approximately two thirds of the material, we reached the saturation point where the addition of new videos did not lead to new insights about third-party behavior (Fusch & Ness, 2015). Reaching this saturation point indicate that the sample size was sufficiently large for the study. Irrespective of this, we analyzed the remaining videos of the sample to make sure this was the case. As we made it through all of the videos, we reviewed the transcriptions of the situations and the notes on intervention patterns made throughout the viewing process. Based on this review, we constructed an ideal-typical model of de-escalation. This model was constructed by looking for the typical behavioral sequence of the successful interventions. It is thus not a model that fits all situations in the material but rather a general pattern that appears to be the typical de-escalatory trajectory.

While the ambition of the study is to approach the videos inductively, it is important to note that everyone on the research team has extensive experience with the study of conflict through CCTV-footage. While attempting to approach the interactions with fresh eyes and describe what transpires throughout the situations, it would be naive to think that the knowledge from previous research does not influence and inform the current inquiry. While attempting to approach the material inductively we therefore acknowledge that a complete bracketing of our preconceptions is probably unattainable and the results should be read with this in mind (Tufford & Newman, 2012).

The second part of the analysis started after we had constructed the de-escalation model. In this part of the analysis, we went through the videos again to validate the model and to code the presence of the intervention behaviors in each video. While the first coding of the empirical material was inductive, the second coding used the insights from the first review to do a more deductive encoding of the material. This coding was done using a simple coding scheme devised based on the first part of the analysis, indicating the presence or absence of each of the behaviors identified in the first part of the coding and the order of appearance of these behaviors. In this study, we focus on interactions within the conflict and thus did not focus on situational factors. Throughout the analysis, we report descriptive statistics from the second part of the analysis of the empirical material.

## Results

### *The Three Phases of Third-Party Intervention*

Based on the analysis of 48 real-life fights, we identified an ideal-typical model of successful third-party de-escalation**.** Third parties were successful in deescalating the interpersonal conflict in 29 out of the 48 conflict situations. The ideal typical model describes how the third parties managed to de-escalate these 29 situations. This model consists of three consecutive phases presented in Figure 1. The second and the third phase of the model are contingent on the outcome of the previous phase(s). This means that if phase one is sufficient to de-escalate the conflict at hand, the second and third phase of the intervention are not performed. Should the first phase on the other hand prove insufficient, the third parties advance to the second phase of the model in order to de-escalate the conflict. Should the second phase likewise prove to be insufficient to de-escalate the conflict, then the third parties advance to the third phase. This contingency is indicated by the arrows of the model.

**Figure 1.** The Ideal-Typical Model of De-Escalation

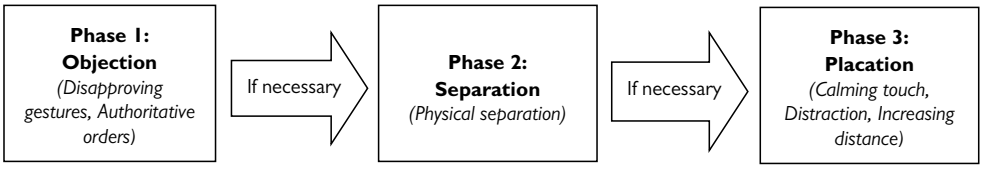


Figure 1 shows the three phases of the ideal-typical model of de-escalation. The characteristic behaviors of each of the phases are detailed between the parenthesis.

*Source: Author's own*

The contingency principle of the 3-phase ideal-typical model was adopted to accommodate the variation in what it takes to de-escalate a conflict in the empirical material. The intervention that de-escalates one situation will fail to make an impact in another. For example, in some situations third parties de-escalate a conflict by physically separating the antagonists (for an example of this, see video 118). In other situations, however, the physical separation of the antagonists does not suffice to de-escalate the conflict.

The intervention by Third party 1 depicted in video 55 is an example of this. This video shows a conflict that takes place at four in the morning in The Red Light District of Amsterdam between an older man (Antagonist 1) and a female sex worker standing in a doorway (Antagonist 2). A younger man (Third party 1) intervenes in the conflict as the conflict escalates to a physical fight. This video shows how Third party 1 tries to keep Antagonist 1 away from Antagonist 2 by blocking him and pulling and pushing him backwards. However, every time Third party 1 pulls Antagonist 1 away, he immediately starts to move closer to Antagonist 2 again. The efforts of Third party 1 thus fail to de-escalate the conflict and rather seem to postpone or pause it. Eventually, this Sisyphean task wears out Third party 1, who suddenly puts his hands in his pockets, turns around, and leaves. After Third party 1 has left, the conflict escalates to a severe physical fight where multiple individuals end up kicking Antagonist 1 as he is laying on the ground.

Similar behaviors by third parties, thus, do not always lead to similar outcomes. What constitutes a successful intervention in one conflict situation can fail to make an impact in another. In order to accommodate this variation in what de-escalates a conflict, the ideal-typical model is not a universal action-plan that can de-escalate all conflicts. Rather, it is a structure that details how third parties typically adapt their intervention as the antagonists react to their attempts to de-escalate the conflict.

Each of the three phases of the model in Figure 1 is characterized by behaviors performed by the third parties as they intervene in a conflict. In the figure, the characteristic behaviors of each phase are written between parentheses. These behaviors are the observable ways that the third parties engage in the different phases of the intervention - the ways that third parties “do” e.g. placation. In order to describe the different phases of the model in further detail, we will address each phase in turn and describe the corresponding characteristic behaviors.

*Phase 1: Objection*

The first phase of the ideal-typical model of de-escalation is objection. In this phase, the third parties show their disapproval of the conflict. This phase usually plays out before the conflict has escalated to a full-blown physical fight. While the antagonists are engaged in a verbal conflict, walking towards each other, or pushing each other a few times, the third parties try to discourage the antagonists from pursuing the conflict further. This is the most frequent of the three phases and is performed in more than eight out of every ten conflict situations in the empirical material (39 out of 48 situations). When this first phase is performed, it is almost always (32 out of 39 situations) the first intervention in the conflict situation. While the behaviors characteristic of the first phase vary in aggressiveness, they are all non-physical and thus rely on convincing the antagonists to change their behavior rather than physically forcing them. We have identified two intervention behaviors that are characteristic of the first phase of the intervention: *Disapproving gestures* and *authoritative orders*.

Disapproving gestures are behaviors where third parties use their body to object to the development of a conflict situation. Third parties perform disapproving gestures in three quarters of the conflict situations in the empirical material (36 out of 48 situations). The disapproving gestures take various forms: A third party holds a hand floating between the antagonists, lifts an arm with the palm of the hand directed towards one or both of the conflict parties, or holds a hand on the chest, shoulder, or stomach of one of the antagonists without physically restraining the person.

Video 60 depicts a conflict situation that is de-escalated using disapproving gestures. This video shows four young men standing and talking on a square in central Amsterdam just after 10 pm. The conflict is initiated by Antagonist 1 who tries to scare or shock Antagonist 2 multiple times by suddenly jumping forward towards him. Antagonist 2 appears to become scared and runs away from Antagonist 1 who continues to follow him around. After this has repeated a few times, Antagonist 2 becomes violent towards Antagonist 1:

*After a few seconds, Antagonist 1 suddenly leaps forward towards Antagonist 2 who responds by taking a big step backward. Antagonist 1 bends over laughing and high-fives Third party 1. Antagonist 1 walks over to antagonist 2, who now holds his ground. As Antagonist 1 gets close to him, Antagonist 2 suddenly leaps forward and hits Antagonist 1 in the head. Antagonist 1 stumbles a few steps backwards and Antagonist 2 jumps forward and kicks him on the legs. The two antagonists start walking away from each other but Antagonist 1 suddenly makes a u-turn and once again starts following Antagonist 2. Third party 2, who*

*is now standing between the two antagonists, sticks an arm out in front Antagonists 1 who in turn slows down. Third party 2 then walks over to Antagonist 2 and Antagonist 1 starts moving forward again. Third party 1 walks up to Antagonist 1 and puts a hand in front of him with the palm turned towards him. Antagonist 1 stops if front of the hand of Third party 1. They stand like this for a few seconds and then leave.* Video 60.

Video 60 shows that sometimes third parties simply have to show their disapproval of a conflict for it to de-escalate. As Third party 1 puts a hand between the two antagonists, he shows that he does not approve of the continuation of the conflict. Antagonist 1 almost immediately gives up on his endeavors, turns around, and leaves.

Authoritative orders is the second type intervention behavior that is characteristic of phase 1. This type of intervention behavior denotes a third party that acts as an authority and commands the antagonists to cease what they are doing. We have observed this intervention behavior in approximately one in ten of the conflict situations in the empirical material (5 out of 48 situations). The authoritative orders take various forms: pointing forcefully towards the antagonist, sending the antagonist away by pointing forcefully down the street, and third parties moving very close to the antagonist, their faces only a few centimeters apart. This type of intervention behavior appears dominating and threatening as the third party attempts to take control of the situation.

The intervention by Third party 1 in video 42 is an example of authoritative orders. This video depicts a conflict that takes place just after four in the afternoon on a big square in the center of Amsterdam. A group of three people with suitcases, including Antagonist 1, are standing on the square with trolley suitcases waiting for a taxi. The conflict arises when a scooter driver, Antagonist 2, appears to believe that Antagonist 1 has damaged his scooter. Antagonist 2 pokes Antagonist 1 hard on the chest, grabs onto his suitcase, and clenches his hands into fists and walks very close to Antagonist 1. Antagonist 1 remains passive throughout and tries to flee from Antagonist 2 by hiding behind suitcases and a flagpole. Eventually the taxi driver, Third party 1, crosses the street and intervenes in the conflict:

*Third party 1 gestures towards Antagonist 2 and puts an arm on his shoulder forcing his head towards his scooter. Third party 1 gestures forcefully with his left hand centimeters from the face of Antagonist 2 and then starts pointing towards his face. He proceeds to use his hand to imitate a mouth that keeps on talking a few centimeters from the face of Antagonist 2. Third party 1 then walks over to the three people with suitcases. Antagonist 2 steps on the scooter but continues to look in the direction of Third party 1 and the people with suitcases.*

*Third party 1 walks back over towards Antagonist 2 while gesturing quite wildly. Third party 1 turns around and walks back towards the three people with suitcases and then waves off Antagonist 2 with a big swooping movement of his right hand. Third party 1 grabs a suitcase and starts gesturing forcefully towards Antagonist 2 again and proceeds to walk up close to him so their faces are very close together. Third party 1 then turns and walks over to the taxi pulling one of the trolley suitcases behind him followed by the three people with suitcases. Antagonist 2 drives off.* Video 42.

This video shows Third party 1 intervening in a conflict by dominating Antagonist 2 and ordering him to drive off. Third party 1 appears dominating and threatening by using fast and wild gestures, walking very close to Antagonist 2, and mocking his objections by imitating a talking mouth with his hand. Antagonist 2 eventually accepts this claim of authority and leaves.

*Phase 2: Separation*

The second phase of the model of de-escalation is separation. In this phase, the third parties physically force the antagonists apart. We observe separation in the majority of conflicts depicted in the CCTV-footage (37 out of 48 situations). Separation is typically preceded by objection (phase 1 of the model), but in about a third of the analyzed conflict situations (16 out of 48 situations) the third parties skip the first phase of intervention and start by separating the antagonists.

While the interventions in phase 1 relied on persuading the antagonists to de-escalate, physical separation on the other hand does not need the acquiescence of the antagonists. Here, the third parties separate the conflicting parties through the use of their body and consequently bring the physical violence to a halt. Physical separation thus relies on third parties physically overpowering the antagonists and forcing them apart.

Physical separation takes various forms across the empirical material that all rely on some degree of physical coercion. Some third parties intervene by putting themselves in front of one or both of the antagonists and block their access to the other antagonist of the conflict. Other third parties pull or push one of the antagonists away from the opposing party. Some latch on to one of the antagonists and try to fixate this person in a specific location.

The intervention by Third party 1 in video number 118 is an example of a situation where a third party physically separates the conflict parties. This conflict takes place in the

center of Amsterdam just after 10 pm in the evening. A group of people, including Antagonist 1, stands outside a bar kicking a football up against a large wall with some bikes and a scooter parked in front of it. Antagonist 2 walks up to Antagonist 1, hits the ball out of his hands, and start arguing with him while gesturing towards the scooter multiple times:

*Third party 1, who was part of the group that kicked the ball up against the wall, walks over to the two antagonists and inserts his hand in between them. The two antagonists both take a step sideways away from Third party 1. Third party 1 takes a step forward and inserts his hand between the two antagonists again. The two antagonists continue to argue and to gesture towards the wall and the scooter next to the wall. Third party 1 places a hand on the shoulder of Antagonist 2 and pats him while pressing his other arm against the stomach of Antagonist 1 so he can't move forward. Third party 1 then grabs both shoulders of Antagonist 2 and puts himself in between the two antagonists. Antagonist 2 attempts to walk around Third party 1, but Third party 1 holds on to his shoulders and manages to keep him in place. Antagonist 2 takes a step backwards and Third party 1 lets go of him. Antagonist 1 turns around and starts walking towards the entrance of the bar.* Video 118.

The conflict depicted in video 118 shows how Third party 1 first intervenes in the conflict by inserting his arm in between the two antagonists of the situation (a disapproving gesture). Unlike the situation depicted in video 60, the antagonists do not appear to change their behavior because of this intervention. Rather, the antagonists disregard the intervention by stepping aside and continue to engage in the conflict. The objection by Third party 1 thus appears to be insufficient to de-escalate the conflict. The physical separation of the antagonists, on the other hand, makes the antagonists step away from each other. The conflict later reignites when Antagonist 1 walks up to Antagonist 2 again, but Third party 1 separates the antagonists again by pulling Antagonist 1 away from Antagonist 2.

The model of de-escalation details that third parties typically start with objection when they intervene in an interpersonal conflict. But this is not always the case. In a third of the conflict situations of the material, the third parties skip the first phase of intervention and start with the second phase. In these situations, something makes the third parties physically separate the antagonists immediately (phase 2), rather than starting by objecting to the conflict (phase 1). We see that third parties sometimes skip the first phase of intervention in situations where they only intervene after the conflict has escalated to a full-blown fight. Some interpersonal conflict situations escalate quickly and in other situations the third parties only arrive after the conflict has already escalated. The conflict depicted in video 129 is an example of a situation where the third parties arrive to the scene of the conflict after it has escalated to a fight. This

conflict takes place at 9:45 p.m. Two men (Antagonist 1 and 2) have parked their cars in the middle of the road and started to fight between the two cars. As the third parties arrive at the scene, Antagonist 2 is laying on the ground and the two antagonists are wrestling with each other. The third parties are thus met with an emergency situation that requires them to take immediate physical action and thus skip the first phase of the model of de-escalation.

*Phase 3: Placation*

The third and last phase of the model of de-escalation is placation. In this phase, the third parties attempt to calm the separated antagonists down. We observed the third phase in half of the conflict situations depicted in the CCTV-footage (24 out of 48 situations). Placation typically takes place when neither the first nor second phase of intervention has stopped the conflict. While physical separation can force antagonists apart, and thus effectively stop the violence, it does not necessarily end the conflict. Sometimes the antagonists remain agitated after they have been separated. In these situations, the separation becomes a continuous effort, where the antagonists struggle to continue the fight (for an example of this, see description of video 55). In order to end not just the violence but also the conflict, the third parties must placate the separated antagonists. In the empirical material we have observed three intervention behaviors characteristic of the third phase: *calming touch*, *distraction*, and *increasing distance*.

Calming touch placates an antagonist through gentle physical touching. Third parties perform calming touch in 7 out of 48 situations in the empirical material. When successful, this type of intervention influences the development of the conflict by calming the emotions of the antagonist down and thus de-escalating the conflict. Calming touch takes various forms that all consist of gentle physical contact between a third party and an antagonist. In the empirical material, we have observed a number of variations of calming touch, such as when third parties caress, stroke or pat the arm, face, shoulder, or back or gently hugs an antagonist. Video 2 shows how Third party 1 and 3 use calming touch to placate Antagonist 1. This situation takes place outside a shopping mall in the outskirts of Amsterdam half past five in the afternoon. The calming touch happens after the third parties have separated the antagonists:

*Third party 3 walks up and starts holding on to Antagonist 1 and moving him towards a bench. Third party 1 starts gently stroking the shoulder and cheek of Antagonist 1 with his hand and then goes back to the store where he works. Third party 3 pushes Antagonist 1 over to a bench where Third party 2 pushes him on the shoulder so he sits down. Third party 3 starts patting the shoulder of Antagonist 1 and after a while he turns around and leaves.* Video 2.

The conflict situation depicted on Video 2 shows how third parties use calming touch to placate the antagonists after they have separated them. This appears to calm down Antagonist 1 who stops attempting to get closer to Antagonist 2. When Third party 3 leaves, Antagonist 1 appears calm and does not try to re-engage in the conflict.

Distraction is the second type of intervention behavior that is characteristic of the third phase. Third parties try to distract the antagonists in 2 out of the 48 conflict situations in the empirical material. We observed two different variations of distraction in the empirical material: a third party offering a cigarette to an antagonist or a third party pointing towards something in the environment for the antagonist to look at. These interventions can appear odd in the situation because they do not react directly to the conflict or violence, but rather propose an alternative line of action. The intervention by Third party 1 in video 56 shows an example of distraction. This situation takes place a quarter past seven in the evening on a square in the center of Amsterdam. Two men (Third party 2 and 3) are restraining a man (Antagonist 1) who continues to be agitated and tries to free himself. A fourth man (Third party 1) walks over to the group and puts a hand on the shoulder of Antagonist 1. Third party 1 then offers Antagonist 1 a cigarette, while Antagonist 1 is physically restrained by Third party 3 and 4. It can seem like an odd time for Third party 1 to suggest Antagonist 1 to smoke since he appears to be agitated and preoccupied. The cigarette appears to be used by Third party 1 to offer a calmer alternative activity in place of the conflict. In this situation, Antagonist 1 rejects the alternative calmer line of action suggested by Third party 1 by repeatedly turning his head away and refusing the cigarette.

Increasing distance is the third and last behavior characteristic of the third phase. This behavior aims to physically separate the antagonists further from each other than what is necessary to terminate the violence (which would otherwise be phase 2). In some cases, third parties force the antagonists 20 or 30 meters down a street in order to calm them down. Third parties increase the distance between the antagonists in 17 out of the 48 conflict situations in the empirical material. The intervention by Third party 2 in video 114 shows how third parties use large increases in distance to calm down Antagonist 2. The video takes place just before two in the morning on a pedestrian street in the center of Amsterdam. A group of five men are standing on the street and one of them (Antagonist 1) is kneeling down and tying his shoelace. Another group of three men walk down the street and one of them (antagonist 2) bumps into Antagonist 1 who falls over:

*Antagonist 1 gets up and looks after Antagonist 2, who turns around and starts walking back towards Antagonist 1. Third party 1, a man who was walking down the street, walks towards*

*Antagonist 2 with a hand lifted towards him and starts talking to him. Third party 2, a man who was walking down the street next to Antagonist 2, grabs onto Antagonist 2 and starts pushing him down the street away from Antagonist 1. After walking approximately ten meters down the street Antagonist 2 stops and turns around towards Antagonist 1, but Third party 2 immediately grabs him by the shoulder and pushes him further down the street.* Video 114.

The situation depicted in video 114 shows how Third party 2 uses physical distance not just to separate the antagonists but also to calm down Antagonist 2. When Antagonist 2 turns around after ten meters there is plenty of distance between the two antagonists to avoid any physical violence between them, but Third party 2 immediately pushes Antagonist 2 further down the street to increase the distance even more. This approach works and Antagonist 2 stops engaging the conflict and starts a calm conversation with his friends. It appears that in some conflicts the closer the antagonists are to each other the stronger the pull of the conflict is. Third party 2 exploits this quality to placate Antagonist 2 when he increases the distance between the antagonists much further than what would be necessary in order to prevent physical violence.

## Discussion

This paper set out to investigate what intervention behaviors third parties perform and what strategies they use to successfully de-escalate interpersonal conflicts. To examine this, we used CCTV-recordings of real-life street fights from the streets of Amsterdam. Through a qualitative analysis of the CCTV-footage, we detailed an ideal-typical model of de-escalation consisting of three phases: Objection, separation, and placation. The third parties start with objection and advance to separation and finally placation if the prior phase does not de-escalate the conflict. This contingency of the third-party intervention speaks to a interactional understanding of conflicts, where the behaviors of the third parties are reactions to, and conditional on, the behavior of the antagonists (R. B. Felson & Tedeschi, 1993). The analysis, thus, does not point towards a single solution that works across all conflicts, but rather describes how third parties adapt their intervention to the behavior of the antagonists.

While the model of de-escalation presented in Figure 1 looks like a clear progression through the three steps it is often more messy. The separation and placation of the antagonists sometimes collapses as the antagonists suddenly reignite the conflict or reengage in physical fighting (for examples of this see the descriptions of video 55, 60, and 118). When a conflict relapses into violence, the third parties must restart their efforts in order to de-escalate the

conflict. The intervention in a fight thus often takes repeated attempts and perseverance in the face of the opposition of the antagonists.

The first phase of the model of de-escalation is objection. In the analysis, we saw how some third parties de-escalate a fight simply by disapproving gestures. Showing disapproval of the conflict development has previously been documented in empirical studies on intervention in both interpersonal conflicts and sexual assault (Bloch et al., 2018; McMahon & Banyard, 2012)

The influence of disapproving gestures by third parties on the development of an interpersonal conflict can be explained by the theory on impression management. Following this theory, the antagonists of an interpersonal conflict are engaged in a character contest, struggling to save face and come out of the conflict on top (R. B. Felson, 1978; Luckenbill, 1977). Since the antagonists are competing to obtain a favorable situational role in the eye of the people present, the third parties can use their position as an audience communicate to the competing antagonists how they can achieve the most favorable situational identity (R. B. Felson, 1982). In the analysis, we saw how third parties use various disapproving gestures to express this dissatisfaction in the conflict situations. We also saw that while this expression of dissatisfaction sometimes de-escalates a conflict, at other times the antagonists appear to ignore or disregard the disapproval of the third parties.

The second way third parties objected to the interpersonal conflict was through authoritative orders. This type of intervention resembles the repressive peacemaker described in the typology of Black and Baumgartner (1983), which is the most forceful of the settlement roles in the typology. This third-party role is here described as treating the antagonists of the conflict like children and de-escalating the conflict by claiming the authority of a parent.

While relatively rare in the current study, previous literature details how authoritative orders is the most frequent intervention behavior by police officers without special conflict training (Bard & Zacker, 1976). This difference might relate to the unique position that the police holds in society, which gives them claim to authority in interpersonal conflicts. The third parties in this study, on the other hand, have to find a way to establish authority in the situation. In the analysis, we saw that the third parties claim this authority by acting dominating and aggressive. This claim to authority resembles Elijah Anderson's description of how urban youth cope with inner city violence by showing preparedness for violence (1999). This preparedness for violence means that third parties might become antagonists themselves when antagonist(s) dismiss the authoritative command to de-escalate.

When the behavior of the first phase of the model of de-escalation fails to convince the antagonists to stop fighting, the third parties proceed to the second phase: Separation. This advancement from the first to the second phase of the model is a trade-off. It offers immediate effect but requires stepping in the middle of a violent and potentially dangerous situation. This physical, and often forceful, separation is no easy feat and requires that the third parties apply more physical power in breaking up the conflict than the antagonists use to continue it. Physical separation of the antagonists is the hallmark of intervention and is part of every empirical study investigating third-party intervention in some form or another. Physical separation is typically included in behavioral categorizations such as direct intervention (McMahon et al., 2013), physical intervention (Bloch et al., 2018), mediator (Black & Baumgartner, 1983), and providing helping behavior (Philpot, Liebst, Levine, et al., 2019).

In some situations, the third parties skip the first phase of the model of de-escalation and immediately start by separating the antagonists. In the analysis, we argued that this happens in cases where the situation escalates quickly, or where the third parties arrived when the conflict had already escalated. While previous research has argued that the severity of the conflict influences the behavior of third parties (Fischer et al., 2011), the current study finds that the way the situation escalates also matters for how third parties intervene. It is thus not only the severity or dangerousness of the situation that matter, but also how (fast) the conflict escalates that shapes the behavior of third parties.

The third phase of the model of de-escalation is placation. The different behaviors characteristic of this phase shows the numerous pathways third parties use to calm down the agitated antagonists. First, calming touch addresses the emotions of the antagonists and tries to calm these emotions by gently touching and stroking their bodies. The influence of this type of intervention can be explained with the theory of incompatible responses. This theory proposes that certain stimuli can engender affective states that are incompatible with aggressive behavior (Baron, 1984). By calmly and gently stroking and touching the antagonists, the third parties might elicit positive emotions in the antagonists. These positive affective states, such as feeling relaxed, that are incompatible with anger and aggression and will thus placate the antagonists (Krahé et al., 2018). This physical intimacy, sometimes between people who appear to be strangers, contrasts the usual rules of conduct in public places detailed by Goffman (2009). It appears that in conflict situations individuals touch and pat each other, even when they have just met. This finding is similar to what previous research has observed in the aftermath of conflicts (Bloch et al., 2018; Lindegaard et al., 2017).

Second, the distraction behaviors do not address the conflict directly, but rather suggests alternative lines of action for the antagonists. This type of intervention is widely described in literature on sexual assault. McMahon and colleagues found that distraction accounts for more than 70 % of the indirect interventions, which again is the most frequent type of intervention during sexual assault (McMahon et al., 2013). Distraction is also an integrated part of preventive programs targeting sexual assault and domestic violence, such as The Green Dot (Coker et al., 2015).

While widely described in the literature on sexual assault, distraction was the least prevalent of all the observed intervention behaviors in the analysis. This difference in prevalence of distraction between the current study and the literature on sexual assault can be a result of multiple things. First, it can be a consequence of the methodological differences between the direct observation of the current study and the self-reported measures typically used in research on intervention in situations of sexual assault. This difference could thus be a consequence of the discrepancy between what we say we will do and what we actually do (Jerolmack & Khan, 2014). Second, it could also be a consequence of the different contexts. It might be easier to intervene in sexual assault situations by distraction, while intervention in interpersonal conflicts, on the other hand might require more direct intervention to get the attention of the antagonists. Lastly, this difference could also be a consequence of the lack of sound available in the current study. If distraction behaviors are expressed through speech acts, the methodological approach of the current study could miss when distraction happens.

Third and last, increasing distance exploits that some conflicts decrease in intensity as the physical distance between the antagonists increases. The third parties can thus placate the antagonists by increasing the distance between them and thereby reduce the "pull" of the conflict. This decrease in the intensity might be a result of a reduction in the perceptual salience of the antagonists – they are moved out of sight or out of earshot of each other - which complicates further communication between them. The necessity of physical proximity for interactions has been addressed more generally by Randall Collins in his work on Interaction Ritual Chains (2014). According to this theory, a successful interaction ritual requires the physical co-presence of the involved parties. By increasing the physical distance, the third parties are thus breaking the interaction ritual of the fight by removing one of its necessary components.

## *Limitations and future directions*

The current study is based on an explorative analysis of the CCTV-footage. This approach was taken because this is a new research area where there is little existing research to inform a deductive study. The explorative approach means that the findings of the study are tentative and in need of replication. The study is thus a first step towards understanding the dynamics of conflict de-escalation in interpersonal conflicts. Future research is also needed to investigate how the findings of this study generalize across cultures and settings. The video footage of the current analysis only depicts conflicts in a Dutch, urban context. It will take further research to investigate how well the findings of the current study generalize across other contexts.

Another shortcoming of the current study is the lack of sound. While the video footage used for the analysis offers insights into the second-by-second behavior performed in conflicts, it offers no information about the content of the verbal exchanges in the conflict situations. This lack of sound means that there might be aspects of the different phases of intervention that we have missed – it could e.g. be that objection is sometimes only communicated verbally. However, As argued by researchers of human behavior, verbal utterances often have behavioral functional equivalents (Eibl-Eibesfeldt, 2017). Humans are thus oftentimes expressing the same with their body as they express verbally. While we expect the addition of sound will add nuance and maybe even types of intervention behavior, we do not expect the addition of sound will invalidate the findings of the analysis.

A third shortcoming of the current study is that it focuses on a specific kind of successful intervention. While the current paper looks at how third parties manage to de-escalate a conflict, there are other ways that an intervention can influence a conflict. It might be that the intervention does not de-escalate the conflict completely, but reduces the violence compared to a comparable situation where this intervention does not happen. An investigation of this would require a quantitative comparison of the trajectories of similar conflict situations.

A fourth shortcoming of the study is that there might be biases in the collection of the videos. In the collection of the empirical material, we relayed on the camera operators for noting down when an interpersonal conflict took place in front of a camera. We instructed the operators for behavioral cues to watch out for and revisited them multiple times throughout the data collection to discuss which situations to include in the material. Although we have no reason to suspect that the operators have had difficulty adhering to our instructions, we have

no way of assessing if their judgements may have been biased and prioritized certain types of conflicts and/or specific demographic groups.

Future research might look into how demographic sub-groups of third parties intervene. It could e.g. be that male and female third parties prefer different intervention behaviors, similarly to what previous research has found in the aftermath of conflicts (Lindegaard et al., 2017). A second direction for future research could be to investigate if situational factors often connected with the frequency of third-party intervention such as the number of people present, the gender of the antagonists, or the time of day produce variations of the model of de-escalation. Another avenue for future research is to test aspects of the model of de-escalation statistically. It could test which situations require that the third parties advance to the second and third phase of the intervention model and whether third parties are statistically more likely to skip the first phase of intervention in situations that escalate quickly.

## *Prevention implications*

The current study finds that different conflicts require different levels of engagement of the third parties. Sometimes third parties will have to get physically involved to stop a fight, at other times, however, this is not necessary. Bystander training programs might benefit from informing participants that sometimes it takes less to stop a conflict than they might expect. There are interventions that third parties can perform that fall between physically forcing the antagonists apart and doing nothing. It is thus possible to engage in phase one of the model of de-escalation and express objection even if progression to phase two might be too much to handle. This recommendation resonates with recommendations from the literature of intervention in situations of sexual assault. Here, researchers argue that it is important that students are not caught in all-or-nothing thinking about intervention (McMahon et al., 2013). This is especially important since doing nothing might be taken as acceptance of the conflict, which previous research has found to increase the severity (R. B. Felson, 1978).

## *Research implications*

Research on the effect of third-party behavior typically measures intervention as a dichotomy of e.g. the presence or absence of intervention in a conflict. The findings of the current study show that this approach overlooks essential aspects of what it takes for intervening third parties to de-escalate a conflict. It matters *what* third parties do. Through the contingency-principle we found that to de-escalate conflicts third parties must be willing to adapt their behavior to overcome the resistance of the antagonists of the conflict. The difference between

escalation and de-escalation sometimes lies in the type of intervention behavior. Future research interested in understanding when third parties manage to de-escalate conflict should therefore move beyond measuring the presence of intervention in a conflict and start paying attention to how third parties intervene.

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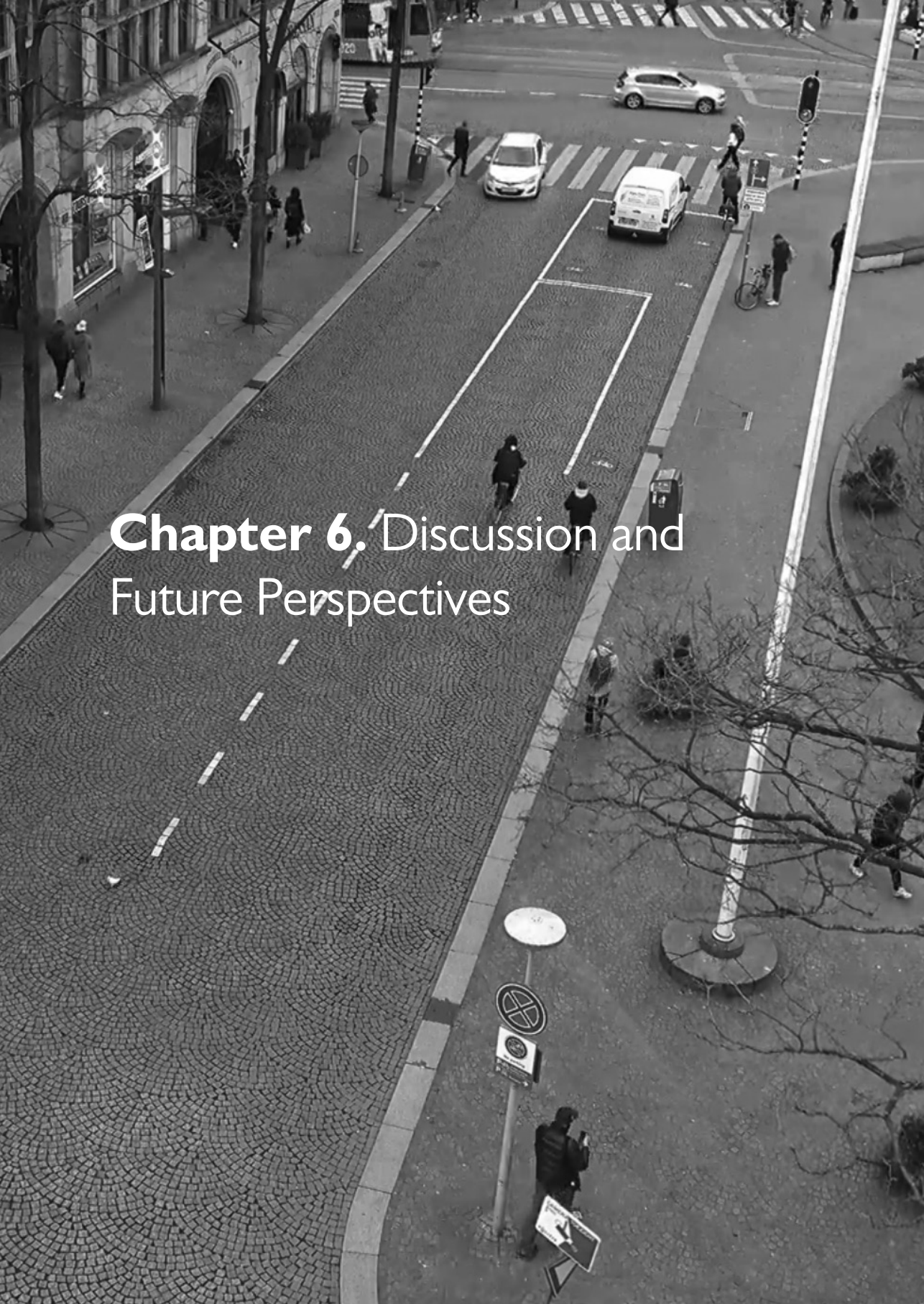

# **Chapter 6.** Discussion and Future Perspectives

In this research project I set out to investigate the role that third parties play in real-life interpersonal conflicts. Based on an interactional conception of interpersonal conflicts, I argued that the influence between third parties and conflict developments is bi-directional. This means that a third party can influence the way a conflict develops but that the conflict development also can influence the way the third parties behave. This double influence espouses a conundrum for the researchers who wish to study third parties. Disentangling these two influences is no easy task and mostly out of reach using traditional empirical approaches. Through an analysis of video footage of real-life interpersonal conflicts, I conducted four investigations of this bi-directional influence. Two studies investigated how third parties are influenced by the conflict developments (chapter 2 and 3) and two studies investigated how third parties influence the conflict development (chapter 4 and 5). The overall finding of these four investigations is that the bi-directional influence between the intervention by third parties and the development of the situation seems to conform to the interactionist conception of interdependence. The behavior of third parties and the conflict development are thus influencing each other continuously throughout the conflict situation.

Back in Amsterdam East and the conflict in front of the grocery store between Mike – who wanted to go shopping - and Jonas - the security guard – that we encountered in Chapter 1. We left the scene when Ruben, a third party, had just pushed Jonas forcefully away from Mike as a reaction to the two antagonists re-escalating the conflict. While this intervention separates the two antagonists of the conflict, this is not the end of the conflict situation. After Ruben has pushed Jonas away from Mike, two new third parties join the situation. These two individuals came running down the street towards the conflict a few seconds earlier, probably because they had seen the conflict from a distance. They could be called Lucas and Michelle. One of these newcomers, Lucas, walks directly over to Mike and pushes him backwards with a single-arm push and then turns around and starts focusing on Jonas. Mike seems unfazed by the push and immediately starts walking forward towards Jonas again. This makes Michelle, the other newcomer to the conflict, throw a drink she held in her hand at Mike and gesture forcefully towards him with her hand in a repeated back and forward motion.

More people join the efforts of Lucas and Michelle, and there are now five people actively intervening in the conflict between Mike and Jonas. While the two antagonists continue to try to get closer to each other, the third parties are trying to keep them apart. Lucas, Ruben, and Simon push Jonas the security guard backwards towards the entrance of the shop, while Drew and Michelle try to keep Mike abate on the street and sidewalk. This separation of the antagonists is, however, short-lived. Mike suddenly forces his way past

Michelle and Drew and pushes Jonas the security guard with his hand. This makes Lucas stop focusing on Jonas and starts pushing Mike backwards.

The two chapters investigating how third-party behavior is influenced by situational developments (Chapter 2 and 3) find that the target selection and the aggressiveness of the intervention behavior are both influenced by developments within the situation. The third parties oftentimes have to decide between two active conflict parties when they intervene in an interpersonal conflict. In the conflict outside the grocery store, Lucas and Michelle have to decide which of the antagonists to intervene towards when they arrive at the situation. In chapter 2, I showed that this decision is influenced by the development of the situation. Following this argument, part of the explanation for who Lucas and Michelle intervene towards is explained by the preceding behaviors within the situation. Third parties are most likely to target the most aggressive antagonist at the time when they intervene and they are less likely to intervene towards an antagonist that is already targeted by another third party. An example of this is how Mike's push of Jonas make Lucas change his mind and intervene towards Mike rather than Jonas. It is as if the aggressive act by Mike persuades Lucas to change his strategy of intervention. Furthermore, the decision of Michelle and Lucas to intervene towards an antagonist each, is informed not only by the behaviors of the antagonists, but also a division of labor between the two third parties. In this instance, this influence manifests itself through Lucas and Michelle targeting an antagonist each and thus cooperating in containing both antagonists at the same time.

Back in front of the grocery store in Amsterdam east. Eventually, Claire, who works in the grocery store, and Ruben manage to lead Jonas the security guard back into the grocery store. Meanwhile, Lucas wraps his arms around Mike and walks him to his scooter assisted by Drew and Michelle. After this, Lucas and Michelle walk towards the entrance of the grocery store. Jonas then starts gesturing towards Mike through a window in the grocery store by punching his fist into the palm of his other hand. This makes Mike start walking towards the entrance of the store, and Michelle, who is standing half-way between the scooter and the shop, walks towards him while shaking her right hand back and forth in a forceful manner with the index finger pointing out as if she is scolding him. Lucas, who was standing in the entrance of the grocery store, turns around and starts running towards Mike, closely followed by Jonas. When he gets close to Mike, Lucas tries to hit him from behind Michelle (but misses). Immediately afterwards Jonas the security guard runs around Lucas and Michelle and hits Mike in the head.

In chapter 3 I found that the aggressiveness of the third parties mirrors the aggressiveness of the antagonists. The more aggressive the antagonists become, the more it increases the risk that the third parties also become more aggressive in their intervention behaviors. In the conflict outside the grocery store, we see this throughout as when Ruben went from gesturing to shoving Jonas a few seconds later and in the development detailed above where Lucas becomes violent. When Mike tries to move towards Jonas while gesturing, Lucas reacts by trying to hit him in the head. The development of the conflict situation thus influences both who third parties intervene towards and how aggressive the intervention behavior is.

This mirroring in the aggressiveness of the intervention of third parties underlines the duality of third parties. On the one hand, third parties can de-escalate conflicts. On the other hand, they can also end up joining the conflict as partisans to one of the parties of the conflict (Black & Baumgartner, 1983). Following the interactional model, the difference between when third parties become one or the other depends - to some extent - on the way the conflict situation develops. Rather than a world that consists of guardians, perpetrators, and victims, such as proposed by the routine activity theory (Cohen & Felson, 1979), the parts we play in conflict situations thus emerge as a reaction to the development of a specific conflict.

Back in front of the grocery store in Amsterdam east. After Jonas has hit Mike, the two antagonists both seem eager to continue the conflict. While the two antagonists thus continue to try to get closer to one another, Ruben stands in between them with his arms stretched up, one towards each of them. Lucas, who recently joined the conflict situation, runs over and attempts to hit Mike in the head from behind (but misses once again). This makes Mike chase Lucas for a few seconds. Mike and Jonas, however, quickly return to their disagreement and start gesturing aggressively towards each other, still kept apart by Ruben, who is now holding on to Mike and stopping him from moving forward. After a while, Drew starts leading Mike away from the square, while Ruben leads Jonas towards the entrance of the grocery store. Mike sits down on a concrete pillar next to the road, while Jonas is escorted to the grocery store. Jonas continues to gesture forcefully towards Mike for a few seconds from the store entrance, but then goes into the store. Inside the store Lucas hugs him and fist bumps him before leaving the scene with Michelle.

In the two studies investigating the influence of third parties on the situational development (chapter 4 and 5), I ask if and how third parties influence the development of interpersonal conflict situations. In chapter 5 I found that successful intervention of third parties develops in response to the effect of the previous intervention behavior. We see this throughout the conflict that takes place outside the grocery store in Amsterdam East. When

the antagonists are at a distance to each other, Ruben for example gestures for the antagonists to stay back and calm down. When this objection is ignored, the third parties react by physically intervening and trying to separate the conflict parties in some way. Since the antagonists remain agitated after they have been separated, the third parties try to calm them down in various ways. The third parties in Amsterdam East try to increase the distance between the antagonists, which is seen by the repeated attempts to lead Jonas back into the grocery store and to lead Mike back to his scooter. Lucas also tries to calm down Jonas by gently touching him when he hugs him. This conditional development of the intervention behavior exemplifies how the successful intervention behavior is not fixed or predetermined but rather in constant response to the antagonist reactions. The conflict situation also shows that despite the efforts of the third parties, the conflict re-escalates multiple times requiring the third parties to re-separate the antagonists.

Chapter 4 showed that third-party intervention increases the chance that antagonists stop from engaging further in conflict behavior. When divided in specific subtypes of intervention behaviors, this analysis showed that in order to stop an ongoing conflict, the physically forceful intervention was the only type of intervention behavior that showed a measurable influence on the antagonist behavior. We see an example of this in the conflict outside the grocery store where the physical separation performed by Ruben breaks the continuation of conflict behaviors by the antagonists. The investigation of the influence of the third parties on the conflict development shows that third parties are an integral part of how conflict situations develop and that this position is owed to their courage, perseverance, and ingenuity. It is thus not a one-size-fits-all approach used by the third parties that manages to de-escalate conflicts, but rather a flexible approach that is adjusted to the development of the conflict situation. One could say, that the third parties successfully manage to de-escalate conflicts because they are interactionists. By this I mean that it is through the responsive nature of how third parties intervene that they succeed in de-escalating some conflict situations. The third parties to the conflict outside the grocery store finally manage to de-escalate the conflict after repeated separations of the antagonists and the persistent efforts of a number of third parties attempting to de-escalate the situation.

The four chapters of the research project thus speak in favor of a conceptualization of a mutual influence between the situational developments of a conflict and the behavior of third parties. The findings of the research project point towards a limitation of the previous research that is based on a theoretical model of uni-directional influence between third-party intervention and conflict development. An example of this is Felson and colleagues who assume that "*third parties influence the offender and victim and not the reverse*" (1984, p. 457

It is necessary to consider what the findings from the current research project means for our understanding of what these studies can actually show. When an empirical investigation for example finds that there are more third parties intervening in severe conflicts than non-severe conflicts (as found by Felson (1982)) or the finding that certain patterns conciliatory intervention is over-represented in situations that do not escalate to violence (as found by Levine and colleagues (2011)), what does this tell us? Following the reasoning in this research project, it does not allow us to deduce anything about the effect of third-party intervention because the behavior of the third parties could be both the cause and effect of the severity of the conflict.

A consequence of the findings of this research project is thus that explanations of the role of third parties in conflicts should remain on the same level as the measured variables. A study measuring variables on a situational level will allow us to describe different types of situations, but not allow us to say anything about how the interventions of third parties shape the conflict development. Since the situational developments and the third-party behavior influences each other, measurements on a situational level will leave us guessing about the isolated effect of each. In order to investigate not the different types of situations, but the influence of third parties within a conflict we need to measure and analyze the conflict situations in a way that allows us to discern the steps of the situation. This level of measurement allows us to investigate not just the type of conflicts, but also if the intervention of third parties constitute turning points in the way conflicts develop.

The investigations of the current research project thus converge with an interactionist explanation of behavior within conflict situations. However, while the empirical studies thus find that the behavior of third parties is shaped by conflicts as they develop, it is important to emphasize that while the interactionist credo resonates with the findings of this project, this is by no means a dismissal of the influence of other more stable factors. As quoted in the introduction, interpersonal conflicts "(…) *are not predetermined by either the characteristics or the initial goals of the participants; rather, they are at least partly a function of events that occur during the incident*" (Felson & Steadman, 1983, pp. 59–60). While this quote on the one hand serves as an argument for the influence of behaviors within the situation on the outcome of interpersonal conflicts, it also states that part of the explanation is probably not to be found within the situational development. While part of the development of situations thus can be explained by the development of conflict situations it is important to note that the research project also finds consistency and stability in the ways third parties act. Conflict situations are thus not completely volatile, determined by situational whims, and subject to constant abrupt changes. Both the target selection and the aggressiveness of third-party behavior are influenced by the previous behavior by the same individual, meaning that everything else

being equal third parties are more likely to continue doing what they have already done. This means that while the use of situational fixed roles for third parties might not encompass all variation in third-party behavior, there does seem to be different baselines or types of third parties. While these can be disrupted or convinced to change their approach, the conceptualization of third parties as a number of types or roles, as developed in most detail by Black and Baumgartner (1983), could be integrated into an interactionist conception of conflicts by seeing the different types of third parties as states that third parties can pass through rather than fixed situational roles.

The current research project thus finds that conflict situations are driven by two seemingly opposing forces at once: consistency and adaptation. Based on this insight, I conceive that third parties continue to act the way they have done until an external force convinces them to adapt their behavior in some way. This can both be due to a situation escalating through the (continued) performance of violence by an antagonist, as argued in chapter 2, or the lack of compliance to an intervention, as argued in chapter 5. This means that both the presence of unwanted change or the absence of wanted change can engender this change in third-party behavior. The external force that can alter third-party behavior is thus conflict development that diverts from the anticipated or sought trajectory by the third party. This complicates things, because we do not have direct access to the wanted or expected trajectories of conflicts. These are, however, somewhat discernable from the intervention behaviors. When a third party intervenes and tries to hold an antagonist back, this behavior proposes a direction of action. It is the conformity of antagonist behaviors to these proposed lines of action (or the lack thereof) that acts as an external force to the third-party behavior.

In order to understand how third parties act we thus have to factor in both consistency and adaptation. There appears to be a certain inertia or path-dependency in how they intervene, but the development of the situation can then convince them to change this approach. An example of this can be seen in the conflict outside the grocery store in Amsterdam east when Lucas changes focus of his intervention as Mike pushes Jonas. The aim of interactionist studies of third-party behavior is then both to understand what "behavioral arguments" that can convince the third parties to change their behavior and similarly - but seen from the other side - what behavioral arguments the third parties can perform to convince the antagonists to change their behavior. This conceptualization of behavior converges with the ambitions of conversation analysis to studying specific turning points in streams of continuous behavior (e.g. Deppermann & Pekarek Doehler, 2021). A major difference between the current research and conversation analysis is, however, that the current study uses behavior rather than spoken language as the empirical starting point. Based on the research we thus end up

with a conception of third-party behavior as the outcome of the preceding behavior by the individual third party but disrupted or in conversation with how the situation has developed at large. Similarly, the conflict development is influenced by the preceding behavior between the antagonists and the intervention by the third parties.

While this research project finds that the behavior of third parties is influenced by the situational development, there thus also appears to be a consistency in the way the individual third parties intervene. This consistency at a certain level of aggression or with certain behavioral preferences cannot be explained with the development of the conflict situation, but is the result of more stable factors influencing the behavior of the third parties. This could be because third parties are influenced by fixed aspects of the situation such as the social relationships (Liebst, Philpot, Heinskou, et al., 2019; Phillips & Cooney, 2005), the gender composition of the conflict (Eagly & Crowley, 1986), or whether the violence is one-sided or not (Wells & Graham, 1999). It could also be that this consistency is due to personality types or previous experiences of the third parties. Some third parties might have a history of aggression and more willingly escalate their behavior to be aggressive, while others might be less inclined towards violence or even disengage if the situation escalates too much. While the current project has not focused on documenting the origin of this consistency, it seems probable that it, like most things in the social sciences, has not one but multiple sources and thus is an amalgam of influences both internal and external to the specific situation.

As detailed in the introduction, one of the most investigated aspects of third-party behavior is how the presence of passive third parties influences the individual likelihood of also remaining a passive bystander (for a review of the literature, see Fischer et al., 2011). In the current research project, the number of passive third parties present in the situation are not considered in any of the empirical studies. This can seem like a central aspect of the conflict situations has been neglected, but it is important to keep in mind that the studies carried out as part of the current research are not investigating when third parties remain passive, but rather what happens in situations where they do take action. There is, to my knowledge, no evidence that the number of passive third parties present in the situation influences the types of behaviors embarked on by third parties. Furthermore, previous research find no connection between the number of people present and the effect of the third-party intervention on the conflict severity (Phillips & Cooney, 2005). It is also worth noticing that the number of third parties present is controlled away as a situational aspect in the empirical investigations of the current project: The number of people present in the situation usually does not vary much across the conflict situations and the systematic empirical investigations all correct for confounding stable situational influences.

While the presence of passive third parties, thus, has received much attention in the study of passivity, it is absent in the current research project since it studies active rather than passive third parties. However, while the current study does not investigate passivity, it is not blind to the influence between the third parties that do take action. While the studies on passivity thus argue that other passive third parties increase the likelihood that the individual remains passive too, the active third parties influence each other as well. We thus see an active variant of the bystander theory, showing that the active third parties of the conflict situations influence each other. One aspect of this was investigated in the study of target selection of third parties in chapter 1. In this investigation, I argued that there is a division of labor between third parties intervening at the same time, similar to what we saw by Lucas and Michelle in the conflict situation in front of the grocery store in Amsterdam East. Here, we thus saw how the intervention of one third party influences the target-selection of another intervening third party.

## Video Footage

In addition to the substantial findings of the empirical investigations, the current research project is also an example of how video footage allows us to investigate sequential aspects of social interaction. The empirical analyses of this research project thus serve as examples of the different ways video footage allows researchers to investigate the development of interpersonal conflicts on a second-by-second level. The chapters approach this in different ways, but they all take advantage of the fact that the video footage documents the conflict situations in very high resolution. This high resolution allowed me to look at the developments of situations over time and see how the individual behaviors feed into the stream of behaviors.

While most previous research has had the conflict situations or individuals in the conflict situations as the level of measurement, the current research project measures and analyzes conflict on a behavioral level. Deconstruction of the conflict situations so that the situation and individuals in it are not seen as constant or consistent per definition, but rather as something that develops has to my knowledge not been done before (note, however, Levine and colleagues (2011) who also used video footage to record individual intervention behaviors but use these to investigate a situational outcome and Lindegaard and colleagues (2017) who investigate post-conflict behavior without relying on situational roles in their analysis). This move to a different level of measurement allows for certain types of variation that would not be feasible otherwise: The antagonists can become third parties and vice versa and the third parties can also develop in the way they intervene This increased flexibility

also poses the question if the high resolution of the videos could be utilized further to look at constituents of the analytical categories used in this research project. In other words, why not move further down the same line and allow for more variation when coding the conflict situations by deconstructing the behaviors used as coding units of the current study even further?

While video data offers the technical possibility of coding behavior as fine-grained as one wants (of course dependent on the number of frames per second in the videos), it is not necessarily so that a smaller unit of measurement is always better. This has to do with one of the basic challenges we face when we encode (human) behavior. In the current studies the behaviors of the coded individuals were categorized into units that belong to everyday language, such as "holding back", "push", or "kick". These units are, of course, categorizations of smaller sequences of behaviors such as "moving arm forward", "turning hand into a fist", "moving leg backwards". This has led ethologists to call these behavioral units for patterned sequences of movement, because while they are constituted of particular movements. These physiological movements are, however, not random but rather highly coordinated (Dawkins, 2007). It can be tempting to break down the measurements from meaningful categories to the constituent physiological movements (Bloch et al., 2018). However, breaking the observational categories down to the smallest possible unit to make the measures more descriptive and flexible is not necessarily a fruitful exercise since there is not always a meaningful way to aggregate these sub-behaviors to socially meaningful actions (Von Cranach et al., 1982). Rather than trying to break the situations down into physiological movements, they were thus coded as behaviors that carry a social meaning, such as e.g. a punch, a kick, and a push. In this research project, social meaningful conflict behaviors thus become the basic unit of the analysis. This vernacular approach to behavioral coding uses descriptions and codes of behavior that correspond to categories used in everyday language in an attempt to remain close to the categories we all use when we talk about action and movement. While future research could use automated coding or code on a smaller scale than the current study, the meaningful social units of analysis will remain the same. This sets a framework for what scale it is meaningful to work on (of course, depending on the purpose of the research), since the deconstruction of these categories will leave researchers with a number of movements that remain ambiguous and connect poorly to the actual conflict. An antagonist is not moving an elbow horizontally backwards, while bending the arm at an acute angle, and after moving the elbow back 30 centimeters suddenly change the direction of movement 180 degrees to move it forward with increased velocity while the five fingers curl up to make contact with the palm of the hand. Rather, the antagonist is hitting someone. This raw behaviorism is not just more work to code, but also means giving up valuable information that allows us to differentiate between the way the same bodily movement can mean different things depending

on how it is used (Geertz, 2002). A fist made as part of a hit or threatening gesture, like Jonas the security guard did in the conflict in the conflict from Amsterdam East, differs from the fist used as a social greeting in a fist bump, similar to what Lucas did later in the same situation. The vernacular approach to behavioral coding allows us to take this variation in meaning of the same behavior into account.

## Policy and Prevention

As argued in Chapter 5, the intervention by third parties is not just a potential tool for crime prevention. Third parties are already actively taking part in the majority of conflicts that happen in public spaces. To some extent, the question is thus whether we should actively try discourage these people from what they are doing, or, on the other hand, give them tools to achieve what they are already trying to do. I support the latter position. Actively intervening in an interpersonal conflict is a risky thing to do (though, previous research shows that this risk is relatively small (Liebst et al., 2018)), and it must be up to the individual to decide whether they will take this risk upon themselves. When people do choose to get involved in conflicts, the current research project can provide some tools for how they can most effectively de-escalate the interpersonal conflicts.

In Chapter 4 I investigated the influence of intervention on the continuation of conflict behavior. Here I found that overall it seems that intervention significantly increases the chance that antagonists will discontinue performing conflict behaviors. This means that what people do makes a difference. When I investigated the specific subtypes of behavior, I found that the only sub-behavior that showed any measurable influence was the physical intervention. It thus seems that to stop an antagonist who has already started engaging in conflict behavior, the third parties can get physically involved in the conflict and try to separate or block the antagonists. To intervene physically in an ongoing conflict takes courage and not everyone will be willing to do this. This physical intervention might be, however, what it takes to get the attention of antagonists who are often fully focused on their opponent in the conflict.

In chapter 5, I investigated how the third parties successfully manage to de-escalate conflicts. The central conclusion of this analysis is that there is not one way to end a conflict, but rather that the successful third parties are those that adapt the intervention to the reaction of the antagonists. This means there is no magical combination of behaviors that third parties can do, that will de-escalate every conflict. Rather, this analysis showed that third parties

must approach conflicts with flexibility and persistency. This analysis showed that third parties that want to de-escalate a conflict often will have to not only physically separate the conflict parties but also placate them in some way. The third parties in the empirical material attempt to placate the antagonists in three different ways and these approaches might serve as a toolkit for conflict de-escalation. The three methods that third parties use to attempt to placate antagonists that remained agitated after being separated are *increasing distance*, *calming touch*, and *distraction*. Teaching prospect third parties that placation might be necessary and these different techniques of placation might decrease the number of re-escalations that the third parties face in attempting to de-escalate a conflict situation.

While the risk of victimization of third parties thus is relatively low, this does not mean that it is always a good idea for the third parties to get involved in a conflict. The third parties sometimes end up joining the conflict as a partisan to one of the parties and turn violence themselves rather than de-escalate it. As argued in chapter 3, the third parties are thus Janus-faced: They are both protective factor and a risk factor. Following the interactionist model of third-party behavior, the explanation for which role a third party takes in a conflict is - at least partly - found in the way the conflicts develop. Certain conflicts will thus have a higher risk of engendering high aggression or violent interventions, which could in turn lead to further escalations of the situation (Wells & Graham, 1999). In chapter 3 I found that third parties mirror the aggression of the antagonists. It is thus more likely that third parties become violent themselves in situations where the antagonist they intervene towards is also very aggressive. This, I argue, can lead to a self-reinforcing mechanism where the already violent situations are escalated even further by the aggressive interventions by the third parties. There thus might be conflict situations that are too violent for lay-people to handle. In these situations, the untrained third party have an increased risk of resorting to aggression and violence, which can have detrimental effects.

## Future Avenues

While the current project has explored new ground both in terms of substantial findings about the part that third parties play in the development of interpersonal conflicts and methodologies of studying behavior using video footage, the project also points towards future avenues of research. While there are of course unlimited opportunities of further research on the topic, I will here propose avenues that I find especially fruitful for future research to explore.

One avenue for future research that has been an object of discussion throughout all four chapters of the research project is the inclusion of audio in the analysis. While the present research project has used video clips without any sound and found it a great source of information, the lack of sound is a serious limitation that future research would benefit from including in the study of conflicts. This has been done with success in studies using body cameras (e.g. Friis et al., 2020) and recordings from mobile phones (e.g. Whitehead et al., 2018). If included in the methodology of the current research project, audio in addition to video footage would allow the studies to include verbal actions as types of intervention and conflict behaviors. While there often are behavioral equivalents to verbal actions (Eibl-Eibesfeldt, 2017), we are still missing out of a lot of information when the conflicts are muted. Sound would allow us to add additional details to the existing behaviors that already coded using the ethogram. Disapproving gestures could for example be extended to include disapproving verbal utterances as well. The inclusion of sound might also allow us to identify the cause of the conflict, which might influence the type of intervention that effectively can cool down the situation. It could be that conflicts that are motivated by challenges to individual face should be approached different than conflicts that are motivated by prejudices against demographic groups (e.g. racism, homophobia, sexism) or that conflicts that erupt within the situation are easier to handle within the situation, whereas conflicts that have a longer history are harder to de-escalate within the situation.

Another avenue of future research is to use the video material to study other types of situations. Researchers have used video footage to collect information about a very diverse topics, such as drug trade (Moeller, 2018), social distancing behavior during the corona pandemic (Hoeben et al., 2021), self-touching (Liebst et al. 2021), robberies (Lindegaard et al., 2015), and conflict behavior in operating rooms (Jones et al., 2016). But the potential application of the methodology stretches to any phenomenon that is observable. Cameras allow us to study both stand-out events, such as the conflicts studied in the current research project, but also to the repeated choreography of everyday life, that most of public life consists of.

The findings of the current study can also be used to study intervention in interpersonal conflicts in other non-visual contexts. A potential avenue for this would be to investigate third-party behavior in social media websites such as Twitter and Facebook. How do the findings from the street conflicts generalize to digital feuds? Do third parties also mirror the aggression of the antagonists and is there also a digital division of labor in target selection? Similar to the benefits of using video footage to study conflicts, the online debates are also documented in a very high resolution because the discussion leaves a digital trail of text behind. This would allow us to pose similar questions that the current project has investigated using video footage.

A limiting factor of the current research project has been the sample size. More observations would give the analyses more statistical power, the possibility of more rigorous analytical designs, and the possibility to make more fine-grained distinctions. While it would be relatively simple to scale the collection of videos to encompass larger periods of time and thus more situations, this would entail an encoding work load that is almost insurmountable. A bottleneck in using videos to study human interaction is thus that encoding of videos on the level used in the current research project is very labor intensive. The heavy work is the repeated task of minutely going through the video clips in order to identify the occurrence of relevant behaviors for each relevant actor. One way to circumvent this is to code the videos less detailed than was done for the current project. Any researcher embarking on a project to encode videos should approach this with a methodological variation of Occam's razor: Always use the simplest coding approach possible for the research you want to carry out. Furthermore, the coding process can be streamlined by using behavioral categories that have been tried and tested in other research and thus easing the tedious process of building and testing the ethogram.

Since the scaling of the data-collection task involves repeated identification of specific behaviors, another circumvention of this bottle neck would be to automate the encoding of the videos. While there have been great leaps forward in the field of computer vision in recent years, artificial intelligence of computers is, however, still not at a level where the coding carried out for the current project could have been automated. Automated coding is, however, applicable to simpler types of behavior such as physical distance between individuals (Bernasco et al., 2021) or identifying social relationships (Ge et al., 2012b) where it allows us to scale the data collection to whatever wants or needs we might have. While automation thus remains a long-term goal in terms of encoding of videos, a more realistic contemporary application could be to automate the detection of conflicts in the continuous stream of footage or the encoding of simpler measures such as the number of people present. Some kind of hybrid between human coders and automated encoding of the footage thus might be the pragmatic solution that is available right now. Over time, the weight between these two will hopefully shift so that an increased number of aspects of the conflicts can be identified and encoded automatically by software.

Another future avenue for research is the development of analytical approaches to the video footage. In this research project I have taken up the task of generating and analyzing a novel type of data. This novel data requires novel types of analysis. The four empirical chapters of this project serve as examples of how this task can be approached, but future research should consider which other ways we as social scientists can approach this type of data. The video data are extremely rich, but traditional statistical approaches rarely allow us to fully utilize

the richness of the data. A panel data model (as used in chapter 4), for example, does not take the order of the within-individual observations into account. The order of events, however, holds a lot of information that is then lost. Future research should explore new statistical approaches further, such as Relational Event Modeling (REM) that allows us to analyze group processes and their historical development (Pilny et al., 2016; Tranmer et al., 2015).

While the current research project contributes to both the substantial knowledge we have about third-party behavior and innovative empirical approaches to the study of human behavior, this is only the beginning. This approach marks a turn towards a social science more concerned with what we do, rather than what we say we do. The future avenues detailed above are only some of the ways that this approach can help us do innovative research and hopefully, in turn, understand ourselves and each other better.

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# Overview of Published Work

The chapters two, three, four, and five are all based on published peer-reviewed articles. Below is an overview of these articles, the co-authors of the articles, and the contribution of each co-author:

**Chapter 2** is published as: Ejbye-Ernst, P., Lindegaard, M. R., & Bernasco, W. (2020). A CCTV-based analysis of target selection by guardians intervening in interpersonal conflicts. *European Journal of Criminology*. https://doi.org/10.1177/1477370820960338. For this chapter PE conceived the research, performed the analysis and wrote the text. MRL and WB provided feedback on intermediate drafts of the final manuscript.

**Chapter 3** is published as: Ejbye-Ernst, P., Lindegaard, M. R., & Bernasco, W. (2021). Third Parties Mirror the Aggression of the Antagonists: A Video-Based Analysis of Third-Party Aggression in Interpersonal Conflicts. *Journal of interpersonal violence*, https://doi.org/10.1177/08862605211023503. For this chapter PE conceived the research, performed the analysis and wrote the text. MRL and WB provided feedback on intermediate drafts of the final manuscript.

**Chapter 4** is published as: Peter Ejbye-Ernst, Does Third-Party Intervention Matter? A Video-Based Analysis of the Effect of Third-Party Intervention on the Continuation of Interpersonal Conflict Behaviour, The British Journal of Criminology, 2022; https://doi.org/10.1093/bjc/azab121

**Chapter 5** is published as: Ejbye-Ernst, P., Lindegaard, M. R., & Bernasco, W. (2021). How to stop a fight—A qualitative video analysis of how third-parties de-escalate real-life interpersonal conflicts in public. *Psychology of Violence*. https://doi.org/10.1037/vio0000410 For this chapter PE conceived the research, performed the analysis and wrote the text. MRL and WB provided feedback on intermediate drafts of the final manuscript

# Samenvatting (Summary in Dutch)

Dit proefschrift onderzoekt de rol die omstanders spelen in de ontwikkeling van interpersoonlijke conflicten. Ik conceptualiseer deze rol vanuit een interactionistisch perspectief, waarbij het gedrag van omstanders zowel de conflictontwikkeling vormt, als er door gevormd wordt. Het empirische onderzoek in dit proefschrift berust op CCTV-beelden van de openbare ruimte in Amsterdam die in 2017 zijn verzameld. Ik ontwikkel zowel kwalitatieve als kwantitatieve methodologische benaderingen voor het analyseren van de videobeelden en pas deze ook toe. De rol van omstanders wordt empirisch onderzocht in vier hoofdstukken: Hoofdstukken twee en drie onderzoeken of de selectie van het doelwit en agressie in interventies door omstanders gevormd worden door de ontwikkeling van het conflict. Hoofdstukken vier en vijf onderzoeken of en hoe de omstanders het verloop van een conflict beïnvloeden. Hoewel elk empirisch hoofdstuk het videomateriaal op een unieke manier benadert, komt in elke analyse de sequentiële ontwikkeling van de conflictsituaties terug. De resultaten van de empirische onderzoeken bevestigen dat de omstanders zowel de manier waarop een conflict zich ontwikkelt beïnvloeden, als dat de ontwikkeling van een conflict de interventies beïnvloedt. Deze bi-directionele relatie weerspiegelt de complexe natuur van menselijk gedrag dat een uitdaging vormt voor onderzoek naar de rol van omstanders in conflictsituaties, aangezien het betekent dat oorzaak en gevolg onderling verbonden zijn. Om deze onderlinge verbinding te begrijpen, stel ik voor dat onderzoekers interpersoonlijke conflicten op een dergelijke manier meten en analyseren dat rekening kan worden gehouden met de chronologie van situaties.

# Appendices

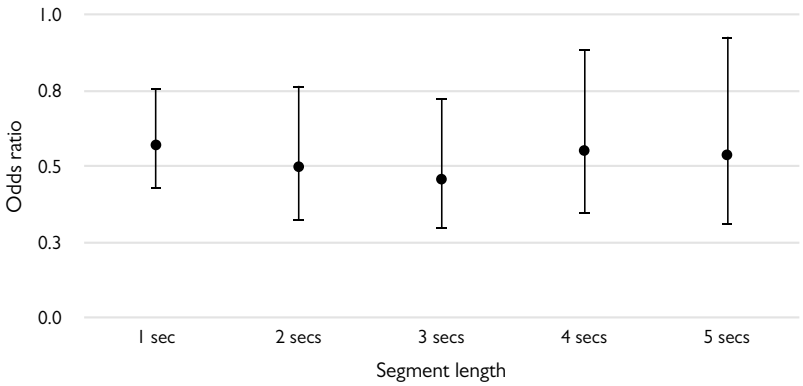
# **Appendix 1.** Ethogram

| Behavior | Brief definition | Level of aggression (Chapter 3) |
|---|---|---|
| Calming hand gestures | Slow, calming gestures performed with open hands usually with the palm of the hand facing the ground or directed toward the receiver. Actors gesticulating with their hands while talking should only be coded if the gestures in themselves seem to be calming. Not all slow gestures are thus calming hand gestures. | Low |
| Aggressive gestures | Fast, angry, and expressive gestures. Aggressive gestures typically involve pointing at someone in a forceful manner, palms turned upwards, simulating hitting or slapping, movements that incite the other party to attack (e.g., waving them closer). Aggressive gestures also include hitting objects. | Medium |
| Invading space | The actor moves his face very close to the face of the receiver without touching him/her. This usually involves just a few centimeters of distance between the actor and receiver, but could be slightly more. | Medium |
| Nonforceful touching | Stroking or gently touching the receiver without physically holding him/her back or trying to move him/her in a particular direction. | Low |
| Blocking or holding a person back | Either blocking an antagonist from crossing a specific point or holding on to an antagonist trying to fixate them at a specific point. | Medium |
| Hauling a person off | The actor is actively trying to change the course, position, path, or direction of the receiver by holding on to the receiver and (attempt to) lead, pull or carry that individual in some direction. | Medium |
| Throwing or aggressively pulling a person | A forceful and fast paced pull where the actor grips the receiver and throws or aggressively pulls them. The actor will typically try to forcefully move the receiver of the act while the actor remains more or less in the same spot. | High |
| Push | The actor uses his or her arms, chest or shoulder to increase the distance between the actor and the receiver or push the receiver sideways. | Medium |
| Hitting | The actor hits the receiver with a clenched or open hand. A hit is when the actor uses his/ her hand to strike someone else with relative high velocity. | High |
| Striking with object | The actor uses an object to strike the receiver either by hitting them or throwing the object at them. | High |
| Kicking | Kicking the receiver with foot or knee. The actor uses his/her foot or leg to strike the receiver. | High |
| Wrestling/ grappling | Grappling/wrestling is a behavior seen when the actor and receiver are in close combat. Grappling/wrestling is characterized by the actor holding onto, shaking, moving, or struggling with a receiver often in a chaotic and messy fashion. | High |

*Source: Author's own*

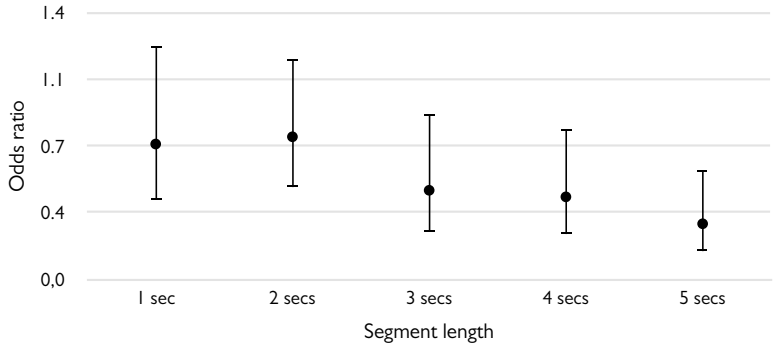
# **Appendix 2.** Robustness of model presented in Chapter 4

**Figure 1.** The influence of in-group physically forceful intervention on the continuation of conflict behavior (odds ratio) with varying lengths of time segments




*Source: Author's own*

**Figure 2.** The influence of out-group physically forceful intervention on the continuation of conflict behavior (odds ratio) with varying lengths of time segments




*Source: Author's own*

**Table 1.** Fixed-effects panel data regression with cluster-corrected standard errors of the influence of pooled subtypes of intervention on the continuation of conflict behavior

| | Odds Ratio | Standard Error | P-value | 95% Conf. Interval | |
|---|---|---|---|---|---|
| Expressed disapproval | 1.119 | 0.291 | 0.664 | 0.673 | 1.863 |
| Physically forceful intervention | 0.416 | 0.078 | 0.000 | 0.288 | 0.601 |

*Source: Author's own*

**Table 2.** Fixed-effects panel data regression with cluster-corrected standard errors of the influence of concurrent intervention on the continuation of conflict behavior

| | Odds Ratio | Standard Error | P-value | 95% Conf. Interval | |
|---|---|---|---|---|---|
| Concurrent intervention | 0.889 | 0.167 | 0.532 | 0.616 | 1.285 |

*Source: Author's own*