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Uncertainty in Conflicts between Societal Groups – A Social Psychological View

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Abstract

The central focus of the following working paper is a social-scientific and especially social-psychological understanding of the relation between the concept of uncertainty and conflicts between groups within a certain society. How can uncertainty be conceptualised (understood)? What is the meaning and role of uncertainty when we want to understand conflicts between groups? What can social psychology contribute to the questions: How do and which uncertainties influence conflicts, especially processes of constructive and destructive conflict regulation? By which group dynamics and mechanisms do groups navigate uncertainty in society? Shortly, conflicts and the regulation of societal conflicts are the central focus of this contribution to interdisciplinary uncertainty studies.
The perspective we outline in the following is social psychological, i.e. we focus on conflicts between groups and their members. We focus on a psychological level. We try to understand individuals, their perceptions, emotions and behaviour. From this perspective, we differentiate between individual and collectively shared uncertainty; we propose a clearer differentiation of levels, types, sources and modes of navigation of uncertainty in group conflicts.

1. Introduction, or Why Conflict and Uncertainty Belong Together?

There is a simple answer to the question of how conflicts in society and uncertainty are connected. Conflicts are always uncertain. They are characterised by uncertainty from the perspective of the conflict parties.

"Conflict results from purposeful interaction among two or more parties in a competitive setting" (Obershall, 1978, p. 291). The agents in a conflict can be individuals, groups or states who compete on the same or different goals, and – in the prototypical case – think or claim that only one group can achieve the goal. Research in social sciences observes conflicts of (a) goals, interests, resources, and positions, (b) societal categories and identities, and (c) values, morals, beliefs, or ideologies (political views). Modern group research also more and more recognises conflicts on (d) memory and histories. It is precisely this point of incompatibility that can be understood as uncertainty. Conflict opponents are usually never certain what the interests, values, beliefs, etc., of the 'others', the outgroup from which they distance themselves, are. Moreover, we will show later that conflicts between groups in society are characterised by producing uncertainty for others in order to maintain the difference between the groups or to produce certainty for the members of one's own group. Modern societies,

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especially democracies, develop and change by conflicts between societal groups and the way in which these conflicts are regulated. But even more interesting is the attention to conflicts under the uncertainty perspective because so far, it seems to have been overlooked that conflict is a type of uncertainty. Conflict "is present whenever we are faced with some kind of discrepancy or inconsistency in our information or evidence. "(Klir & Harmanec, 1997, p. 36). With respect to this understanding of conflict, it already becomes evident that the means and modes of constructive or destructive conflict resolution and management are relevant to the understanding of conflict dynamics. We claim that we can understand societal conflicts better if the approach is based on a clear theoretical as well as methodological reliable analysis of the construct *uncertainty* and especially research of the modes groups in conflict adopt to navigate uncertainty in conflicts.

With respect to available research, we need to recognise that research, including our own research, has focused on the damaging consequences of *navigating uncertainty*[2] because the focus is more on destructive conflict resolution. It focuses on intergroup conflicts characterised by incompatibilities of interests, identities, and values between two or more social groups; simply put, conflicts in which one group tries to assert itself against another or more groups to gain power and influence. Research indicates that when groups share uncertainty, they will try to make sense of the situation and mostly consider it as a threat that will lead to loss (Breakwell, 2021). Therefore, mainly conflict research has so far been more concerned with the motives of individuals in groups to dissolve uncertainty into certainty and security by distinguishing themselves from other groups. We are researching how intergroup conflicts lead to polarisation and radicalisation of individuals in groups, to denigration, misrecognition, discrimination, and exclusion of minorities, and to divisions and dissolution of cohesion of societies. Here, analogue, as well as digital spaces are included in the analyses, especially in our research about online radicalisation into extremist and terrorist violence. E.g., in a special focus on German memory culture in the MEMO-Study (Multidimensional Memory Study - MEMO[3]), we also get information on how people fill uncertain information with distorted certainties in case of memory gaps or an unwanted memory. A specific focus lies on the question of to which extent individual and cognitive biases – operationalised as

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[2] The literature on uncertainty and its influences on individual or group behaviors or processes tend to consider this dynamic from a control perspective, focusing more on its aversive effects. To refrain from the delimitations of this unidimensional consideration that is often used with a control paradigm, we prefer using the term "navigating."

[3] https://www.stiftung-evz.de/was-wir-foerdern/handlungsfelder-cluster/bilden-fuer-lebendiges-erinnern/memo-studie/

stereotypes, prejudices, heuristics, etc. - influence the modes to navigate uncertainties that cause polarisations as well as societal differentiation in societies. Group-focused enmity, discrimination, and exclusion of minorities, as well as new ways of inclusion and hate control, are focused on in our research.

Our research on conflict dynamics focuses on different social groups in society. Considering the societal divisions or cohesion, we do not only focus on revealing the social and political tendencies of the middle classes or the individuals from the majority groups but also on the tendencies within minorities, vulnerable and marginalised groups, and the intergroup conflict dynamics. Since the social and economic resources of different social groups are not the same, their experiences of, as well as their reactions to uncertainties, will vary. Postmigrant communities, for example, already have collective experiences of uncertainty and insecurity, are natural elements of the migration phenomenon (e.g. Williams & Baláž, 2012). Our conflict research does not only investigate the intergroup dynamics between postmigrants and the native communities but also focuses on interminority relations and the transnational political influences that play a role in the social and political inclinations of postmigrant communities. Uncertainty, as a key factor in these dynamics, is rarely considered from minority perspectives, and there is a need to scrutinise the similarities and differences in navigating uncertainty among minority and majority groups. The daily experiences of migrants, particularly irregular migrants or refugees, are characterised by a continuous state of insecurity and uncertainty while leaving their home countries behind, struggling to settle themselves and their families in a system they are not accustomed to, and most of the time, waiting for the bureaucratic procedures to start their new lives, which creates a different collective meaning of temporality for them (Bendixsen & Eriksen, 2018). The postmigrants that have long-time settlements, on the other hand, sometimes are exposed to the claims of loyalty to their home and to the residence countries, which locate them in an *in-between situation* in terms of belongingness (Sandal-Önal et al., 2022) hence, may potentially influence their self-uncertainties. Moreover, during times of crisis, whilst uncertainty is perceived and experienced by all groups in societies, the political discourses of scapegoating the minorities for the ongoing crisis is not an uncommon situation (see Esses et al., 2013). Conflict research, covering all situations, focuses on how uncertainty and minority relationship can have influences on societal processes.

The repercussions of uncertainty to different groups might be experienced in individual or group levels, and focusing solely on the individual aspects of uncertainty may result in overlooking its collective meanings, which does not require a direct individual experience. We know that uncertainty at the individual level fuels the need to control the environment or the belief that everything is under control in the universe (Kay & Eibach, 2013), therefore, leads to the endorsement of conservative ideologies (Jost et al., 2007), conspiracy beliefs (Marchlewska et al., 2018), and to favour authoritarian leadership (Hogg, 2018). Notwithstanding its societal influences, uncertainty has rarely been a research object in collective level, nor was it considered from a constructive perspective. So far, little research has been done on the question of how appropriate *navigation* of uncertainty in and between groups leads to constructive conflict regulation, which ultimately also leads to a stabilisation of democracies or a change in society towards resilience to 'harmful uncertainty navigation'. In the field of research on the reduction of prejudices, deradicalisation and communal conflict management, and on societal cohesion approaches can be identified. Overall, however, we believe that much more research is needed on the question under which circumstances uncertainty fosters cooperation in society and the stabilities of democratic states and processes.

In the following paragraph, our focus is the uncertainty and conflict link between societal groups, i.e., the focus on uncertainty in conflicts between societal groups is outlined. It is a focus which is characterised by a social-psychological and empirical perspective on present societies with a certain cohesion and collective memories, and on conflicts which are dominated by differences and differentiations between societal groups (ingroups, outgroups), i.e. which are also influenced by biases, prejudices, racist, populist, or extremist attitudes and behaviours of societal groups. From this point of view, the previous research tradition regarding its understanding of uncertainties and navigations should first be briefly outlined before new research perspectives with a new paradigm of interdisciplinary uncertainty research for the field of conflict research are presented.

2. Social Psychological Conceptualisation of Uncertainty in Conflicts

Independent from different theoretical understandings of uncertainty as a phenomenon, research needs a common understanding of it more precisely from a perspective of empirical conflict research, the empirical phenomenon of uncertainty. What is uncertainty? How do we

understand uncertainty as a unique and independent phenomenon in group conflicts? Can we differentiate certain dimensions or types of uncertainty? How do we approach uncertainties? These questions are critical for the analyses of modes of navigating since they ask what exactly is navigated in conflict situations.

For a first understanding of uncertainty in intergroup conflict, we can refer to a psychological definition. Psychological uncertainty, specifically, is observable when an individual perceives information to be incomplete, missing, or vague, regardless of whether it is objectively uncertain (Schunn, 2010; Windschitl & Wells, 1996). The American Psychological Association (APA) defines uncertainty as "the state or condition in which something (e.g., the probability of a particular outcome) is not accurately or precisely known" or a "lack of confidence or clarity in one's ideas, decisions, or intentions." (APA, n.d.b). The definitions represent a psychological perspective which goes along with the most widely shared definition in other disciplines. For example, Bennett & Lemoine, (2014) define uncertainty as "[…] a lack of knowledge, not as to cause and effect but rather pertaining to whether a certain event is significant enough to constitute a meaningful cause".[4] Shortly, uncertainty is a lack of knowledge and/or information, the inability of prediction, since causal inference are missing, and insecure. It can refer to affective, cognitive and behavioural uncertainty. The definition is relevant here, since it already shows the close link of *uncertainties* and crises, as a situation […] that produces significant cognitive or emotional stress in those involved in it" (APA, n.d.a) and conflicts, as situations of incompatibility, i.e. discrepancy and/or inconsistency. While the differentiation of uncertainty along personal and situational dimensions has long been known (e.g. Kahneman & Tversky, 1982; Lagnado & Sloman, 2004; Müller et al., 2021), its emergence as a perceptual phenomenon makes it more relevant to the conflict research. This perceptual dimension has been superficially studied in social psychological research, from a two-fold dimensionalisation of uncertainty as informational and personal (or self-) uncertainty (Cremer & Sedikides, 2005; Hogg, 2007; van den Bos & Lind, 2002), which was mostly approached as a dynamic that is needed to be reduced.

Considering its role in risk and decision-making processes, the first tendency to categorise uncertainty is defining subjective/personal/internal vs. situational/contextual/external types (e.g., Müller et al., 2021). These two categories are referred to as the possibilities of the

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[4] Williams and Baláž (2012, p. 168f.) define uncertainty as (a) imperfect knowledge and (b) the unpredictability of the future. The distinction lies in what Adam and Groves (2007, p. 5) call *facta* and *futura*: "*Facta* have already taken (unalterable) form, *futura* are still open to influence."

events that are either bound to the observer's activities or independent of the observer (Luhmann, 1993; cited in Müller et al., 2021). While its role in the intergroup relations and relevant societal processes is at the focus, another dimensionalisation appears to see how uncertainty is implemented in the individual level. In van den Bos & Lind, (2002) and van den Bos et al., (2007), uncertainty is defined as having informational and personal dimensions. Informational uncertainty is defined as insufficiency or lack of relevant information or knowledge to make a judgement. Personal or self-uncertainty, on the other hand, refers to "a subjective sense of doubt or instability in self-views, world-views, or the interrelation between the two" (van den Bos & Lind, 2017, p. 124). This latter dimension has been highly used in explaining the societal problems of extremism, radicalisation, terrorism (Hogg, 2014; Hogg et al., 2013, Kruglanski & Orehek, 2012; van den Bos & Loseman, 2012), conservative (Jost et al., 2007) and authoritarian (Oesterreich, 2005) worldviews, and the support for status-quo (Federico et al., 2012) which can all be considered as the sources of threat to a well-structured democracy and pluralism. However, although self-uncertainty as a factor in supporting extremism, right-wing and conservative worldviews, was conceptualised in terms of feeling uncertain about one's attitudes, values, or identities (Hogg, 2007) and therefore contextualised rather than psychologised; it is still insufficient to understand the role of uncertainty in societal dynamics, since it mainly centralises the uncertainty in descriptive or conceptual facets in individuals. Hogg (2007) describes uncertainty as produced by the contextual factors and makes individuals' confidence about their views, beliefs, values, feelings, and behaviours questionable. Therefore, his approach presents the personal and situational uncertainty as interdependent where the latter causes the former.

Yet the sources and the expressions of uncertainty are diverse, and not merely based on the situational dynamics. In line with the abovementioned social psychology corpus, Anderson et al. (2019) mention three sources of uncertainty, inducing relevant responses: first reflects an indeterminant, vague future which complicates prediction (probability), while the second is resulted from the inadequacy of the information related to the lack of prediction (ambiguity). The final source of uncertainty emerges when the information is too complex to understand (complexity). The authors also refer to some individual sources of uncertainty, mostly tapping to the reactions of risk aversion. This line of thought consider uncertainty as a subjectively perceived situation that evokes particular cognitive, emotional or behavioural responses. However, despite their multidimensional perspective of the sources of uncertainty, the reception and reactions in different levels are not mentioned.

When considered from a multilevel perspective beyond personal and situational dichotomy (which is required if its influences on societies are investigated); one should also ensure on which dimensions and in which forms uncertainty is emerged: Is the uncertainty in question operated in individual level stemming from questions about the self or identity, relational concerns or the lack of knowledge of the observer (actor) on a given issue? Or does it emerge as a collective dynamic which is shared by the members of certain groups, interpreted and represented through a common given meaning? And surely, does it emerge as a result of a contextual or situational phenomenon (i.e. disasters, crises or a macro-level social and political construction that emerge in the top-down communication between individuals and the policy makers) that are independent from the observer (actor)? Among these, the shared or collective level is the least considered one in the relevant literature, yet is quite significant when the societal dynamics of uncertainty is questioned. The first of the two attempts that come closest to conceptualising collective uncertainty is provided by Lucas Casanova, Costa, et al., (2021; also see Lucas Casanova, Pacheco, et al., 2021) where psychosocial uncertainty is defined and measured to understand the subjective expression of uncertainty in a given social context together with its psychological experience. Although it is measured as an individual dynamic, the articulated meanings are rendered as the collective ones that are linked with the personal ones (Lucas Casanova, Pacheco, et al., 2021, p.2). The other one comes from Breakwell (2020, 2021) where she conceptualises uncertainty using the frameworks of threat and mistrust, stating that it emerges when the future is unknown, linked to the collective threat which is basically found on uncertainty since it relies upon the anticipation of what is expected to happen (Breakwell, 2020, p.57). This contribution is not only critical, particularly for understanding the destructive influences of uncertainty in the societal scale, it is also significant to indicate that uncertainty cannot be emerged independent from the social context.

3. Levels of Explanations and Dimensionality of Uncertainty

Therefore, what seems helpful for interdisciplinary research is a differentiation of dimensions of uncertainty. In social sciences and social psychology, uncertainty, its facets, dimensions, roots, and causes can be explained on different levels, which already differentiate uncertainties more concretely.

Following Doise's (1986) differentiation between levels of explanation, we consider that specific phenomena of crises and conflicts and the modes of navigating these conflicts go back to uncertainties that are crucial as intra-personal, inter-personal, inter-group, societal or sociological and ideological and macro-social phenomena. Figure 1 shows the different levels and tries to make explicit that uncertainties can be macro, collective or meso, inter-personal or intra-individual or dispositional. Depending on the explanation, these types of uncertainty play a different role in how uncertainty can lead to conflict, be part and depending on 'the uncertainty in conflict-constellations' lead to different modes of navigating.
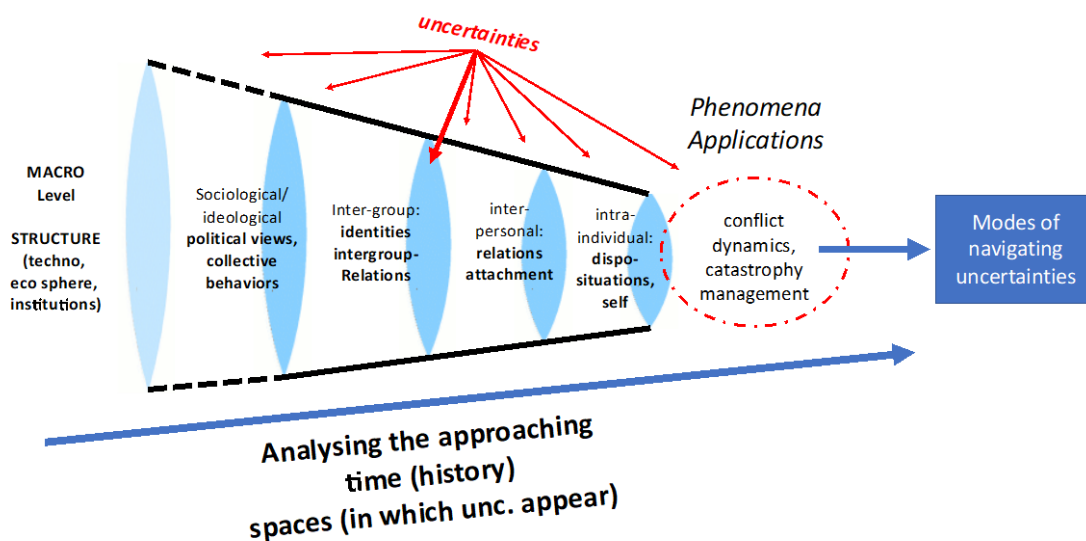

Figure 1. Levels of analyses at which uncertainty can play different roles (own figure).

Because we follow a social psychological perspective, we initially do not consider cultural or macro-social (structural) uncertainties and questions about social structures and their influence on group processes. They play a role, but with reference to Figure 1, our lens is focused on groups and individuals, micro-, meso- and micro-macro uncertainty, however, the most important differentiations are, that (a) uncertainties can (exogenously) influence individual affects, cognitions or behaviour or they can be (endogenous) manifestations of affective, cognitive or behavioural uncertainties, and (b) uncertainties can influence the individual affects, cognitions or behaviour or be manifested as individual affects, cognitions and behaviour or they are shared with others as a collective phenomenon. That is, an individual can experience a conflict not to be uncertain, but when she/he identifies with groups, she/he might experience or perceive it as uncertain. Uncertainty, thus, can be a collective orientation ((Damayanti et al., 2015; Moghaddam & Love, 2012) that is shared in group level (Breakwell, 2021).

This differentiation of individual, collective and contextual uncertainty goes back to the core dimensions of phenomena like attitudes, which can also be applied to experienced or perceived uncertainty. Looking at attitudes – especially in empirical research, perceived uncertainty or insecurity is measured in attitudes – further dimensions of uncertainty can be distinguished. Zick (2016) has proposed a typology to explain the psychology of discrimination by adopting evidence from attitudes research. A modified version can also be adapted to differentiate more dimensions of individual and collective uncertainty, which are interesting from an empirical perspective on uncertainty. Following this, we propose that uncertainty emerge in three layers as different entities[5]:

- individual (uncertainty)
- shared/collective (uncertainty)
- societal/structural (uncertainty)

On each of these levels we can further differentiate uncertainty by dimensions. Uncertainty in a conflict between groups can be:

more or less from a situational perspective:

- exogenous – endogenous
- contingent – incontingent
- stable – situational/variable / constant – periodic
- singular – multiple /cumulative, additive
- strong – weak
- positive (constructive, opening) – negative (threatening, destructive, closing)

more or less as shared within groups:

- cognitive, affective, behavioural
- implicit – explicit / indirect – direct / manifest – latent

more or less from a perspective on conflict outcomes

- predictive – explorative
- specific – generalised
- culturally shaped (inherited) – acquired (learned)

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[5] The classification is based on a classification of discrimination phenomena by Zick (2016).

For the further processing of research and the derivation of new perspectives from the point of view of uncertainty research, the dimensionalisation of uncertainty facets down to the differentiation of individual and collective uncertainty is postponed, especially since so far, the dimensions fanned out here have not been further considered in theories and empirical studies, and therefore there are not yet sufficient methodological approaches. In this respect, this dimensionalisation can also be understood as a research task. The importance of it also depends on the methodological options and the theoretical conception of uncertainty.

4. Measuring and Theorising Uncertainty

Research faces uncertainty from the classical two lenses of social science: Methods and Theory. The methodological questions are closely connected to the theoretical approach, since methods should be precise, i.e., valid and reliable, to operationalise the theoretical constructs or causal and correlational assumptions of theories, c.f. the concept of uncertainty defined by theories. But methodological challenges can also be treated as a separate challenge for research. The differentiation of facets or dimensions of individual and collective uncertainties sketched above and how to tam the methodological issues of uncertainty as noise in measurement are issues of social scientific research. Some main approaches and conceptualisations are outlined in the following paragraphs.

4.1 Uncertainty as Methodological Challenge for Conflict Research

Uncertainty is a methodological challenge for social psychology and social science, and some are independent of theoretical questions. Like in many other disciplines, social psychological research asks how to measure uncertainty in individuals and groups and how to differentiate empirically the construct of uncertainty from other constructs such as risks etc.; in that sense, Knight's concept is also a methodological concept.[6] Uncertainty as a measurement challenge appears as a conceptual question focusing the valid and reliable measurement. Is uncertainty measured in attitudes, beliefs, ideologies or orientations? Is it, as Hofstede (2001) showed, a

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[6] In this paper the difference of the concept of risk and uncertainty is not discussed in detail. (Zinn, 2016, p. 350) makes the difference relatively easy to understand: „*Uncertainty is central to the understanding of risk as the possibility of an undesired event. At the same time uncertainty is only relevant when it comes with the expectation of a potentially undesired future which requires a response*". Hofstede (2001) distinguished uncertainty avoidance from risk avoidance. So, the perception of risk is related to a specific event to be feared, uncertainty is perceived when one is unable to foresee what will happen next.

cultural dimension manifested in individual values?[7] Does the uncertainty measured in social psychological studies is an experienced (like being uncertain about one's self or identity) or a reactive (i.e. emotional, cognitive or behavioural reactions to the perceived uncertainty) dynamic? Secondly, uncertainty can appear as a phenomenon in itself as a bias, errorless answers, "don't knows", etc. in research. The question of how to control the 'uncertain attitudes' appears, e.g., when research wants to analyse the attitudes of individuals and the respondents are uncertain about. This is rather often the case since research widely uses Likert-Scales with midpoints for attitude measurement. In our own research on group-focused enmity and anti-democratic attitudes in Germany – the so-called middle-studies[8] – we often had to recognise that rather many respondents use the middle-category of "partly-partly" when we asked about prejudices and racism toward groups and radical right-wing attitudes. As well, respondents use the "don't know" category, especially when we ask for normatively undesired attitudes like antisemitism. Analysing the tendencies of such indicators for 'uncertain' attitudes showed that those who respond, e.g., uncertain in racist attitudes toward black persons or Jews, are more similar to clearly racist and antisemitic others than to non-prejudiced or racist respondents (Zick, 2021). Third, uncertainty can be part of the design and method itself. This is shown in Hund et al.'s (2001) definition of uncertainty in chemistry.

These methodological questions are highly relevant for uncertainty studies in itself; however, for an understanding of conflicts between societal groups, they are inherently linked to the research questions and the way conflicts are theoretical frames or the assumptions that theories make about conflict dynamics and uncertainty.

4.2 Theorising Uncertainty

Social psychological research understands uncertainty basically from a theoretical perspective, treating uncertainty as an internal psychological reality represented in dispositions, motives etc., or as an external reality, which is threatening, irritating etc., for individuals in groups; this also holds true for many sociological analyses which refer to individuals facing uncertainty. The lens on the 'internal reality of uncertainty' is represented

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[7] Hofstede (2001, p.148) describes uncertainty avoidance as follows: "*Uncertainty-avoiding cultures shun ambiguous situations. People in such cultures look for structure in their organizations, institutions and relationships, which makes events clearly interpretable and predictable.*"
[8] https://www.fes.de/referat-demokratie-gesellschaft-und-innovation/gegen-rechtsextremismus/publikationen/studien/gutachten

by several classical theories, which follow *a control-paradigm*, i.e., the assumption that uncertainty needs to be managed and reduced, e.g. Social Comparison Theory (Festinger, 1954), Uncertainty-Management Model (Gudykunst & Hammer, 1988), General Theory of Uncertainty Management (van den Bos, 2001), Uncertainty-Identity-Theory (Hogg, 2007) or Uncertainty Threat Model of Political Conservatism (Jost & Napier, 2011). The basic assumption of this paradigm is: When uncertainty is present in a context and is perceived or experienced as such, people are expected to look for ways to reduce or overcome uncertainty. Uncertainty is linked to threats, insecurities, stresses, and anxieties etc. The uncertainty about the future that accompanies an increased perception of threat leads to an aversive response that motivates individuals to seek safer, more secure and predictable sources. This reflects into the political orientations and behaviours of individuals that result in the support for authoritarian leaders (Oesterreich, 2005), conservatism (Jost et al., 2007), and status quo (Federico & Deason, 2017). Giner-Sorolla, Leidner & Castano (2017) indicate the link between uncertainty and extremism, stating that the manifestation of what is morally right and what is wrong has the potential to deliver some kind of moral certainty to people who face uncertainty. In the literature on uncertainty, it is argued that the incongruence between the available information and the motivation to understand something is the most important factor leading to uncertainty whilst individuals try to make sense of the world and the social and political context (Haas & Cunningham, 2014). While this control paradigm also inspires the dimensionalisation of the cultures as in the uncertainty-avoidance dimension of Hofstede's (2011) classification, it does not provide knowledge about the exact, culture and context-specific impacts, potential, and relevance of uncertainty to the social and political scale of the intergroup conflict.

One challenge in understanding the link between uncertainties and intergroup conflicts is that "[…] there is no closed theory addressing large uncertainties in conflict decisions", as highlighted in Bilkic and Gries (2014, p. 2). Another challenge is the difference between individual and collective uncertainties (see Fig. 2). For an understanding of societal group-conflict dynamics, uncertainties are implicitly addressed in one of the most important approaches to understanding conflicts between groups and group dynamics, the Social Identity Approach (SIA) (Abrams & Hogg, 1990). This approach rests on *Social Identity Theory* (SIT) (Turner et al., 1979; Tajfel & Turner, 1986; Zick, 2005), which offers a differentiation between individual and collective uncertainty. SIT argues that the self-esteem derived from membership in a particular group is completely group-based and cannot be

compensated by personal self-esteem (Self-Esteem Hypothesis, see, e.g., Houston & Andreopoulou, 2003).

The self-esteem in social identity and, at the same time, the identity of the ingroup can be constantly threatened and is thus subject to insecurity. This goes back to more or less constant social comparisons of the ingroups with outgroups, that is, the need to perform comparisons to more or less relevant outgroups on relevant dimensions as outlined by *Social Comparison Theory* (SCT, Festinger, 1954).[9] Whereas SCT argues that individuals compare themselves with similar others, SIT argues that individuals as members of groups compare their attitudes/behaviour with and adjust them to the ingroup, and the ingroup is then compared to outgroups. Group members not only compare their attitudes and behaviours, and this may be accompanied by insecure self-worth or threatened identity, but they also compare their group's status. The status of the group can be perceived as legitimate, permeable as stable or illegitimate, impermeable, and unstable. Status uncertainties lead to uncertain self-worth in social identity and unleash group differentiation processes (cf., e.g., Ellemers, 1993).

Status uncertainties may have observable outputs in societal relations. In line with our considerations on the group level, approaches in sociology (e.g., Gould, 2003) support the idea that violence occurs more likely when an individual's status is ambiguous or uncertain than when hierarchical structures are already established. According to SIT, individuals are generally motivated to establish or restore a positive view of themselves and to achieve high self-esteem via belonging to one or more groups with a positive connotation (Turner et al., 1987). A further modification and extension of the ingroup-outgroup differentiation process was developed by Turner et al. (1987) in their *Self-Categorization Theory*. Turner et al. 'deepened' the understanding of the central processes of social categorisation in ingroup-outgroup contexts and how individuals make meta-contrasts between themselves as group members, their ingroup and the ingroup compared to the outgroup.

Complementing SIT with aspects of uncertainty about the personal self, life, and future, *Uncertainty-identity Theory* (UIT) by Hogg (2007) explicitly emphasises the role of subjective uncertainty about crucial aspects of the individual's self in categorisation processes (e.g., Hogg, 2007; for a concise overview see Wagoner & Hogg, 2016). Put differently, according to this approach, the underlying motive of self-categorisation is the reduction of

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[9] In this aspect SIT goes back to *Social Comparison Theory* (SCT, Festinger, 1954; Suls & Wheeler, 2012), which argues that individuals who are insecure in attitudes or behavior start to compare their attitudes/behaviors with similar others.

subjective uncertainty, for instance, by identifying with the ingroup. Some correlational and experimental empirical findings support the assumption that high levels of subjective uncertainty evoke identification and intergroup discrimination (e.g., Grieve & Hogg, 1999). UIT thus also implies instances of the presence of uncertainty as antecedents of social categorisation: In situations of uncertainty, individuals categorise to reduce the uncertainty; that is, categorisation is a mode of navigating uncertainty. Jost et al. (2003a/b) reviewed several studies on political orientations, and they showed that "several specific motives relating to the management of fear and uncertainty are associated with the ideology of political conservatism" (Jost et al., 2003a, p. 366). Jost et al. (2007) argue in their Uncertainty-Threat Model of Political Conservatism that conservatism is a belief system to cope with uncertainty and threat which might appear in times of change; at the moment, one may speculate whether conservatism or the activation of political beliefs are specific modes to navigate uncertainties. Again, for SIT, it depends on membership and identification with specific social groups.

One exemplary process that may help making the ingroup look comparably good and therefore boost the group members' individual self-esteem via a positive group identity, is to make the outgroup look bad. In other words, increasing the value of one's ingroup may be sought by devaluing the outgroup. According to all theories linked to the Social Identity Approach, i.e. SIT, Self-Categorization Theory, UIT and others (Abrams & Hogg, 1990), the most important process that then causes intergroup conflict is the focus on differences between the groups. Such intergroup conflict may be the result of preceding uncertainty about the groups and individuals involved. There are also several potential *uses of uncertainty* or modes of navigating uncertainty in intergroup differentiations that may come into play during these processes. Ambiguous and, therefore, uncertain information about the outgroup that may be interpreted either positively or negatively can be framed deliberately and intentionally in a way that portrays the outgroup negatively for the individuals themselves. Additionally, this uncertainty related to information about the outgroup could also be used to convey a negative picture of the outgroup to fellow ingroup members. It is also possible that these processes work more unconsciously and, thus, involuntarily. Still, all these scenarios address the uses of uncertainty in an intergroup context and concern the motivation to increase the relative superiority of the ingroup over the outgroup.

Scientific evidence from psychology shows that individuals can avoid or escape the uncertainty-provoking information, but when it is unavoidable, e.g., as in situations of crises, they either opt for the - usually simplified - information available in their immediate environment that points the way to reinforcing their ingroup identities (Hogg, 2014), tend towards authoritarian politics (Hogg & Adelman, 2013), embrace conspiracy theories (Marchlewska et al., 2018) or they enter an exploratory state to increase predictability (Haas & Cunningham, 2014), which could pave the way for more innovative solutions. Uncertainty, when individuals' basic existential needs are not threatened, may motivate people to explore (Haas & Cunningham, 2014; Staub, 2012) or deliberate (MacKuen et al., 2010). Here, it is important to note that not all empirical investigations of uncertainty about a specific situation could show larger degrees of intergroup discrimination in those with higher levels of situational uncertainty (e.g., Tajfel & Billig, 1974). To sum up, the Social Identity Approach focuses on group-based (social or collective) uncertainty, which is shared in groups and perceived or felt by single individuals to the extent to which they identify with respective groups.[10]

The Social Identity Approach may not be the only theoretical framework that enables understanding the role of uncertainty in intergroup conflict and societal relations. Apart from this, another theoretical perspective, social representations, is useful for understanding how people navigate uncertainty. Considering the situations where individuals face massive crises that require complex, expert knowledge (as in the COVID-19 pandemic) while experiencing insecurity and threat, socially shared representations disseminated by the communication might provide them to give meaning to the emergent situation that they are unfamiliar with. In this situation, social representations (Moscovici, 1988), the common knowledge that individuals generate through incorporating new information into their existing knowledge set (Andreouli & Chryssochoou, 2015), could also be taken as a way to navigate uncertainty. Social representations are the tools for making the unfamiliar inputs familiar, are considered as the shared knowledge that is collectively produced, are bound to the social groups and identities, and not only function as reflecting the realities but also construct the reality itself (Elcheroth et al., 2011). In addition to the theoretical contribution it provides in understanding

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[10] Personal and social uncertainty should not be confused or mixed, and measurements and/or operationalizations must catch collectively shared perceptions or feelings of uncertainty (e-g- Moghaddam & Love, 2012). Additionally, for an extension of the model on the macro-level concepts of societal or cultural uncertainty like the highly influential concept of uncertainty avoidance by Hofstede (2001) can be added to the analyses. We note, however, that the concept of uncertainty avoidance mainly relates to relatively stable cultural differences concerning how societies deal with comparably constant, unchanging uncertainties.

the formation of common sense during emergencies, the social representations approach can be utilised as a methodological tool to see how collectively shared uncertainties prevail in social groups.

5. An Uncertainty-Focused Conflict Perspective

Although the Social Identity Approach (SIA) is very convincing, interdisciplinary connectable, clear in the assumptions about structures of conflicts, and very instrumental in understanding conflict dynamics and international research offers hardly overlooked empirical evidence for the assumed ingroup-outgroup dynamics, the approach treats uncertainty less precisely than is necessary. It is rather not possible to derive concise assumptions and studies on the link between uncertainty and group processes. Therefore, the approach needs to be elaborated in much more detail in the upcoming uncertainty studies. For this purpose, we come back to the initial assumptions of the uncertainty approach: Uncertainty is always emergent in conflicts because conflicts are characterised by uncertainty. Even in SIA, uncertainty is not understood as an elementary endogenous or exogenous aspect of the conflict between groups. Uncertainty is also not captured in its central facets beyond the distinction between individual and collective uncertainty, the modes of dealing with it are not differentiated, and the question of conflict regulation, which provides clues to modes of navigation, is not central. Uncertainty is rather conceptualised and analysed as something to be tamed by groups in conflicts, even in the SIA, which does not take the assumption seriously that uncertainty is something groups not only try to reduce but produce or use to generate, influence, control and provoke intergroup conflicts.

Therefore, a shift of the traditional conflict perspective in terms of the limited consideration of uncertainty is needed, which considers the motives and functions, means and modes of certainty and security. First, uncertainties are not (always) stressful, something to be reduced/managed, etc., should include the fact that conflicts do not always lead to destructive demarcation between groups but can also lead to constructive, peaceful intergroup constellations. Research on the question of reducing prejudices, strengthening intergroup conflicts, conflict management and peace research offer starting points for this.
Second, to link questions of constructive and destructive conflicts, we can consider that conflicts arise from uncertainties and that these are "used" in the conflict dynamics, i.e. in negotiations, including the processing and production of uncertainty. Uncertainty can be a

resource in intergroup conflicts, and groups in conflict manage external uncertainties stemming from their conflict or the context (situations). Third, uncertainties can be further unfolded on the basis of the Social Identity Approach. The SIA suggests that uncertainties within groups and between groups should be distinguished at the individual, group and contextual levels, not just individual and collective uncertainties. Figure 2 distinguishes five 'uncertainties' that may be relevant for an analysis of intergroup conflict. This line of thought also allows us to contemplate differential sources of uncertainty, whether it comes from the ingroup, from the outgroup, or emerges as a situational dynamic since the individual and collective reactions toward these sources might vary.
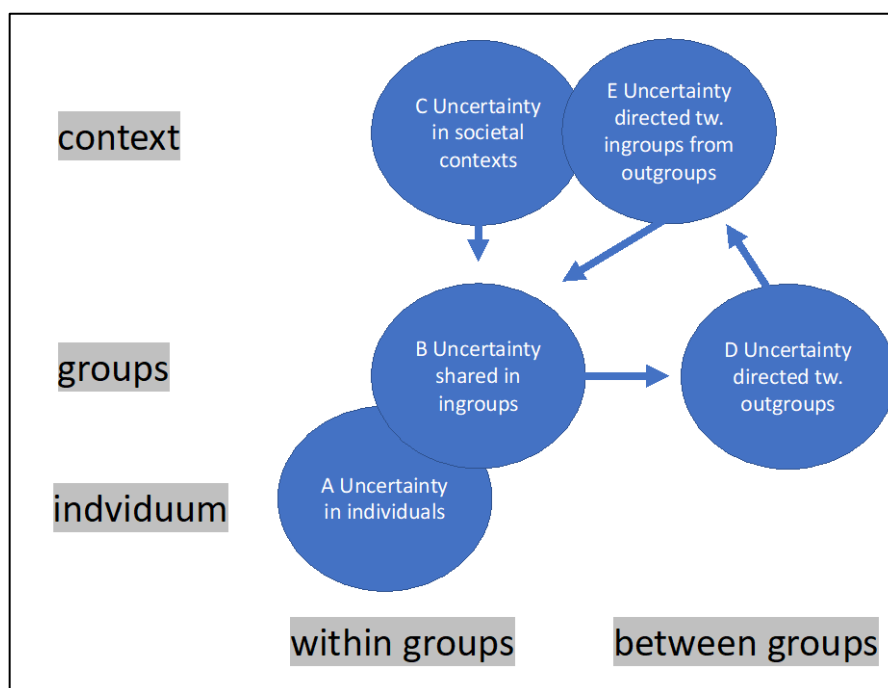

Figure 2. Facets of Uncertainty in Group Conflict (own figure)

So, traditionally, the Social Identity Approach examines uncertainty as an individually perceived or experienced dynamic (A), although this is theoretically distinguishable from group-based uncertainty (B), which is collectively shared in groups and independent from the individual manifestation. Uncertainty can also emerge in macro social or political contexts (C), like the uncertain, unstable and unpredictable crisis situations; that are not bound to individual or group-level dynamics. It can (D) be constructed, produced, used and directed by groups against outgroups with whom conflict is sought, and it can finally (E) also be directed by outgroups against the ingroup and then additionally appear as contextual uncertainty.

Finally, we suggest differentiating the situational societal context of intergroup conflicts more clearly. Especially the example of using ambiguity and uncertainty for interpretations of the outgroups and their members' attitudes, norms, values, behaviours, and the like to shape other ingroup members' attitudes and behaviours of the outgroup put an emphasis on the importance of investigating multiple levels including single individuals, their mutual interactions, and specific societal situations and constellations, in which these interactions occur. Taking these different levels into account is also paramount for the prediction of future uses of uncertainty in intergroup processes.

A more precise analysis of intergroup conflicts beyond the question of appropriate operationalisation of the uncertainties outlined above is also a particular challenge from a methodological point of view. Going beyond traditional approaches to investigate attitudes and behaviour of individuals as group members and of groups as a coherent entity separately, to understand complex social behaviour concerning uses of uncertainty, one needs to consider the interdependence of individuals and group-level outcomes that can result from interactions between individuals that may also be largely grounded in their respective identities and thus group memberships (see Pickett et al., 2011). In other words, for the comprehension of complex group-level processes, one should examine (social psychological) phenomena with the help of systems-oriented approaches like agent-based modelling (e.g., Lemos et al., 2013; Macal, 2016; Pickett et al., 2011).

Based on the theoretical model that has been constructed upon the levels of analyses summarised in Figure.1 and the multidimensionality that is based on the social identity approach, which is visualised in Figure.2, we suggest a theoretical and methodological framework (see Table 2) that can be used to investigate the role of uncertainty in political and societal conflicts, manifested as divisions or cohesion.

Table 2: Levels, Types, Sources and Modes of Navigation of Uncertainty in Group Conflicts

LEVELS (and measurement)	TYPES (Expressed as)	SOURCES	Modes of NAVIGATION
I. INDIVIDUAL (individual measures like attitudes, identities, etc.) → Endogenous	a. Self / Identity (Focus: Who you are, where you belong to) b. Relational / Affective (Focus: insecure feelings about the future of the self, close ones, society and the world)	Self (Dispositional) Ingroup Outgroup	Closure (Strengthening the ingroup identification) Identity Exploration (Looking for alternating identities, groups)

	c. Cognitive / Informative (Focus: Lack of knowledge or information on certain issues)	Situational	Scapegoating / Othering (Assigning the responsibility of the uncertainty to the others) Deliberation (Consideration of opponents' views and the intention to negotiate)
II. SHARED / COLLECTIVE: *Finding others are experiencing the same uncertainties* (Breakwell, 2021; 36) (Representations) → Endogenous	a. Social identity (Focus: Ambivalence or lack of knowledge about the group) b. Relational / Affective (Focus: insecure feelings about the future of the self, close ones, society and the world) c. Cognitive / Informative (Focus: Lack of knowledge or information on certain issues)	Ingroup Outgroup Situational	Exploration and Deliberation Vs. Closure and Othering
III. CONTEXT / SITUATIONAL: *Independent from the observer* (Luhmann) (Discourses, incidents) → Exogeneous	a. Actual / Objective (Focus: disasters, crises, etc.) b. Constructed (Discursive, top-down)	Outgroup Situational	Othering and polarization Vs. Deliberation and cohesion

This framework takes uncertainty into account as a dynamic that may invoke negative/destructive as well as positive/constructive modes of navigating uncertainties. From this perspective, uncertainties that are emerging in different levels (individual, collective or structural/situational) might be expressed in different types that are bound to the source of uncertainty which might be self, ingroup, outgroup or a situational dynamic where the individuals or the groups have no control on.

The uncertainties that emerge in these varying levels, expressed in varying types and originating from different sources, can be navigated in different modes. Individuals may have uncertainties about who they really are or where they belong (self), they may have insecure feelings like anxiety when thinking about their future (relational/affective), or they may not have adequate information about certain issues or to use for predicting their future (cognitive/informative). Leaning on the literature on uncertainty-identity theory (Choi & Hogg, 2020; Hogg, 2007), uncertainty-management theory (van den Bos et al., 2007) or uncertainty threat model of conservative ideology (Jost et al., 2007), strengthening the ingroup identification and hence, closing into the group boundaries might be a mode of navigating the uncertainty. However, particularly when the source of uncertainty is the ingroup, closure might also not be the only option individuals use as a mode to navigate

uncertainty. As defined by Haas & Cunningham (2014) through the term `uncertainty paradox`, this may motivate people to explore different options to increase predictability. Therefore, uncertainty may have the potential to increase open-mindedness in individuals, or also it may lead to closure and political intolerance. When the source of uncertainty is the outgroups or when it is a situational state like a crisis, the individual mode might focus on finding a target that can be considered accountable for the uncertain situation and amplify the intergroup differences through negatively differentiating the outgroup, which makes a way to increase the us-them distinction, outgroup derogation, and othering. Yet, MacKuen et al. (2010) propose the emotional reaction of anxiety, which is closely linked to uncertainty, also has the potential to generate a motivation to deliberate with the other parties (or the outgroups) to consider their views. Therefore, we may expect the individual modes to navigate the outgroup, or situation-originated uncertainties might also vary between deliberation and othering.

On the collective level, we can observe uncertainties shared by more than one individual and come across social groups where the members collectively have the same uncertainties. Here, the sources of these uncertainties might similarly be ingroup, outgroup or the situation; and the types include social identity uncertainty (Wagoner et al., 2017) with relational or cognitive uncertainties at the individual level. For example, the first phases of the pandemic were characterised by collectively shared uncertainties in the form of cognitive (lack of knowledge) or relational (shared insecurities regarding the future). During that process, among those who believed that the outbreak of the disease originated in China, the responsibility of the pandemic was assigned to Asian people (Dhanani & Franz, 2020), which fueled anti-Asian discrimination and othering (Wu et al., 2021). This was a mode of navigating the uncertainty which was assumed to be originated from an outgroup. Yet, exploring the ways to increase the knowledge about the causes and consequences of the virus through following scientific sources can also be a mode to navigate it. Here, the pandemic can also be considered as a situational uncertainty that is shared by collectives and is emerged independent from the observer (the member of the collective or the individual), and the modes of navigating it might lead people to othering or deliberation.

Considering the macro crises, disasters, or similar situations where uncertainty is emerged with or without the inclusion of the observers' interpretation, the societal modes of navigating it might be more visible. A context that invokes uncertainty would lead to a stronger

demarcation of the ingroup boundaries, perpetuate othering, and lead to societal divisions, especially in societies where the social groups' equality is at stake. The political tendencies opting for the powerful, authoritarian options would cause consideration of plurality, democracy, and diversity as sources of threat to the ingroup cohesion. When power politics provide secure and certain discourses that individuals might need in an uncertain context, uncertainty itself can be utilised or generated by especially the populist politicians through (i) continuously constructing an existential threat for the societies, where the politics of securitisation is presented as a solution, (ii) propagating an endless us-them distinction where the others are portrayed as the scapegoats for causing uncertainty. Uncertainty is a useful tool for political actors who would particularly exercise power as a means to consolidate collectives through the use of political construction of threat. The lack of information or the insecurity toward the future experienced by the members of society can provide a useful ground for a populist politician to communicate a threat through an imagined feared, uncertain future since the narrative of threat is based on the anticipation of an undesirable outcome (Breakwell, 2021). Particularly for the current era, we know that in times of crisis, individuals have challenges accessing and adopting information and turning it into knowledge that would make them feel safe and secure. The reliability of circulating information through digital technologies is questionable, and the current digital technologies open spaces for disseminating disinformation and conspiracy theories (Stano, 2020). This atmosphere would facilitate the utilisation of uncertainty for the consolidation of political power, and both in actual or discursive facets, we may see how societal polarisation can be cultivated through a collective construction of threat and othering (Bolton, 2021; Chernobrov, 2016).

To sum up, consideration of uncertainty from a multidimensional perspective would give a fertile ground to understand how this dynamic would emerge and influence societal relations and how it can be linked to political and social divisions or cohesion. Uncertainty is immanent in societal conflicts, but as the incongruence between the available information and the people's motivation to understand and give meaning to the social world, it might open spaces for the need to explore and deliberate. This makes uncertainty an opportunity in conflict research where the negotiation of the conflicts and the ability to cooperate are the two key dynamics for the societies to sustain.

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