From Culture to Behaviour: How Can a Culture of Violence Affect Organized Conflict?

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Abstract

The reasons why some countries suffer from high levels of violence are still poorly understood despite the important attention they have received in academia. One of the potential drivers explaining spatial and temporal differences in organised conflict is the culture surrounding violence. This paper specifically attempts to explain: How does a culture of violence impact the likelihood and intensity of organised conflict? I build a theoretical framework which describes a culture of violence constituted of (at least) four dimensions. I propose that a society with a stronger culture of violence is more likely to experience armed conflict and less likely to have non-violent conflicts. I also hypothesize a positive effect on conflict intensity. I perform an exploratory factor analysis to investigate the dimensions of a culture of violence and use zero-inflated Poisson regressions to test its effect on organized conflict. The exploratory factor analysis reveals the existence of not four but at least five dimensions of culture of violence. A culture of violence does not appear to influence the likelihood of conflict. However, when conflict does occur, culture of violence seems to increase the intensity of conflicts. Unfortunately, this paper does not find sufficient support to reject the null hypotheses.
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List of Abbreviations

EFA – Exploratory Factor Analysis
RWA – Right-Wing Authoritarianism
SDO – Social-Dominance Orientation
NVC – Non-Violent Conflict
OSV – One-sided Violence
BRD – Battle-Related Deaths
Datasets
WVS – World Value Survey
QOG – Quality of Government
VDEM – Varieties of Democracy
I. Introduction

The reasons why some countries suffer from high levels of violence are still poorly understood despite the important attention they have received in academia. Violence is often seen as unavoidable, yet the world has witnessed a decline of violence and wars throughout the past centuries (Pinker 2011; Gat 2017). Although this trend is promising, the rate of decline has been vastly different across countries. Data shows wide disparities in conflict rates and intensity (Pettersson and Öberg 2020), similar conclusions can be drawn from homicide rates across the world (UNODC 2019). Although several theories have been developed to address the causes of war (some even doing so convincingly), the full picture remains elusive. Failing to understand more subtle causes of war runs the risk of applying solutions incorrectly and may ultimately cause more conflict and violence. One of the potential drivers explaining spatial and temporal differences in organised conflict is the culture surrounding violence. Cultural changes have been shown to impact interpersonal violence in Europe, resulting in a decrease in homicide rates (Elias et al. 2000; Gurr 1981). Despite cultures of violence being convincingly studied in other academic fields (e.g., criminal sociology), and the use of cultural explanations in peace and conflict research, to date the impact of cultures of violence on the likelihood of conflict has not been extensively investigated. This thesis attempts to combine these insights to apply them to the study of peace and conflict. This paper specifically attempts to explain: How does a culture of violence impact the likelihood and intensity of organised conflict?

Relying on the fields previously identified as relevant to a culture of violence, I develop a definition of culture of violence: “Values, norms, institutions, attitudes, and habitual modes behaviour that impact whether or not violence is expected and or seen as legitimate within a given society”. I argue that a higher degree of a culture of violence leads to more violent societies, which in turn increases the likelihood of conflict. I build a theoretical framework which describes a culture of violence constituted of (at least) four dimensions. One dimension relies on research in the field of sociology, showing how a normative system can encourage violent behaviours. Relying on the field of psychology, I suggest that values and attitudes can both constitute independent dimensions of a culture of violence. Finally, I borrow the concept of legal cynicism from criminal sociology suggesting it constitutes a fourth dimension of a culture of violence. Then, revisiting the colloquial “violence begets violence” argument as a causal mechanism, I propose that a society with a stronger culture of violence is more likely to experience armed conflict and less likely to have non-violent conflicts. Specifically, I hypothesise that the stronger the culture of violence in a given society, the more likely it is to experience (1) state-based conflict, (2) non-state conflict, (3) one-sided violence.
I also hypothesise that, (4) the stronger the culture of violence, the less likely it is to experience non-violent conflict. The final hypothesis is that (5) cultures of violence will have a positive effect on conflict intensity.

To answer the research question, I proceed in three steps. Building on data from existing datasets (World Value Survey, Quality of government, Varieties of Democracy), I build a dataset measuring the culture of violence in 63 countries for the period 2005-2020. Then, I perform an exploratory factor analysis to investigate the dimensions of a culture of violence. Finally, having derived a score for each country, I run two series of zero inflated Poisson regressions to test the existence of a link between cultures of violence and the incidence and intensity of different forms of conflict.

The exploratory factor analysis reveals the existence of not four but at least five dimensions of culture of violence: violent values, violent attitudes, violent norms, institutional trust, and state violence. Running regressions with these five dimensions as independent variables yields the following results, among others. A culture of violence, as measured in this paper, does not appear to influence the likelihood of conflict. However, when conflict does occur, a culture of violence seems to increase the intensity of conflicts. Despite promising results, causation cannot be fully established. Some interrogations remain, specifically regarding temporal order and the causal mechanisms. Thus, the null hypotheses cannot, in good faith, be rejected.

Nonetheless, this paper makes two contributions. First, I contribute to the understanding of violence by proposing a novel multidimensional model of culture of violence, which can be used for empirical studies. While this model will benefit from further refinements, it can be the basis of further research. Second, I proceed to use this multidimensional culture of violence to test its relationship to organised conflict. Similar premises had been used in previous papers, Mullins & Young (2012) test a similar assumption on terror attacks while Ross (1993) worked on “culture of conflict” in pre-industrial societies. However, no study so far has studied culture of violence on different forms of organized conflict using quantitative methods and a recent time-period.

This paper proceeds according to the following structure: I start by reviewing the existing research regarding cultures of violence in various fields of research (peace and conflict, criminology), at various levels (neighbourhoods, countries) and in specific phases of conflict. I continue by providing a theoretically driven explanation of the concepts and their functioning. The third section presents in detail the research design used in this paper. In the fourth section, I report
findings on the nature of cultures of violence and its link with organised conflict. Finally, I conclude this paper with a discussion of the results and a review of the limitations.
II. Cultures of violence in previous research

Why does a culture of violence matter? The following quote taken from the UNICEF’s data portal succinctly summarises what this thesis aims to contribute:

“Understanding the norms that govern a society can provide clues to the underlying causes of violence and how it can be prevented. In certain cultures, for example, violence may be perceived as a normal and acceptable way to resolve conflict”. (UNICEF 2020)

Rather than an attempt at closing a major gap in any specific strand of peace and conflict literature, this thesis attempts to fill a multitude of small gaps left by various perspectives on culture, violence, and conflict. Currently research on culture and conflict has theorised and systematically examined the influences of civil war on post-war violence (Deglow 2016; Wallensteen 2015; Davenport, Melander, and Regan 2018; Höglund and Kovacs 2010; Steenkamp 2005). However, pre-war periods have not been approached in the same way; current studies of the influence of pre-war conditions on the onset of violence lack a systematic and empirically driven approach. Furthermore, research has produced a variety of causes of war theories. The largest strands include rationalist explanations (grievances, weak states etc.) (Berdal and Malone 2000; Cederman, Gleditsch, and Buhaug 2013), structuralist or institutionalist theories (international relation theories, democratic peace, etc…) and theories that view conflict in an evolutionary perspective (Pinker 2011; Gat 2009; 2017). Explanations focusing on violence as a culture have routinely lacked the same level of scrutiny.

In addition, previous works that have studied the influences of cultures of violence have often been focussed on small units of analysis and/or interpersonal violence such as seen within the field of criminal sociology (Carroll 2007; Nowotny and Carrara 2018; Mullins and Young 2012). Although (Wood 2007) and his fellow contributors provide useful resources to conceptualise what a culture of violence might look like, this conceptualisation is not empirically tested and is not theorised beyond the level of interpersonal violence. There is thus a need to examine the influence of cultures of violence more broadly and systematically.

Other scholars have looked at the link between conflict and specific cultural variables. For example through looking at values and attitudes (Cohrs et al. 2005; Sundberg 2014), democratic peace theory (Hegre, Bernhard, and Teorell 2020), gender equality (Melander 2005; Caprioli 2005; Schaftenaar 2017; Dahlum and Wig 2020; Barnhart et al. 2020). Caprioli goes as far as to claim that “intrastate conflict is more likely in those societies whose cultural norms support violence as a legitimate means toward addressing grievances” (2005). However, this claim is not substantiated
throughout her paper. Although these works have focussed on specific aspects relevant to cultures of violence, their scope does not go beyond specific variables. There are reasons to think that compartmentalising the research may lead to misunderstand the relationship between cultures of violence and conflict (Hamby and Grych 2012, 1).

Cultures of violence have nonetheless been the subject of research. A noteworthy contribution is the work made by Norbert Elias and subsequent researchers. Elias (Elias et al. 2000) put forward the hypothesis that violence has declined in Europe over the course of several centuries. This hypothesis has later been supported by Gurr and Eisner (among others) (Eisner 2001; Gurr 1981) who have showed a decrease of violence across centuries. The theory put forward by Elias to explain this decrease comes from evolutions of social dynamics at the group level, and changes in psychological trends and modes of behaviour at the individual level (Eisner 2001, 619). Although, this literature does not discuss per se cultures of violence, their conclusions are in line with the idea of a culturally determined drivers of violence.

Others have specifically focused on variations of the concepts. Franklin (1964) is perhaps one of the earliest attempt at explaining a conflict through the lens of a culture of violence. He analysed, how violence was routine and even valued in the south of the United states to explain the onset of the US civil war. More recently, Evans (2010) compared two distinct (racially motivated) cultures of violence in the US and South Africa. Although the contribution is informative, both the works of Franklin and Evans fail to form a cohesive theory on cultures of violence and lack generalizability beyond the discussed case studies. Ross (1993) does develop a theory around ‘the culture of conflict’ and test his hypotheses cross culturally on pre-industrial societies. However, he notes himself (p.165) that the generalizability of his findings to modern days requires more support. A recent study by Mullins and Young (2012) show that cultures of violence are correlated with the use of terror attacks by dissidents. Although the level of analysis of the study is small, the study demonstrates the importance of the understanding the effects of cultures of violence in relation to peace and conflict research.

In line with a growing body of literature (Chenoweth and Cunningham 2013; Chenoweth and Ulfelder 2017; Sutton, Butcher, and Svensson 2014; Stephan and Chenoweth 2008) this thesis will attempt to contribute to our understanding of conflict by disaggregating the effects of cultures of violence by analysing outcomes usually studied in isolation. Studies on armed conflict are often confined to a single type of conflict (Civil War, One Sided Violence …). Non-violent conflicts have for example only appeared on the research agenda. Stephan and Chenoweth (2008) have examined
the differences in outcomes between violent and non-violent methods but this time it is violent methods that are not disaggregated.

Overall, the significance of cultures of violence has been partially demonstrated in previous literature. However, they have often been given much less attention as other types of explanations (i.e., rationalist, evolutionary). Previous studies which addressed the role of culture of violence often lacked generalizability because they only studied a certain type of societies, or just due to the number of cases studied. This thesis attempts to rectify this gap by testing its theory on a large number of nation-states. This allows for a greater generalizability and a more systematic approach. Finally, the study of culture of violence and conflict has too often been unidimensional. Meaning that it attempted to study the effect of a single cultural variable (a specific attitude, norm, value) on a single outcome (interpersonal violence, armed conflict). This thesis attempts to rectify this academic gap by building a broader theory which includes attitudes, norms, values, and behaviour and by testing its effect on different forms of organized conflict (e.g., non-violent conflict, one-sided violence, or state-based conflict).

Important to note is that theorizing a culture of violence does not seek to contradict other classes of explanations (rationalist, structural …) rather it seeks to complement them in order to fine tune our understanding of conflicts (Wood 2007, 81). Despite the empirical difficulties of studying culture (from measurement validity to essentialisation issues), this endeavour can yield important results. While other classes of explanations have provided useful findings. They have failed to form a comprehensive theory capable of explaining armed conflict. This thesis modestly attempts to add a stone towards the creation of such a theory.
III. Theoretical framework: Definitions, Mechanisms, Hypotheses

A. What is a culture of violence?

This section proposes a theoretical framework to study the link between culture of violence and organised conflict. After defining my main concepts, I continue this section by providing a theoretically grounded discussion of what makes up a culture of violence and how we arrived at the definition used in this thesis. Then, I elaborate on the theorized link between the independent variable and five dependent variables (under the umbrella term, organised conflict) and provide five testable hypotheses. Finally, I conclude this section by a discussion of potential causal mechanisms.

By organised conflict I mean: “collective action by at least one organised group, violent or otherwise, in pursuit of a political objective (or incompatibility)”. This definition is useful as it allows us to include violent and nonviolent conflict methods. It does not discriminate against the type of actor involved in the conflict. However, it allows to exclude individual level conflicts. Moreover, it is compatible with definitions of armed conflicts by UCDP (State based conflict, non-state conflicts, One Sided-Violence) or non-violent campaigns (as defined by NACVO 2.1). Although the definition does not exclude it per se, the paper is not concerned with interstate conflicts and neither is its theory. That is not to say that a culture of violence has no bearing on interstate conflicts, however this paper is not concerned with this possibility.

Cultures of violence are understood in this paper as “Values, norms, institutions, attitudes, and habitual modes behaviour that impact whether or not violence is expected and or seen as legitimate within a given society”. This definition goes beyond saying what a culture of violence and allows us to specify which elements of culture are considered in this paper. In the following section I argue that this definition captures the important aspects of culture relevant to the use of violence.

Clear definitions of violence have often been avoided in work surrounding cultures of violence. For instance, Wood (2007) does not define violence at all and merely discusses what it does and where it comes from. Violence is understood in this paper as “physical harm and damage”. Where it is not otherwise specified, this paper uses the term violence as “physical harm and damage”. This definition is used for two reasons. It ensures theoretical consistency with previous definitions used (see below). Moreover, it allows for clear specification of the phenomena deemed relevant for this paper. It is broad enough to include interpersonal, state violence, or non-state violence (Sundberg 2014). However, it excludes psychological and structural violence. This is not to say that these dimensions are unimportant, however they exceed the scope of this present study.
What makes up a culture of violence?

Culture is an impressively difficult concept to capture into a definition. Kroeber & Kluckholm (1952) distinguished 164 definitions. In a more recent attempt at discussing its definitions, Baldwin et al. discussed 313 definitions of the term (2005, xvi). Although discussing all the definitions and debates surrounding the term would be unhelpful for this paper, some takeaways are necessary to define cultures of violence and justify the choices involved. This paper borrows its understanding from Wedeen who conceptualises culture as “semiotic practices”, this means studying the relations between individual practices (habits, norms, self-policing) and “systems of signification” (2002, 714). This approach relates to the use of culture as an independent variable. It aims to explain what language and symbols do, how they are inscribed in concrete actions and produce observable effects, in other words what is “doing the doing” (ibid.). The objective here is to elaborate on the definition of cultures of violence and show how it captures the parts of culture relevant to the use of violence. To do so, I discuss what are the functions of culture, how it fulfils these functions, and how specifically these functions apply to violence.

What are the functions of culture?

What does culture do? That is the focus of functionalist definitions of culture. Baldwin et al. (2005) identify five functions dealt with in the literature (guidance, shared identity, value expression, stereotyping, and control). While the functions related to identity (stereotyping, value expression, shared identity) are useful for delineating groups and inter-group relations, they are not as useful in the context of describing intra-group behaviour. Therefore, I focus on the other two functions (guidance and control) since they are relevant to explain violent behaviour.

The guidance function of culture helps individuals (1) relate and deal with their environment, (2) organise group life, (3) solve issues in everyday life, all of which can be summarised as giving order to the world (Baldwin et al. 2005, 38). In this sense it regulates behaviour such as violence in society. Specifically, this means providing a sense of (1) when it is acceptable to use violence, (2) gives us (or not) overarching structures to deal with violence or its causes, (3) and how one ought to respond in specific situations. Related to the guidance function is the control function of culture, here specifically intra-group control. By providing an order to the world, culture also de facto makes certain behaviours legitimate and others deviant. In turn, culture justifies and organises the control of group members behaviour through positive and negative sanctions.
In doing so, it affects and influences the behaviour of individuals within the group. Returning to violence, these functions coincide with the theory put forward by Elias regarding the decrease of violence in Europe. Long term micro-level social dynamics (etiquette, self-control) in conjunction with macro level dynamics (states growing monopoly on violence) were instrumental to the decrease of everyday violent behaviour (Eisner 2001, 619).

In summary, culture has at least two functions relevant to the spread of violence in a given society. First, it structures the social world, allowing individuals to decide for themselves when to use violence and how to view it. Second, this structure, in turn, enables social control at the group level, thus legitimating certain behaviours and punishing others (deviant behaviour).

What is “doing the doing”?

Attributing an important role to culture when it comes to shaping behaviour is not sufficient, to build a convincing theory, this paper needs to establish in which specific ways culture does that. Structural definitions of culture are helpful as they describe what the attributes and discernible patterns among cultures are. This is useful since it suggests a multiplicity of cultures and allows for systematic comparison among them (Baldwin et al. 2005, 31). In their review of the literature Baldwin et al. identify seven notable attributes across structural definitions: “a) whole way of life, (b) cognitive systems, (c) behavioural systems (either individual or communal), (d) language and discourse, (e) orientation/relational systems, (f) social organisation, and (g) structure as an abstract construction” (ibid.).

To form a definition of culture of violence, identifying which dimensions are relevant seems crucial. Broad categories such as “way of life” are unhelpful in a scientific context as they do not provide the “causal story”. For instance, Waldmann (2007, 63) states that “a culture of violence includes all socio-cultural structures and symbols that are connected with, produced by, and perpetuate violence”. As he himself points out, such a definition is also not very useful for empirical analysis. This is especially the case in the context of a multi-case study such as this one. In contrast, this paper identifies four theoretically sound items (we know what is “doing the doing”) which are measurable. I argue that these components are also salient enough to form a stand-alone theory. Other dimensions can then be used in future research to refine this initial theory.

Although beliefs, norms, values, customs, attitudes, modes of behaviour, and institutions are all concepts that have been identified by previous literature to explain cultures of violence (Steenkamp 2005; Waldmann 2007; Ross 1993). This paper particularly focusses on the role of
norms, values, attitudes, and institutions. Before doing so it is however necessary to briefly elaborate on why other items of culture have been excluded of the definition of culture of violence. Interrelated with norms, values and behaviour is of course language (notably of political elites) and rituals. Despite its obvious interest to a culture of violence, it is excluded from the analysis in this paper. This is not because language has no role in this theory, after all, securitisation is a process that gave rise to an entire field of study. Rather this is because of data availability, there is no data allowing comparisons across a large number of cases regarding phenomena such as securitisation. Regardless, of the results of this study, the results will be weakened by such an omission. Data concerns are typically not included in theoretical frameworks. However, this early precision is necessary as this theory will need to stand on its own despite excluding important, but immeasurable, dimensions. The hypotheses developed in this theory will need to be retested adding this additional layer (I return to this issue in the discussion of the results).

**B. From culture to violence**

The rest of this section elaborates on how each components of a culture (of violence) are defined and may lead to increased violent behaviours. A few theoretical precisions are, however, necessary. First, I do not claim that the list of causal mechanisms presented here is exhaustive or definitive. Second, this study does not attempt to directly test these causal mechanisms. This is an educated guess based on existing research. Third, it is also important to note that although each mechanism is presented in isolation, they are very much interrelated and influence each other in ways that are difficult to apprehend. The theoretical contribution of this paper is that although many of these concepts have been developed in isolation by different research strands, they ought to be considered together. Fourth, the arguments made here are probabilistic rather than deterministic. None of these mechanisms are aimed at explaining a particular conflict. Rather they show how culture of violence may make societies more prone to certain forms of conflict.

**Norms: Social Control and Legitimate violence**

In this paper, norms are understood in the common sociological sense as standards for individuals within a group to follow, and carry with them a sense of what “appropriate behaviour or thinking” is in a specific situation (Finnemore and Sikkink 1998, 890–91). Weber distinguishes three type of rules understood here to make up norms, custom, convention and law (Weber, Roth, and Wittich 1978, 29–34). Customs refer to rules that are not externally sanctioned by the group (formally or informally). Individuals follow them without coercion, i.e., because they are comfortable or obvious enough to the individual for them not to be thought about. Thus, individuals will find likely that
others conform with that custom (e.g., I never questioned baguettes being the usual form of bread until going abroad). Norms also include conventions, that is, rules from which the deviation will be disapproved and likely sanctioned by other members of the group (e.g., table etiquette). Finally, norms include laws from which deviation will be met with a staff punishing or coerce compliance through physical or psychological means (e.g., Legal systems, treaties).

So how do norms influence violent behaviour? I specify two mechanisms: guidance and (social) control. First, there is plentiful evidence that when we deviate from norms (deviance), the group (here society, the state) will inflict some form of punishment (social control)\(^1\). When it comes to violence, the most obvious social control mechanism may be the legal system. If a society explicitly punishes a behaviour (say sexual violence or murder) through law. This in turns increases the cost of such an action as the individual would risk prison, or even death. Hence, individuals will be disincentivised to commit this behaviour. As alluded to in the definition earlier, formal social control mechanisms are not the only ones. Social control can also be exerted in a variety of manners by family, group of peers, or one-self. Some research even suggests that the informal social control forms may be more effective than direct coercive threats (McGuire 2002). In fact, in his review of the civilising process, Eisner emphasizes the importance of self-control: “Greater social control aimed at discipline, there will be greater self-control and less individual level violence (Eisner 2001, 632).

Second, which forms of violence are seen as legitimate is equally important. Although some form of violence is generally seen as legitimate in all societies (self-defence, discipline), norms can delineate which behaviours are seen as acceptable. Therefore, I suggest that the more forms of violence are considered ‘normal’ within a society the more violent behaviour it will experience. In turn it will be more likely to experience violent forms of conflict. The corollary to this argument is that in societies where violence is viewed as a deviant behaviour, individual level violence will be lessened, and grievances will more likely be addressed through non-violent conflict methods.

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\(^1\) See Durkheim, Merton, Bourdieu
Institutions: The legal cynicism argument

An institution (as defined in sociology) is a “relatively stable collection of practices and rules defining appropriate behaviour for specific groups of actors in specific situations” (March and Olsen 1998 in Finnemore and Sikkink, 1998, 891). They also note that the crucial difference with norms is that those institutions are interrelated and function together to legitimize the practices and rules associated with them. This means that rather than being a response to specific situations (like norms) they are more general. Institutions are however distinct from values insofar that they are, like norms, collectively held. Following, this understanding two institutions relevant to violence are identified in this paper. On the one hand all laws, surrounding violence itself, and on the other hand the institutions designed to solve disputes (Rule of law, justice system, police). The laws surrounding violence refers to how violence is codified and punishment in the legal system. Common examples would be the use of torture or physical punishments, or the prohibition of various violent behaviours (intimate partner violence, the use of physical punishments for children). Its functioning will not be discussed extensively here as these institutions can easily be considered as part of the normative system regarding violence and thus follows the same path albeit on a different level.

How dispute settlement mechanisms contribute to a culture of violence is perhaps less straightforward. Although the rule of law is not necessarily concerned with violence itself, it provides the rules (legal system) and the practices (police, court system, prisons) for solving disputes which in turns has an impact on violent behaviour. Fry (2003, 161) notes that peaceful societies often rely on third parties to mediate or adjudicate conflict. Moreover, the strength and distance of state authorities, courts and police forces have been correlated with the acceptability of violent behaviours such as personal vengeance and ritualized violent dispute settlement (Wood
The Rule of law has also been shown to predict antisocial punishment behaviours (Herrmann, Thoni, and Gachter 2008). The role of the rule of law in managing violence points to the use of violence as a mean. Wood points specifically to a “useful” use of violence to accomplish vengeance. It deters and punishes deviant behaviour, ensuring that norm breaches do not lead to any benefits (Wood 2007). However, a population can see the law and its agents (police, courts) as illegitimate, unresponsive or ill equipped to ensure public safety, this is referred to as legal cynicism (Kirk and Papachristos 2011). Importantly, this concept includes both objective effectiveness and perceived effectiveness by the recipients. When legal cynicism is prevalent, individuals may take justice “in their own hands” to resolve grievances. Thus, violence becomes a habitual mode of behaviour in the community. This legal cynicism argument can be seen as not pertaining to violence directly. However, I argue that such a view would be a mistake. The absence of effective dispute settlement mechanisms, or the perception that this is the case creates the condition for violence. What the theory points to is that in areas with high level legal cynicism violence will be more prevalent even if other variables such as poverty and violence in other parts of the city (Kirk and Papachristos 2011). Although this argument has been developed to explain more violent neighbourhood, I argue that is mechanism might be at play in larger units as well.

Figure 2. Causal chain: From dispute settlement mechanisms to conflict.
From values to attitudes

Schwartz & Bilsky (1987, p. 551 in Hitlin and Piliavin (2004)) define values as: (a) concepts or beliefs, (b) about desirable end states or behaviours, (c) that transcend specific situations, (d) guide selection or evaluation of behaviour and events, and (e) are ordered by relative importance” (emphasis added). Schwartz in his research found a near universal structure of values comprising of 10 value types² (Hitlin and Piliavin 2004). It is worth noting that they differ from norms because they are individually held whereas norms function at the group level. While not independent from normative pressures (see Bardi and Schwartz 2003) values have three important functions affecting behaviour. They help privileging specific actions over others, they affect the interpretive process within situations and influence the planning of action (Hitlin and Piliavin 2004, 65).

The link from values to behaviour is more indirect as there is no value regarding violence specifically. Certain values (security, conformity, tradition), also known as conservation values (Asbrock, Sibley, and Duckitt 2010, 1866), affect violent attitudes. As we demonstrated earlier, attitudes in turn affect behaviour.

In some cases, the link between conservation values and violent attitudes is mediated by “socio-political or ideological attitudes”. These attitudes, for long thought of as unidimensional, have two dimensions: right-wing authoritarianism (RWA) and social dominance orientation (SDO). Of particular interest is RWA which captures “beliefs in coercive social control, in obedience and respect for existing authorities, and in conforming to traditional moral and religious norms and values” (Asbrock, Sibley, and Duckitt 2010, 1863–64). Although, these aspects were previously thought of as personality trait, more recent research shows that modelling it as an attitude is empirically better supported (see figure 4).

2
1. Hedonism: self-centered sensual gratification
2. Power: status and prestige, control people and resources
3. Achievement: competitive personal success
4. Stimulation: encourage risk taking and adventure
5. Self-direction: autonomous thought and action (idea of agency)
6. Universalism: tolerance and concern for welfare of all others
7. Benevolence: preserve and enhance welfare of those with whom one is in frequent personal contact
8. Conformity: self-restraint and subordination of one’s own inclinations to the expectations of others
9. Tradition: traditional and religious activities
10. Security: stability, safety, and harmony of society, relationships, and self
The reason this is of interest for a culture of violence is that multiple study found a link between RWA and violent behaviour. RWA predicted negative attitudes towards outgroups, positive attitudes towards intergroup violence (Asbrock, Sibley, and Duckitt 2010). A link is also made between RWA and refusal of helping intimate partner violence (Riley and Yamawaki 2018). While there is a link between right wing authoritarianism and positive attitudes towards three forms of violence: war violence, penal violence and corporal punishment (Benjamin 2006). People scoring high on the RWA scale are also less tolerant of deviance and favour more forceful punishments (Asbrock, Sibley, and Duckitt 2010) attitudes that could be linked back to the conformity and tradition values. Finally, conservation values correlate with violent attitudes without the intermediating effect of RWA or SDO. The security value influences attitudes towards war and penal violence while tradition and conformity values are correlated with attitudes towards child rearing violence and masculine violence (Sundberg 2014).

From attitudes to behaviour

Attitudes or more precisely attitudes towards violence are understood as: “positive appraisals of acts, actors, or norms of physical harm or damage” (Sundberg 2014, 70). The link between attitudes and behaviour is perhaps the simplest of them all. It has long been hypothesised that a positive attitude towards a behaviour will be correlated with a higher likelihood of performing said behaviour. However, showing the link between attitudes and behaviour has proven far more complex than anticipated with some studies even showing a negative correlation (Glasman and Albarracin 2006). Glasman and Albarracin produced a meta-analysis of attitude-behaviour research and found that there appears to be link between attitudes and behaviour when attitudes are accessible (“easy to retrieve”) and stable over time. Moreover, the link is stronger when the respondents had first-hand experience of the attitude object (Glasman and Albarracin 2006). In practical terms, this means that attitudes towards various forms of violence are expected to correlate with the related behaviour. The mediating factors (accessibility, stability, and experience) suggest that the correlation will be stronger in societies that are violent and have been so for a long time. This points to a potential vicious circle in which societies may enter akin to the finding that the biggest predictor of civil war is previous civil war.
Before moving on, two theoretical precisions are warranted here. First of all, recent research has shown that no single values functions in isolation but with trade-offs (Schwartz et al. 2017). In essence this means that behaviour is the result of trade-offs between values rather than due to a single value. Thus, to be complete the role of other values should be assessed. Additionally, attitudes too have also shown to be more complex. Peace and war (and by extension violence and non-violence?) are often plotted along a single axis, a single continuum. Bizumic et al. (2013) found that attitudes towards war and peace are to be plotted on two different axis. War and peace attitudes are nonetheless negatively correlated. These two theoretical caveats show the immense complexity of the link between values, attitudes, and behaviour. The focus on attitudes towards violence and conservation values that are correlated with such attitudes is nonetheless non-contradictory with either points, they merely show that more refined models could be developed with more time and resources.

C. From a culture of violence to organised conflict

The outcomes that this paper attempts to explain deserve some attention before specifying my hypotheses. For simplicity’s sake, the discussion has considered our outcome variable only rudimentarily so far. However, conflict can take many forms, violent or not. A growing body of literature differentiates the causes of armed conflicts and non-violent conflict onset (Schaftenaar 2017, 763) and have identified several variables affecting the choice of conflict method. Chenoweth and Ulfelder (2017) have found that previous theories do not explain well the onset of non-violent conflict, Cunningham (2013) finds that some (though not all) factors affect armed conflict and non-violent methods in different fashion. While a number of papers have worked on the effect of specific variables such as gender equality, manufacturing to GDP ratio, or globalisation (Karakaya
2018; Schaftenaar 2017; Butcher and Svensson 2016). The findings regarding gender equality deserve special attention. Schaftenaar (2017) finds that gender equality results in an increased likelihood of non-violent conflict onset, compared to both armed conflict onset and no onset.

Following the same logic this paper differentiates its results along different outcomes (as defined by UCDP and NAVCO datasets). Multiple dependant variables will allow for more subtle results. Under the umbrella-term organised conflict, four outcomes are considered in this paper: One Sided Violence, Non-State Conflicts, State-Based Conflict, and Non-Violent campaigns. For specific definitions, and a discussion of why other forms of conflict are excluded see the research design. It does not appear unreasonable to assume that different forms of organised conflict either have different drivers, or at least that they respond differently to each driver. Especially, knowing that UCDP data notes distinct (though not uncorrelated) patterns between different forms of armed conflict (Themnér and Wallensteen 2012). If one is to make an educated guess on the effect of cultures of violence on conflict onset, the following hypotheses could be formulated. The likelihood of one-sided violence will be more affected by cultures of violence than low intensity intrastate conflicts (involving the state or not). And low intensity conflict will be more responsive to cultures of violence than a full-blown civil war. The reason for that to happen does not necessarily lie with cultures of violence itself. However, for each of these events different hurdles need to be overcome by the actor(s). It can be expected that the more hurdles to a conflict form the less effective a culture of violence will be. For example, mobilisation has been shown to be an important precondition for non-violent campaigns (Schaftenaar 2017; Sutton, Butcher, and Svensson 2014). A stronger culture of violence will likely limit greatly mobilisation. However, a civil war against a state requires the rebel party to overcome collective actions issues, requires more military capacities, sometimes requires performing governance duties or the support of local populations. Although, a culture of violence would still have an effect on civil wars, its effect is likely to be masked or dwarfed by other hurdles. Finally, I also expect that, all else being equal, a culture of violence will lead to more intense conflict. Although this is not the main focus of the theoretical framework, this is logical. If violent is a common behaviour, there is no reason to expect that it will be different during a conflict.

Derived hypotheses

Keeping this in mind, I derive five hypotheses to test in this paper. I hypothesize that the stronger a culture of violence in a given society, the more likely it is to experience (1) state-based conflict, (2) non-state conflict, (3) one-sided violence. I also hypothesise that the inverse effect will be measured on non-violent campaigns: (4) the stronger the culture of violence, the less likely it is
to experience non-violent conflict. Finally, I formulate the hypothesis that (5) cultures of violence will have a positive effect on conflict intensity.

**State Based Conflict**

**H1:** The stronger the culture of violence in a given society; the more likely it is to experience intrastate war in the same year.

**Non-State Conflict**

**H2:** The stronger the culture of violence in a given society; the more likely it is to experience a minor intrastate conflict in the same year.

**One-sided Violence**

**H3:** The stronger the culture of violence in a given society; the more likely it is to experience one sided violence.

**Non-Violent conflict**

**H4:** The stronger the culture of violence in a given society; the less likely a non-violent campaign.

**Conflict Intensity**

**H5:** The stronger the culture of violence, the more intense the conflict will be.

**Violence begets violence and associated mechanisms**

So far, we have merely explained how a culture of violence may lead to more violence but not the later part of the causal story. What is the complete chain from a culture of violence to organised violence? Although this study will have limited to no bearing on proving causal mechanisms, it is important to discuss the link from culture of violence to organised conflict to reach a convincing theory. First, we can note a link between violence and conflict is not so farfetched. Attitudes towards war and penal violence, child-rearing violence, and masculine violence appear to be correlated with each other (Sundberg 2014). Thus, suggesting that different forms of violence are serially correlated. Moreover, arguments such as ‘the legacy of war’ emphasize how violent conflict leads to lasting interpersonal violence (Steenkamp 2005). Finally, different forms of interpersonal violence appears to be correlated in some ways (Hamby and Grych 2012). Hence, it appears reasonable to assume that pre-conflict organised violence is subject to similar patterns than post-
conflict or interpersonal violence, only the other way around. However, none of the mechanisms presented so far have explained why violent behaviours would lead to an increased likelihood of conflict. This section argues that the decision to take up arms can be traced back to a culture of violence.

A common feature of previous work on cultures of violence (Evans 2010; Ross 1993; Franklin 1964; Carroll 2007; Waldmann 2007) has been to include not only the values, norms and attitudes but also what Waldmann (2007) calls “habitual modes of behaviour”. That is behaviour patterns in a given society. When it comes to violence, this can take the form of criminal violence, state violence (political assassinations, penal violence etc …) or merely private interpersonal violence (which may or may not be criminal, child rearing violence, sexual violence). Given the various forms of violence and conflict, it is difficult and perhaps ill-advised to theorize a single cause mechanism. Thus, I distinguish four ways in which violence can affect the onset of violent conflict following’s Weber typology of social action (Weber, Roth, and Wittich 1978, 24). In addition I address some mechanisms previously identified by Ross (1993) in his study of cultures of violence.

Like the other forms of violence, violent conflict is a behaviour. According to Weber (1978, 24), social action (or behaviour) can be oriented in four ways. First, Instrumental rational ways, “that is determined by expectations as to the behaviour of objects in the environment and of other human beings” (ibid). That is everything affecting the rational calculation “of the actors own rationally pursued and calculated ends” (ibid). Day to day behaviour and culture of violence can affect the rational calculation of choosing conflict in many ways. For instance, by having violent norms, thus reducing the cost of picking armed conflict and even perhaps aiding recruitment. Or in practical ways, by facilitating the accessibility of weapons (i.e., through organised crime, or even legislation). Second, behaviour can be oriented value rationally, “that is determined by a conscious belief in the value for its own sake of some ethical, aesthetic, religious or other form of behaviour, independent of is prospects of success” (ibid). In this context daily use of violence can reinforce norms, values, and attitudes supportive of war violence. Hence reducing one’s own moral objections to the use of violence as a legitimate mean to achieve some end. Third, affectual ways, “that is, determined by the actor’s specific affects and feeling states” (ibid). At the interpersonal level, this could take the form of vengeance killings. A similar causal mechanism can be envisioned by individual’s victim of violence (torture, killed family member …) by organised groups such as the state. Fourth, traditional ways, “that is determined by ingrained habituation” (ibid). If violence
becomes a regular occurrence to solve issues, this may cause violence to be used to solve larger issues that result in violent conflict out of habit.

More specifically, Ross (1993, 60) also identified three ways in which a culture of violence, or a culture of conflict as he calls it, induces more conflict: “harsh socialisation”, (lack of) “warmth and affection”, and male gender-identity conflict. Male gender identity refers to: Men being socialised into “warrior-like gender roles to protect the nation, while women are expected to support the collective goals of a nation” (Schaftenaar 2017, 764). This concept is of particular interest since it has consistently been associated with higher likelihood of armed conflict (Caprioli 2005; Bjarnegård and Melander 2011; Bjarnegård, Brounéus, and Melander 2017; Melander 2005). Similarly, harsh child rearing socialisation as well as warmth and affection, rely on early childhood experiences to shape later conflict behaviour. They do so mainly by influencing the capacity for cooperation and the capacity to form images of others. Ross (and others since) have also pointed to later stage institutions that shape the framing of others and responses to aggression that are culturally acceptable (1993, 10).
IV. Research Design

Having argued that cultures of violence influence organised conflict from a theoretical standpoint, I outline how to test the hypotheses of this paper. I start by presenting the data selection for the independent variable. This also serves as case selection. Second, I outline the first phase of the research, and its first contribution. Using exploratory factor analysis (EFA), I develop a model of culture of violence. This accomplishes two things: It reduces the data from a large set of indicators to five factors, and it provides an empirically based conceptualisation of the dimensions of culture of violence. Third, I elaborate on the data selection to measure the dependent variable: organised conflict. Fourth, I present the method used to test the link between culture of violence and organised conflict. I conclude this section with a brief discussion of the strength and weaknesses of the approach taken in this paper.

A. Measuring Culture of Violence: Norms, Values, Attitudes, and Institutions

To measure culture of violence I started by using existing data to produce a dataset capturing the different dimensions of cultures of violence. The unit of the dataset is the country level. Every variable is measured where available from 2005 to the present day. Each variable exhibits different levels of variability over time and thus require different frequency of measurements. Thus, leading to certain variables being measured yearly, and others only once or twice. I elaborate on this for each variable specifically. For each variable, the available data is used to create a mean score for each country since 2005. The data is taken from existing data from the World Values Survey (WVS) (Inglehart et al. 2020), the Variables of Democracy project (V-Dem) (Coppedge, Gerring, et al. 2021; Coppedge, Gerring et al. 2021) and the World Bank Governance Indicators. All three sources have been regularly used in research which is testament to their reliability and should allow good levels internal and external validity. Moreover, using cross-national data allows for efficient comparison across countries. The World Value Survey consists of face-to-face interviews at the place of residence. Although each country follows its own specific sampling strategy, WVS ensure that national samples are centrally approved to ensure it meets the required standards and that the sample is representative of “all people aged 18 and older residing within private households in each country, regardless of their nationality, citizenship or language” with a minimum sample size of 1200 respondents per country (‘WVS Database’ 2021). This thesis does not have the scope/Within this study, I do not have the scope to dive into a comprehensive review of sampling techniques used to collect the data. Given the overall quality of the data for all three sources, and the fact that data is taken from the same sources for all countries I expect good internal consistency.
Measuring Violent Values

In line with the literature, three values are retained as relevant for our analysis and are hence included in the measure of cultures of violence. These are the security value, the conformity value, and the tradition value (Sundberg 2014). This paper uses data by the World Value Survey (WVS) in which individual respondents are asked how important in their life it is to live in “secure surroundings and avoid anything that might be dangerous”, whether “It is important to this person to always behave properly; to avoid doing anything people would say is wrong”, and whether “tradition is important to this person; to follow the customs handed down by one’s religion or family”. Although the data is not available for the whole time period (2005-2014, one or two data points per country) this is not necessarily a problem. A meta-analysis of existing research suggests values- are relatively static over time within individuals (Schuster, Fischer, and Pinkowski 2018). The main issue regarding value change is related to societal change or intergenerational change. Inglehart and Welzel (2005) did find important intergenerational value change for survival/self-expression values. However, these changes happen over exceedingly long period of times, longer than the 6-year gap here.

Measuring Violent Attitudes

Attitudes towards violence are also measured through World Value Survey Data. I use a slightly modified version of the operationalisation of violent attitudes by Sundberg (2014). I measure positive appraisals (attitudes) towards: Penal Violence, Child Rearing Violence, Masculine Violence, and interpersonal violence. Although no satisfactory measure of war violence is available it is partly subsumed by the measure of interpersonal violence. Attitude towards Child-Rearing violence is measured by asking whether “Parents may use violence or threats when bringing up their children”. Attitude towards Masculine Violence is measured by asking whether: “Men may use violence to keep their wives in line”. Finally, attitudes on interpersonal violence are measured by asking if “violence against other people can always be justified, never be justified.

Measuring Violent Norms

Norms are rarely measured cross culturally and hence are difficult to apprehend in a study such as this one. Norms of violence suffer from this problem too. Norms are measured through proxy indicators on behaviour. Instead of measuring if violence is seen as a legitimate tool, these indicators measure the level of violence in society. Although it would be preferable to have direct

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3 Inglehart is also behind the World Value Survey
don norms themselves, I argue that using proxy is acceptable in the absence of norms data. Indeed, one can argue that if a behaviour is widely present in society, it is at least partly due to norms tolerating or rewarding such behaviour. The main challenge of using behaviour data in this study lies with an endogeneity problem. In practical terms this means that relevant indicators are intentionally left out. A non-exhaustive list of these includes: the production of military equipment, its export and import, or the prevalence of political killings. Instead, I use four indicators from two datasets. Respondents in the World Value Survey were asked: (1) How secure they feel in their neighbourhoods (2) if they were victim of a crime in the past year, (3) if their immediate family were victim of a crime in the past year. These questions are supplemented with an additional variable taken from the VDEM dataset. This variable measures to what extent the state uses torture against its own citizens.

Measuring Legal Cynicism

To measure institutions, and specifically the part relating to the legal cynicism argument, the Rule of Law estimate by the World Bank is used. This indicator has several benefits. First, it covers a wide range spatially and temporally. Indeed, it provides data for all countries of interest, every year in our time period. Moreover, it captures well the concept of legal cynicism as it includes data on the effectiveness of the rule of law (courts, police, etc) and data on the trust in the population towards these institutions. In addition, the WVS itself asks questions relating to the level of trust towards several institutions. We have included the questions covering trust in the police, the courts/justice system, and the armed forces. Although, these variables may seem redundant with the Rule of Law estimate, these measurements provide two added benefits. First, it allows to disaggregate the effectiveness of the rule of law from the trust of these institutions allowing to capture potentially different effects. Second, the sample asked is the same as the one asked for the other indicators taken from the world value survey. Thus, the model produced will be more cohesive as sampling errors will not be able to account for divergent effects.
### Operationalisation of Cultures of Violence

<table>
<thead>
<tr>
<th>Indicator (variable name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Violent Values</strong></td>
<td>It is important to this person to live in secure surroundings and avoid anything that might be dangerous? (Security)</td>
</tr>
<tr>
<td></td>
<td>It is important to this person to always behave properly; to avoid doing anything people would say is wrong? (Conformity)</td>
</tr>
<tr>
<td></td>
<td>Tradition is important to this person; to follow the customs handed down by one's religion or family. (Tradition)</td>
</tr>
<tr>
<td><strong>Violent Attitudes</strong></td>
<td>Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between:</td>
</tr>
<tr>
<td></td>
<td>Violence against other people (Interpersonal violence)</td>
</tr>
<tr>
<td></td>
<td>… Parents may use violence or threats when bringing up their children? (Violent discipline)</td>
</tr>
<tr>
<td></td>
<td>… Men may use violence to keep their wives in line? (Masculine violence)</td>
</tr>
<tr>
<td><strong>Violent Norms</strong></td>
<td>Could you tell me how secure you feel these days in your neighbourhood? (Feel safe)</td>
</tr>
<tr>
<td></td>
<td>Have you been the victim of a crime during the past year? Respondent (Victim crime)</td>
</tr>
<tr>
<td></td>
<td>And what about your immediate family--has someone in your family been the victim of a crime during the last year? (Family victim crime)</td>
</tr>
<tr>
<td></td>
<td>Is there freedom from torture? (Torture Use)</td>
</tr>
<tr>
<td><strong>Legal Cynicism</strong></td>
<td>I am going to name a number of organisations. For each one, could you tell me how much confidence you have in them: is it a great deal</td>
</tr>
</tbody>
</table>
of confidence, quite a lot of confidence, not very much confidence or none at all?

The courts/Justice system (Trust justice)

… The Police (Trust police)

… The armed forces (Trust army)

Rule of Law Estimate (Rule of Law)

Table 1. Operationalisation of items

Missing data and case selection

Once all data is collected and merged into a single dataset, a mean is calculated to form a single data point for the period 2005-2020 for each country. This allowed for a dataset with 14 variables and 103 observations (countries). However, this dataset suffered from important levels of missing data. To resolve this problem, all countries with at least one missing variable are omitted from the dataset, resulting in a final dataset with 63 countries for the period 2005-2020. Summary statistics for each variable can be found in table 2, and the list of countries included can be found in annex A. Note that for ease of interpretation, variables are flipped (when necessary) so that higher scores denote a stronger culture of violence.

Before moving on, it is important to note that the availability of data (spatially, and temporally) limited the options for case selection. Given the relatively modest size of the sample for large-n study, no further case selection is conducted. One of the clear drawbacks of this strategy is that missing data is rarely missing at random, especially concerning violence and conflict. However, a look at the list of countries included in our sample will show that it remains relatively balanced with countries in different continents, different levels of conflict (present or past) and major differences in cultures, economic or political metrics. Thus, while the sample is not random it is satisfactory enough to conduct meaningful isolation and analysis.
<table>
<thead>
<tr>
<th>Descriptive statistics</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Pctl(25)</th>
<th>Pctl(75)</th>
<th>Max</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Security</strong></td>
<td>63</td>
<td>4.66</td>
<td>0.45</td>
<td>3.42</td>
<td>4.30</td>
<td>5.02</td>
<td>5.55</td>
<td>1 - 6</td>
</tr>
<tr>
<td><strong>Conformity</strong></td>
<td>63</td>
<td>4.50</td>
<td>0.42</td>
<td>3.22</td>
<td>4.28</td>
<td>4.75</td>
<td>5.33</td>
<td>1 - 6</td>
</tr>
<tr>
<td><strong>Tradition</strong></td>
<td>63</td>
<td>4.54</td>
<td>0.57</td>
<td>2.85</td>
<td>4.22</td>
<td>4.93</td>
<td>5.72</td>
<td>1 - 6</td>
</tr>
<tr>
<td><strong>Violent Discipline</strong></td>
<td>63</td>
<td>2.92</td>
<td>1.23</td>
<td>1.38</td>
<td>1.95</td>
<td>3.73</td>
<td>7.11</td>
<td>1 - 10</td>
</tr>
<tr>
<td><strong>Masculine Violence</strong></td>
<td>63</td>
<td>1.98</td>
<td>0.67</td>
<td>1.17</td>
<td>1.49</td>
<td>2.35</td>
<td>4.75</td>
<td>1 - 10</td>
</tr>
<tr>
<td><strong>Interpersonal Violence</strong></td>
<td>63</td>
<td>1.91</td>
<td>0.60</td>
<td>1.17</td>
<td>1.55</td>
<td>2.08</td>
<td>4.18</td>
<td>1 - 10</td>
</tr>
<tr>
<td><strong>Trust Army</strong></td>
<td>63</td>
<td>2.18</td>
<td>0.40</td>
<td>1.27</td>
<td>1.97</td>
<td>2.38</td>
<td>3.57</td>
<td>1 - 4</td>
</tr>
<tr>
<td><strong>Trust Police</strong></td>
<td>63</td>
<td>2.39</td>
<td>0.39</td>
<td>1.28</td>
<td>2.16</td>
<td>2.64</td>
<td>3.36</td>
<td>1 - 4</td>
</tr>
<tr>
<td><strong>Trust Justice</strong></td>
<td>63</td>
<td>2.42</td>
<td>0.38</td>
<td>1.41</td>
<td>2.19</td>
<td>2.67</td>
<td>3.31</td>
<td>1 - 4</td>
</tr>
<tr>
<td><strong>Feel Safe</strong></td>
<td>63</td>
<td>1.90</td>
<td>0.32</td>
<td>1.21</td>
<td>1.65</td>
<td>2.08</td>
<td>2.69</td>
<td>1 - 4</td>
</tr>
<tr>
<td><strong>Victim Crime</strong></td>
<td>63</td>
<td>0.08</td>
<td>0.06</td>
<td>0.004</td>
<td>0.04</td>
<td>0.11</td>
<td>0.24</td>
<td>0 - 1</td>
</tr>
<tr>
<td><strong>Family Victim Crime</strong></td>
<td>63</td>
<td>0.11</td>
<td>0.08</td>
<td>0.01</td>
<td>0.04</td>
<td>0.14</td>
<td>0.35</td>
<td>0 - 1</td>
</tr>
<tr>
<td><strong>Rule of Law</strong></td>
<td>63</td>
<td>-0.04</td>
<td>0.97</td>
<td>-1.96</td>
<td>-0.89</td>
<td>0.73</td>
<td>1.54</td>
<td>-2.5 - 2.5</td>
</tr>
<tr>
<td><strong>Torture Use</strong></td>
<td>63</td>
<td>-0.88</td>
<td>1.48</td>
<td>-3.50</td>
<td>-2.26</td>
<td>0.36</td>
<td>1.99</td>
<td>-4 - 4</td>
</tr>
</tbody>
</table>

*Table 2. Descriptive statistics (independent variables)*
B. Measuring the dependant variable: Organised conflict

To measure the dependant variable, organised conflict, two data sources are used, the UCDP project and the NAVCO project. Hence, I follow the definitions of both projects which are summarised below.

The violent (or armed) leg of organised conflict is measured with data taken from the UCDP dataset. For a conflict to be recorded, it must reach a threshold of at least 25 battle related deaths in a calendar year. In the UCDP’s understanding intrastate conflicts can be separated in three categories. Armed conflicts “between two organised groups, neither of which is the government of a state” are referred to as non-state conflicts. If one of the groups is the government of a state and that the incompatibility concerns government and/or territory it is considered a state-based conflict. While the deliberate use of armed force by a formally organised group (or government of a state) against civilians is termed: One sided violence. All three categories are mutually exclusive, hence there is no risk of a conflict being recorded several times. However, the same actor can be involved in all three categories of intrastate conflicts. To measure conflict intensity, I use the georeferenced dataset from UCDP (Pettersson and Öberg 2020; Sundberg and Melander 2013) to measure intensity. Rather than following the dichotomous measure of intensity used in the dataset (below 1000 battle related deaths is a minor conflict, above is a war), I use the measure of battle related deaths, aggregated per country.

To measure the occurrence of non-violent conflicts I use data provided by the Nonviolent and Violent Campaigns and Outcomes (NACVO), version 2.1. In this dataset a non-violent campaign is “a series of observable, continuous, purposive mass tactics or events in pursuit of a political objective. Campaigns are observable, meaning that the tactics used are overt and documented. A campaign is continuous and lasts anywhere from days to years, distinguishing it from one-off events or revolts” (Chenoweth and Shay 2020).

C. Methods

Exploratory Factor Analysis

In order to obtain a more precise measure of cultures of violence, Exploratory factor analysis (EFA) is used. EFA is a statistical method to identify the “smallest number of hypothetical constructs (also known as factors, dimensions or latent variables […] that can parsimoniously

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4 For more in-depth discussions of the definitions please refer to the relevant codebooks.
explain the covariation observed among a set of measured variables” (Watkins 2018, 219–20). Often used in psychology, this method is useful allows the “mapping of theoretical constructs” and theory testing (Loevinger, 1957; Meehl, 1990 in Watkins 2018, 220). Thus, it is an appropriate way to test what are the relevant dimensions of cultures of violence. This method will allow to estimate scores for each country for each dimensions of a culture of violence. These scores can then be used to run regressions.

**Regressions**

To test our hypotheses, I proceed to regress the dependent variables (1) non-violent campaigns, (2) one sided violence, (3) state-based conflict, (4) non-state conflicts, and (5) battle-related deaths on the dimensions identified in the factor analysis. I also perform this test with battle related death numbers per country. Given that the dependent variables are event counts that take integer values \( \epsilon \{0, 1, 2, 3, \ldots \} \). Two standard approaches to model this kind of data assume that it follows either a Poisson or a negative binomial distribution. However, the histograms below show that all the dependent variables are strongly skewed towards zero, suggesting that these standard count data distributions would fit poorly.

![Figure 5. Distribution of the dependent variables](image.png)
This may be so because my dependent variables capture two successive processes. One binary process (Is there conflict or not?) and then, conditional on there being conflict, a count process (How much conflict is there?). Intuitively, the occurrence of conflict is independently distributed from the intensity of conflict. This would explain the clustering of observations at zero. Controlling for this, the remaining (truncated) distribution will likely follow a Poisson process.

To separately model these two processes, I use a zero inflated Poisson model. This model follows a two-step procedure that replicates the underlying structure observed in the data. First, a binomial logit model is fit to the data to estimate the probability of zero vs. non-zero values. The second step then fits a truncated Poisson distribution to the data, conditional on the outcome of the first step being positive. This way I estimate the probability of any given count of organised conflicts. For robustness, I also run a zero inflated negative binomial the results of which are presented in appendix B and loosely resembles the results presented in the analysis.

**Model specification**

To test confounding variables, I control for two well established drivers of conflict (GDP per capita and regime type) in quantitative studies (Dixon 2009; Collier and Hoeffler 2004). In addition, I control for ethnic fractionalisation, although its effect on conflict is less well established this variable achieves an important additional test. Since I measure cultures of violence at the national level, this model should be particularly impacted by competing cultures which could attenuate or counter the effects at the national level. All control variables are taken from the quality of government dataset (QOG) (Teorell, et al. 2021). The polity score is originally produced by the polity project and consists of a unified scale from -10 (strongly autocratic) to 10 (strongly democratic). GDP per capita was originally compiled by Kristian Gleditsch. It is expressed in current prices. Finally, ethnic fractionalisation was originally produced by James Fearon. QOG has imputed the data for 2003 to 2019 thus covering remarkably well the time period of interest. This metric is a score from 0 to 1 measuring the probability that two randomly picked individual belong to different ethnoreligious groups. As for other variables extracted from the quality of governance dataset, the data is suited for regressions as it has good coverage spatially and temporally and is of established quality.
Limitations

This research design nonetheless presents some limitations due to sample size and validity concerns. First, the data does not allow to have a large sample size. This is a problem as it increases the risk of sampling error and various measurement errors which in turns may result in misleading results. Although, I argue that these problems have been addressed and mitigated in a satisfactory manner and as well as possible, reporting these issues of importance for the transparency of this research. The main problem concerns validity. Specifically concerning time variation Does the period measurement distort the measure and erases variation that would happen in shorter time spans? I argue that the period selected allowed to have the most precise data as possible, thus alleviating this issue. Moreover, regressions have been run against earlier time periods as well as shorter time periods displaying very similar results. One can interpret this as showing a relatively static culture of violence, with evolutions over the course of decades if not centuries. This would be consistent with studies such as Norbert Elias who studied culture and violence over a mere eight centuries. The second issue regards construct validity. Previous studies of attitudes, norms and values, have typically relied on much broader questionnaires typically using more items to measure each item. This is unfortunately not possible over meaningful and representative samples. To address this issue, I have attempted to pick questions and indicators that are as close as possible to the concept being measured. Thus, aggregated indicators and question measuring several concepts are excluded. Thus, resulting in a short but effective questionnaire. For instance, one can hardly argue that questions on attitudes towards beating children do not capture well attitudes on violent discipline. I believe that the results of the factor analysis also display the veracity of this point with minimal amounts of cross loading.
V. Analysis

Having now established conclusions from previous research, having established a theoretical framework, and having established a research design to test this theoretical framework, this section analyses the data collected. I first present how the EFA is conducted and the results it provides. The data allows us to identify five dimensions of culture that are meaningful for our analysis. Then, I proceed to use the derived scores for each of these dimensions and each of our 63 countries as independent variables. I present two series of regressions. The first series of regression shows a link between culture of violence and organised conflicts. The second series of model, including control variables, shows similar results. However, the results do not allow us to confidently reject the null hypothesis. I proceed with a discussion of the results where I elaborate on what results appear promising and where the empirics does not match the theory. I conclude this section with a brief discussion of the limitations of this paper.

A. From a culture of violence to a five-dimensional model

Modelling Cultures of violence

Following the best practices outlined by Watkins (2018) and other relevant literature, this section reports the relevant decisions and statistics made conducting the exploratory factor analysis. In addition to the data management, all analyses is conducted using the software R (R Core Team 2021), EFA is conducted with the “psych” package (Revelle 2021). The relevant statistics in this section are also summarized in table 3.

First, I test the data’s suitability for exploratory factor analysis. The Bartlett test of sphericity tests that correlation matrix between variables is created by random data. The chi-square value should be statistically significant. In addition, The Kaiser-Meyer-Olkin measure tests the sampling adequacy and should be above 0.5 to be considered acceptable with values superior or equal to .70 are desired. Our data on culture of violence passed both tests favourably with a highly significant Bartlett test (2.22e-16) and a moderately good KMO score (0.68).

The next step consists of determining how many factors (or dimensions) the model should consist of. This is an important step as misspecification (too few or too many dimensions) can lead to serious flaws in the results (Hayton, Allen, and Scarpello 2004). Several methods are available (scree plot, Kaiser’s rule, parallel analysis) and typically used by the literature. Parallel analysis however appears to show the best results (Watkins 2018; Hayton, Allen, and Scarpello 2004). In this case the parallel analysis indicates that anything from three to five factors would be
appropriate as shown in figure 1.

![Parallel Analysis Scree Plots](image)

*Figure 6. Parallel analysis scree plots*

EFA refers to two possible methods common factor analysis and principal components analysis. As this paper attempts to identify a latent dimensions, common factor analysis appears to be preferable to principal components analysis (Watkins 2018, 227–28). The subsequent choice lies in choosing an estimation method of the communalities. The two main methods are ML and iterated principal axis (PA or MINRES). ML estimations have been found to underperform when the sample size is relatively small. Thus, using MINRES is preferable. Since we expect the different dimensions of cultures of violence to be correlated an oblimin rotation is preferred to a varimax rotation.

As recommended by Watkins (2018) we first ran the model with the highest possible amount of factors (here, five). This model is ultimately retained as it exhibited better factor loadings, good communalities, acceptable (and better) model fit indices than other models. Moreover, each factor exhibited acceptable to very good internal consistency. Thus, models with fewer factors were discarded. The most commonly reported model fit indices for factor analysis are the SRMR, Tucker-Lewis-Index and the RMSEA. The SRMR and the TLI both are within the commonly used thresholds. Although, they are more typically reported for Confirmatory factor analysis (another type of factor analysis), they are also reported in the table below. The indices reported good to acceptable fit level according to usual requirements with the exception of the
RMSEA. However, the RMSEA has been found to be particularly sensitive to sample size and usual cut off points is not necessarily telling (Chen et al. 2008).

<table>
<thead>
<tr>
<th>Data and Model Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Usual Minimum Requirement</strong></td>
</tr>
<tr>
<td>’Bartlett Sphericity’</td>
</tr>
<tr>
<td>’Keyser-Meyer Olkin’</td>
</tr>
<tr>
<td>’SRMR/RMSA’</td>
</tr>
<tr>
<td>’Tucker Lewis Index’</td>
</tr>
<tr>
<td>’RMSEA’</td>
</tr>
</tbody>
</table>

Table 3. Data and model fit of a five-dimensional model

**Model Description**

The resulting model is summarised in a correlation matrix below. Factor loadings above 0.3 are highlighted which allows to distinguish five distinct factors. Factor 1 consists of three items: the trust in the justice system, the police, and the armed forces. We can see very strong loadings with respectively 0.98, 0.86 and 0.72. Factor 2 includes three items: the respondent’s family was victim of a crime, the respondent was victim of a crime, and the respondent felt safe (in his neighbourhood). The loadings are moderate to excellent with respectively 0.99, 0.98, and 0.53. Factor 3 is constituted of three items and includes measures of the security, conformity, and tradition value. The factor loadings are again excellent with respectively 0.9, 0.79 and 0.73. Factor 4 includes all three measures of attitudes towards Masculine Violence, Interpersonal Violence, and Violent Discipline. Loadings are again excellent with respectively 0.94, 0.81 and 0.67. Finally, factor 5 consists of only two items measuring the efficiency and trust in the rule of law and the use of torture by state authorities. One caveat to this model is that the Feel safe variable appears to cross-load. It practical terms this means that its variation is explained by several factors. Although this is generally seen as bad practice, Watkins (2018) notes that this is not necessarily a problem if one
can explain theoretically why this would be so. In the case of the “feel safe” variable, it appears logical that threat perception will be related to the prevalence of violence (factor two) but also to how much one values its safety.

In addition to high loadings, most of the items show a high communality, meaning that the factor they load onto can explain a large share of their variation. Only the “feel safe” item only score moderately, which is not surprising given the cross loading. Although this does not invalidate the current model, it appears that this item would be the prime suspect if one is to improve the model in the future. Finally, as I argued in the previous section, the excellent loading on each factor displays indicators that are not too “noisy”, only capturing what they are expected to capture. In addition, the Cronbach alpha denote excellent construct validity for each factor, as they are comprised between 0.79 and .89 with the exception of factor 3 (0.54, nonetheless acceptable). This is important as it ensures the validity of the model.

<table>
<thead>
<tr>
<th>Correlation Matrix, Communality, and Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Trust Justice</td>
</tr>
<tr>
<td>Trust Police</td>
</tr>
<tr>
<td>Trust Army</td>
</tr>
<tr>
<td>Family Victim Crime</td>
</tr>
<tr>
<td>Victim Crime</td>
</tr>
<tr>
<td>Feel Safe</td>
</tr>
<tr>
<td>Security</td>
</tr>
<tr>
<td>Conformity</td>
</tr>
<tr>
<td>Tradition</td>
</tr>
<tr>
<td>Masculine Violence</td>
</tr>
<tr>
<td>Interpersonal Violence</td>
</tr>
<tr>
<td>Violent Discipline</td>
</tr>
<tr>
<td>Torture Use</td>
</tr>
<tr>
<td>Rule of Law</td>
</tr>
</tbody>
</table>

Table 4. Correlation matrix, communality, and uniqueness of the items

Model Interpretation: Factor Naming and Correlations

In practical terms, how can this model be interpreted? I proceed to propose an interpretation of this model and how consistent with theoretical expectations each factor is. A part of EFA
interpretation is naming each factor. However, note cautions identified by Kline regarding naming factors (2016, in Watkins 2018, 236) “they are solely for ease of verbal communication and may not mean that “the hypothetical construct is understood or even correctly labelled” (p. 300), (b) they should not be thought of as corresponding to real things (i.e., reification)”’. Keeping this in mind, I discuss how: institutional trust (factor one), violent norms (factor two), violent values (factor 3), violent attitudes (factor four), and state violence (factor five) potentially form five dimensions of culture of violence.

In this model, four of the five factors are remarkably fitting with theoretical expectations. We can observe that trust in the justice system, the police, and the armed forces load onto a single factor, named institutional trust. Trust in the justice system is the most salient item which comforts the idea that trust in the dispute settlement mechanisms play a particular role. Three of the four measurement of violent norms saliently load onto a single factor, violent norms. Some doubt remains about what is behind this fact. Although, the previous section hypothesized that these measurements relate to norms of violence. However, the three items measure relatively narrow conceptions of violence, mostly related to societal or interpersonal violence. Hence, this model does not allow to say if other norms (forms) of violence would load onto the same factor. The three items related to values also saliently load onto a single factor, that can be named violent values. This is extremely consistent with Schwartz’s previous findings that these three values are highly correlated within individuals. Violent also consistently load onto a single factor named violent attitudes. This appears to show that violent values and violent attitudes, although related, operate in distinct ways as expected by previous literature.

The most surprising factor in this model is perhaps factor five. One could have expected that the use of torture would have been associated with variables measuring the prevalence of violence/violent norms; As for the second item, Rule of Law, one could have expected it to be related to institutional trust. This appears to suggest that state play a particular role in affecting violence. This is perhaps not so surprising considering previous research regarding the monopoly on violence and the rule of law. In this light, the use of torture can be seen as an indicator of how much the state uses violence on its citizens. The rule of law although not measuring violence itself can be interpreted at how well the state constrains violent revenge by others which would be consistent with the findings on antisocial revenge by Herrmann et al. (2008). Although, the relationship between the items and the factor is difficult to establish, it seems that state violence is affecting these two items. This model would tend to show that the efficiency of the rule of law and its perception play two distinct roles in causing a culture of violence. Indeed, institutional trust
shows a .4 correlation with the norms of violence while state violence has a .4 correlation with violent values. However, Correlations are difficult to interpret in an EFA model as there is no control and no way to know the direction of the correlation. Nonetheless, neither correlation appears completely inconsistent with the theoretical expectations.

**Five Factors Model**

![Diagram of Five Factors Model](image)

**Figure 7.** Visual representation of a five-dimensional structure of culture of violence

Despite this slight deviation from theory the model remains remarkably fitting. The consistency of factors one to four grants credibility to the model and does not reveal major flaws in the data or the theory. While the credibility and the contribution of the model should not be overstated it should also not be understated either. The EFA grounds the theoretical constructs in the empirical world. It shows that cultures of violence are not unidimensional and consist of at least five dimensions with their respective drivers, and effects. Although the model needs to be further tested to increase its credibility, notably with different measurements and different samples, it opens new avenues to test the effect of individual factors. While it would be fallacious to say that
any of these dimensions had not been previously identified or researched, they have often been addressed in isolation, and sometimes in different academic disciplines (psychology, criminology, peace and conflict research). This model further demonstrates that the different dimensions of violence and the cultures surrounding it should be examined together in order to better grasp its specificities, causes and effects.

B. From a culture of violence to organised conflict

The next step of the research is to derive scores for each country and each of the five dimensions. Before reporting the results of the regressions, I present the scores for Germany, South-Africa, Colombia, and the United States which exemplify the variability of these dimensions. Note that as for the EFA, high scores reflect a high culture of violence. Descriptive statistics are available in the appendix C.

Colombia is an interesting case to start with. It has moderate to high scores on four of the dimensions. However, it shows with the lowest score on attitudes towards violence. Unsurprisingly Germany displays the lowest culture of violence of the four with all five dimensions having only negative scores. South Africa displays scores moderately on institutional trust, state violence, and
violent values and scores high on violent attitudes and violent norms. Finally, displays moderate to good scores on all dimensions. One can however note that the norm dimension scores highest and can clearly be distinguished from the rest. This brief example is interesting as it shows that different countries will have different culture of violence profiles with disparate clustering of the scores per country. On a surface level the data appears to fit relatively well to the recent history of these four countries.

**Regressions**

In this section, I present the regressions obtained following the research design specified earlier. The first model (1 to 10) does not include control variables whereas the second does (11 to 20). I first present the logit leg of the regression before presenting the count model. Thus, this section consists of four regression tables obtained with the package ‘pscl’ (Jackman 2020).

The logit model estimates the likelihood of observing a zero or non-zero value (model 1 to 5, table 5). Effectively, this tells the likelihood that a country experiences the dependent variable or not. For example, using the dependant variable “BRD” (Battle-Related Deaths) we can estimate which dimensions of a culture of violence have an effect on whether or not there will be any battle related death in a country over the time period 2005-2020. We can note that most of these values are not statistically significant and hence should not be interpreted. This suggests that culture of violence is perhaps not well suited to explain whether or not organised conflicts take place. Nonetheless, there appear to be a few significant effects. For the interpretation, keep in mind that higher score on the five dimensions of culture of violence denote a stronger culture of violence making the results counter intuitive for institutional trust (A higher score does not mean more institutional trust but less). Institutional trust appears to have an effect on non-violent conflicts, while the effect on the other DVs does not meet the commonly accepted significance thresholds (i.e., p<0.05). For non-violent conflicts, the coefficient is negative. Thus, a higher score on institutional trust will result in a lower likelihood of non-violent campaigns. This is in line with the hypothesis H4. Additionally, state violence appears to have significant effects on all the DVs (but non-state conflicts). State violence shows a negative relationship with the likelihood of organised conflicts. This is in line with the theory for non-violent conflicts but not for armed conflict. This might hint towards a link between state violence and state’s repressive capabilities; I elaborate further on this in the discussion. Of course, given that these models do not include control variables yet, the results should not be interpreted causally as they only serve as illustrations. This and subsequent discussions only make qualitative statements as the coefficients cannot be consistently interpreted as you would in a linear model.
**Dependent variable:**

<table>
<thead>
<tr>
<th></th>
<th>NVC (1)</th>
<th>OSV (2)</th>
<th>Non-State (3)</th>
<th>State Based (4)</th>
<th>BRD (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Trust</td>
<td>-1.011**</td>
<td>-0.079</td>
<td>-0.244</td>
<td>-0.065</td>
<td>-0.065</td>
</tr>
<tr>
<td></td>
<td>(0.414)</td>
<td>(0.418)</td>
<td>(0.376)</td>
<td>(0.324)</td>
<td>(0.323)</td>
</tr>
<tr>
<td>Violent Norms</td>
<td>-0.864*</td>
<td>-0.258</td>
<td>-0.523</td>
<td>-0.330</td>
<td>-0.329</td>
</tr>
<tr>
<td></td>
<td>(0.462)</td>
<td>(0.427)</td>
<td>(0.436)</td>
<td>(0.343)</td>
<td>(0.343)</td>
</tr>
<tr>
<td>Violent Values</td>
<td>0.117</td>
<td>-0.816*</td>
<td>-0.208</td>
<td>-0.014</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>(0.339)</td>
<td>(0.423)</td>
<td>(0.304)</td>
<td>(0.284)</td>
<td>(0.284)</td>
</tr>
<tr>
<td>Violent Attitudes</td>
<td>0.165</td>
<td>-0.460</td>
<td>-0.119</td>
<td>0.203</td>
<td>0.203</td>
</tr>
<tr>
<td></td>
<td>(0.380)</td>
<td>(0.396)</td>
<td>(0.353)</td>
<td>(0.330)</td>
<td>(0.330)</td>
</tr>
<tr>
<td>State Violence</td>
<td>-1.603***</td>
<td>-1.602***</td>
<td>-0.829</td>
<td>-1.035***</td>
<td>-1.036***</td>
</tr>
<tr>
<td></td>
<td>(0.484)</td>
<td>(0.550)</td>
<td>(0.518)</td>
<td>(0.368)</td>
<td>(0.368)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.517</td>
<td>1.051**</td>
<td>0.972**</td>
<td>0.351</td>
<td>0.351</td>
</tr>
<tr>
<td></td>
<td>(0.381)</td>
<td>(0.431)</td>
<td>(0.452)</td>
<td>(0.301)</td>
<td>(0.301)</td>
</tr>
</tbody>
</table>

| Observations     | 63      | 63      | 63            | 63              | 63      |

Note: *p*<0.05, **p**<0.01, ***p***<0.001

*Table 5. Zero inflation model coefficients (binomial with logit link)*
The second step of the model estimates the effect of a culture of violence for those countries experiencing organised conflict, for each of the five dependent variables (models 6 to 10). Effectively, this means that the model determines the effect on the count of conflicts a country experience. Although this regression table presents some unanticipated results, it generally appears to be in line with the theory developed. As anticipated, most of the dimensions of a culture of violence are negatively related with the occurrence of non-violent campaigns with the exception of violent values which unexpectedly has the inverse relationship. In addition, state violence does not meet the typical significance levels. Regarding one sided violence, there is no significant results but one, a negative relationship between violent norms and the likelihood of one-sided violence (-0.332) which is unexpected. The results regarding non-state conflicts are perhaps the most consistent with the theory, evidencing a positive relationship with four of the five dimensions of culture of violence. Only the value dimension does not follow this pattern, but the coefficient is not statistically significant. Fourth, a higher likelihood of state-based conflict appears to be related to higher scores on the value and state violence dimensions while the opposite effect is observed for violent norms. The role of violent norms is once more puzzling and points to a potential need to refine our initial theory. I return to this issue in the discussion. Finally, as anticipated, the five dimensions of a culture of violence are significantly related to an increase in battle-related deaths.
<table>
<thead>
<tr>
<th>dependent variable:</th>
<th>NVC (6)</th>
<th>OSV (7)</th>
<th>non-state (8)</th>
<th>state based (9)</th>
<th>BRD (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>institutional trust</td>
<td>-0.335***</td>
<td>-0.204*</td>
<td>0.241**</td>
<td>-0.054</td>
<td>0.341***</td>
</tr>
<tr>
<td></td>
<td>(0.073)</td>
<td>(0.120)</td>
<td>(0.122)</td>
<td>(0.073)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>violent norms</td>
<td>-0.394***</td>
<td>-0.332***</td>
<td>0.353***</td>
<td>-0.282***</td>
<td>0.213***</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.112)</td>
<td>(0.095)</td>
<td>(0.069)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>violent values</td>
<td>0.193***</td>
<td>-0.109</td>
<td>-0.109</td>
<td>0.185***</td>
<td>0.398***</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.094)</td>
<td>(0.093)</td>
<td>(0.061)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>violent attitudes</td>
<td>-0.156**</td>
<td>-0.065</td>
<td>0.892***</td>
<td>0.039</td>
<td>0.178***</td>
</tr>
<tr>
<td></td>
<td>(0.078)</td>
<td>(0.114)</td>
<td>(0.057)</td>
<td>(0.077)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>state violence</td>
<td>-0.122</td>
<td>0.346*</td>
<td>1.662***</td>
<td>0.255***</td>
<td>1.739***</td>
</tr>
<tr>
<td></td>
<td>(0.106)</td>
<td>(0.185)</td>
<td>(0.161)</td>
<td>(0.096)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>constant</td>
<td>2.535***</td>
<td>1.727***</td>
<td>0.969***</td>
<td>2.441***</td>
<td>7.380***</td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.167)</td>
<td>(0.197)</td>
<td>(0.076)</td>
<td>(0.006)</td>
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<tr>
<td>observations</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
</tr>
</tbody>
</table>

*Note:*

*p***p**p<0.01

*Table 6. Count model coefficients (Poisson with log link)*
Introducing control variables

When adding control variables, the results of the binomial logit are largely similar but lose statistical significance (models 11 to 15, table 7). Consistent with the previous specification, state violence appears to be the most significant and important dimension. The state violence coefficients are negative across all five DVs, suggesting that an increase in culture of violence is associated with a decrease in organised conflicts, all else being equal. However, note that the coefficients for OSV and non-state conflict are not statistically significant. This unexpected finding does reinforce the suggestion that our starting hypotheses need to be refined.
### Table 7. Zero inflation model coefficients (binomial with logit link)

I conclude this section by reporting the result of the second step of the ZIP including control variables (models 16 to 20, table 8). Looking closely at the model one can note several interesting...
results. The direction of the results shows the same peculiarities as the previously observed models. There appear to be distinct effects of a culture of violence on non-state conflict and other forms of armed conflict. The value dimension also retains its peculiar effect on nonviolent conflicts. Once more state violence shows significant and larger effects. Finally, battle related deaths are again most easily interpreted with consistently positive and significant relationships. However, all these results are somewhat undermined by the coefficients corresponding to the control variables. Indeed, several of these results suggest a positive relationship between organised conflict and GDP and regime type. However, these results are contrary to previously established and robust results. While this is not necessarily removing any merit to the measurements described earlier, this definitely suggest problems with the regression models used in this thesis. Additional regressions where also conducted as robustness checks (negative binomial and zero inflated negative binomial) and are available in appendix B. The results are largely similar and insignificant. The next section discusses these findings in greater detail, relating them to the theoretical framework.
<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>NVC</th>
<th>OSV</th>
<th>Non-State</th>
<th>State Based</th>
<th>BRD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(16)</td>
<td>(17)</td>
<td>(18)</td>
<td>(19)</td>
<td>(20)</td>
</tr>
<tr>
<td>Institutional Trust</td>
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<td>-1.013</td>
<td>0.432**</td>
<td>-0.178**</td>
<td>0.290***</td>
</tr>
<tr>
<td></td>
<td>(0.090)</td>
<td>(0.254)</td>
<td>(0.180)</td>
<td>(0.088)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Violent Norms</td>
<td>-0.023</td>
<td>-0.614</td>
<td>0.878***</td>
<td>-0.254***</td>
<td>0.581***</td>
</tr>
<tr>
<td></td>
<td>(0.098)</td>
<td>(0.184)</td>
<td>(0.126)</td>
<td>(0.085)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Values</td>
<td>0.203***</td>
<td>0.129</td>
<td>0.003</td>
<td>0.218***</td>
<td>0.204***</td>
</tr>
<tr>
<td></td>
<td>(0.061)</td>
<td>(0.154)</td>
<td>(0.106)</td>
<td>(0.069)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Violent Attitudes</td>
<td>-0.149*</td>
<td>-0.054</td>
<td>1.224***</td>
<td>-0.032</td>
<td>0.025***</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.156)</td>
<td>(0.077)</td>
<td>(0.086)</td>
<td>(0.004)</td>
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<tr>
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<td>1.994***</td>
<td>0.624***</td>
<td>2.081***</td>
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<td>(0.182)</td>
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<td>-0.584***</td>
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<td>(0.350)</td>
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<td>(0.001)</td>
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<td>(0.457)</td>
<td>(0.314)</td>
<td>(0.165)</td>
<td>(0.008)</td>
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Observations 62 62 62 62 62
Log Likelihood -131.399 -81.566 -149.703 -171.682 -56,643.380

Note: ²p* p*** p<0.01

Table 8. Count model coefficients (Poisson with log link)
C. Discussion

Beyond the sheer numbers, how well do these findings fit with the theoretical framework. Finally, I conclude this section with a discussion of the limitations of this study from a theoretical and empirical perspective. The results of the regression can seem somewhat inconsistent. The peculiar effects of widely known variables such as GDP and regime type, and the sample size could be reason enough to dismiss the usefulness of these models entirely. I suggest that a more constructive approach is to look at these regressions as robustness checks for the findings provided by the EFA. While it is doubtful to think this paper can alone has uncovered all the meaningful dimensions of a culture of violence, this is no reason to despair. By examining in conjunction, the EFA and the regressions, one can establish where they diverge and where the models converge. By establishing where the models converge, we can highlight where the findings are most robust and assumptions to be tested in future research. By establish where the model needs to be refined, theoretically or empirically. Where results diverge or are inconsistent lies perhaps a point of further separation between existing factors and a yet unknown dimension of (cultures of) violence.

A useful result to start with is the effect of cultures of violence on battle-related deaths. Both count models have found that all the main IVs predicted an increase in battle-related deaths regardless of control. This is in contrast with relatively erratic results per form of conflict. The consistency of the result that if culture of violence does not influence the occurrence of conflict, it has a reliable impact on its intensity (as measured by fatalities). Furthermore, the apparent erratic nature of the other IV’s is testament to the need of disaggregating conflict behaviours and their causes. Too often the choice of violence and/or non-violence has been treated as dichotomous variable. This model can offer a framework to continue disaggregating violence and conflict towards ever more precise theories.

One of the converging effects is the peculiar role of the state in the various stages of violence. First, we established that norms and behaviours promoted by the state constituted a dimension of its own in cultures of violence (state violence dimension). Second, the regression show that the state violence dimension appears to be the most consistently related with organised conflict. Interestingly, opposite effects are noted in each step of the model. This suggest that state violence makes organised violence less likely. However, when conflict does occur it is more intense. This may because of a relationship between violent states and repressive states. If a state has more (or is seen has having more) repressive capacity, it is only logical that more conflicts will be
suppressed before they even start. When conflict erupts nonetheless, it is logical that it will be more intense if the opponent is more readily making use of violence.

The peculiar role of the state does not stop here. Non-state conflicts and the other forms of organised violence appear to have inverse relationship to violent norms and institutional trust, suggesting that they may respond to different drivers. These findings taken together beg further questions, and while they cannot be a surprise for any scholar of politics and war, they remain interesting. One of the possibilities to understand these findings is to return to how an individual may decide to enter in a conflict. A culture of violence should push the individual to favour violent means regardless of the target of the conflict. However, it is possible than when the conflict concerns the state the repressive capacities mask the effect of a culture of violence. Thus, leading to the negative relationships between a culture of violence and organised conflict observed in these models.

Finally, the values and attitudes dimensions appear to have distinct but positive effects on organised conflict. While violent values are associated with higher levels of non-violent and state-based conflict, violent attitudes are linked to more non-state conflicts. It remains unclear if this is merely due to sample and significance issues or it points to two related but distinct processes. In addition, why violent values would lead to more non-violent conflict is unclear. Violent norms also appear to have inconsistent results and makes for a prime suspect for revision of the model. One of the credible deficiencies of this factor as it is measured in this model relates to its operationalisation. While I argued that the measurement used for this dimension are adequate, they might benefit more indicators to cover a wider range of violent norms. Albeit not always significant, institutional trust and violent norms as measured here appear to have a related effect on the different forms of organised conflict. Future research may establish whether or not this convergence is merely spurious or suggests a correlation between these two factors. An additional possibility is that upon the discovery of further dimensions of culture second order factors might help to further delineate which dimensions converge and which do not.

These results appear far more complex than anticipated in the theoretical framework. While these results must be pondered carefully in light of a number of limitations, the following conclusions can be drawn regarding the hypotheses. First of all, hypotheses H1 to H4 do not find any support in these results. On the basis of this data, there appear to be either no link between the independent variable and the dependent variables. The only significant results even suggesting that the relationship is the exact opposite to the one theorized. In contrast, the fifth hypothesis, relating to conflict intensity is supported by the data. In addition, a number of interesting but
unanticipated results uncovered here require further research. To conclude this section, I review the limits this paper has faced and that should be remedied in future research.

Limitations

First, I consider limitations regarding the data. Due to important data scarcity regarding many of the concepts this thesis attempted to measure the sample size remained relatively limited. This is likely the cause of various measurement errors. Hence all the results should be treated carefully. Keeping this in mind, this thesis did not interpret the size of the regression coefficients, in other words the size of the effect. Further research, based on better data may be able to interpret better the size and direction of the effects between organised conflict and the dimensions of a cultural of violence. Furthermore, due to the methods used this thesis is not able to effectively test potential causal mechanisms that would further reinforce the credibility the theoretical link between culture of violence and organised conflict.

Does a culture of violence cause conflict or does conflict cause a culture of violence? The issue of temporal order and endogeneity is of paramount importance to establish causality. The independent and dependent variable are measured within the same time period and with no way of establishing in what temporal order they happen. Due to this measurement issue, this thesis is unable to contribute when it comes to the temporal order. Earlier work surrounding the “legacy of war” theory has posited convincingly that conflict does lead to a culture of violence. While this paper cannot prove it, it has attempted to invert this proposition. I suggest that a culture of violence can, in itself, be a driver affecting organised violence. While thinking of culture of violence and conflict as a cycle may be inconvenient for measurement, it may be the most logical answer.

A third issue lies in how culture of violence is conceptualised. Future conceptualisation may benefit from a wider interpretation of culture on the one hand and violence on the other hand. As this thesis alluded to earlier, this paper as excluded discourse and language from its definition of culture due to time and data constraints. However, it would be interesting to see if the way described is talked about and used as a rhetoric object has a significant effect on conflict or it is dwarfed by the use of violence. While I have focused this point on language as it is most obvious, this can of course be extended to other cultural variables if relevant. In addition, this thesis has focused on norms, attitudes, and behaviour specifically relating to physical violence. It would be interesting to see if broadening the definition of violence, the dimensions simply grow in size and effect, or if a new dimensional structure emerges.
VI. Conclusion

In this paper, I attempted to understand further: How does a culture of violence impact the likelihood and intensity of organised conflict? The theoretical framework proposed that cultures of violence can be divided in four distinct dimensions: norms, attitudes, values, and dispute settlement mechanisms. However, the results of the factor analysis showed that this premise is slightly inaccurate. Norms, values, and attitudes did form three of the five dimensions of a culture of violence. However, the fourth expected dimensions turned out to be best divided in two dimensions. On the one hand, trust in the police, the justice system and the army formed a dimension of culture of violence, named “institutional trust” in this paper. On the other hand, culture of violence is completed by a fifth dimension named “state violence” capturing how the state uses and constrains violence. This last dimension includes both how well the state control violence and how much it uses it.

Based on the theoretical framework I had proposed five hypotheses. I suggested that the stronger the culture of violence in a given society, the more likely it is to experience (1) state-based conflict, (2) non-state conflict, (3) one-sided violence. I also hypothesised the inverse effect on the likelihood of non-violent conflict: (4) the stronger the culture of violence, the less likely it is to experience non-violent conflict. Finally, I hypothesised that a culture of violence will have a positive effect on conflict intensity. I tested these hypotheses using a zero inflated Poisson regression. In light of the results, hypotheses one to four are not supported, with some results even suggesting the opposite relationship (state violence dimension). However, hypothesis five did find some support. Thus, a culture of violence, does not seem to influence the likelihood of conflict. However, when conflict does occur, culture of violence appears to increase the intensity of conflicts. Given limitations of this paper regarding temporal order and causal mechanisms, and control variables having effects contrary to established literature demand caution. Thus, this paper cannot formally reject the null hypotheses for either of the five hypotheses.

Nonetheless, this paper provides a number of interesting results and contributions which should not be underestimated. Specifically, I wish to underline two contributions. First, this paper contributes to the understanding of violence by proposing a novel multidimensional model of culture of violence. In addition, this model can be used as the base for further empirical studies. While this model would benefit from important improvements, it may serve as a basis for future research. Second, I use this multidimensional culture of violence to test if it has a relationship to organised conflict. Although, similar premises have been used in previous research, this is to the
best of my knowledge, the first attempt to empirically test the effect of such model on organised conflict (armed or otherwise). Although the results are in part inconclusive, this has the potential to refine our understanding of causes of war, post-conflict periods, and the link between the two.

While the results of this paper are promising, for lack of being definite, they call for further research on at least three points. First, this study has been hampered by poor data availability on a number of metrics. Data covering violence in terms of values, attitudes, norms, and behaviour needs to be improved spatially and if possible, temporally. By spatially, I mean that more countries could be the target of questionnaires and measurement efforts on these metrics. Importantly, I also mean data at a lower level of aggregation (region, city, neighbourhood) as a culture of violence (and/or its effects) may be highly localised (Emery, Jolley, and Wu 2011; Buhaug et al. 2011). Improved temporal coverage will also allow to study the variation of cultures of violence and its drivers. At the same time, having more finely knit temporal coverage would allow to measure cause and effects in a more contiguous way, hence making research more reliable and effective. In essence, this would allow to reduce the effect of essentialisation of culture temporally and spatially.

Provided that the first step has been conducted in a satisfactory way, future research could bring a number of refinements to the culture of violence model outlined here. I have alluded to the fact that the model can be improved by being expanded to other cultural variables (language, discourse, rituals) and other forms of violence (structural and psychological violence). In addition, the model would benefit from even more precise measurements of the dimensions already identified as to understand more thoroughly its functioning and effects. Furthermore, the model could also benefit from research at different levels of analysis. Perhaps, the state level is not always the best suited to understand the effects of a culture of violence on conflict, especially in the context of weak states.

Finally, I conclude this paper on thoughts on the implications if future research comes to confirm the premises of this thesis. An important takeaway is that we must not only study the uses of violence but also how violence is viewed by the actors that do use it. Crucially, we must also look at how those who do not make use of violence think of violence. Are cultures of violence and culture of violence merely opposites on a same scale. Or as for attitudes towards war and peace, cultures of violence and peace are best plotted on two correlated but distinct axis?
VII. Bibliography


ANNEX A – List of Countries

1. United States
2. Haiti
3. Trinidad & Tobago
4. Mexico
5. Colombia
6. Ecuador
7. Peru
8. Brazil
9. Chile
10. Argentina
11. Uruguay
12. Netherlands
13. Spain
14. Germany
15. Poland
16. Slovenia
17. Cyprus
18. Romania
19. Russia
20. Estonia
21. Ukraine
22. Belarus
23. Armenia
24. Georgia
25. Azerbaijan
26. Sweden
27. Ghana
28. Nigeria
29. Rwanda
30. Ethiopia
31. Zimbabwe
32. South-Africa
33. Morocco
34. Algeria
35. Tunisia
36. Libya
37. Iran
38. Turkey
39. Iraq
40. Egypt
41. Lebanon
42. Jordan
43. Israel
44. Yemen
45. Kuwait
46. Qatar
47. Kyrgyzstan
48. Uzbekistan
49. Kazakhstan
50. China
51. Taiwan
52. South Korea
53. Japan
54. India
55. Pakistan
56. Thailand
57. Vietnam
58. Malaysia
59. Singapore
60. Philippines
61. Indonesia
62. Australia
63. New Zealand
### Annex B – Negative Binomial Regressions (Zero-Inflated)

Zero inflated Negative Binomial model coefficients (binomial with logit link)

<table>
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<tr>
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<th>Dependent variable:</th>
</tr>
</thead>
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<td>NVC (1)  OSV (2)  Non-State (3)  State Based (4)  BRD (5)</td>
</tr>
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</tr>
<tr>
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<td>(0.568)  (0.819)  (1.521)  (0.506)  (0.448)</td>
</tr>
<tr>
<td>Violent Norms</td>
<td>-0.913  -1.182*  -1.351  -0.878*  -0.866*</td>
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<tr>
<td></td>
<td>(0.574)  (0.675)  (1.045)  (0.470)  (0.452)</td>
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<tr>
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<tr>
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<td>(0.951)  (0.848)  (1.007)  (0.656)  (0.578)</td>
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<td>(1.870)  (2.316)  (4.029)  (1.616)  (1.506)</td>
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</table>

| Observations | 62 | 62 | 62 | 62 | 62 |
| Log Likelihood| -113.260 -73.572 -83.865 -124.265 -289.573 |

*Note: *p<0.1; **p<0.05; ***p<0.01
Zero inflated Negative Binomial model coefficients (binomial with logit link)

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<th>Dependent variable:</th>
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Observations 62  62  62  62  62
Log Likelihood -113.260  -73.572  -83.865  -124.265  -289.573

Note: *p<0.1; **p<0.05; ***p<0.01
Annex C – Additional information about the exploratory factor analysis

Descriptive Statistics: Country scores derived from the EFA

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<th>St. Dev.</th>
<th>Min</th>
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Additional EFA statistics

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