Section A. General information

1a. Title
Digital warfare in the Sahel: popular networks of war and Cultural Violence

1b. Summary
Through a multi-disciplinary approach, combining historical ethnographic and computational methods, this project aims to establish how and under what conditions new Information and Communication Technologies (ICTs), with a focus on social media platforms and popular networks, influence the spread of direct violence and contribute to networked conflict. It focuses on the Sahel that has become the scene of unprecedented violence since 2012: a period that coincides with the advancement of new ICTs in the region. The role of digital connectivity is both a unifying and disruptive factor in this networked warfare. It may change organisational dynamics, increasingly towards compartmentalisation, and it intensifies and adds to information flows that become people’s identification with the network, i.e. ethnic or social identity and a sense of belonging. The latter may also become a legitimation of direct violence, i.e. Cultural Violence. Both may become explosive in the physical reality of conflict and lead to acts of violence. The project will not stop here, and indeed will contribute to the development of (social)media strategies for peace.

1c. Public summary
Digitale oorlog in de Sahel: sociale netwerken in oorlog en cultureel geweld


Digital warfare in the Sahel: popular networks of war and Cultural Violence

Violent conflict is on the increase in the Sahel since 2012, coinciding with the increased use of Social Media in the region. The organisation of networks and their information flows are changing, and this project studies the conflict as a digitally and physically networked one. Cultural violence—the legitimation of violence—spreads through (trans)regional networks, and discursive and ‘real’ warfare become entangled. This interdisciplinary study focuses on (trans)national Fulani networks, combining historical-ethnographic and computational methods to understand the ‘workings’ of networked conflict. The project warns of possible increases in ethnic violence, resulting from digital media uses.
Section B. Scientific proposal

B1. Scientific quality

Introduction: the problem
New Information and Communication Technologies (ICTs) influence social and political processes by changing organisational patterns and information flows. In daily life, digital and physical social networks have become intimately intertwined (Castells 2009, van Dijck 2013). In Media and Conflict Studies, the role of digital media is highlighted as a contributing cause for the emergence of political and violent conflict (Zeitzoff 2017, Stremlau 2018, Budka & Brauchler 2020). In this project we focus on such disruptive effects of new ICTs on society in the Sahel. For the past decade violent conflict has been spreading over this region. It is probably not a coincidence that during this period the Sahel has also increasingly become digitally connected (Keita et al. 2015, Stremlau 2020). The project proposes to investigate how new ICTs, especially mobile phones and social media, trigger and facilitate the violence and conflicts that are transforming the Sahel into a zone of networked warfare (Trémolière et al. 2021). We concentrate on the role of popular networks that have gained political space with the increase in access to digital media. ‘Popular’ here means the ordinary, the common people, who are often unseen actors in networked wars and the main victims of direct violence. New ICTs influence popular networks in two ways: 1. They change organisational dynamics, increasingly towards compartmentalisation, and 2. They intensify and add to information flows that inform people’s identification with the network, i.e. ethnic or social identity. Both may become explosive in the physical reality of conflict and lead to acts of violence.

To decipher the effects of the digitally steered networks on social realities we combine historical, ethnographic, and computational approaches. This involves mapping of the interconnections of digital and physical (popular) networks, and creating a data set of content of the information flows. We will focus on particular popular networks, those of the Fulani, who live widespread over the Sahel and play a prominent role in these conflicts both as victims and perpetrators.

This interdisciplinary case study of the Sahel will result, for the first time, in a clear understanding of how and why new ICTs influence the spread of direct violence and contribute to networked conflict. The project will not stop here but turn this knowledge into a possible counter-scenario for peace. As J. Galtung (1990), the founder of peace studies, already stated: the study of conflict also helps to understand the process of peace (Postill 2020).

In the following I will outline the current discussions regarding the socio-political situation, the impact of ICTs on network formation, information flows, and the shortcomings in our current understanding of these phenomena.

Sahel: from mobile space to networked war
The Sahelian space is ecologically and economically formed around mobility. The nomadic pastoralists who follow the vagaries of nature to find good pasture and access to water, the long-distance trade routes, the labour mobility, and the travelling Muslim scholars spreading their ideology—all have made the Sahel a mobile space (Walther and Retaillé 2008), one where social networks contract and expand in relation to the needs of its population. This is a rhythm that has changed profoundly with the establishment of the colonial and post-colonial state bureaucracy obstructing such mobilities. Also, ecological and demographic changes have led to increasing tensions between user groups, pushing mobility in different directions and spreading communities further apart. It is in such disrupted mobile space that communication is important, and hence new ICTs found fertile ground and re-established connectivity (de Bruijn 2019). It is at this digital turning point in Sahelian history that we also find the Sahel in complete turmoil.

Over the past decade, the Sahel has become the scene of protracted warfare and direct violence, such as mass killings and ethnic cleansing. The conflict that started in Mali in 2012 has since extended to Burkina Faso and Niger (West Sahel). Other conflicts were already ongoing in the Central African Republic, the Lake Tchad region, and northern Nigeria (Central Sahel). After 2015, violence against civilians in the Sahel increased sharply, and the total number of deaths reached 60,000 in 2020 (ACLED 2020). Hundreds of thousands of people have fled to cities and gathered in camps. The dynamics of these violent conflict(s) in the Sahel are a manifestation of ‘new’ wars (Kaldor...
people who had no voice to express their voices. It is here that we situate ‘Cultural Violence’, a concept introduced in 1990 by Johan Galtung, as one corner of the violence triangle: cultural, structural, and direct. Cultural Violence places the human factor at the centre of investigation: the human thinking, reasoning, believing. The concept helps us to understand the decisions people make collectively or individually in relation to direct violence—decisions either as a perpetrator, as a victim, or as an agent of justice. In

New ICTs and their democratising power invite researchers to turn their agenda to the popular and its political agency (Chabal 2009). Karin Barber urged the study of the popular to understand change: ‘Popular [cultural] forms [and networks] not only emerge out of historical change, but also participate in it, embody it and comment upon it’ (Barber 2018: 3). Access to new ICTs has also led to new organisational forms of popular networks. The Arab Spring, defined by its huge popular movements, demonstrated this turn (Branch and Mampilly 2015). New ICTs change the organisational structure of networks to a more horizontal and hybrid form, creating more space for counter-power (de Waal and Ibreck 2013)—or, as other authors have suggested, to a more democratic organisation (Wasserman 2010, Gumede 2018, Dwyer and Molony 2019). They have become ‘weapons of the weak’ (cf. Scott 2000) and enable people who had no voice to express their voices. As such, new ICTs have contributed to the creation and reinforcement of popular networks. Such networks in war can become a ‘safe haven’ and a form of social capital (de Bruijn and van Dijk 2012), where ICTs are the social glue of the network (Vertovec 2004). This may seem contradictory in a context of conflict and disruption, but in times of duress (de Bruijn and Both 2018) such networks can also be spaces of belonging. People in conflict regions live in the constant precarious condition of ‘no peace no war’ (Richards and Helander 2005); they live by the gun and may become involved in conflict at any time (Debos 2011). In these contexts, people cannot avoid conflict dynamics. In conflict, such networks are organised around opposite goals and may become compartmentalised spaces in society. This in turn may lead to furthering existing oppositions and to polarisation (Maynard and Benesh 2016). These popular social networks then become networks of war that, in the digital age, are at least partly (and sometimes predominantly) anchored in the digital sphere.

We will research the organisation of these popular networks and consider the connection between the digital and physical as the terrain where people search for a way to cope with whatever situations they are confronted with during a networked war: as pastoralists, villagers, activists, or fighters.

Cultural violence and information flows

We also wish to understand communication dynamics that go beyond the organisational characteristics of a network and delve deeper into the content of information flows. Social networks are the ‘pavement’ where information circulates, is interpreted, reshaped, and communicated (cf. Ellis 1989). In conflicts, such circulation can become ‘discursive warfare’ that translates into violent effects (Gargiulardone 2019). In relation to digital networks, this is referred to as the ‘weaponization’ of social media (Gray and Guay 2019). It is here that we situate ‘Cultural Violence’, a concept introduced in 1990 by Johan Galtung, as one corner of the violence triangle: cultural, structural, and direct violence, each of which has a specific role and temporality in the perpetuation of violent conflict.

Galtung defined Cultural Violence as ‘those aspects of culture, the symbolic sphere of our existence—exemplified by religion and ideology, language and art, empirical science and formal science (logic, mathematics)—that can be used to justify or legitimize direct or structural violence’ (1990: 291). This should not be confused with the notion of the culture of violence, or violent culture; instead, Cultural Violence as a concept takes us into a discursive understanding of the existence and perpetuation of direct, physical violence and underscores also the structural causes of violence. Cultural Violence places the human factor at the centre of investigation: the human thinking, reasoning, believing. The concept helps us to understand the decisions people make collectively or individually in relation to direct violence—decisions either as a perpetrator, as a victim, or as an agent of justice. In
this project we apply the concept also to digital communication as it flows in the popular networks amplified in social media. Cultural Violence, the legitimisation of violence, consists of narratives, histories, discourses, ideologies, memories, and life stories; and it is embedded in speech, in art, and in other cultural expressions expressed in language and symbols in society (Aijmer and Abbink 2000, Six-Hohenbalken and Weiss 2016). Hate and dangerous speech is part of this (Maynard and Benesh 2016, Gargliardone 2019). In the networked, connected Sahel, these forms of discursive warfare circulate over wide digital networks. The project aims to investigate this ‘discursive warfare’—or Cultural Violence—as expressed in popular digital networks that relate to physical networks.

Fulani popular networks: a case study

In the conflicts in the Sahel, one group is a constant factor: the Fulani (Peul in French). In a previous project of the project leader, it became evident that in both West and Central Sahel conflicts, Fulani are important actors (Amadou 2018, Sangaré 2019, Jourde et al. 2019, Benjaminsen and Ba 2021, Lorimer 2021, Nwozor et al. 2021). The Fulani are an example of people creating the mobile space that is the Sahel. As nomadic pastoralists and traders, and with a history of empire building, they have long been connecting different parts of that large space (De Bruijn 2007, cf. Hanson 1996, de Bruijn and van Dijk 2001; see map). In recent history they are increasingly organising in associational networks, which have developed international branches and links to the diasporas in Europe and the USA. These organisations often feel the need to defend Fulani culture as a response to a sentiment of marginalisation present in many Fulani communities. Such sentiments are related to the ruptures these communities have lived through as a consequence of ecological and demographic developments and of alienation from the State (Pellerin 2019). The Fulani are increasingly networked in a social space that is also ethnically defined.

The spread of mobile telephony and social media into the remote areas in the Sahel (Keita et al. 2015) has (re)intensified connections between Fulani communities and families over long distances (de Bruijn et al. 2016; Keja et al. 2020). The formation of (inter)national associations that promote Fulani culture and society has become much easier. The introduction of audio messaging (especially e.g. WhatsApp, Telegram) has enabled the integration of the non-literate in such networks. Observations in Fulani WhatsApp groups show that there are close linkages between the regions. How do these digitally steered networks interact with the physical (inter)national networks of the Fulani in the Sahel? And what can we read in these networks?

In various (social) media platforms, the war in the Sahel is discussed also as a manifestation of ethnical tendencies, seen for example in the official statements of ministers or military who depict the Fulani as important actors in jihadi groups. These messages find their way into social media. Such accusations followed by military action and direct violence have led to a counter-reaction by the Fulani, also expressed in digital networks. In these reactions, one can read that they recognise the fact that Fulani are also part of militias, but they denounce the
generalised actions and hostile language used against Fulani. Fulani associations, in particular, play an increasingly active role in countering the accusatory discourse. We also observe in these networks the emergence of a discourse on ‘Fulani-ness’, a celebration of their culture and separateness from other groups, in which their cultural unity and shared history are emphasised through not only historical narratives, but also through the circulation of images of violent acts (cf. Amadou 2018). ‘La question Peul’ was placed on the table by journalists and academics (Thiam 2017, Sangaré 2019) and has not left discussions in NGO-circles, in citizen fora, and in international politics since. As scholars have warned, new ICTs in conflict situations lead to the articulation of ethnic consciousness and oppositions (Bailard 2015, Mano 2015, Noble 2018). Hence, the question arises: how do these digitally steered networks interact with and create this wave of Fulani-ness that has become a weapon in a networked war of polarised reality?

The Fulani networks may be seen as networks in war, lying at the interface of cultural, direct, and structural violence, and at the same time as networks that are composed of ordinary Fulani in a variety of roles. It is clear that the increase in direct violence by national armies, or state-supported militias, has been an important incentive for the strengthening of ethnic discourse and actions. In this research we map the changing Fulani networks in relation to the spread of new ICTs and as a reaction to the violence. We search to understand if their mobile space is part of or even has created the networked conflict. We will also analyse the discourses, speech, and narratives that circulate in these digital networks and that may function as contributors to Cultural Violence. Searching to understand these dynamics will help to answer the overall research question: How and under what conditions do new ICTs influence the spread of direct violence and contribute to networked conflict?

Objectives, research questions, methods, and sub-projects

Objectives:
• To understand the role of new ICTs in the organisation and perpetuation of violent conflict.
• To show the dynamics of digital information flows in violent conflict.
• To explore the potential role of social media in processes of peace and reconciliation.

Research questions:
1. How did Fulani popular physical and digital networks change in the past decade in organisational form and spread over the Sahelian space, and what is their relation to and role in networked violent conflict?
2. How do Fulani culture and memory inform Cultural Violence in Fulani popular networks, and how do they ‘travel’ through these networks? Does the conflict lead to new forms of Cultural Violence (hate speech, misinformation)
3. How and under what conditions do the interaction and entanglement of digital and physical popular networks contribute to the intensification and violence of the conflict?
4. How can we transform the disruptive force of digital networks into a force for peace?

Methods
To be able to grasp the complexity and international connectivity of the networks and information flows, their discourses, meaning-giving processes, and changes therein, the project combines (n)ethnography and computational methods. The two methodological pillars are: 1. (n)ethnographic–(cultural)historical–communication research to understand the socio-cultural and historical dynamics and to understand the digital and physical networks of popular organisation and engagement in the networked wars; and 2. digital/computational methods: Dynamic Social Network Analysis (DSNA) to be able to map interconnected and diverse popular networks (Trémolières 2021: 63-91, Brandes et al. 2013), and Natural Language Processing (NLP) to examine large data sets of the content of the information flows that circulate in these networks (Jänicke et al. 2015, Nguyen et al. 2019).

Nethnography is the qualitative understanding of the digital networks through participatory observation in these networks (Kozinets 2010) and has become a sub-discipline: Digital Anthropology (Horst and Miller 2012). This will be paired with ethnography on the ground in physical networks, with interviews and focus-group discussions to map the networks and understand the historical–cultural explanations of the content of the information flows.

DSNA will visualise and combine the wider structures of the networks and help to identify the characteristics of these networks. It will use available (free) software such as Gephi and network analytic and visualisation packages in Python. Standard centrality measures will be used: Degree centrality; Betweenness Centrality; Community detection. This will provide insight into, for example, central people in the networks and
people responsible for information flows, pointing to concentrations in the network and changes over time. These insights will inform the ethnographic research on ways to deepen knowledge about power relations, oppositions, and changes therein.

NLP techniques will especially help to detect specific types of information flows and changes therein, so as to understand Cultural Violence. More specifically, they will provide insight into the shifts in language use and sentiments over a period of time and identify which narratives are circulating (Blei 2012). Computational stylistics will identify how people talk about each other or about specific topics; sentiment analysis will determine aspects of subjectivity in narratives (Hutto and Gilbert 2014); and hate speech detection will identify open calls for violence or for abusive behaviors (Poletto et al. 2020). Such distant reading will be translated into visualisation to facilitate the analysis and comparison with the ethnographic data (Janicke et al. 2015).

The two methodological pillars are dialectically related. As Nguyen and colleagues (2019: 19) formulated it: ‘By moving back and forth between large-scale computational analyses and small-scale qualitative analyses, we can combine their strengths so that we can identify large-scale and long-term trends, but also tell individual stories.’ This integration is realised in the collaboration between the sub-projects (see below). Together with the Leiden University Centre for Digital Humanities (LUCDH), the project will build an archive of the large data set that results from this research.

An important point to tackle in this project is the language that is central in the analysis of discursive warfare. The main languages the project will work with are French and Fulfulde, next to a large corpus of visual expressions (e.g. photos, documentaries, live video and audio streaming). Most software is developed for English language; some French applications also exist, and African languages are gradually being incorporated. The main local language in which we will work will be Fulfulde. The project will contribute to the creation of a data set to develop NLP for Fulfulde. NLP for Fulfulde is developed by colleagues in Mali, with support from UNESCO (see Masakhane, a platform for African NLP).

Central to the project is online research in social media platforms. Access (using API) to the data is based on the terms of service of the platforms involved. (N)ethnographic methods allow the researchers, through their personal relations, to enter private platforms such as Facebook, WhatsApp, and Telegram (Zuckerman 2021). The public space of Facebook is where we expect the most important exchanges on the network. Recently, Meta allowed researchers to explore these data with crowdtangle. Software to analyse these data sets is available through the LUCDH. We will use the software that has proven best practices.

This project works with people online and offline who live through difficult times. Anonymisation of the participants will be crucial, in both the ethnographic and computational data. Also, the protection of the researchers is a concern. To ensure maximum security to all, collaboration with local institutes will be a key factor. The project envisages working with researchers in the field via the project Voice4Thought Académie (V4TA). The security protocols of Leiden University and V4TA will guide this project.

**Sub-projects**
The research consists of five sub-projects. These projects are interrelated and develop in tandem. Each of the projects has a methodological emphasis. Sub-project one, ‘Changing (Fulani) popular networks in conflict in the Sahel’, will build on previous research of the project leader, who has a long record in Fulbe and Sahel studies, combined with interviews on the ground. A first sketch of the networks will be ready the moment sub-projects two and three will start their fieldwork. It hence informs these sub-projects on the choices about where to start their search for data. Sub-project two, ‘Mapping the popular (Fulani) digital networks in the Sahel and their entanglement in conflict networks’, will elaborate on the organisation of Fulani networks in the digital space, compile a data set on these networks that are verified on the ground and also related to physical networks, and analyse these data sets with DSNA. Sub-project three, ‘Cultural violence in (Fulani) popular networks in networked wars in the Sahel’, will compile a data set of content in the networks, verify these as well on the ground, and analyse these data sets with NLP techniques. A specialist from LUCDH will be involved in the training and supervision of the team for the computational methods. The project leader has extensive ethnographic knowledge of the region and will be responsible for the training and supervision of the team for the (n)ethnographic methods. Sub-project four, ‘Trends in popular (digital and physical) networks in networked war’, will be the outcome of a workshop held in the third year of the project, to which specialists will be invited. It will test the concept networked war and the role of popular digital networks and their interconnections in physical networks in war. Next to exchanges between regional experts,
this project will also be based on a literature review. Sub-project five, ‘Podcasts for Peace’, is a close collaboration with actors on the ground and uses findings from the other sub-projects to turn the understanding of the disruptive power of social media into a constructive approach to counter discursive warfare, in the form of a podcast series.

B2. Embedding, organisation, and budget

2a. Project team composition

<table>
<thead>
<tr>
<th>Title, first name, surname</th>
<th>Affiliation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Dr. Mirjam E. de Bruijn</td>
<td>History Institute, Humanities Faculty, Leiden University</td>
<td>Project leader, promoter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title, first name, surname</th>
<th>Affiliation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Jelena Prokic</td>
<td>Leiden University Centre for Digital Humanities</td>
<td>Co-promoter, adviser, trainer</td>
</tr>
<tr>
<td>PhD 1</td>
<td>Leiden University, to be selected</td>
<td>PhD student</td>
</tr>
<tr>
<td>PhD 2</td>
<td>Leiden University, to be selected</td>
<td>PhD student</td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
<td>Research assistant</td>
</tr>
<tr>
<td>V4T</td>
<td>Non-governmental organisation with sister organisations in Mali and Chad</td>
<td>Research and societal partner; consultant</td>
</tr>
</tbody>
</table>

2b. Motivation of embedding, organisation and budget

The team comprises the main applicant, Prof. de Bruijn, who will be project leader; a supporting lecturer at LUCDH, Dr. Jelena Prokic; two PhD candidates (with also computational skills); and a student assistant. The project will collaborate with the organisation V4TA, which runs research and artistic projects for youth respectively in Mali and Chad. They will be consultants for the project, which also entails capacity building. The senior members of V4TA will participate in workshops and exchanges of the project.

Prof. De Bruijn is a specialist of the history and anthropology of the Sahel and Fulani. The study of media, new ICTs, and their relation to social change and political agency have been part of the research programmes she has headed since 2006. NWO-based programmes led by Prof. De Bruijn that inspired the urgent questions formulated in this project are: Mobile Africa Revisited (Integrated Programme (W 01.65.310.00, 2008–2013); Connecting in Times of Duress (Vici grant (W 01.70.600.001) 2013–2018; and Nomads Facing Change (W 08.420.114, 2016-2019). Recently she received a grant from the Norwegian Research Council for the project DDMAC (Decoding Digital Media in African Conflict). The proposed research is complementary to this DDMAC project, which focuses on Ethiopia and Mali. De Bruijn is an ethnographer and is well acquainted with qualitative methods also in the digital field.

Dr. Prokic is a computational linguist and has experience with NLP and also DSNA. Dr. Prokic is part of the LUCDH. The Digital Centre’s role at the university is to support researchers with computational methods. Dr. Prokic will integrate the work for this project in the time that is reserved for such support. The project as a whole will profit from the recently established Digital Humanities Lab (part of LUCDH), where all necessary hardware and software are available. The Digital Centre also has specialists in digital archive building.

Prof. de Bruijn and Dr. Prokic have complementary skills and they will supervise the yet-to-be selected PhD students.

The project will be facilitated by Voice4thought-Académie in Mali and Chad. V4TA is a sister organisation of Voice4Thought, which is based in the Netherlands. Voice4Thought is a ‘spin-off’ from the Vici project mentioned above. The V4TA is a project and a method. It has set up research units in different parts of Mali and in Chad. From Mali and Chad researchers can also work in Burkina Faso / Niger and Cameroon, the two core regions for this project insofar as it concerns ‘field work’. They have experience in the development of podcasts and their dissemination. V4TA will be a consultant to the project.

The internationalisation of the project is embedded in the possibility of scholarships for African scholars and in the various workshop that will be organised during the project.
The project team is the core of this project, which will run for four years. The project leader will need the maximum of the replacement funds to also allow her to travel; the two PhDs will need to travel to the regions. The Digital Humanities Lab at LUCDH has all the required technology for the SNA and NLP analyses. The student assistant will help in the administration of the project. Travel costs will cover at least 8 field trips for the PhDs and project leader. The team will also travel for participation in international conferences, and for the conferences of the project. Included in these cost is the compensation for the work done at the V4TA by junior researchers. The main project languages will be English, French, and Fulfulde; translation costs will therefore be relatively high. The project will create a website, which will also be a digital platform accessible to the public. For this a webmaster will be employed on a consultancy basis. The development of the archive, based on a graph model will also need assistance of a consultant. The projects research findings will be used to develop a series of podcasts, for which we will collaborate with local radio and junior employees of V4TA in Mali and Chad and with other interested artists in the Sahel. (Costs for the website, archive and podcasts are included in knowledge utilisation) The project will organise exchanges with experts in the field from local research institutes (i.e. fellowships, seminars, workshops) also for the outcome of sub-project four. This will also lead to a knowledge network. Online organisation will reduce costs. The website, podcasts, and the exchanges are key for the dissemination of the results to both a scientific and societal audience.

B3. Scientific and societal impact

Ethnicity and conflict
This research will make a plea for the importance of the study of the role of ethnicity/ethnic identity in conflict. The open demonstration of ethnicity and the recognition of racial relations is taboo in Sahelian societies (see Hall 2011). However, ethnic divisions have become more articulated during the conflict. The proposed research intends to understand the idiom of ethnic identity and racism in the context of the networked conflicts in the Sahel. This relates to a wider debate on ethnicity and conflict, that around ethnicity and integration, as currently researched in ethnic studies and in genocide studies. Although ethnographic studies have also been accused of essentialising ethnicity, and hence offering a tool to politicians to instigate ethnic violence, we think there are now important reasons to bring this field of studies back to the heart of the study of conflicts in the Sahel. The study of the Fulani, therefore, does not mean to essentialise Fulani but to show processes at work that we can label ethnic racism, ethnicity, and polarisation. The use of ethnic labelling, in socio-political practice and discourse, both online and offline, is at the core of this study. Such insights are relevant not only to understanding situations in the Sahel, but worldwide.

The research will also push the importance of the inclusion of ‘positionality’ in research. The outcome of the processes we investigate can be highly volatile. Hence, there is a need to reflect on the position of the research group and their responsibility to the public. Ethnic studies entail both a scientific search and an activist positioning. The project leader chooses to start this research on discursive warfare with a case study on the Fulani, because observations over the past decade reveal a relationship between an increase in ethnic identification and (discursive) violence. These compare with known genocidal conflicts in Rwanda, Sierra Leone, and elsewhere in the world. The increasing manifestation of cultural violence against Fulani in social media in Nigeria (Lorimer 2021) is an example that confirms the observations. As researchers and as citizens of the world, we should have the courage to step into such research. It is important to do so as part of a diverse team, so that any tendency to essentialisation in the interpretations of the findings will be countered by different voices.

Media and Conflict
This project engages with debates about the effect of social media on societal processes. It will add to a critical view on the plans of media giants such as Google and Facebook to connect the unconnected all over the world (Stremlau 2020, Toussaint 2020). Instead of seeing this as a positive development that will inevitably lead to progress, we need to be aware of the disruptive effects that may intensify existing conflicts. This project therefore will contribute to Media and Conflict debates and to the Anthropology and Sociology of war.

In war or conflict analysis, the actors are often defined according to their direct roles in violence or military effects. This project includes the view that those one would not expect to be part of a war, but who are rather considered victims (see Trémolières et al. 2021) or bystanders (Staub 1999), may change roles while engaging in digital networks. The project opens a debate on the relationship between networked wars and popular networks. It will firmly position this as a new theme on conflict and media research agendas.

Another field where the findings of this project will make a difference in debates and the practice of research is in its combination of ethnography and computational methods. These two fields are challenging to unite. This project will thus further the discussion on how these two methods can work together to make sense of the world.
Peace
The project outcomes will be important for mechanisms of peace. Galtung (1990) concludes his article with the explanation that his aim to understand violence is to be able to develop peace programmes. This project embraces this ‘hope’. Indeed, if we understand better why ICTs facilitate violence, we can also use them to foster the opposite outcome. Galtung saw Cultural Violence as the constant violence, the one that is difficult to erase and that persists in discourse and self-identification. This project uses its outcomes to develop a series of podcasts to counter such discourses. We are inspired by the methodology that Radio La Benevolencia developed. Central to their approach is edutainment that speaks about serious matters (Kogen 2013). The knowledge about Cultural Violence gathered in this project will be the basis for such a programme. Podcasts can be sent through local radio stations, to WhatsApp groups, and so on. The development of such societal products also contributes to insights into peace processes and the role of media in these processes. This is an emerging field in the study of Media and Conflict.

In our collaboration with Voice4Thought, the project will reach out to youth. It will not only help develop these youth to improve their research skills and to develop the skills for creating podcasts; in doing so, the findings of the project itself will also feed into their reflections and may bring to a halt the processes of radicalisation. Processes of radicalisation do not per se affect only the marginalised, but especially affect also those who disconnect from their world and seek for a better ideology (De Bruijn 2019b). During this project, the interaction with youth in the Sahel will be geared towards a process of de-radicalisation.

The findings of this research feed into knowledge about the Sahel for the public. The team will be encouraged to participate in public discussions and in media fora and dissemination. The project will also have an outreach to EU and Dutch policy makers.

B5. Reference list

ACLED 2020. The armed conflict location & event data project, acleddata.com

Gray, S. and J. Guay 2019. 'The Weaponization of Social Media: How social media can spark violence and what can be done about it.' Mercy Corps.


Hutto, C. and E. Gilbert. 2014. “VADER: A parsimonious Rule-Based Model for sentiment analysis of social media text”. ICWSM.


### B6. Work plan and planned deliverables

The project will start on 1 January 2023 and end on 31 December 2026. The figure below shows how the different projects will develop in time. The project team will share periods in the Sahel for research and workshops. Important is that they are working at similar moments on the analysis of data, as the various projects have to work together. This is also expressed in the deliverables of the project. The PhD theses will be composed of articles in which the PhD will be first author but will collaborate with other team members. Other deliverables, such as a project book, will show the collaboration with a wider group of scholars. The podcast publications will also be a common endeavour with a high involvement of the artists and journalists of the V4TA. The creation of podcasts will be a project in which training of young people will also be an important output.

![Planning for the Project 'Digital warfare in the Sahel'](image)

* The exact planning will be made with the team. This will be done in S1, 2023.
**Intended deliverables over 4 years**

<table>
<thead>
<tr>
<th>Project</th>
<th>Deliverable</th>
<th>Time period</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ‘Fulani networks in conflict’</td>
<td>Report on Fulbe networks</td>
<td>April/Mai 2023</td>
<td>De Bruijn</td>
</tr>
<tr>
<td></td>
<td>Book on Fulbe networks</td>
<td>December 2023</td>
<td>De Bruijn</td>
</tr>
<tr>
<td></td>
<td>Article on methods</td>
<td>June 2024</td>
<td>De Bruijn &amp; Prokic</td>
</tr>
<tr>
<td></td>
<td>Article on the ‘effect’ of digital networks on direct violence</td>
<td>June 2025</td>
<td>De Bruijn</td>
</tr>
<tr>
<td>2 ‘Mapping the popular Fulani digital networks’</td>
<td>Proposal</td>
<td>June 2023</td>
<td>PhD 1</td>
</tr>
<tr>
<td></td>
<td>Visualisation digital networks</td>
<td>December 2023</td>
<td>PhD 1 &amp; Prokic</td>
</tr>
<tr>
<td></td>
<td>Visualisation interconnections physical and digital networks</td>
<td>June 2024</td>
<td>PhD 1 &amp; De Bruijn</td>
</tr>
<tr>
<td></td>
<td>Article 1: on physical and digital networks</td>
<td>December 2024</td>
<td>PhD 1 &amp; De Bruijn &amp; Prokic</td>
</tr>
<tr>
<td></td>
<td>Advanced visualisation networks</td>
<td>March 2025</td>
<td>PhD 1 &amp; Prokic</td>
</tr>
<tr>
<td></td>
<td>Article 2*</td>
<td>June 2025</td>
<td>PhD 1 &amp; Team members</td>
</tr>
<tr>
<td></td>
<td>Article 3*</td>
<td>August 2025</td>
<td>PhD 1 &amp; Team members</td>
</tr>
<tr>
<td></td>
<td>Article 4 *</td>
<td>December 2025</td>
<td>PhD 1</td>
</tr>
<tr>
<td></td>
<td>Thesis manuscript</td>
<td>June 2026</td>
<td>PhD 1</td>
</tr>
<tr>
<td>3: Cultural violence in Fulani networks</td>
<td>Proposal</td>
<td>June 2023</td>
<td>PhD 2</td>
</tr>
<tr>
<td></td>
<td>Digital data set on Cultural Violence</td>
<td>June 2024</td>
<td>PhD 2 &amp; Prokic</td>
</tr>
<tr>
<td></td>
<td>Article 1: Cultural Violence; a narrative to legitimise violence</td>
<td>August 2024</td>
<td>PhD 2 &amp; Prokic</td>
</tr>
<tr>
<td></td>
<td>Data set from fieldwork (corpus)</td>
<td>March 2025</td>
<td>PhD 2 &amp; De Bruijn</td>
</tr>
<tr>
<td></td>
<td>Article 2*</td>
<td>June 2025</td>
<td>PhD 2 &amp; Team members</td>
</tr>
<tr>
<td></td>
<td>Article 3*</td>
<td>August 2025</td>
<td>PhD 2 &amp; Team members</td>
</tr>
<tr>
<td></td>
<td>Article 4*</td>
<td>December 2025</td>
<td>PhD 2</td>
</tr>
<tr>
<td></td>
<td>Thesis manuscript</td>
<td>June 2026</td>
<td>PhD 2</td>
</tr>
<tr>
<td>4: Comparison</td>
<td>Article*</td>
<td>August 2025</td>
<td>Team</td>
</tr>
<tr>
<td></td>
<td>(edited) Book manuscript</td>
<td>September 2026</td>
<td>De Bruijn</td>
</tr>
<tr>
<td>5: Podcasts</td>
<td>Podcast series</td>
<td>2024-2025</td>
<td>V4TA/Team</td>
</tr>
<tr>
<td>Outcomes of the Visiting fellowships</td>
<td>4 articles* that are part of edited volume, or participation in articles of the project as for sub projects</td>
<td>2024-2026</td>
<td>Visiting fellows</td>
</tr>
</tbody>
</table>

*the exact titles and content of the articles will be defined based on the findings
All articles will be published in refereed (on-line) journals or platforms