Of Friends and Foes:
How Human Coalitional Psychology Shapes Public Reactions to Terrorism

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Miriam Lindner
Aarhus, October 2018

Preface

This report summarizes my PhD dissertation entitled "Of Friends and Foes: How Human Coalitional Psychology Shapes Public Reactions to Terrorism", conducted at the Department of Political Science, Aarhus University. The dissertation consists of this summary report and five original research articles that are published in or have been prepared for international peer-reviewed journals. The summary report provides an overview of the project, outlines an integrated theoretical framework for the different elements in this dissertation, and discusses the key methodological choices underlying each of the individual articles. In addition, it discusses the implications of the findings beyond the individual articles. The dissertation consists of the following articles:

- **Paper A:** Lindner, M. & Bang Petersen, M. "Citizens' Intuitions of Terrorism: 'Terrorism' Is What 'They' Do To 'Us'." *Working Paper*.

- **Paper B:** Lindner, M. "Public Reactions to Female vs. Male Terrorist Violence: Experimental Evidence for the Male Warrior Hypothesis." This paper is a revised version of the article published in *Evolutionary Psychology*, 16(2).

- **Paper C:** Lindner, M. "Mnemonic (Mis-)Matches: Accurate and Biased Recall of Terror-Suspects". This paper is a revised version of the forthcoming article *in Evolutionary Psychological Science*.

- **Paper D:** Laustsen, L., Lindner, M., & Bang Petersen, M. "Can Terrorist Attacks Reduce Prejudice? Polarization, Ideology and the Psychology of Terrorist Attacks as Identity Threats." *Working Paper*.

- **Paper E:** Lindner, M. "Of Friends and Foes: How Human Coalitional Psychology Shapes Public Reactions to Terrorism." *Working Paper*.

Chapter 1: Introduction

Some say that "terrorism" is a word like pornography – blurry at the boundaries, but something everyone will surely recognize when they see it. During the three years I spent working on this dissertation, Europeans were repeatedly struck by violent, large-scale attacks that severely disrupted everyday life. Whether assailants shot civilians in Paris, Sousse[1], or Manchester, mowed down pedestrians in Nice, Berlin, or Stockholm, or detonated bombs in Beirut, Brussels or Istanbul, the questions that unfolded in the wake of these attacks were staggeringly similar: Why aren't all perpetrators judged and punished equally for violent attacks of comparable magnitude? To what extent should we reconcile a desire for increased levels of national security, on the one hand, with an appreciation for democratic freedoms, on the other? What can our political elites do to contain some of the violent backlash that threatens to tear at our social fabric? And what do we actually talk about when we talk about "terrorism"? Answers to these questions will help address challenges that loom large in the minds of many Europeans and have become a defining feature of international politics.

This dissertation is an argument about the factors and mechanisms that shape public reactions to terrorism. Of course, scholars in political science and psychology – two fields of inquiry that I will marry in this dissertation – have in no way remained mute about the effects of terrorist attacks on the public. On the contrary: In the wake of 9/11 and the subsequent declaration of the "War on Terror", academic scholarship on terrorism spiked dramatically (Silke, 2008). The majority of these studies have focused on political attitudes and policy support in the aftermath of terrorist attacks (e.g. Huddy, Khatib, & Capelos, 2002; Huddy, Feldman, Taber, & Lahav, 2005); their impact on the perception of and attitudes toward minority groups, such as immigrants and Muslims (Legewie, 2013; Sides & Gross, 2013); the short- and long-term mental health effects of direct and indirect exposure to terrorist violence (e.g. Hansen, Østergaard, Sønderskov & Dinesen, 2016; Levav, 2006; Canetti & Lindner, 2014); and the framing of terrorist attacks and their perpetrators in the

[1] On 26 June, 2015, 38 people were killed in an attack on a tourist resort in Port El Kantaoui, located close to the city of Sousse, Tunisia. I was aware of the fact that another attack occurred on the same day in Saint-Quentin-Fallavier, France. Until writing this introduction, however, I was admittedly oblivious to the fact that three other Islamist attacks had struck Kuwait, Syria, and Somalia on the same day. Ironically, I succumbed to the very processes of our human coalitional psychology I aim to highlight in this dissertation.

media (Norris, Kern & Just, 2003). While these studies document the widespread and often severe consequences of terrorism on the public, academic scholarship has yet to integrate the findings under a single theoretical framework that explains *why* the public reacts so strongly to terrorist violence and thereby makes it possible to explain *how* these reactions are shaped.

This dissertation aims to fill this lacuna and builds on the framework of evolutionary psychology, which subscribes to the view that the human mind, like the body, has evolved to solve recurring challenges in our ancestral environment (Cosmides & Tooby, 1994). While terrorism is still evolving and is largely considered a modern phenomenon, intergroup violence *per se* is older than our species – it is "deeply and densely woven into [the] causal tapestry" of humankind (Tooby & Cosmides, 2010, p. 191; Wrangham & Peterson, 1996). According to this view, aggressive conflict among our ancestors was significant enough to constitute a major selection pressure and has likely resulted in a multicomponent group-based – or coalitional – psychology. Building on the notion that "the past world of conflict and cooperation is reflected in the present architecture of the human mind" (Tooby & Cosmides, 2010, p. 192), I argue that modern terrorism corresponds to the adaptive challenge of coalitional aggression and that viewing it through the lens of our human coalitional psychology can significantly nuance our understanding of it. The framework I present extends previous work on the psychological mechanisms underlying public reactions to terrorism by grounding it in a rigorous theoretical foundation and is thus well suited to answer the overarching research question that guides this dissertation: *How does human coalitional psychology shape public reactions to terrorism?*

Humans are social, group-living animals who constantly sample their social environment and monitor it for safety. Assessments of the safety of our social environment are largely contingent upon two interrelated, yet distinct, factors: threats posed by rival (and potentially hostile) coalitions and the support provided by one's own coalition (Boyer, Firat, & van Leeuwen, 2015; Tooby & Cosmides, 2010). In line with the notion that terrorism is a highly salient social phenomenon (Richards, 2006) and building on central tenets from the framework of coalitional psychology, this dissertation poses – and answers – two sub-questions: *How do (1) between-coalition threat assessment and (2) maintenance of within-coalition alliances shape public reactions to terrorist violence?*

In focusing on processes of between-coalition threat assessment and the maintenance of within-coalition alliances, the dissertation makes three key contributions. First, it demonstrates that perceptions of terrorism are contingent upon the presence and detection of often subtle coalitional threat cues, and that they are associated with domain-specific responses designed to pre-

empt future harm. Even more so, these responses are often intuitive and contingent upon minimal information. For example, not only do reports of coordinated attacks often strike us as more severe than headlines about other forms of violence – e.g., homicide, gang violence, or even mass shootings – they are also associated with a particularly harsh policy response and sometimes even the decision to go to war (Hetherington & Nelson, 2003). With reference to processes of coalitional threat assessment, the dissertation also sheds light on the tendency to apply differential labels to violent assault, which has recently garnered significant outrage in public debate (e.g. Peralta, 2015). It shows that lay perceptions of "terrorism" differ, often dramatically, from more official definitions of the term (e.g. Gibbs, 1989; Primoratz, 1990).

Second, with its focus on the maintenance of within-group alliances in the face of terrorism threat, the dissertation nuances extant debates in academic scholarship on the role of a major, politically-relevant, sorting mechanism: political ideology and partisan identity. Here, I reconcile two important contemporary orientations that have produced (seemingly) mutually exclusive findings as to how the public responds to terrorism threat. On the one hand, empirical studies have produced a wealth of evidence in support of the so-called "conservative shift hypothesis", i.e., the tendency of individuals to adopt more conservative attitudes in the aftermath of terrorist attacks (Jost et al., 2003). On the other hand, social psychologists have posited that existential threat can precipitate a gravitation toward pro-normative standards of one's ingroup, whether conservative or liberal, a tendency commonly referred to as "worldview defense hypothesis" (e.g. Greenberg et al., 1992). Instead of treating these two hypotheses as distinct, I argue that they constitute two sides of the same coin. Specifically, I show that the conservative shift and worldview defense hypotheses map closely onto processes of between-coalition threat assessment and the maintenance of within-group alliances, respectively. Even more so, I demonstrate that they can augment each other.

Third, the dissertation expands the proposed model by suggesting and exploring a novel venue for mitigating some of the negative effects following terrorist attacks. I do so by marrying the theoretical underpinnings of human coalitional psychology with a large literature stressing people's susceptibility to group influence under threat. Specifically, I argue and demonstrate that it requires the presence of ingroup cues to initiate a gravitation to the norms of one's own coalition in times of crises. Importantly, the presence of party cues can not only exacerbate gaps in public opinion about appropriate responses to terrorism, but also mitigate these gaps. While studies have investigated the impact of the media in perpetuating stereotypes about minority groups in the

aftermath of terrorist violence (e.g. Jenkins, 2003), to my knowledge, I present the first empirical study of how political elites can shape public opinion in its wake.

Together, the findings of this dissertation are relevant to scholars across a range of academic disciplines, such as political science, psychology, sociology and criminology. At the same time, they also provide insights into the very cognitive architecture that guides our (often intuitive) responses to terrorism. Positing that our evolved coalitional psychology is designed to reason adaptively about terrorist violence implies that many of our responses bear functional value. Nonetheless, many of these responses can, if acted upon in more overt ways, put democracy at stress – an outcome that perpetrators so surely crave. Only when we understand how the human mind reacts to different forms of violence can we design proper interventions, improve crisis communication, and contain wider, negative consequences of societal proportions.

1.1 Overview of Papers, Data, and Summary Report

This summary report is accompanied by five individual articles, each of which is guided by its own unique research questions that, in turn, inform their respective research designs, methodology, and operationalization of key variables. Together, they substantially contribute to answering the overall research question that guides this dissertation. More specifically, Papers A–C address the first sub-question (*How does between-coalition threat assessment shape public reactions to terrorism?*), and Papers D addresses the second sub-question (*How do mechanisms of within-coalitional maintenance factor into these reactions?*). Paper E conducts an integrated test of the proposed model, thereby ultimately touching on both mechanisms.

Of course, one can only devote oneself to the study of public reactions to terrorism if it is clear which acts, according to lay people, qualify as "terrorism". The ambiguity surrounding the term is attested by empirical studies that count more than 200 definitions of terrorism, and governments across the world currently employ more than 100 definitions (Schmid, 2011). Paper A, which consists of two individual studies, lays out the core claim that human coalitional psychology is intuitively and effortlessly activated upon detection of specific coalitional threat cues, upon which it generates domain-specific output in the political domain. Importantly, this paper demonstrates that this mechanism operates across national and cultural contexts, and that percep-

tions of events as 'terrorism' set in motion the psychological dynamics involved in responding to coalitional aggression. The findings serve as a fundamental building block for subsequent articles in this dissertation.

Paper B extends Paper A and asserts that previous studies in the domain of terrorism research have overlooked two seemingly trivial factors that shape public reactions to terrorism: perpetrator and respondent sex. This paper builds on and tests the so-called Male Warrior Hypothesis, which argues that the evolutionary history of male-to-male coalitional aggression may have resulted in sex-specific differences in the way coalitional threat cues are perceived and responded to (van Vugt, 2006). It combines literature from the domain of criminal justice outcomes – particularly the well-demonstrated finding that female perpetrators are commonly punished more leniently than male perpetrators – and a psychological literature that stresses intergroup categorization processes in the domain of punitive attitudes. The paper demonstrates that specific terror-suspect constellation elicits stronger support for torture among men (but not women) and further suggests that this response might be domain-specific.

Paper C presents further evidence that our coalitional psychology is psychologically deep-seated. Building on notions of adaptive memory and Error Management Theory, it demonstrates that coalitional threat cues, like other evolutionarily relevant threat cues, bear mnemonic value. The paper demonstrates that the presence of coalitional threat cues is associated with a higher likelihood of accurate recall of terror-suspect characteristics. In addition, it shows that the absence of coalitional threat cues leads individuals to commit a higher rate of false positive errors – that is, their absence produces a greater false alarm rate. These findings have important repercussions as they suggest that ingroup perpetrators, lone wolves, and female attackers not only receive less attention at in the public debate but also that people overreact to – or even misperceive – certain events of violent assault.

Paper D and Paper E work in conjunction and address processes of maintenance of within-coalition alliances with a focus on political ideology and partisan identity as coalitional sorting mechanisms. Paper D utilizes a natural experiment surrounding the 2015 Copenhagen attacks and demonstrates that prejudice can *decrease* when liberal worldview components are salient in the aftermath of a terrorist event. This major finding opens up for new ways to potentially mitigate (or exacerbate) some of the negative effects in the aftermath of terrorism. Paper E complements and augments Paper D by presenting an experimental test of the claim that the presence of party cues can exert a powerful influence on within-coalition dynamics – and hence, on public opinion – under threatening circumstances.

The dissertation draws on rich sets of data collections to test its hypotheses. It relies on a number of survey experiments administered to large, and for the most part, nationally representative samples of citizens from Denmark, the US, and Egypt. In addition, I carefully developed experimental stimuli that mimic real-world contexts – a challenging but not impossible endeavour in the domain of terrorism research. Together, these methodological efforts provide a high degree of robustness, external validity, and generalizability.

The summary report proceeds in four steps. Chapter 2 provides an overview of the theoretical framework and reviews existing empirical work. Chapter 3 describes the studies comprised by this dissertation, their methodologies, research designs, and data collections. Chapter 4 presents the major findings of these studies. Lastly, Chapter 5 discusses the findings in light of contemporary debates, their implications, and lays out directions for future research.

Chapter 2: Theoretical Foundations and Previous Work

This chapter presents the overall framework of this dissertation and explains why evolutionary psychology in general, and coalitional psychology in particular, offer suitable venues to study public reactions to terrorist violence. It also outlines how it contributes to answering the overall research question that informs this dissertational work: *How does human coalitional psychology shape public reactions to terrorist violence*?

In order to develop my core argument, I first present a brief overview of the relationship between intergroup conflict and the evolution of human coalitional psychology. I then propose an integrated theoretical framework for the study of public reactions to terrorism and show how two distinct, yet interrelated, literatures map onto said framework. Specifically, I show that previous findings on conservative shift speak to between-group threat assessment and that findings on worldview defense processes speak to the maintenance of within-coalition alliances. In tandem, I argue, they can significantly advance our understanding of previous findings regarding public reactions to terrorist violence and serve to generate novel hypotheses. Lastly, I present a central claim of this dissertation: that political elites can exert a powerful influence on these associations in the aftermath of terrorist violence by harvesting people's pronounced susceptibility to group influence under threat.

2.1 Intergroup Violence and the Evolution of the Coalitional Mind

Although we are living in the most peaceful time in human history (Pinker, 2011), a wealth of evidence suggests that intergroup conflict and aggression between coalitions are a defining feature of our species' evolution (Wrangham & Peterson, 1996). Indeed, intergroup conflict is ubiquitous across human societies – both traditional and modern – and so common and widespread that it is now largely considered a human universal (Keeley, 1996; McDonald, Navarrete & Van Vugt, 2012; Tooby & Cosmides, 2010). Anthropological and archaeological observations document that intergroup conflict in past societies has killed substantial numbers of people (Bowles, 2009), and evidence from our closest relatives in the animal kingdom speaks to the continuity of aggression from our great ape ancestors (Wrangham & Peterson, 1996; Wrangham,

2006). Indeed, researchers now assume that our ancestors have engaged in violent intergroup conflict for at least 6 million years (Manson & Wrangham, 1991; Boehm, 1992).

Evolutionary psychologists contend that intergroup conflict is a driving force behind our species' social behavior because it was substantial enough to constitute a major selection pressure. It has likely wired the human mind to perceive the social world largely in terms of in- and outgroups, or coalitions (Kurzban & Leary, 2001; Tooby & Cosmides, 2010). Decades of psychological research demonstrates that humans intuitively, spontaneously, and reliably sort people into groups, often based on arbitrary and minimal features (Kurzban, Tooby, & Cosmides, 2001; Tajfel, 1970). Further, they exhibit differential dynamics with respect to in- and outgroup coalitions, and the consequences are well documented in political science and psychology literature. Phenomena such as prejudice, xenophobia, and nationalism – commonly treated under the umbrella of "intergroup bias" – are rather infamous examples of these dynamics (Boyer et al., 2015).

Of course, not all coalitions are equal. Whereas our coalitional psychology can be activated with respect to different types of groupings, a tendency that is dependent on situational factors, some coalitional alliances can be seen as posing a significant threat to oneself or one's own coalition. For example, "the elderly", "high school students", or "the physically handicapped" all constitute outgroups for those who do not belong to or identify with them, but they all share an important feature: they are essentially non-threatening. Other groups show hostility toward our group and could inflict grave costs to our well-being, and an assessment of their ability and intention to do so is often intuitive. An assessment of whether or not another group is threatening is often based on minimal information, or cues, implying factors such as their intent or their formidability (e.g. van Vugt, 2009).

Let us consider an example to illustrate this tendency. On the morning of 9/11, as yet another plane crashed into the second tower of the World Trade Center in New York, a news commentator exclaimed: "I do not know what this is, but this must be deliberate – this must be terrorism". This comment resembles an intuitive reaction that many of us are familiar with. When reports of coordinated attacks in Paris or other places surface on social media and news media websites: we intuitively "sense" that these events are different from other violent acts, such as homicides or even mass shootings. They are different because they imply, first, that an individual could not have coordinated these violent events alone, and second, that someone is "out to get us". Without knowing who is behind an attack, and long before learning about the intent or motivations for an attack, we intuitively experience a variety of feelings: fear, stress, and potentially the need to pre-empt future harm. Ultimately, the

events of 9/11 led to the commencement of the "War on Terror" abroad, as well as to dramatic changes to surveillance laws at home (known as the Patriot Act, which was rushed into legislation only 45 days after the attacks). Anecdotal and descriptive evidence suggest dramatic spikes in hate crimes against members of Muslim faith and Middle Eastern origin in the aftermath of Islamist attacks. At the same time, other large-scale terrorist events speak to our intuitions about terrorist violence. For example, long before knowing details about what had unfolded, many were quick to ascribe Breivik's coordinated attacks in Oslo in July 2011 to a radical Islamist terrorist organization – only to be left stunned to find out that they had been committed by one of their 'own'.

This dissertation examines these intuitive responses in an empirical manner by focusing on coalitional threat cues inherent to terrorist violence and their consequences in the political domain. To reiterate, I posit that modern terrorist violence corresponds to coalitional aggression because it involves a hostile outgroup coalition that is engaging in highly coordinated behavior, and because cues emanating from such coordinated behavior "either purposefully or incidentally predict [...] political allegiances" (Kurzban, Tooby, & Cosmides, 2001, p. 15387). In the following, I explain in more detail how two major components of human coalitional psychology can aid us in nuancing our understanding of public reactions to terrorism, and illustrate how previous findings map onto these components, therefore allowing for their theoretical integration.

2.2 An Integrated Model of Public Reactions to Terrorism

Terrorism, one of the main goals of which is the "intentional generation of massive fear" (Cooper, 2001, p. 883), is a highly salient psychological and political phenomenon. In order to understand why and how the public reacts so strongly to terrorist violence, political scientists and social psychologists have examined the associations between terrorist threat, political ideology, and political attitudes (e.g. Huddy et al., 2005; Jost et al., 2003). However, they have amassed evidence in favor of two competing hypotheses and, by trying to debunk one and confirm the other, treated them largely as mutually exclusive.

Specifically, based on the notion that conservative opinions offer protective value in times of insecurity and threat, scholars have largely argued in favor of the so-called "conservative shift hypothesis" – the tendency of people to adopt more conservative attitudes in the aftermath of terrorist violence, irrespective of whether they identify as liberal or conservative (Jost et al., 2003;

Nail et al., 2009). Under the umbrella of Terror Management Theory, social psychologists have defended the "worldview-defense hypothesis", the central tenet of which is that people conform to their ideological priors, whether conservative or liberal, in the face of threat (Greenberg et al., 1992). These two orientations thus make different predictions as to how the public, politically speaking, responds to terrorism. Whereas the former suggests that public opinion should shift toward the conservative end of the political spectrum (reflected in, for example, stronger support for surveillance measures, military retaliation, and anti-immigration laws), the latter posits an increasingly polarized public in the face of threat. In the following, I show how – from a coalitional psychology perspective – both these tendencies reflect attempts to return to a higher degree of coalitional safety.

2.2.1 Between-Coalition Threat Assessment and Conservative Shift

Human beings, like all living things, intuitively respond to threat because survival and reproductive success require us to avoid actual and potential danger. Humans exhibit tendencies to fear stimuli that have posed hazards in our ancestral past, such as darkness, separation, heights, snakes, and spiders (Oehman, 2009), and evidence from ethology, neurophysiology, and experimental psychology shows that hazards elicit different reactions and orchestrate distinct neural circuitry in various evolutionarily relevant domains (Blanchard et al., 2011; Woody & Szechtman, 2013). In the social domain, one of the greatest fitness threats stems from hostile outgroup coalitions intending to, or actually inflicting, harm on us. Our human coalitional psychology relies heavily on between-coalitional threat detection, which is often intuitive and implicit in nature (Tooby & Cosmides, 2010). In line with this, studies show that people more readily approach and avoid in- and outgroup members, respectively (Paldino & Castelli, 2008), and attentional vigilance is increased for outgroup men (compared to ingroup targets and outgroup females; Maner & Miller, 2013). Others show that the activation of functionally relevant stereotypes about outgroup members is facilitated under circumstances that heuristically suggest vulnerability to harm (Schaller, Park & Mueller, 2003).

These mechanisms are also highly visible in the aftermath of large-scale attacks. Let us consider the 2013 Boston Marathon bombing, which dominated the front page of the *New York Times* for eleven consecutive days following the attack, as an example. Studies report that about one-quarter of the American population followed the event on social media, and the Boston Police Department witnessed a considerable increase from 54K to 264K follow-

ers worldwide (Buntain et al. 2016a). Another study found a significant increase in the use of the word 'fear' on April 19th, the last day of the manhunt (Buntain et al. 2016b). Reflecting the tendency to react with a heightened sense of fear and vigilance in the aftermath of terrorist attacks, the month following the 9/11 acttacks saw a massive increase in the sales of gas masks, protective suits, guns, and biological warfare detection kits, not only in the US but also in London, where people feared that a terrorist attack might be imminent ('Gas mask demand jumps', 2001). These responses by the public are often characteristic of terrorist attacks, and virtually incomparable to other forms of threat.

Importantly, our coalitional psychology is not just built to identify intergroup threat cues but also to spontaneously generate and guide appropriate responses to them (e.g. Cottrell & Neuberg, 2005). Upon the detection of coalitional threat cues, people often exhibit a strong motivation to engage in a variety of appropriate emotional responses and precautionary behaviours designed to avoid said threat and curb the potential of future harm – in other words, to return to a higher level of coalitional safety (Boyer, Firat & van Leeuwen, 2015). Examples of this tendency can be found after virtually every major attack: Rather than wanting to punish the specific perpetrator(s) of an attack, people often aggress against other people who are *seemingly* affiliated with the perpetrator(s). Hence, in the face of coalitional threats, responses are not just aggressive; they also generalize to any member of the opposing coalition, possibly in an attempt to deter hostile, rival outgroup coalitions. In the domain of intergroup violence, numerous anthropological studies document that people often counter group-based threats of violence with aggressive retaliation or sincere threats hereof (Frank, 1988). In addition, psychological studies show that exposure to coalitional threats activate precursors to aggression such as increased dehumanization, increased anger, and decreased empathy towards the target group (Mackie, Devos, & Smith, 2000), and that outgroup perpetrators are commonly punished more harshly than ingroup perpetrators (e.g. Piazza, 2015).

If we were to translate these responses to coalitional threats into the political domain, they would largely be called "conservative." Several studies have indeed illustrated that people, in aggregate, do shift towards the conservative end of the political spectrum following terrorist threat and actual terrorist violence. Drawing on a large number of studies embedded in the post-9/11 context, proponents of the so-called conservative shift hypothesis that have uncovered unfavourable attitudes toward racial and cultural outgroups in general (Kalkan, Layman & Uslaner 2009), and Muslims, Muslim-Americans, and Islam in particular (Davis, 2007; Panagopolous, 2006; Traugott et al., 2002)

and found that both personal and national concerns about terrorism constitute major precursors of these attitudes (Huddy et al., 2005).

Further corroborating the claim that the presence of between-coalitional threat is associated with a response that will pre-empt future harm, data suggests that terrorist threat not only appears to correlate with policy choices regarding other threatening coalitions or outgroups, but also emerges as a clear cause of desire for retaliation (Grant & Brown 1995, Herrmann, Tetlock, & Visser 1999; Marcus et al., 1995; Pyszczynski et al., 2006). Policy choices tend to maintain or intensify violent conflict situations, for example by supporting violent or retaliatory solution to conflict, as opposed to diplomatic or conciliatory approaches (Arian, 1989; Bar-Tal & Labin, 2001). Others demonstrated increased support for armed attacks against the outgroup (Gordon and Arian, 2001), increased support for aggressive military action and for their national military force (Hirschberger, Pyszczynski & Ein Dor, 2009; Merari & Friedland, 1985). Groups that are disliked, violent, or disruptive also face more restrictions on their civil liberties and rights (e.g. Davis & Silver, 2004; Marcus et al., 1995).

Overall, the literature shows that perceived threat emerges as a powerful predictor of increased intolerance, prejudice, ethnocentrism, and xenophobia, "regardless of whether threat is defined as a widely acknowledged external force or a subjective, perceived state" (Huddy et al., 2005, p. 593). Of course, terrorist attacks are devastating, not only because they commonly claim many innocent civilian lives, but also because they remind us of our physical vulnerability and of the ideological rifts that separate us from a small, radical minority. The findings above are important because they demonstrate an 'outward' reaction to threat. Yet, there are principled reasons to assume that within-coalition dynamics may be just as important. I argue that they are both parts of the same coin: once considered in conjunction, they can paint a more complete picture of how the public responds in the face of terrorism.

2.2.2 Maintenance of Within-Coalition Alliances and Worldview Defense

As mentioned above, one way people return to a higher degree of coalitional safety in the context of intergroup violence is by deterring, aggressing against, and punishing hostile outgroups. However, under threatening circumstances, humans are also highly dependent on social support. Decades of psychological research demonstrates that even under normal and secure circumstances, humans exhibit an inherent need for belongingness and affiliation (Erber & Erber, 2001) and automatically attend to alliance-relevant information in their

social environment. They look for cues indicating reliability in potential partners (Bacharach & Gambetta, 2001; van't Wout & Sanfey, 2008), seek information about others, e.g through gossip (Dunbar, 1996), and continuously evaluate the status of friendship ties (DeScioli & Kurzban, 2009; Tooby & Cosmides, 1996). Most central to this dissertation, humans monitor alliances among others, even among outsiders (Pietraszewski, Cosmides, & Tooby, 2014).

One of the important ways in which people can create or enhance interpersonal connections is through affirmation of common values, or what some have termed a shared reality with relevant others (Hardin & Higgins, 1996). Motivated to affiliate with and be accepted by others, people tend to present themselves in ways they believe will lead others to respect and like them, thereby causing an increase in signaling of belonging to a particular group (Asch, 1955; Baumeister & Leary, 1995; Schaller & Conway, 1999). Evolutionary psychologists posit that the internalization of and adherence to social norms was particularly relevant to the coordination within groups and therefore had fitness-relevant advantages.

If humans gather support by maintaining and forming alliances, this tendency should be particularly strong in the face of challenges that could have been efficiently addressed through the help of one's coalitional allies (Navarette et al., 2004; Navarrete & Fessler, 2005). This is because adhering to the pro-normative orientation of the ingroup in times of crisis will signal that one deserves the group's support in return (Schaller & Conway, 1999), and evidence supports this notion by documenting that, upon threat detection, people send clearer commitment signals, cultivate homogeneity in the group, and avoid members of other alliances. As Huddy (2013) notes, "the notion of threat – which typically involves an external threat from a known outgroup – is relevant [...] because it can strengthen ingroup unity, in addition to inflaming outgroup hostilities" (p. 762).

According to this view, political ideologies emerge as a salient coalitional sorting mechanism in modern mass politics because inherent to them is a language of shared norms, beliefs, and values (Hardin & Conley, 2001; Hibbing, Smith & Alford, 2013) regarding attitudes that address conflict resolution, threat management, resource distribution, stereotypes, delineated power relationships, and group membership criteria that define who does or does not belong (Navarrete & Fessler, 2005). Signaling adherence to the ingroup's norms and values in the political domain can thus be achieved by expressing support for an opinion, the implications of which form a central part of this dissertation.

Social psychologists traditionally refer to Terror Management Theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986; Solomon, Greenberg, &

Pyszczynski, 1997) to explain the tendency to defend deeply held beliefs and ideological commitments in the face of (terrorism) threat. Based on the notion that external threat enhances ingroup solidarity and tightens ingroup boundaries in direct proportion to the degree of threat (Brewer, 2007; Coser, 1956), they have demonstrated that existential threat primes result not only in increased aggression toward those who challenge one's worldview, but also in heightened agreement with and affection for those who uphold or share beliefs similar to one's own (e.g., Florian & Mikulincer, 1997, Rosenblatt et al., 1989). This has resulted in the so-called worldview defense hypothesis, which posits that people will tend to bolster, or reaffirm, their ideological priors in the face of threat. In the political domain, this should lead to differential responses among conservatives and liberals – and hence a polarizing effect – such that conservatives should become more conservative and liberals should become more liberal (Greenberg et al., 1992; but see also Jonas et al., 2008).

Previous studies shave accumulated support for this assumption, finding that existential threat primes resulted in a heightened agreement with and affection for those who uphold or share beliefs similar to one's own (e.g., Florian & Mikulincer, 1997; Rosenblatt et al., 1989). In one study, Greenberg et al. (2002) showed that under threat, conservatives judged dissimilar others more harshly, whereas liberals – in line with a bolstering of worldviews that stress tolerance – increased their liking of dissimilar others. With specific reference to political ideology. Kosloff and colleagues (2010) showed that a threat manipulation heightened liking of charismatic candidates who shared the perceiver's political orientation, whether liberal or conservative, whereas it reduced liking for candidates from the opposing political camp. McGregor et al. (1998) illustrated that both conservatives and liberals respond to existential threat by increasing their aggression toward people of the *opposing* political orientation, thereby bolstering or hardening their own worldview. In another study, existential threat increased dogmatic belief style regardless of political orientation, such that both conservatives and liberals strengthened their beliefs (Vail et al., 2011). Further, existential threat increased support for extreme military interventions among politically conservative but not politically liberal individuals (Chatard, Arndt & Pyszczynski, 2010; Pyszczynski et al., 2006). Together, these findings suggest that pro-normative adherence to one's ideological priors plays an important role under threatening conditions.

Of course, one clarification in terms of theoretical choice deserves elaboration: Why prioritize the framework of coalitional psychology over TMT? While both perspectives predict that existential threat should lead to increased adherence to pro-normative standards of the ingroup, their underlying explanations as to *why* this adherence should occur differ. Specifically, the framework of coalitional psychology expands TMT in two key ways: first, TMT posits

that reminders of death activate worldview-defense processes; the framework of coalitional psychology posits that coalitional (vs. non-coalitional) threats should increase gravitation toward pro-normative standards of the ingroup. As mentioned above, I suggest that terrorism corresponds to the adaptive challenge of coalitional aggression, thereby constituting a coalitional threat. Second, TMT posits that worldview defense is largely a result of individual differences in self-esteem; the framework of coalitional psychology argues that the bolstering commitment to the ideology of one's own coalition served the adaptive advantage of binding social relations (Boyer et al., 2015). While this view is consistent with an extensive literature on social cognition (Baldwin, 1992; Hardin & Higgins 1996; Schaller & Conway, 1999) and intergroup bias (e.g. Asch, 1952; Sherif, 1966), it can accommodate a number of seemingly contradictory findings (Boyer et al., 2015).

Overall, the two reviewed contemporary orientations (conservative shift and worldview defense) make contrasting predictions concerning public reactions to real-world crises that imply a high degree of threat. Nonetheless, they also share two general assumptions – both of which are very much aligned with the framework of coalitional psychology. First, both orientations emphasize the importance of situational contexts to temporarily threaten one's sense of (psychological) security. Second, they predict that attitudinal changes occur in the service of restoring such security. There remains some debate as to the exact nature of these shifts and whether they are inevitable across all people and contexts (Jonas et al., 2008; Jost, Fitzsimons, & Kay, 2004; McGregor & Marigold, 2003). These debates have largely resulted in attempts to debunk one account or the other (e.g. Lambert et al., 2009; Ullrich & Cohrs, 2007) or aiming to identify the conditions under which either a conservative shift or worldview defense processes occur (e.g. Burke et al., 2013).

Adopting a coalitional psychology perspective thus provides a nuanced theoretical integration as it ascribes importance to both processes in shaping responses to terrorism - specifically, it posits that humans respond to between-group threat by aggressing or retaliating (conservative shift), but also acknowledges the tendency to seek coalitional support and maintain alliances (worldview defense). An integration of both processes is even more relevant given that a recent meta-analysis compared effect sizes for studies showing both worldview defense processes and conservative shift effects under existential threat, and demonstrated sizable effects for both (Burke et al., 2013). Nonetheless, it leaves a major question unanswered: Why do some studies identify reactions supporting a conservative shift (and hence a reaction to between-group threat), whereas others demonstrate the existence of worldview defense (and hence the tendency to maintain within-coalition alliances?

2.3 The Importance of Party Cues

When reviewing extant literature on conservative shift and worldview defense processes, it soon becomes evident that most studies suffer from a serious limitation: they do not account for contextual cues that could potentially confound the findings. For example, studies documenting conservative shift have examined responses in environments that were, arguably, dominated by a strong and prominent discourse on harsh retaliation or conducted under a Republican president (e.g. in the context of 9/11). Studies examining worldview defense processes, on the other hand, have do so largely under conditions in which worldview components were not readily available or present at all. Indeed, some have noted that documented conservative shifts may have been an artifact of historical context –and that when prevailing cultural trends favor conservatism, existential threat primes often strengthens conservative leanings, whereas they increase liberal leaning when prevailing trends are more progressive in nature (cf. Paper D). Others (Nail & McGregor, 2009) have ascribed divergent findings between conservative shift and worldview defense processes to priming, suggesting that asking respondents about their political orientation (and having some indicate that they are liberals) is sufficient to prime liberal ideals. While the authors state that "the issue of priming is critical" (p. 239), they nonetheless conclude that "a fair test between the motivated conservatism and worldview defense hypotheses occurs under circumstances in which participants respond with *no overt politically relevant primes*" (p. 239, emphasis added by author).

It is difficult to imagine a world in which political leaders remain mute about their views in the aftermath of a terrorist attack. Here, it is posited that previous studies have largely failed to take into account exactly these contextual factors and how they can 'amplify' processes of within-coalition maintenance upon the detection of between-group threat. People are susceptible to group influence, not only to authority figures in general (e.g. Milgram, 1974), but to their political elites in particular (e.g. Cohen, 2003). Indeed, political orientation and partisanship are by many viewed as constituting a worldview component and susceptible to subtle (even non-conscious) group influence (Cohen & Solomon, 2011) and reflect group attachment that are of strong psychological importance to many citizens (e.g. Campbell et al. 1960; Carsey & Layman 2006, Lebo & Cassino 2007) to an extent that they can powerfully shape their views (Zaller, 1992). As Dalton (2016) states, "when the political parties take clear and consistent policy positions, the party label provides [...] information on how 'people like me' should decide" (p. 7).

As mentioned earlier, many view political ideology and partisan identity as constituting worldview components that are highly susceptible to subtle

(even non-conscious) group influence (Cohen & Solomon, 2011), and that group attachment along these lines is of strong psychological importance to many citizens (Campbell et al., 1960; Carsey & Layman, 2006; Lebo & Cassino, 2007; Green et al. 2002; Greene 1999). Importantly, partisan identification can shape views in ways so powerful that it has been labelled a 'perceptual screen' through which partisans process incoming information (Zaller, 1992). As Dalton (2016) states, "when the political parties take clear and consistent policy positions, the party label provides an information shortcut on how 'people like me' should decide" (p. 7).

Early studies have shown that people follow partisan cues in general (e.g. Cohen, 2003), and others showed that information about party positions substantially influences individuals' opinions about policy proposals (Kam 2005; Lau & Redlawsk 2001; Mondak 1993; Pardos-Prado & Sagarzazu, 2016). Further, an impressive body of research demonstrates that partisan cues assume an important role in the formation of citizens' attitudes (e.g. Arceneaux 2008; Campbell et al. 1960; Lau & Redlawsk 2006; Mondak 1993; Zaller 1992). The importance of party cues in shaping public opinion is, among others, reflected in the tendency of partisans to retain information that confirms their prior beliefs and forget that which challenges their partisan positions on a wide range of political topics (Jerit & Barabas, 2012), and that elite influence can cause people to embrace positions that they would not hold had they been equipped with more facts (e.g., Kuklinski & Hurley, 1994).

Other studies have shown that the presence of party cues can significantly sway public opinion, even with respect to fundamental issues such as the decision to go to war. For example, Berinsky (2009) showed that changing the parties' stands from united opposition to united support for a military intervention sizably increased subjects' support for military intervention. Berinsky (2007) studied six American wars and demonstrated that in the context of the Iraq War, Democrats – who were initially polarized on the issue – started to strongly supporting the war when it was explicitly referred to as a 'Republican' or 'Bush' war (Berinsky, 2007, p. 968). Slothuus and De Vreese (2010) showed that citizens responded more favorably to an issue frame on a policy issue when it was sponsored by their 'own' party compared to when said frame was promoted by another party. Overall, extant literature on party cues suggest that they can sway public opinion.

The importance people's susceptibility to group influence under threatening conditions and the demonstrated effects of party cues in shaping public opinion raises many questions about how political elites can directly and indirectly affect citizens under conditions of terrorism threat. If people do indeed tend to maintain alliances (and signal their affiliation to them) under condi-

tions characterized by a high degree of between-group threat, and if individuals are particularly motivated to pay attention to ingroup cues for guidance about which beliefs and norms to rally around (Davis, 2007; McClosky, 1964), then the presence of party cues might either mitigate or amplify partisan differences in the aftermath of terrorist violence.

Nascent evidence from the psychological literature also supports the assumption that the situational salience of worldview components can indeed override 'chronic' worldviews, including political ideologies, when they are disseminated by one's respective ingroup. For example, following an existential threat prime, people tend to conform more to recently primed cultural standards of the ingroup, are more reluctant to violate those standards, and experience greater distress when they do so (Greenberg et al., 1992). Importantly, these tendencies can bear important repercussions for tolerance, a reaction pattern opposite to that of intergroup bias resulting from adherence to ingroup ideology (Allport, 1954; Greenberg et al. 1992; Park & Judd, 2005). Studies have shown that activating congruent norms or values for both liberals (e.g. compassion or tolerance) and conservatives (e.g. security) resulted in conservative or progressive evaluations in line with the salient ideal (Burke, Kosloff, & Landau, 2013), and that existential threat does not lead to negative reactions towards outgroup members when the value of tolerance is highly accessible (Rothschild, Abdollahi & Pyszczynski, 2009; Weise et al., 2008). Evidence from the real world further consolidates this finding: Following the Cartoon Crisis, political elites promoted inclusive tolerance as an essential Danish value, which led to increased tolerance toward Muslims (Sniderman et al., 2014). Thus, there is reason to assume that negative reactions in the aftermath of terrorist violence are not inevitable.

It is worth pointing out how marrying the framework of coalitional psychology with notions about people's susceptibility to group influence (that is, considering ingroup/party cues under threatening conditions) can account for a number of seemingly contradictory findings. First, by focusing on processes of threat assessment and maintenance of within-coalition alliances, the model suggests that (1) terrorist attacks lead to an aggressive response (or conservative shift) in aggregate, but that (2) subsequent responses might be characterized by pro-normative ingroup attachment, which varies for conservatives and liberals, respectively. Importantly, according to CP, both tendencies reflect the desire to return to a baseline (or higher) level of perceived safety (Woody & Szechtman, 2013). As such, it speaks to the importance of examining more nuanced trends in the aftermath of terrorist violence. In a related vein, it illustrates why so few studies have identified a "liberal shift", and why worldview defense processes (vis-à-vis conservative shift) might be harder to detect. According to the proposed model, everyone – regardless of political ideology –

should react to threat, resulting in a response that in aggregate might reflect a conservative shift. For conservatives, then, the presence of party cues in line with their ideological priors could amplify an intuitive response to threat. Rather than bolstering adherence to ingroup values which others hypothesize to result in increased tolerance among liberal individuals (Kosloff et al., 2010), I posit that these two mechanisms create more cross-pressure for liberals, leading them to remain "anchored" on the political spectrum under terrorism threat. Hence, it might require the presence of cues stressing liberal worldview components to initiate an empirically detectable shift among liberals. The final study in this dissertation examines these responses and in so doing, addresses the coalitional mechanisms that guide citizens in the aftermath of terrorist violence.

Chapter 3: Research Design and Data

In order to test the assumption that intuitions about and reactions to terrorist violence are shaped by our human coalitional psychology, I largely resort to an experimental methodology. In this chapter, I explain why an experimental approach enables me to properly address the research question that guides this dissertation. Further, I present an overview of the five articles included in the dissertation, their theoretical foci, and major methodological features. Lastly, I describe the measures I took in order to increase the external validity of the findings.

3.1 Overview of Studies and Data

This dissertation draws on four survey experiments, three of which were specifically designed to address major research questions in this project. Table 1 presents an overview of the methodological choices underlying each paper in the dissertation and summarizes research designs, data sources, and key variables. As shown, the dissertation employs rich data collections and diverse operationalizations of both independent and dependent variables. The conclusions rest on six data collections distributed across the five individual articles, which form a rich and strong basis for answering the overall research question.

Paper A consists of two studies designed to the hypothesis that intuitions about terrorism (vs. crime) are contingent upon the presence of coalitional threat cues and that this tendency is expressed across different national and cultural contexts. Its two studies draw on large, nationally representative samples of Danish, American and Egyptian adults, who were exposed to generic vignettes containing a range of coalitional threat cues. Paper B and Paper C also rest on an experimental approach, namely fictional news snippets containing subtle cues suggesting intergroup conflict, and test the claim that coalitional threat cues shape punitive attitudes toward terror suspects (Paper B) and that coalitional threat cues bear mnemonic value (Paper C). The two papers build on the same data collection but utilize different key variables to address distinct research questions, as outlined in this chapter.

Papers D and E focus on the maintenance of within-group alliances in the aftermath of terrorist violence. Paper D tests the argument that terrorist attacks do not necessarily have to be associated with a conservative shift, especially when liberal worldview components are readily accessible. Employing a

unique dataset on the same individuals collected just before and after the 2015 Copenhagen shootings, it serves as an important foundation for Paper E, which again rests on an experimental approach. Paper E employs a large sample of American adults and was designed to test the claim that party cues can exacerbate – or mitigate – partisan differences under conditions of terrorism threat by using a highly realistic priming technique, which is described in more detail below.

Table 1. Overview of Papers

Paper	Central Research Question(s)	Data/Participants	(Experimental) Treatment, Design	Key Dependent Variables
A.1	Are scenarios in which 'they' attack 'us' more likely to be perceived as 'terrorism' (vs. 'crime')? How are perceptions thereof associated with support for aggressive, group-based policies?	Randomized survey experiments employing a nationally representative sample of Danish adults (N = 1,006)	Short, generic vignettes containing coalitional threat cues; 2x2x2x2x2x2 Between-subjects design	1. Perceived degree of "terrorism" (vs. "crime") 2. Support for aggressive, group-based policies 3. Implicit reaction times
A.2	Are processes of categorizing inter-coalitional attacks in which 'they' attack 'us' psychologically deep-seated – that is, do they hold across different national and cultural contexts?	Randomized survey experiments employing nationally representative samples of U.S. (N =1891) and Egyptian (N = 1966) adults	1. Four vignettes from Study 1, adjusted to national contexts (2x2 between-subjects design) 2. Short vignettes varying salience of intergroup bias	1. Perceived degree of "terrorism" (vs. "crime") 2. Emotional reaction to presence of intergroup bias 2. Support for international cooperation concerning counter-terrorism efforts
B	Do coalitional threat cues shape support for torture of terror-suspects?	A randomized survey experiment conducted on a nationally representative sample of 2,126 U.S. adults	Fictional newspaper articles containing three coalitional threat cues (perpetrator sex, ethnicity, and coalition size); 2x2x2(x2) between-subjects design	Support for interrogational torture, punitiveness
C	Is memory recognition enhanced for coalitional threat cues? Is the absence of coalitional threat cues associated with a higher likelihood of committing false positive errors?	Same data collection as in Paper B; main analysis limited to White/Caucasian respondents (N = 1,437); Robustness check on full sample[a)]	See Paper B	Surprise recognition task pertaining to characteristics of terror suspects
D	Can a terrorist attack in a liberal environment lead to a reduction in prejudice?	Survey experiment of Danish adults (N = 993)	Natural Intervention: 2015 Copenhagen Attacks	Prejudice toward in- and outgroups (operationalized as dehumanization)
E	How do varying degrees of party polarization shape public support for harsh security measures in times of terror?	1. Randomized survey experiment in the U.S. (N = 5,270) (2. Pre-test of experimental stimuli on 3,000 U.S. adults)	1. Terrorism prime (video of breaking news coverage of recent terrorist attacks) vs. control video; (2x)x2x5 between-subjects design 2. Vignettes containing cues pertaining to various degrees of elite polarization	Support for harsh security measures

Note: Please see Paper C for a discussion of the motivation to limit the sample to White respondents, as well as an Online Appendix presenting analyses for the full sample.

3.2 Advantages of Experimental Research

Studying terrorism is not an easy endeavor. Unlike other important phenomena in the political domain, such as elections, we cannot reliably predict when and where terrorist attacks are going to happen. Silke (2001) notes that much research in the domain of terrorism has focused on sources that are not always free from bias, neither in terms of accuracy nor content - a serious reservation that can undermine the reliability of findings generated from such data. Although some studies have used large-scale observational datasets surrounding major terrorist events (Carnagey & Anderson, 2007; Nail et al., 2009; van de Vyver et al., 2015; but see Bar-Tal & Labin, 2001), this type of data makes valid causal inferences a challenging, "risky" process (Hernan and Robins, 2006). In light of these reservations, scholars have recently stressed the importance of studying terrorism-related phenomena with reference to an experimental methodology (e.g. Arce, Croson & Eckel, 2011).

One of the key claims in this dissertation is that between-coalition threat assessment shapes public reactions to terrorism. Consider one implication derived from the theoretical model in Chapter 2, which is tested in Paper B: that the presence (vs. absence) of even subtle coalitional threat cues leads to differential reactions toward terror suspects. Citizens should be inclined to punish terror suspects more harshly when they are identified as male outgroup members affiliated with a large terrorist organization (than if they are female, lone, ingroup perpetrators), and this tendency should be particularly expressed among men. In the real world, we are not exposed to said cues simultaneously (e.g. a perpetrator cannot be identified as both male and female). This problem can be properly addressed by employing an experimental approach.

Experimental research presents us with an appropriate way of drawing causal conclusions regarding interventions or treatments, and of establishing causality. The central feature of an experimental approach lies in the random allocation of people, or participants, to various treatment conditions that are carefully designed and altered. In order to establish a causal effect, each independent variable can be manipulated such that, *ceteris paribus*, any fluctuations in the dependent variable can be ascribed to corresponding movements in the independent variable.

Returning to the example above, such an approach allows for the random allocation of male and female participants to different treatment conditions, in which some participants read a news snippet containing information that a number of male, outgroup terror suspects have been arrested, and others re-

ceived information that a single female, ingroup terror suspect has been apprehended. The random allocation to treatment groups allows me to control which factors – or here, coalitional threat cues – the participants were exposed to. That is, it allows for a control of "the myriad of extraneous factors – both known and unknown, plausible and implausible – that may be linked to the phenomenon of interest" (McGraw, 1996, p. 771). Further, these conditions make it possible to demonstrate that the cause preceded the effect; that the size of the effect varies with the size of the causal effect; and to rule out alternative causal explanations, thereby fulfilling the principal criteria for establishing causality.

3.3 Increasing External Validity

Like any scientific methodology, following an experimental approach has both advantages and disadvantages. A primary concern is external validity (Lupia, 2002), that is, the ability to generalize the causal relationship beyond the experimental setting to the real world. This potential weakness has been considered the "Achilles' heel for many experimentalists" (Kam, Wilking, & Zechmeister, 2007). While this concern applies to virtually all topics or issues studies within an experimental framework, it is particularly important to address in the domain of terrorism research.

As Kinder and Palfrey (1993) note, "experimenters need not wait for natural processes to provide crucial tests and telling comparisons: they can create them on their own" (p. 15). However, unless one lives in a geographic area repeatedly and reliably affected by terrorist attacks, one has to exhibit a certain degree of creativity in order to study public reactions to terrorism in an experimental context. It is difficult but not impossible to "mimic" the impact of a real-world terrorist event in an experimental setting. In an attempt to increase the external validity of my findings and in order to address three major concerns about the generalizability of experimental findings (Kinder & Palfrey, 1993), I made three efforts relating to the following areas: data collection, characteristics of the sample, and development of stimulus material. In the following, I describe these efforts in more detail.

3.3.1 Data Collection

As Vissers et al. (2001) note, "of all aspects of the validity of artificial situations such as psychological experiments [...], transfer to the real world is probably the one brought up most frequently" (p. 129). The main concern here is that experimental settings may be too artificial and therefore make it difficult to generalize findings to the real world. Throughout the experimental procedures

employed in the individual studies, I tried to make sure that threat cues were subtle (and thus not overly artificial; see point 3.3.3) and that participants were in a familiar environment in which they would usually be exposed to the type of information that was presented in the experimental manipulations. The survey experiments took place via the web, and respondents were invited to participate from their own home, where they would normally encounter information (e.g. through the news media or social media) similar to the information presented to them in the form of experimental stimuli.

In addition, Paper D employs a natural experiment within days before and after the 2015 Copenhagen shootings. Here, the naturally occurring event was treated as an experimentally induced condition. Two points are worth making: the survey experiment contained a number of variables relevant to the study, but it did not have to induce terrorism (or threat thereof) artificially, which can be considered a big advantage. However, it suffered from the disadvantage of not having full control over other factors that might be deemed important, such as the degree of exposure to the event. A natural experiment as presented in Paper D surrenders some of the experimental control and therefore sacrifices a degree of internal validity for the sake of external validity.

3.3.2 Sample

Researchers frequently rely on convenience samples consisting of undergraduate students for their research. While fairly inexpensive – and in the sense of the word, convenient – this sampling method introduces problems that can hamper the generalizability of the findings to the general population (Henry, 1990). After all, convenience samples constitute a "narrow data base" (Sears, 1986). If we want to infer claims that are applicable to the general population, we need a sample consisting of people that resemble said population.

In order to tackle this issue and to increase external validity, the studies presented in this dissertation employ large, diverse groups of participants. Moreover, three of the five individual papers rely on nationally representative samples with sample sizes ranging from roughly 1000 to 5000 participants. Furthermore, the samples were collected in various countries: in the United States, Denmark, and Egypt. Using samples across different national, cultural, and political contexts is important as conditions specific to these contexts may influence how people receive and respond to information.

Another consideration makes the use of nationally representative samples (vis-à-vis convenience samples) beneficial to the study of public reactions to terrorism, especially with regards to claims about the importance of within-coalition alliances. This project largely focuses on ingroup membership along the line of political alliances. Given that people's affiliation with these political

alliances (e.g. political parties) develops and becomes more stable over the life course, and because many debates concerning appropriate responses to terrorism occur in an explicitly political context, using nationally representative samples can assist in gauging the actual dynamics underlying public reactions to terrorism.

3.3.3 Stimulus Material

Experiments usually aim at inferring to the real world, and a central concern about external validity is to develop experimental stimuli that mimic or resemble those people commonly encounter in real-world environments (Barabas & Jerit, 2010; Gaines et al., 2007). In addition, the researcher should make sure that there is sufficient variability in the treatment. As mentioned above, terrorist attacks are highly salient societal events that gain widespread attention in the media and among the public. This makes it difficult to design stimuli that are realistic, and it would be unrealistic – and unethical – to fabricate news about a major terrorist event.

The experimental stimuli underlying each individual data collection were designed to incorporate subtle coalitional threat cues that resembled information citizens would come across on a day-to-day basis. For example, Paper A employed rather generic vignettes as experimental stimuli. Participants were asked to evaluate a number of very short statements (e.g. "A number of foreigners kill a number of Danes in a highly coordinated act" or "A Danish national causes damage to a residential building in an impulsive act"). The experimental stimuli thus avoided any mention of the ethnicity or ideological motivation behind the act, which could have influenced the results. Paper B relied on fictional news snippets concerning apprehension of terror suspects. Rather than fabricating a terrorist event that could have alerted participants to the purpose of the study, this experimental stimulus contained information that might not have reached the participant. In Paper E, American participants were exposed to a vignette describing party positions in Congress on an important security matter. Of course, not a day goes by when the positions of the main political camps are not highly salient – at least to those who stay informed about political issues on a regular basis. It would, for instance, be highly unusual if we were to describe a situation in which Democrats adopt a strongly Republican position on a policy matter and vice versa. Thus, in line with common practice in research on party cue effects (e.g. Druckman, Peterson, & Slothuus, 2015), I chose to model the vignettes around real-world positions, designed to increase any artificiality in the stimuli that could alert participants to the effects I aimed to study.

Further, for Paper E, I designed a novel stimulus to prime participants with terrorist threat. I created a video montage of breaking news segments from well-known TV news stations pertaining to a range of major terrorist attacks on American and European soil, among others the 2004 Madrid bombings, the 2011 Norway attacks, the 2015 Paris attacks, and the 2016 Berlin Christmas market attack. As the results show, the video successfully induced a sense of threat, as participants reported substantially higher negative affect after watching it (compared to the control group, which was exposed to a video containing non-violent stimuli).

It should be noted that experimentally manipulating (or even inducing) terrorism threat gives rise to a major ethical concern. First, participants could be misled by the information presented to them. As mentioned above, Paper B employed a fictitious news article containing information about apprehended terror suspects, some of which were described as being of Middle Eastern descent. In times when tensions are often running high, and prejudice against the Muslim minority is a serious issue, it would be unacceptable to provide such information without informing subjects that the newspaper article was, indeed, an experimental manipulation. Hence, after each study, I ensured that respondents were debriefed and thoroughly informed about the purpose of the experiment. Furthermore, and in order to curb the danger of potentially aggravating subjects vis-à-vis a specific minority group, consideration was given to include terrorist attacks committed by white perpetrators (e.g. the 2011 Norway attacks and the Colorado Springs shooting) in the terrorism prime designed for and employed in Paper E.

Chapter 4: Summary of Findings

The studies in this dissertation have produced a number of empirical findings that substantially contribute to our understanding of how the public responds to terrorism. While Chapter 2 presented the theoretical foundations of *why* the public reacts to terrorist violence, this chapter presents the findings that illuminate to *how* the public reacts to terrorist violence. This chapter focuses on the core results from the individual articles, the presentation of which corresponds to the two sub-questions raised in the introduction. The first set of findings speak to the importance of between-coalition threat assessment, and the second set of findings speak to the maintenance of within-coalition alliances. Further, I present evidence that political elites can shape these associations. More elaborate analyses, robustness tests, and information on other included variables can be found in the respective articles and their appendices[2].

4.1 Between-Coalition Threat Assessment

With regard to the first part of the research question – *how does between-coalition threat assessment shape public reactions to terrorism?* – the main findings pertain to lay intuitions about terrorism vs. crime, perceptions of terror suspects, and their effects in the political domain. In short, between-coalition threat assessment substantially shapes how the public perceives – and responds to – terrorist violence. This assessment is contingent on the presence of subtle coalitional threat cues. Specifically, the analyses supported the following conclusions:

- Coalitional threat cues pertaining to group membership of victims and perpetrators shape lay intuitions of an event as "terrorism" vs. "crime". Specifically, cases in which "they", the outgroup, attack "us", the ingroup, are associated with higher perceptions of an event as constituting "terrorism" (rather than "crime").
    - Figure 1 in Paper A elegantly presents this major finding in the Danish context. It shows that cases in which 'they', the outgroup, attack 'us', members of the ingroup, lead to higher perceptions of an attack as constituting 'terrorism' than any oher combination of victim and perpetrator group membership. While this finding is in line with previous

[2] None of the reported findings changed substantially when Holm-Bonferroni adjustments for multiple comparisons were applied.

research speaking to the importance of intergroup categorization, it extends extant literature by demonstrating that this tendency cannot be interpreted as an instance of ingroup favoritism (i.e., to vindicate attacks committed by ingroup members). That is, the second scenario implying inter-coalitional aggression (cases in which "we", the ingroup, attack "them", the outgroup) are, to a higher extent than intra-coalitional attacks, perceived to constitute "terrorism" as well. These findings suggest that the coalitional mind is particularly 'tuned' to attacks crossing coalitional boundaries.

  - If this finding does indeed reflect a deep-seated psychological process in our human coalitional psychology, we should find its expression across different contexts. For example, Americans constitute an ingroup to Americans but an outgroup to people in the Middle East, and vice versa. Study 2 of Paper A extends the findings of Study 1 by testing their generalizability across different national, cultural, and political contexts. It demonstrates that both American and Egyptian citizens are more likely to label acts as "terrorism" when 'they' attack 'us'. That is, Egyptians are more likely to attach the label of 'terrorism' to an attack when Americans attack Egyptians, whereas Americans are more likely to perceive an attack as 'terrorism' when Egyptians attack Americans (cf. Paper A, Figure 3).

- Scenarios of inter-coalitional aggression in which "they" attack "us" are more likely to be labelled as "terrorism" in an automatic, spontaneous, and effortless fashion (Paper A, Figure 2). Using implicit reaction times as a proxy for more intuitive processing, Paper A shows that people are quicker to reach a decision about whether an event qualifies as "terrorism" vs. "crime". This result further speaks to the assumption that violent assaults that cross group boundaries tap into deep-seated psychological processes.
- Beyond shaping perceptions of "terrorism", coalitional threat cues also appear deep-seated to the extent that their presence (vs. absence) is associated with enhanced recognition memory of terror-suspect characteristics. Paper C supports three notions:
  - The presence of isolated coalitional threat cues increases the probability of correct recognition of terror suspect characteristics (cf. Paper C, Figure 1). Specifically, respondents were more likely to correctly recognize terror-suspects identified as male (vs. female); terror-suspects identified as belonging to the outgroup (vs. the ingroup); and terror-suspects acting with the support of a large coalition (vs. a lone actor).
  - Recognition memory is enhanced when coalitional threat cues co-occur (cf. Paper C, Figure 2). Specifically, people are more likely to correctly recall male outgroup perpetrators acting on behalf of a larger coalition

(that is, Arab males operating with the support of a radical, Islamist terrorist organization) compared to any other combination of terror-suspect characteristics. These findings expand other studies by suggesting that memory retention is enhanced for fitness-relevant stimuli and by demonstrating their relevance in the domain of coalitional aggression.

- The absence of coalitional threat cues is associated with the tendency to commit false positive (or Type II) errors. In line with Error Management Theory, those exposed to female terror suspects, ingroup perpetrators, and individual perpetrators were more likely to commit false positive errors were more likely to mistakenly indicate that they had read a newspaper article describing male perpetrators, outgroup perpetrators, and terrorist suspects acting on behalf of a larger terrorist organization, respectively. An important implication of these results is that people are not only more alert to cues implying coalitional aggression, but associated biases may also reduce or distort the attention that threats from female suspects, lone wolves, and ingroup attackers receive at the level of public debate.

This first set of findings demonstrates that important aspects of human coalitional psychology lend strong support to the assumption that public reactions to terrorism are contingent upon processes of between-coalition threat assessment. As such, they lay an important foundation for subsequent results produced in the individual studies of this dissertation. Let us recall that an important consequence of the detection of coalitional threat cues is a desire to return to a higher degree of coalitional safety, which can be accomplished by aggressing against a rival coalition and therefore pre-empting future harm. In line with this assumption, analyses supported the following conclusions:

- Perceptions of an event as constituting "terrorism" are associated with increased support for aggressive, group-based policies designed to deter the hostile outgroup coalition (cf. Figure 1, Panel B in Paper A). Even more so, these policy responses were characterized by the tendency to not only punish the specific perpetrator(s) responsible for the attack, but to extend this punishment to other members belonging to the coalition. This important finding is mirrored in the results of Paper B, which focuses on support for torture as a form of defensive aggression.
  - It should further be noted that responses to 'terrorism' are not only particularly aggressive when 'they' attack 'us' - people also sanctioned scenarios in which 'we' attack 'them' more harshly than intra-coalitional attacks. Again, this corroborates the assumption that the coalitional mind is 'tuned' to attacks crossing coalitional boundaries, rather than

vindicating attacks committed by one's own group.

- Paper B expands the main finding of Paper A by adding another, theoretically relevant, coalitional threat cue: perpetrator sex. In line with the Male Warrior Hypothesis which posits "a more pronounced coalitional psychology among men" (van Vugt., 2009, p. 379), results show that in aggregate, exposure to male outgroup terror-suspects acting on behalf of a large coalitions (operationalized as male, Arab terror-suspects belonging to a large, radical Islamist terrorist organization) elicited higher support for torture compared to (all but one of the) remaining combinations of terror-suspect characteristics. Further, this tendency was driven by male respondents. This major finding suggests that male outgroup coalitions activate a deep, tribal psychology designed to deter hostile coalitional networks, and shows that reactions to even subtle coalitional threat cues elicit a domain-specific response.
    - Nuanced responses based on respondent sex, however, revealed that these associations were driven by male participants. Among men, the exposure to the coalitional threat vignette led to higher support for torture compared to the remaining combinations of terror-suspect characteristics. This was not the case for women, for whom the effect of the coalitional threat vignette was absent (cf. Paper C, Table 3).
- Sex role attitudes and mere punitiveness did not account for the findings, suggesting that male coalitional psychology is deeply ingrained and readily activated by even subtle cues implying intergroup conflict. This finding further speaks to the importance of viewing responses to terror-suspects as domain-specific, such that men might be willing to support interrogational torture (a means of defensive aggression designed to avert future costs), but not punish them more harshly (offensive aggression) because retaliation might be likely.
    - It should be stressed that the findings of Paper B address an apparent mismatch between two existing literatures. On the one hand, and as established earlier, the terrorism literature has focused mostly on intergroup bias along group-demarcation lines of race, ethnicity, and religious denomination (e.g. Piazza, 2015). On the other, one of the most well-established findings in the domain of criminal justice outcomes is that female and male offenders are perceived differently, often resulting in milder sentencing of women. Confirming predictions derived from the MWH, these findings suggest that we need to consider co-occurring threat cues, as well as the sex of the agent exerting a response.
- The dataset of Paper A included factors that allowed for additional analyses. Specifically, Paper B (and Paper C) employed coalition size as a proxy

for another coalition-relevant threat cue: degree of formidability. However, it is not group size *per se* that should uniformly and unconditionally trigger an aggressive response. Rather, such a response should be activated upon the detection of cues suggesting that another coalition possesses the ability to inflict grave costs on one's own. In this context, it is important to highlight the differences in experimental stimuli utilized in Papers B and C vis-à-vis Paper A. Specifically, Paper B (and Paper C) relied on short, fictional newspaper vignettes that described the apprehension of (a) terror-suspect(s) – hence, an operationalization of formidability in ways other than group size difficult could potentially compromise external validity. Paper A, on the other hand, used generic scenarios in the form of very short vignettes. As such, the stimulus material employed in Paper A actually included another factor that taps on formidability: degree of planning. Whereas uncoordinated and impulsive acts send a signal of low formidability (if any at all), coordinated acts imply a high degree of formidability. Anecdotal evidence from recent terrorist events abounds: whereas there is considerable intuitive concern about the intent of coordinated attacks that hit stadiums, bars, and concert halls across Paris, the public appears more hesitant to refer to isolated events (such as a stabbing) as terrorist violence. Thus, in order to examine whether group size and degree of coordination mattered to the same extent that they did in Paper B, additional analyses were run on the dataset underlying Paper A.

- Table A1 in the Appendix presents mean support for an aggressive policy response across combinations of victim and perpetrator group membership, as well as degree of planning (coordinated vs. impulsive; Panel A) and group size (large group vs. lone actor; Panel B). Results show that relative to the scenario in which 'they' attack 'us' in a highly coordinated fashion, policy support was significantly lower for each of the remaining scenarios. Similarly, the scenario in which a large coalition of outgroup members ('they') attack 'us' elicited stronger policy support compared to each of the remaining scenarios. This finding lends further evidence to the assumption that a harsh policy response is contingent not only upon the group membership of perpetrators and victims, but also on perceptions of higher formidability[3].

[3] Findings were robust when analyses were conducted at the individual, rather than the vignette, level.

4.2 Maintenance of Within-Coalition Alliances

Papers A-C provide evidence for the mechanism between-coalition threat assessment. Papers D and E address the maintenance of within-coalition alliances in shaping public reactions to terrorism. The two papers supported the following conclusions:

- *Paper D* delivers non-laboratory evidence for the hypothesis that conservative shifts after terrorist attacks are not inevitable, especially when liberal worldview components are highly accessible. Drawing on a nationally representative panel study of Danish adults with pre- and post-measurements of prejudice assessed within days of the 2015 Copenhagen shootings, the central finding of this paper is that aggregate levels of prejudice toward Muslim groups *decreased* rather than increased after the Copenhagen attacks, even though these groups are commonly perceived as being associated with the perpetrator.
    - Importantly, the aggregate reduction in prejudice was driven by low-authoritarians, i.e. those who subscribe to central tenets of tolerance and who, in the face of threat, might be motivated to defend this worldview by bolstering it. Further, high-authoritarians' prejudice levels increased in response to the Copenhagen shootings, which speaks to notions regarding maintenance of within-coalition alliances. The findings that the terrorist incident led to a divergence of responses is particularly relevant given the situational salience of worldview components, that is, a majority of Danes are low authoritarians. The central finding of this paper illuminates important dynamics relating to liberal reactions to terrorism in the light of accessible, salient, and congruent worldview components in a real-world context. As such, it adds to a body of literature with an overwhelming focus on motivated conservatism in the response to threatening events (cf. Brandt et al., 2014; Haidt 2013) and shows that public reactions to terrorism can mask more nuanced responses.
- Since Paper D relied on a natural experiment, and as stated in Chapter 3, it is difficult to make clear causal inferences regarding the mechanism at play. Paper E provided experimental evidence for the assumption that contextual factors (such as liberal worldview components in Paper D) mask more fine-grained pattern for Democrats/liberals and Republicans/conservatives (see below). However, and in line with previous literature, findings in Paper E supported accounts of conservative shifting when no ingroup cues were present.
    - Specifically, terrorism threat led both Democratic partisans/liberals and Republican partisans/conservatives to increase their support for

harsh security measures. While levels of support for said policies continued to differ between partisans, partisan differences did not become substantially more pronounced under terrorism threat (cf. Paper E, Figure 2).

4.2.1 The Importance of Party Cues

Based on the findings presented above, and in line with the theoretical assumption that political elites might be able to shape tendencies to gravitate more strongly toward the pro-normative standards of one's ingroup, the dissertation examined the influence of party cues. That is, the main findings of Paper E concern the question as to whether political elite harvest – or mitigate – the differences that exist among the partisan public under terrorism threat. Paper E advances the following conclusions:

- Relative to secure circumstances, party cues exert a powerful influence on public opinion in the aftermath of terrorist violence (Paper E, Figure 4).
    - Relative to highly polarized party cues under secure circumstances, highly polarized party cues under terrorism threat significantly increased polarization between Democratic and Republican partisans.
- In a strongly polarized elite environment, both partisans increased their support for harsh security measures under terrorism threat relative to secure circumstances – however, this reaction was stronger for Republicans. This finding supports the assumption that a highly polarized elite environment leads to a polarization of public opinion by initiating worldview defense processes, such that Republicans – for whom respective party cues are inchoate with an intuitive response to threat reacted more strongly to their presence than Democrats, who might experience more cross-pressure between an intuitive response to threat and party cues stressing liberal worldview components. This finding thus demonstrates that Democrats remained 'anchored' when cues inchoate with their liberal worldview components are present under terrorism threat.
    - Weakly polarized party cues are sufficient to significantly increase partisan differences under terrorism threat (relative to secure circumstances), a finding that is driven by a significant increase in policy support among Republicans under terror. Democrats remain anchored in their policy support.
- Under terrorism threat itself, partisan differences increase relative to the degree of party polarization. Strongly polarized party cues significantly increased partisan differences relative to even weakly polarized cues.
    - This effect is driven by both partisans, such that strongly polarized party cues (relative to weakly polarized party cues) led to a significant

decrease in policy support among Democrats and a significant *increase* in policy support among Republicans. This finding corroborates the impact of ingroup cues in times of crisis. In other words, under terrorism threat, it does not only matter that political elites are polarized – it also matters how strongly they are polarized. According to the degree of polarization, partisans follow suit.

- Of course, these findings above paint a rather dire picture, as they suggest that political elites can harvest mechanisms of within-coalition maintenance to create increasing rifts among the public. However, because the findings support the notion that political elites might exploit existing partisan differences to their advantage by disseminating polarized party cues, they might also use their "voice" to mitigate some of the negative effects we so often witness in the aftermath of terrorist attacks. Therefore, another question concerns the effect of unified party cues under terrorism threat - that is, cues containing information that political elites agree on the issue of harsh security measures. The following conclusions were supported:
    - Unified party cues supporting harsh security measures under terrorism threat do only mitigate the partisan gap that existed under secure circumstances, but substantively decrease it. This finding is driven by increased support for harsh security measures among Democrats under terrorism threat; Republicans remain anchored.
    - Similarly, unified party cues opposing harsh security measures under terrorism threat mitigate partisan differences that exist under secure circumstances. Although terrorism threat significantly increases policy support among both partisans, partisan differences themselves are contained.
    - Under terrorism threat itself, unified party cues opposing harsh security measures mitigated the differences between partisans that even weakly polarized party cues had created. That is, unified party cues opposing use of harsh security measures significantly decreased partisan differences relative to weakly polarized cues under terrorism threat.
        - First, unified party cues supporting harsh security substantially decreased partisan differences that even weakly polarized party cues had created. This effect is driven by Democrats, who substantively increase their support for harsh security measures; Republicans remains anchored.
        - Similarly, unified party cues opposing harsh security measures substantially decreased partisan differences under terrorism

threat. This effect is driven by Republicans, who substantively decrease their support for harsh security measures upon exposure to unified party cues; Democrats' support remains anchored.

Chapter 5: Conclusion and Discussion

Overall, the dissertation and its five individual papers underline the importance of human coalitional psychology in shaping public reactions to terrorism. More specifically, the dissertation makes three major contributions to the existing literature. First, it advances an integrated theoretical framework to study public reactions to terrorism. Second, it generates and derives testable hypotheses from this framework and emphasizes the role of two components central to human coalitional psychology: between-coalition threat assessment and maintenance of within-coalition alliances. Third, the framework is used to derive and subsequently test the importance of political elite communication in the aftermath of terrorist violence, when much of our social fabric appears to be at stake. Here, I elaborate on each contribution, illustrate how they can inform current public debates, and discuss future research avenues.

5.1 An Integrated Theoretical Model

Terrorism poses significant challenges in the domain of national and international politics and looms large in the minds of many citizens across the globe. While extant literature has sought to examine how the public responds to terrorist violence, it has not proposed a rigorous theoretical framework that can accommodate (seemingly disparate) empirical findings that previous studies have produced. As mentioned in the introduction, such a coherent framework is needed in order to account for both the *why* the public reacts so strongly to terrorist violence, thereby allowing for a more nuanced understanding of *how* these reactions are shaped. The proposed framework marries the psychology and political science literatures with reference to human coalitional psychology, derives and tests predictions, and accommodates valuable findings produced by previous scholarship in the process.

With regards to the latter, this dissertation breaks with existing notions that the public responds to terrorism *either* by shifting toward the conservative end of the political spectrum *or* by bolstering their ingroup attachment (Burke et al., 2013). It shows that both tendencies map onto processes of inter-coalition threat assessment and maintenance of intra-coalition alliances, and that they go hand in hand because they enable people to return to a higher degree of perceived safety. However, it also acknowledges that people, especially under threatening conditions, are susceptible to group influence, and

that they are inclined to signal adherence to the normative ideals of their ingroup in return. By marrying these approaches, the proposed framework speaks to a long-standing debate concerning public reactions to terrorism in the psychology and political science literatures, and provides a solution to a prominent theoretical puzzle.

Some might argue that employing an evolutionary psychological account raises the question as to whether the produced findings are indeed attributable to evolved psychological mechanisms or whether they can be ascribed to other processes, such as cultural socialization, stereotyping, or intergroup bias. A closer look at the findings produced in this dissertation reveals that these approaches would have difficulties in accommodating them. For example, these alternative perspectives do not account for the conclusions that inter-coalitional attacks trigger a "terrorism template" across national and cultural contexts, that inter-coalitional attacks perpetrated by the ingroup against the outgroup are more likely to be labelled as "terrorism" than intra-coalitional attacks (Paper A), that responses to terrorism are domain-specific (resulting in, for example, an increased willingness to torture terror suspects to obtain information, but not to blindly punish them; cf. Paper B); and to be more vigilant to certain constellations of terror-suspects, and to retain their characteristics better (cf. Paper C).

Further, and in a related vein, the tendency to construe intergroup categorization based on ethnic origin in the domain of political violence is often reflected in the trend of mass media in Western countries to highlight attacks committed by Arab perpetrators and covering them more extensively than others (Powell, 2011). Holding the media responsible for the existence of intergroup bias, however, dismisses the finding that, while the particularities depend on the social context (Hewstone, Rubin & Willis, 2002), processes of intergroup categorization are ubiquitous. A major advantage of focusing on human coalitional psychology underlying these processes is its ability to explain why the labelling of acts as 'terrorism' across different national, cultural, geographic (e.g., ETA in Basque country), ideological (e.g., RAF in Germany), and religious (e.g., IRA in Ireland) lines. Future research would make important contributions by expanding its agenda into an examination of the relevance of these group demarcation lines.

Overall, an account stressing the relevance of coalitional dynamics does not only hold the potential to serve as a meta-theoretical paradigm for integrating, reconciling, and expanding existing literatures, but also to generate powerful and sound hypotheses. This dissertation tested some of these hypotheses and, in so doing, touched directly to a number of large public debates that have surfaced repeatedly in recent years after terrorist attacks across the globe.

5.2 What Do We Talk About When We Talk About "Terrorism"?

One of the most salient debates after terrorist violence concerns the tendency of the public to label some acts as "terrorism" and others as "mass shootings" or "crimes". The existence of a 'terrorism' template (cf. Paper A) across cultural and national contexts speaks to the notion that to the ordinary citizen, terrorism is, in fact, an instantiation of coalitional aggression that the human mind has been built to respond to in an intuitive fashion. This is important, as it suggests that folk intuitions about terrorism differ starkly from official definitions, but also that these labels are applied before many details about an attack (e.g. ideological intent) are not yet known to the population. This conclusion bears major ramifications for public debates concerning terrorist violence. First, it shows that perceptions of and reactions to terrorism do not reflect a strictly Western pattern of thinking, one that may have emerged due to the recent history of radical Islamist terrorism against Western countries. On the contrary, this association can be observed across cultures, where 'terrorism' is viewed as attacks on one's own group committed by outsiders. Second, alerting people to the fact that others might not consider attacks on foreign soil as grave as when they occur on their own can breed hostility between groups – some of which might give rise to terrorist violence in the first place.

Tilly (2004) correctly observed that 'most terror occurs on the perpetrators' own home territory' (p. 11). the proposed psychological framework warrants the consideration that 'terrorism' is intuitively viewed as an instantiation of coalitional aggression. Essentially, 'terrorism' is attributed to events where 'they', an outgroup, attack 'us', the ingroup. Despite the large and varied number of formal definitions concerning the term, none of them has explicitly acknowledged an intergroup dimension (Schmid, 2011; but see Horowitz, 2001) – a feature that is, from a psychological perspective, of pivotal importance. Importantly, the findings presented in Paper A also shed light on the so-called 'empathy gap'. i.e., the tendency to overwhelmingly display outrage when violence hits us at home while turning a blind eye to attacks of similar gravity far from home. For example, anecdotal evidence that suggest that extra-national attacks (e.g. terrorist events in Iraq or the wider Middle East) fail to spark outrage across the globe, whereas terrorist attacks in Western countries (e.g. terrorist attacks in Europe) gain widespread attention. Contrary to common assumptions, for example, that differential reactions should be ascribed to geographical distance (Trout, 2010), the findings in this dissertation suggest that these tendencies are an expression of our deeply engrained coalitional psychology that is often intuitive in nature.

While commentators and analysts have recently addressed (and criticized) the unbalanced reactions to recent terrorist attacks in Paris and Beirut, citing cultural bias, racism, and statistical numbness as potential explanations, future research should address additional and alternative conceptualizations of in- and outgroup membership beyond that of national identity employed in the current studies. For example, people across the globe might feel more outrage toward terrorist attacks in Western countries because in-group membership can be contingent upon cultural identity, relatedness, or proximity (e.g. people might feel closer to a group that is geographically proximal and/or shares sociohistorical and cultural roots with one's own group; Roberts & Burleson, 2013). Further, such in- and outgroup dimensions can be either cognitive or affective (Ma-Kellams, 2011), implying that people (who, for example, might travel more frequently to Western countries compared to Arab or Middle Eastern countries) might feel differentially about events occurring in places they have been to (Ghosh, 2015). Of course, in-group boundaries are often context-dependent, malleable, and expandable. A replication of the findings presented in this study based on other conceptualizations can further help explain the patterns of effects demonstrated here, and future research will make important contributions by exploring the generalizability of these findings across different conceptualizations of in- and outgroup membership.

Ironically, and in interaction with Paper C, this suggests that we should more carefully consider how we label these events in public discourse, as they might further the biases of our own coalitional psychology we so frequently appear to succumb to. For example, the more often we talk about outgroup perpetrators as 'terrorists', the more chronically accessible this concept might become to the coalitional mind; at the same time, we might habituate ourselves to perpetrators of our 'own' if we continue to refer to them as derailed madmen. The issue extends beyond the mere labelling of events and perpetrators, however, and implies that they might contribute to lower levels of vigilance toward terror-suspects who belong to our ingroup. This is even more relevant given that statistics show that right-wing, extremist violence outnumbers attacks committed by Islamic terrorist groups in many Western countries, and in the US in particular. And, as Paper B shows, this might have fundamental consequences on how we treat them – a tendency that terror organizations could potentially exploit.

Given that Paper E suggested that political elites can significantly shape public reactions to terrorism, and to the extent that media outlets are often shaped by partisan affiliation – we should also consider the role that language plays in describing the carnage. Returning to the example of the 2015 Paris attacks and the Beirut bombings just a day before, the headlines that emerged

in response to these events were fundamentally different. In the English-language press, Beirut was overwhelmingly described in terms of a "Hezbollah stronghold" (a reference to the Lebanon-based Shiite Muslim militant group and political party). Examples include, but are not limited to, headlines such as "Dozens Killed in Bombing Targeting Hezbollah Stronghold in Lebanon" (Slate), "Suicide Bombing Kills At Least 37 In Hezbollah Stronghold Of Southern Beirut" (NPR), "Two suicide bombers hit Hezbollah bastion in Lebanon" (Reuters), "Deadly explosions rock Hezbollah stronghold in Beirut" (France 24), "There's been a major bombing attack in Hezbollah's Beirut stronghold" (Business Insider). *The Atlantic*'s **coverage of the attack** emphasized that "the neighborhood is a stronghold of Hezbollah", and the *The Wall Street Journal* called that neighbourhood 'Bourj al-Barajneh', "an area that is a bastion for the Iran-backed Lebanese militia Hezbollah." In contrast, headlines about the violence in Paris tended to reflect outrage, alarm, and grief. Reuters declared "Disbelief, panic as militants cause carnage in Paris a second time," while *The New Yorker* announced "Terror Strikes in Paris" and CNN called it a "massacre." What the coverage prioritized was not the ethno-religious makeup of the area attacked, but the civilian nature of the scene.

If citizens take important cues from authority figures in times of threat, their language could send strong signals of reinforcement of a psychological process that it already characterized by an intuitive response dismissing intra-coalitional violence when 'they' attack 'them' (cf. Paper C). Hence, such discourse could potentially go beyond the immediate intuitive response to different attacks, thereby making these distinctions more readily available, leading the coalitional mind to fill in the gaps with respect to wider 'templates' that exist for terrorist violence.

5.3 A Functional Response to Terrorism?

Paper A showed that perceptions of and reactions to terrorism hold across different cultural and national contexts. Paper B demonstrated that the presence of coalitional threat cues elicited a response that can be considered domain-specific; and Paper C showed that people are particularly vigilant to the presence of said cues, such that they are better retained in memory (and that their absence is associated with memory bias). These findings raise two distinct, yet interrelated, questions about generalizability of the results over time. First, should we expect similar reactions in times of less saliency of terrorist violence? And, second, should we expect a different reaction after a prolonged period of multiple attacks? On the one hand, given the relative salience of terrorism is our current day and age, one might expect that with a higher frequency of attacks or prolonged periods of multiple attacks, the public might

start responding differently, reflected in – for example – a decrease in negative attitudes toward outgroups, vigilance, and support for aggressive policies. On the other, our responses serve a function, and this is why they are triggered reliably.

It is important to consider these questions with respect to the central assumption of this dissertation, namely that the coalitional mind has evolved to be 'tuned' to instances of coalitional aggression because it has been – and continues to be - a very costly phenomenon. Normative considerations about the implications of public reactions to terrorism aside (e.g. concerning public support for interrogational torture for certain terror-suspects, but not others; cf. Paper B; and the implications of labelling certain types of assault, but not others, as 'terrorism'; cf. Paper A), it is therefore important to reiterate that these responses have functional value. That is, "distinct forms of coalitional aggression constituted selection pressures that have resulted in psychological adaptations designed to reason adaptively within these domains" (Lopez, 2017). If the output documented in this dissertation is indeed the product of (a range of) adaptive psychological mechanisms, then we would expect them to be reliable activated to cues suggesting between-group conflict. However, I posit that it is important to distinguish between more 'overt' responses to terrorism on the one hand, and more 'covert' responses, on the other. An example of a more overt response is the decision to support a given policy that restricts civil liberties, punishment of perpetrators, and discrimination of outgroup members; more covert responses include those of physiological nature – i.e. elevated stress levels – and intuitive vigilance to stimuli in the environment.

With regards to what I refer to as overt responses, it is noteworthy that despite the fundamental impact of large-scale attacks, studies show that their negative effects commonly dissipate within a few weeks after their occurrence. For example, studies show that stereotyping markedly increased in the immediate aftermath of the Manchester bombing of May 22, 2017, but that this tendency had dissipated within the week following the attack (Mancosu et al., 2018). Similarly, even the 9/11 terrorist attacks were relatively short-lived, such that decreases in enthusiasm and increases in sadness flattened out after roughly seven days following the events (Krueger et al., 2007). Metcalfe et al. (2011) used monthly data to show that the 9/11 attacks did not have a long-lasting impact on subjective well-being in the U.K. And Moskalenko et al. (2006) showed that among Americans, identification with their country was higher four days after the 9/11 terrorist attacks than six months before or 18 months after.

In line with the assumption that our coalitional psychology reliably responds to inter-coalitional attacks comes from the Gallup organization, which

has monitored public concern about future attacks since 9/11. Their data suggests fluctuations in concern about future attacks, which was highest in September 2001, after which it decreased – only to spike significantly after the 2004 Madrid train bombings and the 2005 London bombings. These tendencies are further highlighted by the fact that in June 2002, 11% of those surveyed by the poll stated that the Bush administration had gone too far in restricting civil liberties in return to guarantee a higher degree of national security, whereas this number increased to more than 40% in May 2006. Hate crimes against members of the Muslim community also increase significantly after terrorist events. A report by the ADC (American-Arab Anti-Discrimination Committee) counts 700 violent attacks on US Muslims in the nine weeks following 9/11 and states that "the intensity of the backlash, especially in terms of hate crimes and discrimination, was at its peak in the first six months following the attacks, and particularly during the first nine weeks" (Ibish & Stewart, 2003, p. 15).

Of course, studies focusing on terrorism in times of less saliency are limited in their generalizability, not only to the extent that they largely focus on single events of disastrous impact (e.g. 9/11, the Boston Marathon bombings, the 2004 Madrid attacks, or the 2005 London bombings), but also because they largely focus on the West, where terrorist violence is statistically speaking less common than in other parts of the world, such as Africa and the wider Middle East. Evidence for the assumption that instances of coalitional aggression, such as terrorist violence, do not lead to a 'flattening' of responses comes from areas that are repeatedly struck by attacks over prolonged periods of time. For example, studies show that terrorist attacks in Israel continue to be associated with higher stress levels among the public, as well as flare-ups of hostile attitudes toward the perpetrators and a desire for retaliation (e.g. Hirschberger & Ein-Dor, 2006), often resulting in open and bilateral escalation of the conflict. Further, exposure to terrorism in Israel continues to increase exclusionist attitudes towards outgroup members (see Bar-Tal and Labin, 2001; Canetti-Nisim et al., 2009) in a fluctuating manner. These persistent reactions make sense given that 'letting down one's guard' with respect to its potential effects could lead to even more disastrous consequences.

It is also important to consider more 'covert' responses and how they influence the covert responses described hitherto. This brings us to a discussion of the media, which one cannot remain mute about when discussing the implications of terrorist violence on the public. It has been shown that repeated media exposure to terrorist attacks is linked to increases in long-term stress and trauma-related disorders, to an extent that they can usher in spillover effects on children and infants. Such exposure to terrorism may, in turn, lead to fear conditioning. e.g. in which repeated exposure to terrorist acts which may

activate fear circuitry in the brain, thereby exacerbating negative emotions (Holman et al., 2014; Schuster et al., 2001). This, in turn, can information pertaining to specific attacks chronically accessible and influence a variety of psychological outcomes, such negative stereotypes about certain outgroup members. This also implies that we might become 'chronically biased' toward certain perpetrators (cf. Paper A and C).

In line with this, it has been suggested that the largescale coverage of terrorist events by the media can interfere with 'recuperation' after terror. Holman et al. (2014), who administered a representative survey of the U.S. population between 2-4 weeks after the Boston Marathon bombing, showed that repeated media exposure to the bombing was associated with higher stress across all U.S. States. Even more so, the largescale media coverage of terrorism can affect mental health outcomes and the well-being beyond individuals directly affected by terrorist violence. For example, there is evidence that media exposure to terrorist attacks, including the 9/11 attack in New York and the Oklahoma City bombing (Ahern et al., 2002; Pfefferbaum et al. 2001), were associated with trauma-related symptoms at the national level throughout the U.S. Additional evidence suggests that that those living in U.S. States not affected by the event (e.g. Schlenger et al., 2002) and even in other countries (e.g. Metcalfe et al., 2011) were negatively impacted by terrorist events, again possibly due to media coverage. This suggests that the recent increasing frequency, and thus reporting, of terrorist acts in Europe and the U.S may potentially contribute to higher levels of stress-related diseases in the long term. To the extent that media outlets communicate reactions to terrorism, exposure to different types of rhetoric might increase not only the salience of terrorist violence in general, but also the underlying circuitry of our coalitional mind which will then facilitate, or amplify, its responses (cf. Paper A-C). And these 'intangible' or 'covert' responses influence 'tangible' and 'overt' responses in turn, many of which can be detrimental to our social fabric.

Overall, while the overt effects of terrorism may not be long-lasting, they can be triggered, time and time again, with the occurrence of new large-scale attacks. It is important to reiterate that although our intuitive reactions to terrorist violence might be normatively undesirable, the framework adopted in this dissertation suggests that they bear functional value. Humans are extraordinarily resilient. But that does not mean that these events do not scar us – after all, if this was the case, our coalitional mind would not have been equipped with the domain-specific mechanisms that still appear to be at work today. Curbing some of the intuitive reactions might be a difficult enterprise – however, it appears that political elites and other authority figures can come to the rescue.

5.4 How Can We Contain Violent Backlash?

Recent terrorist events on European soil provide anecdotal evidence that authority figures can harvest terrorist events to either polarize the public or keep the fears of citizens at bay. For example, in the wake of the violence that shook Norway in 2011, the reaction of then-PM Jens Stoltenberg was unequivocal: 'Our response is more democracy, more openness, and more humanity. We will answer hatred with love' (Orange, 2012). Norway, he suggested, would not seek retaliation as the U.S. had done after 9/11. After Stoltenberg's speech, Norwegian citizens readily rallied around their prime minister, opposition politicians echoed his message and expressed support, and the attacks were not turned into a partisan issue. 'We all applaud the prime minister for the way he led the nation after this attack', a member of the right-wing Progress Party stated later.

Compared to Norway, terrorist attacks in other countries – such as in the United States and France – have commonly elicited larger partisan rifts both among elites and the general public, and reignited debates on the balance between civil liberties and national security. For example, in the wake of the 2015 Charlie Hebdo attacks, centre- and far right-wing parties called for stricter surveillance and law enforcement powers, and Front National's Le Pen vowed to 'wage war against Islamism'. In contrast, President Hollande stated that the satire published by Charlie Hebdo represents the core values of the French Republic, including independence, freedom of expression, and pluralism and democracy. In order to voice support for freedom of speech, thousands took to the streets across France, where they condemned the 'highly intrusive surveillance methods' advocated by Le Pen.

This project is (one of) the first to empirically examine the influence of political elites in shaping public opinion in the aftermath of terrorist violence. With reference to the maintenance of within-coalition alliances (reflected in a gravitation toward ingroup norms) and heightened susceptibility to group influence under threat (cf. Paper D and E), it shows that political elites can exploit this tendency in order to steer polarization, but also harvest it in order to pre-empt hostility and animosity. The data generated in Paper E suggests that political elites can contribute to, or amplify, serious rifts between a given nation vis-à-vis outgroups and between different political camps. The dissertation thus demonstrates that the influence of political elites in shaping public reactions to terrorism plays a much more crucial role in amplifying (and mitigating) partisan perceptual gaps than what has been recognized, or at least shown, in extant work.

Crisis communication in the aftermath of terrorism is widely recognized as an important factor in keeping the fears of affected populations at bay. Of

course, political elites are not the only authority figures that people look up to in times of crisis and people vary with respect to the importance they place on political alliances as an ingroup. The findings therefore point to the importance of considering other platforms and authority figures that can disseminate relevant cues in this context, such as the media or religious leaders. Future research, outlined below, can help us to ensure that crisis communication is implemented with a more careful reference to the psychological dynamics that shape public reactions to terrorism.

5.5 Directions for Future Research

Of course, "evidence accumulated from adaptive task analyses and lab and field experiments are not on their own sufficient to allow us to conclusively determine the nature of ancestral environments or psychological adaptations" (Lopez, 2017, p. 19). The theoretical foundation, as well as the findings produced by this dissertation, however, stress the the "need to view contemporary experiences with an eye toward the ancestral world in which our minds are designed to operate" (Kirkpatrick & Navarrete, 2012, p. 295). In other words, making sense of public reactions to terrorism with reference to how the coalitional mind functions in this domain can substantially nuance our understanding of the often harsh and biased reactions to large-scale attacks. Importantly, this contribution expands the existing literature on public perceptions of and reactions to terrorist violence by illuminating the cognitive machinery that has likely shaped these reactions in the first place. Ultimately, a framework that accommodates the very psychological foundations that shape reactions to violence, also vis-à-vis other forms of violent assault, is essential if we want to be able to pre-empt some of the negative effects of terrorist violence that often threaten our social fabric.

Although the dissertation has produced a number of important findings, the story does not end here. Rather, it raises new questions and calls for further, methodologically and theoretically rigorous, research on the subject. First, more research on the cumulative effects of terrorist violence on the public is needed. Because terrorist attacks tend to be sudden, surprising, and of short duration, they are usually regarded as discrete events. In reality, they build on one another, and any new attack or attacks are read, variably by different groups, in the context of the history of such events. This raises an important question: Does repeated exposure to terrorism "habituate" people to its effects, or do they persist? An answer to this question can potentially provide further insights into the cognitive architecture underlying our intuitive reactions to terrorism, as highlighted with reference to several important implications throughout this discussion.

Second, it will be important to further examine the salience of ingroup membership in the context of terrorist violence. Ingroup identification can vary greatly with specific circumstances surrounding intergroup assault, e.g., terrorist violence along religious, ideological, or national lines. Paper B, for example, operationalized in- and outgroup membership in terms of ethnicity, which was motivated by the fact that the events of 9/11 have made this group demarcation line particularly salient. However, recent evidence from evolutionary psychology suggests that coalitional affiliation can override race (Kurzban et al., 2011). Hence, it will be important to examine intergroup assault along other group demarcation lines, such as ideology. If, for instance, one group attacks another explicitly because they identify as liberals, would this (according to liberals) constitute terrorism? Extending a research agenda in this manner will provide a more nuanced picture of coalitional aggression and its role in shaping public reactions to terrorism along other group dimensions.

In a similar vein, a compelling demonstration in future research would be to experimentally manipulate the "us" while holding the "them" constant, in order to show that the same act can be categorized as 'terrorism' versus 'crime' depending on the manipulated group membership of the perceiver. An illustrative case from the real-world, for example, would be that of Dylann Roof, a white American who killed nine people at a black church in South Carolina on June 15, 2017. The findings presented in this dissertation suggest that Black individuals would be more likely to categorize this act as terrorism than White individuals – however, this effect might potentially be mitigated if the category 'American' was made salient as compared to the category 'race'. Addressing such puzzles will further nuance our understanding of how the coalitional mind operates in response to different attacks crossing group boundaries when different demarcation lines of one's own group membership are made salient.

While the dissertation contributes to our understanding of the intuitive distinction between terrorism and crime (cf. Paper A), future research is needed to distinguish the former from other types of violent intergroup assault. A fundamental question to address concerns the demarcation of terrorism vis-à-vis other forms of mass violence. For example, do perceptions of and reactions to terrorist violence draw on the same cognitive systems as those for 'war'? An answer to this question will further illuminate the cognitive templates that might (or might not) exist for different instantiations of intergroup violence and coalitional aggression, and will shed light on how our 'hunches' guide our behavior in the face of modern forms of mass violence.

Altogether, this dissertation journeyed back and forth across an academic landscape built largely by evolutionary psychologists and political scientists,

but also criminologists and sociologists. In augmenting the findings that previous scholarship has produced - as well as in explaining how the findings of this dissertation map onto these findings in return – it is difficult to dismiss how well they inform each other.

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Appendix

Table A1. Support for Aggressive Group-Based Policies for Interactions between Group Membership of Victim/Perpetrator and Degree of Planning (Panel A) and Group Size (Panel B).

		Support for Aggressive Group-Based Policies				
		A: Degree of Coordination			B: Group Size	
		M (SE)	Difference		*M (SE)*	Difference
'They' Attack 'Us'	**Coord.**	**.51 (.01)**		**Large**	**.50 (.01)**	
'We' Attack 'Us'	Coord.	.49 (.01)	-.02*$_h$	Large	.47 (.01)	-.03**$_h$
'They' Attack 'Them'	Coord.	.46 (.01)	-.05***$_h$	Large	.45 (.01)	-.05**$_h$
'We' Attack 'Them'	Coord.	.47 (.01)	-.04***$_h$	Large	.47 (.01)	-.05***$_h$
'They' Attack 'Us'	Imp.	.47 (.01)	-.04***$_h$	Small	.48 (.01)	-.02*$_h$
'We' Attack 'Us'	Imp.	.43 (.01)	-.08***$_h$	Small	.45 (.01)	-.05***$_h$
'They' Attack 'Them'	Imp.	.42 (.01)	-.09***$_h$	Small	.43 (.01)	-.07***$_h$
'We' Attack 'Them'	Imp.	.43 (.01)	-.08***$_h$	Small	.43 (.01)	-.07***$_h$

Notes. Entries on the left side of columns are group means of support for aggressive group-based policies with standard errors in parentheses. Entries on the right side are differences in means relative to the main scenario, scenarios in which 'they' attack 'us' in a coordinated manner (Panel A) and when a large coalition of 'them' attacks us (Panel B). Letters in superscript indicate means that did not differ significantly at the 5%-level. *p < .05; **p < .01, ***p < .001 (two-sided). The Bonferroni-Holm correction for multiple comparisons was performed by ordering p-values from smallest to largest. Then, a unique alpha level for each p-value was calculated by the formula: .05/(7-position in sequence +1). Each p-value was then compared against its corresponding alpha.

Table A2. Regression Models

	Support for Aggressive Group-Based Policies	
	Degree of Planning	Group Size
Group Size	0.02***	0.02**
	(0.004)	(0.01)
Degree of Harm	0.06***	0.06***
	(0.004)	(0.004)
Target	0.04***	0.03***
	(0.004)	(0.004)
Perpetrator	-0.01	-0.02*
	(0.01)	(0.01)
Victim	-0.01	-0.02**
	(0.01)	(0.01)
Perpetrator x Victim	0.05***	0.06***
	(0.01)	(0.01)
Degree of Planning	0.05***	0.04***
	(0.01)	(0.004)
Perpetrator x Planning	-0.01	
	(0.01)	
Victim x Planning	-0.01	
	(0.01)	
Perpetrator x Victim x Planning	0.01	
	(0.02)	
Perpetrator x Group Size		-0.003
		(0.012)
Victim x Group Size		0.01
		(0.01)
Perpetrator x Victim x Group Size		-0.01
		(0.02)
Constant	0.38***	0.381***
	(0.01)	(0.01)
N	64	64
R^2	0.893	0.895

Notes. Entries are unstandardized OLS regression coefficients with standard errors in parentheses. The dependent variables is scaled from 0 to 1, with higher values indicating stronger support for aggressive group-based policies. All independent variables are binary experimental variables that can take the values of 0 and 1. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. For information on variables, see Paper A.

English Summary

This dissertation advances our understanding of the psychological mechanisms shaping public reactions to terrorism. While previous studies document the widespread and often severe consequences of terrorism on the public, academic scholarship has yet to integrate the findings under a single theoretical framework that explains *why* the public reacts so strongly to terrorist violence and thereby makes it possible to explain *how* these reactions are shaped. In this dissertation, I expand notions of human group-based, or coalitional, psychology, and examine the importance of two distinct yet interrelated mechanisms: between-coalition threat assessment and maintenance of within-coalitional alliances. The dissertation contributes to and advances existing literature in three major ways.

First, it draws on insights from evolutionary and coalitional psychology and advances an integrated theoretical framework for understanding why the public responds so strongly to terrorist violence. It stresses that two mechanisms – between-coalition threat assessment and maintenance of within-coalition alliances – can significantly nuance our understanding of the subject and accommodate a range of findings that have hitherto been treated largely as mutually exclusive.

Second, and in order to test the central tenets of the proposed framework, it builds on rich variation in research designs, experimental manipulations, and large datasets that provide a high degree of robustness and external validity. Overall, the results support the notion that modern terrorism corresponds to the ancestral challenge of coalitional aggression. Specifically, I demonstrate (1) that the presence of even subtle coalitional threat cues is sufficient to elicit a domain-specific response in the political domain that is often aggressive in nature; and (2) that the maintenance of within-coalitions matters in the face of threat, especially when more tolerant, liberal worldview components are salient and accessible.

Third, the dissertation presents evidence that political elites assume a more important role in exacerbating rifts among the public than assumed. It concludes that political elites can not only harvest their influence on the public in the aftermath of terrorism, for example in order to sway public opinion on security matters, but that they could also constitute a driving force of tolerance in society. As such, this dissertation opens up new ways to potentially mitigate some of the negative effects we so often witness in the aftermath of terrorist violence, and which threaten to tear at our social fabric.

In addition to this summary report, the dissertation consists of five individual articles that have been published or prepared for publication in peer-reviewed international journals.

Dansk Resumé

Denne afhandling forfiner vores forståelse af de evolutionært betingede psykologiske mekanismer, der former befolkningens reaktioner på terrorisme. Hvor tidligere studier har dokumenteret de vidtrækkende og betydelige konsekvenser terrorisme kan have, så har tidligere akademisk arbejde ikke formået at integrere disse fund i et samlet teoretisk framework, der både kan forklare hvorfor befolkningen har så stærke reaktioner på terrorangreb og hvordan disse reaktioner formes. I denne afhandling udvikler jeg begreberne gruppebaseret/koalitions psykologi, og undersøger betydningen af to distinkte men relaterede mekanismer: trusselsvurderinger mellem grupper samt opretholdelse af alliancer inden for grupper. Afhandlingen bidrager til den eksisterende litteratur på tre måder.

For det første trækker afhandlingen på indsigter fra evolutionær og koalitions psykologi og fremlægger et integreret teoretisk framework for at forstå, hvorfor befolkningen reagerer så stærkt på terrorangreb. Afhandlingen understreger at to mekanismer - trusselsvurderinger mellem grupper samt opretholdelse af alliancer inden for grupper – kan nuancere vores forståelse af emnet og er konsistent med en række fund som hidtil er blevet anset for at være gensidigt udelukkende.

For det andet, og for at teste de centrale aspekter af det fremlagte framework, bygger afhandlingen på en række forskellige forskningsdesigns, eksperimentelle manipulationer samt større datasæt, der giver en høj grad af robusthed og ekstern validitet. Samlet set peger resultaterne på at moderne terrorisme kan sammenlignes med den udfordring vores forfædre mødte, da de blev truet af andre grupper/koalitioner. Konkret demonstrere jeg (1) at tilstedeværelsen af diskrete cues omkring trusler fra andre grupper er nok til at skabe en domæne-specifik reaktion i det politiske domæne, der ofte er aggressivt af natur; og (2) at opretholdelsen af alliancer inden for gruppen betyder noget, når gruppen er truet, særligt når komponenter af en mere tolerant, liberal verdensopfattelse er saliente og tilgængelige.

For det tredje præsenterer afhandlingen evidens for at politiske eliter har en mere prominent rolle i forhold til at skabe dybere skel i befolkningen end hidtil antaget. Afhandlingen konkluderer at politiske eliter ikke kun har mulighed for at påvirke befolkningen efter et terrorangreb, ved for eksempel at ændre folks holdning til sikkerhedspolitik, men også har mulighed for at skabe mere tolerance i samfundet. Afhandlingen åbner således op for nye måder hvormed man potentielt kan afbøde nogle af de negative konsekvenser man så ofte ser efter terrorangreb, og som truer med at slide på sammenhængskraften.

Udover denne sammenfatning består afhandlingen af fem forskningsartikler, der enten er udgivet eller er klar til at blive udgivet i fagfællebedømte internationale tidsskrifter.