

# **#ParisAttack – Making sense of a terrorist attack in Twitter**

Jutta Martens

Master's Thesis in Faculty of Theology, Religion Conflict and Dialogue -program

January 2020

Tiedekunta/Osasto – Fakultet/Sektion Teologinen tiedekunta		Laitos – Institution -	
Tekijä – Författare Jutta Martens			
Työn nimi – Arbetets titel #ParisAttack – Making sense of a terrorist attack in Twitter			
Oppiaine – Läroämne Religion, Conflict and Dialogue			
Työn laji – Arbetets art Pro gradu –tutkielma	Aika – Datum Tammikuu 2020	Sivumäärä – Sidoantal 64	
Tiivistelmä – Referat <p>Pariisissa 13. marraskuuta 2015 tapahtui seitsemän terrori-iskun sarja, jossa uhriluku nousi 129 henkeen ja loukkaantuneita oli noin 352. Terrori-isku sai paljon mediahuomiota osakseen ja sen takana oli terroristijärjestö ISIS (The Islamic State of Iraq and Syria). Keskustelu eri sosiaalisen median kanavissa oli vilkasta iskujen jälkeen. Tämä Pro gradu –tutkielma keskittyy terrori-iskun jälkeiseen keskusteluun ja ihmisten ensireaktioihin Twitterissä. Koska aikaisempaa tutkimusta tämän tyyppisen kriisin ensireaktioista on hyvin rajallisesti, data, jota tässä tutkielmassa käsitellään, rajoittuu tviitteihin, jotka lähetettiin neljän päivän sisällä iskuista. Tutkimuksen tavoitteena oli mallintaa millaisia ensireaktioita ihmisillä oli Islamin nimeen tehtyjen terrori-iskujen jälkeen, mitkä teemat tviiteissä nousivat esiin, mihin tarkoitukseen Twitteriä käytettiin ja minkälainen rooli uskonnolla oli ihmisten järkeistämisen prosessissa (sense-making).</p> <p>Tämän tutkielman tutkimusstrategiana on tapaustutkimus. Data kerättiin Twitteristä Pulsar nimisellä työkalulla. Datan rajaamiseksi käytettiin aihetunnisteita #parisattack, #parisshooting ja #paristerror sekä ajallista ja kieleen liittyvää rajaamista. Tiedon analysoinnin metodina käytettiin sisältöanalyysia.</p> <p>Tutkimuksen perusteella, Twitteriä käytettiin laajasti Pariisin terrori-iskujen jälkeen ja tiedon jakamisen tarve korostui Twitterin ensireaktioissa. Muita syitä tviittaamiseen olivat mielipiteiden jakaminen tai hallitsevan tunteen ilmaiseminen. Uskonto esiintyi suhteellisen pienessä osassa tviittejä. Nämä löydökset tukevat aikaisempaa tutkimusta tiedon saamisen tärkeydestä alkuvaiheessa kriisitilanteen tapahduttua, ja siten selittää pientä uskontoa käsittelevien tviittien osuutta. Kun dataa tarkasteltiin vain uskontoaiheisten tviittien osalta, mielipiteiden osuus korostui. Suuri osa näistä tviiteistä pyrki edistämään rauhanomaista yhteisymmärrystä (concensus) pääviesteinään se, että Muslimeja, Islamia tai uskontoa ei ole syyttämisen terrori-iskuista. Toisaalta noin neljännes tviiteistä piti edellä mainittuja syyllisenä iskuihin ja pyrkivät aiheuttamaan vastakkainasettelua (confrontation). Nämä löydökset viittaavat siihen, että uskonto jakoi mielipiteitä ja siitä etsittiin syytä terrori-iskuihin. Tämän tutkimuksen mukaan uskonto oli osa ihmisten järkeistämisen prosessia uskontoaiheisten tviittien pienestä lukumäärästä huolimatta.</p>			

Avainsanat – Nyckelord

Terrorismi, terrori-iskut, merkitys, uskonto, Islam, sosiaalinen media, Twitter

Säilytyspaikka – Förvaringställe

Helsingin yliopiston kirjasto, Keskustakampuksen kirjasto, Teologia

Muita tietoja

## Table of Contents

1.	Introduction .....	1
1.1.	Research aim and structure of the thesis .....	1
1.2.	Case: The Paris terrorist attacks in November 2015 .....	3
1.3.	Twitter as a social media tool .....	4
2.	Theoretical framework .....	9
2.1.	The use of social media during crisis .....	9
2.2.	Sense-making in a crisis situation.....	12
2.3.	Social media as a sense-making tool.....	15
3.	Data and methods .....	18
3.1.	Case study as research strategy.....	18
3.2.	Data collection and sample selection .....	19
3.3.	Content analysis.....	23
3.4.	Researcher's position.....	24
4.	Early reactions and reasons for tweeting .....	26
4.1.	Overview of the data .....	26
4.2.	Sharing information is the main motive for tweeting.....	28
4.3.	Analysis of the sense-making themes.....	29
5.	The concept of religion portrayed in Twitter .....	42
5.1	Overview of the religion-related data.....	42
5.2	When it comes to religion, opinions are shared .....	44
5.3	The aim is to gain consensus rather than cause confrontation.....	45
5.4	Analysis of the concept of religion in the tweets .....	47
6.	The sense-making process in Twitter in the early phases after the Paris attacks .....	56
7.	Conclusion.....	62
	Bibliography .....	65

# 1. Introduction

## *1.1. Research aim and structure of the thesis*

Terrorism and terrorist attacks are global problems in today's world. The terrorism is often motivated by religious beliefs and the attacks aim to high number of casualties. Terrorist attacks are commonly present in the media especially if the attack is targeted to a western city, and discussions on the reasons and solutions to terrorism are vivid. Attacks are common especially in the Middle East and Africa, but Europe and the Western world have also been targeted several times.

Internet and social media play a crucial role in the terrorist attacks. Social media offers a possibility to widen the ways of interaction from one-way communication to multi-directional way of interacting and sharing information. Different social media platforms have enabled democratization as to who tells stories, to whom and how. This free flow of interaction in the internet and in varying social media channels enable users to be part of the content creation and telling stories.<sup>1</sup> The terrorist organizations have been clever in using this feature of social media for their own purposes to spread their message and propaganda.

During crisis, social media becomes a platform for sharing ideas, having conversations, expressing feelings and spreading information. People negotiate, share opinions, speak out, ask questions and give answers, grief, hate, and hope. Different social media channels are widely used by people in trying to make sense of crises. Researching social media and the content that is shared for instance in the micro-blogging platform Twitter provide an idea of the surrounding society and how people see crises such as a terrorist attack. Twitter is a rich site for analysis due to its diversity of users, endless content and boundless communication flow.<sup>2</sup> People express themselves in social media, and the micro-blogging platform is widely used as a communication channel.

Due to my background in communications, I have long been interested in the use of social media and the possibilities these communication channels provide. The use of social media has been growing constantly since these channels' existence, and it is today an intrinsic part of people's everyday lives. While studying at the Religion, Conflict and Dialogue - master's program, my interest towards researching the motives and causes of terrorism grew.

---

<sup>1</sup> Lindgren 2012, 285.

<sup>2</sup> Kuula 2006, 194.

Social media often plays a crucial role in the terrorist attacks. The way terrorists use social media for their own purposes, but also how people use social media to handle such crisis are interesting fields of research. Due to these interests of mine, I decided to research the role of social media, and more precisely a micro-blogging platform Twitter, after a terrorist attack.

In this research, I want to understand how a crisis such as a terrorist attack was handled in social media and how users try to make sense of the crisis in Twitter. What kind of themes rise in the discussions taking place in this micro-blog platform and for what purpose it is used for? Also, due to my educational background at the Faculty of Theology and my interest towards conflicts, confrontations and prejudices, the role of religion and how it was portrayed in the tweets after a terrorist attack conducted in the name of Islam is in my interest. According to Lin and Margolin, data received from a micro-blogging tool is rewarding for a researcher as it enables to analyse actual and real behaviors near dangerous and disastrous events. People often rely on social media in emergencies and crisis to support varying information needs that the authorities and news media are unable to fulfil.<sup>3</sup> This makes the focus on the data received from Twitter even more motivating to me.

The Paris attacks were conducted by a branch of The Islamic State of Iraq and Syria (ISIS) the 13<sup>th</sup> November 2015 and gained a lot of media attention. I was lucky to get a comprehensive amount of data related to the use of Twitter during these terrorist attacks. There is a lack of research concentrating on the users' early reactions and on the sense-making during the critical period of crisis.<sup>4</sup> This critical period is a brief time span, ranging from few minutes to usually no more than few days after the crisis happened.<sup>5</sup> The critical period ends when there is no longer immediate danger. Therefore I decided to concentrate on the tweeters' early reactions, focusing on the tweets sent within four days after the attacks.

The aim of this thesis is to address the research problem "What are the early-reactions to a crisis in a micro-blogging platform and how religion is part of the sense-making of the terrorist attacks conducted in the name of Islam?" In order to be able to address the research problem, answers to the following sub-questions will be provided:

1. Which themes were central in the users' early response in Twitter after the Paris attacks the 13<sup>th</sup> November 2015?
2. What were the main uses of Twitter after the Paris attacks and how does the use of Twitter contribute to the sense-making during the first days after the attack?

---

<sup>3</sup> Lin & Margolin 2014, 8.

<sup>4</sup> Muhren & et al. 2008; Stein 2004.

<sup>5</sup> Stein 2004, 1243.

3. What role does religion play in the tweets after a terrorist attack executed in the name of Islam?

This thesis contains seven chapters. In this first chapter the background for the research is provided and the aim of this thesis is explained. The theoretical background is discussed in the second chapter by introducing the theories that are relevant for this thesis. The third chapter goes deeper into the data collection procedures and the methods that were used in this thesis. The findings and analysis are provided in the following chapters four and five, concentrating on what purposes the micro-blogging tool was used, themes and topics that stand out, and the ways people try to make sense of the attack. The role of religion is also a significant focus of this research. As the terrorist attack was conducted in the name of Islam, the interest of this thesis is to research how religion was portrayed in Twitter and how it contributed to individuals' sense-making process after the Paris terrorist attacks. The sixth chapter discusses the findings linking them to broader academic discussions on the topic. Finally, the research is summed-up in chapter seven by providing conclusions and final remarks.

## ***1.2. Case: The Paris terrorist attacks in November 2015***

In this research the terrorist attacks taking place the 13<sup>th</sup> November 2015 in Paris and in Saint Denis, a Parisian suburb, are used as a case. This case represents a large-scale terrorist attack that received a lot of media attention and prompted a lot of activity in social media. The attacks targeted a well-known and widely visited European city which is a popular tourist attraction. As Stepinska claims, terrorists' desire to gain maximum amount of publicity has created a tendency to select targets and engage in types of symbolic actions that translate visually in coverage or news broadcast.<sup>6</sup> This terrorist attack was successful in that sense.

On the 13<sup>th</sup> of November, a wave of seven attacks started from the Stade de France, where an explosion killed the bombers and a passer-by. During the following minutes four bars and restaurants were attacked with assault rifles killing dozens of people. After few minutes, the terrorists attacked Bataclan concert hall where a US rock band was playing to an audience of 1500 people.<sup>7</sup>

---

<sup>6</sup> Stepinska 2011, 204.

<sup>7</sup> Telegraph 2015.

In total 129 people were killed and approximately 352 were injured in the attacks, which targeted seven different sites around Paris and happened almost simultaneously. The attackers made verbal references to Syria and Iraq.<sup>8</sup>

ISIS (The Islamic State of Iraq and Syria) announced to be responsible for the attacks. They claimed that the attacks were a counteraction to French air strikes in Syria in September 2015 and Iraq in September 2014.<sup>9</sup> The attacks were organised by a Belgium-based terrorist cell with close contact to ISIS in Syria. Many of the attackers had visited Syria and some of them had entered Europe among the flow of migrants and refugees.<sup>10</sup> After the terrorist attack, president Hollande issued a state of emergency and called for three days of mourning.<sup>11</sup>

This terrorist attack is not unique in a sense that it belongs to a series of other terrorist attacks that have happened in the Europe and other parts of the western world before and after the 13<sup>th</sup> of November 2015. The rise of terrorism targeting to the western countries tells about an existing conflict between different values and beliefs, combined with other societal issues that drive people towards extremism. It is however essential to keep in mind that even though the media coverage often highlights that terrorist attacks that happen in the western countries, most of the terrorist attacks happen in Middle East and North Africa, South Asia and Sub-Saharan Africa.<sup>12</sup>

Even though this thesis uses a case study as a research strategy, the aim is to contribute to the larger discussion on how a crisis such as a terrorist attack is handled in Twitter and how people try to make sense of such a disaster by using a microblog service.

### ***1.3. Twitter as a social media tool***

Twitter is an online news and social networking service with 134 million daily average users worldwide (2019)<sup>13</sup>. It is a communication channel that enables fast and unfiltered information sharing. In Twitter, users can post and interact by sending and commenting on the messages, known as *tweets*. The tweets may consist of written and multimedia content and are shared through private and public messages. Users, known as *Twitterers*, can broadcast an unlimited number of tweets to other Twitterers who have subscribed to these broadcasts

---

<sup>8</sup> Reuters 2015.

<sup>9</sup> The Guardian 2015.

<sup>10</sup> The Guardian 2015.

<sup>11</sup> CNN 2015.

<sup>12</sup> Global Terrorism Database 2018

<sup>13</sup> <https://investor.twitterinc.com/> 2019.



(followers). Twitterers also receive broadcasts from other users to whose account streams they subscribe, or are following.<sup>14</sup>

Tweets are organized in columns in a chronological order on each user's account. In order to specify the topic of a tweet, hashtags (#) are commonly used. Users mark a tweet with the # symbol and a word or a phrase, e.g. #fifaworldcup for football. These hashtags also act as keywords for the post and by using them, one can find information on the topic of the hashtag. By following a specific hashtag, users can stay informed or learn about the topic without having to be in a specific location or know the other users who are contributing to the hashtag.<sup>15</sup> The hashtag is commonly used in Twitter to coordinate discussions between users, who do not need to be connected through existing follower networks. This differentiates Twitter from other social media channels where crisis communication happens among existing friendship networks. Twitter has special role in crisis communication as it enables people to share information but also to create their own content.<sup>16</sup>

Hashtags are usually used to specify the theme of the content. This, however, means that hashtag datasets do not necessarily include all relevant tweets, but only those that the user was aware of or was willing to include. Moreover, hashtags may also be misused. In such cases, tweets may include hashtags that are not related to the intended topic. Or tweets that would be relevant to the topic may not have the commonly used hashtag, so the content may not be included in the wider conversation.<sup>17</sup>

The message length differentiates Twitter from other social media services. Twitter restricts users to 280 characters encouraging brief and to-the-point posts. Originally the length of a tweet was limited to 140 characters but on 7<sup>th</sup> of November 2017 the number of characters was doubled for all other languages except Chinese, Japanese and Korean.<sup>18</sup> At the time of the data collection for this research, the limit was still 140. Twitter as a microblogging tool fulfils a need for faster communication and information sharing. By demanding shorter posts, Twitter lowers users' requirement of time and thought investment for content consumption and generation. The second important difference compared to other social media platforms is the frequency of the updates.<sup>19</sup> A Twitter user may post numerous updates in a day whereas for instance blogs are updates far less regularly. In recent years, Instagram and

---

<sup>14</sup> Starbird & Palen 2010, 2.

<sup>15</sup> Heverin & Zach 2012, 35.

<sup>16</sup> Stieglitz et al. 2018, 329.

<sup>17</sup> Bruns & Stieglitz 2013, 74–75.

<sup>18</sup> [blog.twitter.com](http://blog.twitter.com) 2017.

<sup>19</sup> Java et al. 2007.

Facebook have updated their platforms to encourage people to post with smaller threshold. Instagram released user-generated platform Instagram Story in 2016 for sharing videos or collections of photos that will disappear after 24 hours and Facebook released Facebook Stories with similar functionalities in 2017 to enhance the frequency of posts. These platforms compete with Twitter but Twitter has succeeded in staying a popular communication tool for many especially as a real-time news provider.<sup>20</sup>

Twitter users have developed means to support interactivity, which include replying to or mentioning other users with @ symbol. The conversations are public and other users can follow them. If a user finds a tweet interesting, he or she can *retweet* the posts. The retweet is visible with a text “[name] retweeted”. Retweeting indicates that the *retweeter* thinks that the original tweet is useful, significant, or interesting, and wants to share it with his or her own followers.<sup>21</sup> It is a kind of informal recommendation system. A user can also like another tweeter’s post with a heart-function or comment other users’ tweets. Retweets are especially common in crisis situations. According to Starbird and Palmen, Twitterers whose tweets are retweeted almost always belong to mainstream media, service organizations, or accounts whose explicit purpose is to cover the emergency event.<sup>22</sup>

Lastly, what differentiates Twitter from most other social media platforms such as Facebook or Instagram is that the follower structure in Twitter is asymmetric. This means that if user A is following user B, user B does not need to follow back user A. This asymmetric nature of Twitter makes it less likely to capture pre-existing ties but enforces instead bi-directionality.

Twitter is used in different devices, from laptops to smartphones, which enables constant and real time posting. This increases the speed and interactivity with which content is created and distributed. Due to the lack of real filters, the flat hierarchy and easy use also enables information to travel faster compared to more traditional media channels.

There are four types of user intentions on Twitter: talking and sharing everyday routines or current doings, having conversations on common interests by commenting and replying to others’ posts, sharing information, and reporting the news and commenting on timely events.<sup>23</sup> A single user may have multiple intentions and can even serve different roles

---

<sup>20</sup> Investopedia 2019.

<sup>21</sup> Heverin & Zach 2012, 35.

<sup>22</sup> Starbird & Palen 2010, 3.

<sup>23</sup> Java et al. 2007.

in different communities. According to Java et al., there are three different categories of Twitter users:

- Information source, who have many followers and whose updates are considered valuable
- Friends, with whom the users have personal relationship, which is the most common user category on Twitter, and
- Information seekers who post rarely but who follow other users regularly.<sup>24</sup>

Recently there has been discussion on the flipside of all the information available in the internet, the possibility for anyone to generate content and the use of social media in sharing sometimes biased information and own opinions. The arrival of internet has allowed people to access an extremely rich set of sources of information. Processing all the information and keeping a critical approach to the sources of information may be sometimes challenging. People can look for information from the subjective sources that strengthens their views and opinions on a certain topic. According to Azzimonti and Fernandez this strengthens the polarization as people are likely to be influenced by biased or even fake news, and end up finding information from the sources that reinforces their prior ideas and attitudes on the surrounding world. Azzimonti and Fernandez think however that the speed of communication may also reduce polarization as it is also possible to gather information coming from unbiased signals more efficiently.<sup>25</sup> This is important to understand when researching the content shared via Twitter or any social media channel. Tweets are useful for collecting data on public discourses and can reveal changes in the state of public mood at a larger scale<sup>26</sup>. This can easily be seen in the cases of terrorist attacks as well.

Recently, social media platforms such as Twitter have drawn increasing attention from research communities. When researching Twitter or any other social media channel, it is important to remember that social media users are not representative samples of the population when it comes to age, gender, and socioeconomic status. For instance, Twitter is more popular among younger adults and within urban areas.<sup>27</sup> Majority of the users are male whereas women are more likely to use Facebook and Instagram.<sup>28</sup> Twitter has a significant impact especially on how news are distributed and it is widely used by journalists and news

---

<sup>24</sup> Java et al. 2007.

<sup>25</sup> Azzimonti & Fernandes 2018, 3–4.

<sup>26</sup> Bollen et al. 2009, 450.

<sup>27</sup> Lin et al. 2017, 1585.

<sup>28</sup> Walton 2019.

media agencies. While for instance Instagram focuses on sharing visual content, Twitter with specific hashtags have been widely used to share ad hoc news that are aimed contribute to wide-ranging discussions on a topic and to spread broadly.

## 2. Theoretical framework

This thesis investigates the use of a micro-blogging tool in a situation of crisis, and how people are making sense of a disturbing event such as a terrorist attack by using such a communication channel. The thesis is closely linked to the previous researches on the use of social media and the theories of sense-making after a crisis event. As Laaksonen and Matikainen stated, even if the research concentrates solely on the content related to a specific topic on a specific social media channels, the researcher must know the wider context related to the topic and understand the means of interaction and include them into the analysis.<sup>29</sup> This chapter will answer to Matikainen and Laaksonen's request by discussing the theoretical background and previous research on the topic. The interest of this research is also to pay special attention to the religion-related content of the tweets. These tweets are seen as part of the broader sense-making process presented in this chapter, and religion-related content more of a topic of a tweet. The chapter is divided into three sub-chapter. First, previous research on the use of social media during crisis is discussed, followed by the theory of sense-making. Finally, social media as a sense-making tool is discussed.

### *2.1. The use of social media during crisis*

Before starting this chapter concentrating on the use of social media during crisis, it must be noted that finding research on the social media is rather easy, but as the field of social media is constantly changing research that is taking into account all the most recent features is rather difficult to find. The use of social media as well as the channels in use are constantly evolving, therefore a recently published article or book most likely already contain partly outdated information as the publishing process may take time. This is good to keep in mind while diving into the previous research on the topic.

The way people interact and communicate have changed a lot during the past decades. The role of social media as a communication channel has become significant. In the past, information was mostly gained as a one-way communication from news media or official response agencies such as police. Social media has changed this pattern of how people form their understanding and from where they look for information. There is no-longer one single source of news, but many people actively provide information to each other through varying

---

<sup>29</sup> Laaksonen et al. 2013, 201.

social media channels. Social media tools enable people to listen, communicate and contribute regardless of their location, and are thus useful tools for sharing information also in crisis situations. The communication is fast and the information reaches wider audience. The interest of this research is to concentrate on the use of social media during crisis.

Oxford Dictionary defines the *crisis* as “A time of intense difficulty or danger”.<sup>30</sup> Stein introduces Hermann’s (1963) classic definition which refers to an event that is threatening, unexpected, and consists of a specific period of time when actions take place and people to react the event.<sup>31</sup> Surprising and often stressful, threatening and transitory nature are characteristic for a crisis. A terrorist attack can be considered as a typical example of such an event.

The interest within the research community in the use of social media during an emergency or a crisis has been growing during the last 15 years.<sup>32</sup> Several researches have shown that social media plays a crucial role in crisis situations; During China’s Sichuan Earthquake the 12<sup>th</sup> May 2008, social media channels became one of the major places for people to share information, express feelings and opinions, and exchange mutual support.<sup>33</sup> Very similar findings have been found for instance when the use of social media during school shootings have been researched. Social media is used as a crisis communication and emergency management tool, as well as a space for the users to engage in emotional exchanges and communication of distress.<sup>34</sup> It enables users to seek for help, provide assistance, evaluate the situation or include political statements and critic, or express emotions, grief and support.<sup>35</sup> The use of Twitter varies depending on the event, the phase and the need of the user. It creates, together with the mainstream media, a shared social space where people who were affected by the crisis can connect, search for information, and share thoughts, experiences and feelings.<sup>36</sup>

The importance and role of Twitter during crisis has been researched a lot, and a term *Twitter effect* is in use to refer to the impact that microblogging has.<sup>37</sup> It emphasizes the changing ways in which people communicate during crisis, but also how big news agencies cover the emerging crisis. Twitter, as one social media channel, has become not only a

---

<sup>30</sup> Oxford Dictionary.

<sup>31</sup> Stein 2004, 1243.

<sup>32</sup> Vieweg et al. 2008.

<sup>33</sup> Qu et al. 2009, 1.

<sup>34</sup> Shaw et al. 2013, 23.

<sup>35</sup> Shaw et al. 2013, 25.

<sup>36</sup> Hakala 2012, 256.

<sup>37</sup> Feldhaus et al. 2012, 4.

groundbreaking, real-time distribution channel used by mainstream media, but also one of the news sources preferred by the final users.<sup>38</sup> In crisis situations, the widespread global interest and the intensity and fast sequence of the events that are typical to an emergency situation may produce uncertainty around trustworthiness of the information, and lead to concerns about rumours and misinformation. This is typical especially during the early stages of a crisis when the facts may not yet be established.<sup>39</sup> Sometimes in crisis, it might be difficult even for news media to get updated information of what has happened. This was the reality for instance during Haiti earthquake in 2010 when the news organizations were unable to get reporters to the site and were depending solely on social media, and especially the rapid and easily accessible information in Twitter.<sup>40</sup> In these kinds of situations, social media and especially Twitter have become important sources of information for journalists. Matthew Weaver, a journalist who is live-blogging crisis events on the Guardian.co.uk, describes the way Twitter functions as follows: “first the tweets come, then the pictures, then the video and then the wires”. Twitter is a significant part of the users’ everyday life and when striking events happen, there will always be users, both locally and globally, who share the news.<sup>41</sup> The content that is produced and shared in social media channels can provide eyewitness images, videos or up-to-date descriptions of the event, which have become in some case a major part of crisis reporting.<sup>42</sup> “The new technology is altering how we report, where we report from and most of all who is doing the reporting”.<sup>43</sup>

According to Heverin and Zach, the information-sharing dominates the early response phase of violent crises in microblogs, whereas opinion sharing increases as the time passes, coming to the picture in the recovery phase of the crises.<sup>44</sup> The intermixing of both information and opinion makes the prevalence of alternative discourses an important feature of Twitter. In Twitter people are able to negotiate and reinterpret the meaning behind news, and these interactions are essential in developing a collective understanding of an event.<sup>45</sup> Pulkit et al have researched the use of Twitter after a terrorist attack in Uri, India in 2016. The terrorist attack caused widespread reaction on social media and different platforms were full of hate content and misinformation. Social media channels, such as Twitter, are increasingly

---

<sup>38</sup> Bruno 2011, 16.

<sup>39</sup> Bruns & Burgess 2014, 375.

<sup>40</sup> Bruno 2011, 6.

<sup>41</sup> Weller et al. 2013.

<sup>42</sup> Rauchfleisch et al. 2017, 3.

<sup>43</sup> Bruno 2011, 6.

<sup>44</sup> Heverin & Zach 2012, 34.

<sup>45</sup> Eriksson 2016, 369.

being used by people to react to real-world events and to express their opinions.<sup>46</sup> They serve as a platform for having conversations, sharing information and expressing opinions which may be in opposition to the mass media discourse. Using Twitter, people can mix the information and opinion, and thus, negotiate and reinterpret the meaning behind news events. Dervin and Fernette argue that these discourses and negotiations are vital for creating a collective understanding of the event.<sup>47</sup>

Even though previous research emphasizes the importance of social media as a channel to share information, reinterpret the meanings and spread opinions, it is also necessary to understand and highlight the other side of the coin. The famous citation is relevant today as the fake news and alternative truth have been on discussion: *"A lie can travel halfway around the world before the truth can get its boots on."*<sup>48</sup> Azzimonti and Fernandes researched the concept of fake news in social media and claim that even though internet has expanded the access to information and allowed people to share it at a faster pace, it also provided a channel for individuals with extreme views to manipulate information via fake news, inaccurate facts, and prejudiced and misleading rhetoric. They argue that the popularity of social media networks such as Facebook and Twitter has exacerbated the problem even further, as people may be exposed to fake news through their friends' opinions. This results from the inability to filter out the sources of information that shape their friends opinions. This may cause polarization that, Azzimonti and Fernandes argue, can be explained with the fundamental shift in communication technology experienced in the last twenty years.<sup>49</sup>

## ***2.2. Sense-making in a crisis situation***

*"Information is a human tool to make sense of the reality assumed to be both chaotic and orderly."* -Dervin 2003<sup>50</sup>

Brenda Dervin has been developing a theory of sense-making. The theory focuses on searching and using information in constructing one's world. Sense-making suggests that people are continually facing cognitive gaps and are constantly trying to find solutions to these gaps. Emotions, previous experiences, attitudes, feelings, and instincts are all used in

---

<sup>46</sup> Pulkit, et al. 2017.

<sup>47</sup> Eriksson 2015.

<sup>48</sup> Anonymous

<sup>49</sup> Azzimonti & Fernandes 2018, 23.

<sup>50</sup> Dervin 2003, 327–328.



sense-making.<sup>51</sup> Also communication and interaction with other people are vital elements to an individual's sense-making as people do not have a comprehensive view of the continually changing world. Therefore, according to Dervin, people need to be able to understand both the order and chaos that is taking place. Dervin argues that "sense-making focuses on how humans make and unmake, develop, maintain, resist, destroy and change order, structure, culture, organization, relationships, and the self".<sup>52</sup>

During times of insecurity or crisis, such as a terrorist attack, sense-making focuses on the sense-making process and relies deeply on the interaction between and among people.<sup>53</sup> The central activities in sense-making are information seeking, processing, creating, and using. Savolainen stress that "sense-making is most of all a process where sense is the end-product."<sup>54</sup> Rimé et al. claim that the importance of interpersonal communication between people after an emotional event is vital, but call it as "social sharing of emotion". They argue that after experiencing an emotive event, people initiate interpersonal behaviours in which discussions and reactions are central. Through this social sharing people are able to construct a collective script of for instance a disaster.<sup>55</sup> Sense-making, thus, requires talking, interaction, conversation, argument, and dialogue with others. It has neither a beginning nor a formal end.

As sense-making is a personal process, the understanding of what is happening also changes depending on who is the "sense-maker". Muhren et al. claim that sense-making is focused on extracted cues, meaning that people notice some things and not others. People link the cues with other ideas that clarifies the meaning of the cue. Extracted cues enable people to act, which increases their confidence and confirms their idea and understanding of the earlier cues they have faced.<sup>56</sup> Azzimonti and Fernandes agree with this by introducing Cass Sustein's (2002) view that "the internet creates 'echo chambers' where individuals find their own biases and opinions endlessly reinforced, and people restrict themselves to their own points of view –liberals watching and reading mostly or only liberals; moderates, moderates; conservatives, conservatives; Neo-Nazis, Neo-Nazis." They claim that this increases the polarization and clusters like-minded people.<sup>57</sup>

---

<sup>51</sup> Dervin & Frenette 2003, 239–240.

<sup>52</sup> Dervin 2003, 332.

<sup>53</sup> Dervin & Frenette 2003, 239–240.

<sup>54</sup> Savolainen 1993, 16.

<sup>55</sup> Rimé et al. 1991, 436.

<sup>56</sup> Muhren et al. 2008, 201–202.

<sup>57</sup> Azzimonti & Fernandes 2018, 2.

Research concentrating on sense-making during the critical period of crisis is limited. Stein introduces Shrivastava's (1987) view of the critical period of a crisis, being "the period in which the crisis unfolds after being set off by a specific "triggering event" that occurs at a specific time and place". This critical period is, thus, a brief time span, ranging from few minutes to usually no more than a few days.<sup>58</sup> The critical period ends when there is no longer immediate danger. Chaos and urgency are typical for the critical period of a crisis. When something happens that launches the crisis, people try to find answers to questions such as "Who did the shooting?", "Was anyone hurt?", "Where is the shooter?", "Am I safe?", "Are the people I know safe?", "What are the police doing?", and "What should I do?". As people try to bridge their cognitive gaps, they may face challenges concerning shortages in information, conflicting information, or information overload. Communication and interaction with other people are a way of providing the information needed to bridge the cognitive gaps, and are, therefore, crucial in sense-making during crisis. When the critical period finally ends, the recovery period begins during which people can redefine the new sense of "normal."<sup>59</sup>

Sense-making during the critical period has numerous features. It contains interest and significance in a situation in which a person faces a shocking and potentially dangerous event. Due to this shocking event, there is a threat of a sudden loss of meaning and an experience that an individual's world view has been disturbed. An individual's routines and way of thinking are interrupted leading to a situation where she/he has no idea of how to proceed. The person is motivated to engage in sense-making, structure the crisis and account for inconsistencies.<sup>60</sup> In order to get a grip of the normal life and make sense of the crisis, people aim to engage in sense-making and try to structure what has happened. Sense-making is, as Stein puts it, "borne of uncertainty and is the on-going attempt to address it through establishing a familiar framework with which to understand it".<sup>61</sup>

Stieglitz et al. introduce a concept of "collective sense-making". It is a process in which "explanations of a situation are exchanged and then used to negotiate a shared social information basis on which collective goal-driven behaviour is established and sustained". Even though social media has become an extremely powerful channel for gathering and sharing information during crisis, most of the processes of collective sense-making carried out on social media remain unaddressed. This is surprising as it can be assumed that

---

<sup>58</sup> Stein 2004, 1243.

<sup>59</sup> Heverin & Zach 2012, 36–37.

<sup>60</sup> Stein 2004, 1246–1247.

<sup>61</sup> Stein 2004, 1246.

communication on sense-making has an impact on many and represents a large share of the overall communication during crisis situations in social media.<sup>62</sup> In the following chapter social media as a sense-making tool or enabler is discussed.

### ***2.3. Social media as a sense-making tool***

Collective sense-making takes place, in addition to face-to-face and other forms of communication, also in social media. It is especially relevant within the context of social media crisis communication,<sup>63</sup> as social media offers a channel for interpersonal crisis communications. People increasingly use social media channels such as Facebook and Twitter in the aftermath of terrorist attacks to make sense of crisis. In times of terrorist attacks, the sense-making process has been found to be emotional at both the individual and collective level.<sup>64</sup> After a crisis situation such as a terrorist attack or natural disaster, people aim to fulfil their information needs and make sense of a disaster by interacting with others. In case of information gaps that are not filled by official news agencies, people seek answers from unofficial sources to satisfy their information needs. As a result, information from friends, family or other community members may find greater acceptance and resonate more to the individual's information needs than the official news.<sup>65</sup> Pew Research Center recently published a study on the use of social media as a source of news. The research states that in 2018, 47 percent of the Americans got news from social media "often" or "sometimes". Forty-two percent of the social media news consumers thought that the news from social media are largely accurate.<sup>66</sup> Social media is a common source of news and information especially among younger people<sup>67</sup>. These researches show that social media plays essential role as a source of information and thus, has a significant influence on how people make sense of a crisis and the surrounding world in general.

An example of a disaster where social media had an important role in sense-making was the tragic Virginia Tech shootings in April 2007. During and after the crisis, people shared information on details of the shootings and reported on their own safety through social media channels. The resulting interactions became the basis of a highly distributed problem-solving activity that discovered, in parallel and with redundancy and apparent accuracy, the names of

---

<sup>62</sup> Stieglitz, et al. 2018, 328.

<sup>63</sup> Stieglitz, et al. 2018, 331.

<sup>64</sup> Fischer-Pebler, et al. 2019, 138.

<sup>65</sup> Heverin & Zach 2012, 35.

<sup>66</sup> Shearer & Matsa 2018.

<sup>67</sup> Matsa, et al. 2018.

the 32 fatalities in advance of official releases of that information.<sup>68</sup> The use of social media in sharing and gaining information has been typical also in other cases of emergencies.<sup>69</sup>

After a crisis evolve, sharing opinions becomes an important part of sense-making. Opinion-related tweets increase significantly when time passes and the critical period turns to the recovery phase. This suggests that while information sharing is critical to sense-making immediately after the crisis, people also need to connect to the collectivity as they redefine the new sense of “normal”. Therefore, as soon as more details about the event emerges and the amount of uncertainty decreases, people get the opportunity and time to communicate also personal explanations and observations.<sup>73</sup>

Microblogging is used for individuals’ own as well as collective sense-making during crisis. Pieces of information sent by individuals help to build an overall picture of what is happening on a specific hashtag. This kind of collective behaviour aligns with the sense-making concept that no individual can have a complete understanding of the reality but people need to work together to make sense of a chaotic situation. As sense-making is a personal process<sup>74</sup>, people interpret the information they gain and form their understanding on the situation based on their personal beliefs and analysis. This means that for instance in a case of a terrorist attack conducted in the name of Islam, the interpretation of and relation with religion has an essential role in an individual’s sense-making. Religion may be interpreted as a reason, cause or justification for an attack. Religion is also often very personal issue that may be affiliated with emotions, strong beliefs, opinions or thoughts. As it is common that micro-blogging is used to express feelings or inner thoughts in crisis situation<sup>75</sup>, an individual’s beliefs can be assumed to have a role within the tweets related to a terrorist attack that is motivated by religion.

Fisher-Prebler et al. researched the collective sense-making after the Berlin terrorist attack in 2016. Based on their research, typical early reactions in sense-making contain information sharing through Twitter (up to 50 percent of their research data) and pro-social behavior such as the search for meaning and sense, sympathy and prayers, togetherness, and calls for tolerance. In addition, sharing emotions to support or help each other was important

---

<sup>68</sup> Vieweg et al. 2008.

<sup>69</sup> Starbird & Palen 2010, 1.

<sup>70</sup> Heverin & Zach 2012, 35.

<sup>71</sup> Vieweg et al. 2008.

<sup>72</sup> Starbird & Palen 2010, 1.

<sup>73</sup> Heverin & Zach 2012, 44.

<sup>74</sup> Muhren et al. 2010, 201–202.

<sup>75</sup> Heverin & Zach 2012, 44.

in social media after disasters. Twitter offered a public space for expressing and sharing grief and support and making sense of the traumatic events.<sup>76</sup>

In Fisher-Prebler et al.'s research, xenophobic, Islamophobic, anti-immigration, and nationalistic statements were also common. Twitter users argued their worldviews, discussed and validated their opinions, and expressed personal views, all of which are important for handling with terrorist attacks and reducing anxiety. They argue that as Twitter connects people and provides a real-time communication channel, it helps users to follow the standards they associate with their worldviews and helps them to decide whether other users have a similar perspectives.<sup>77</sup>

---

<sup>76</sup> Fischer-Prebler et al 2019, 146–147.

<sup>77</sup> Fischer-Prebler et al 2019, 146–147.

### 3. Data and methods

This chapter explains the data collection process and presents and provides justification for the methods used in this research. Aktouf (1987) defined *method* as “the logical procedure employed by a science, i.e. the set of specific practices it uses to render the development of its demonstrations and theories clear, understandable and irrefutable.”<sup>78</sup> The method for this research is chosen to best serve the purpose of this thesis and to enable answering the research questions. The chapter will explain case study as the research strategy, provide insights to the data selection process, and finally present the methods of the analysis.

#### 3.1. Case study as research strategy

Case study was selected to be the research strategy for this thesis. According to Gillham, *case* is a unit of real-life human activity existing here and now, and which can only be studied or understood in its context. It aims to answer to the specific research questions and tries to seek evidence which exists in a case setting. The data and the context of the case study need to be understood before it is possible to identify the most appropriate theories for the research.<sup>79</sup> Eriksson and Koistinen claim that defining *case study* is complicated and providing one universal and comprehensive definition is hard. Due to its manifold nature, case study is often described as a research strategy or approach rather than methodology. According to Eriksson and Koistinen, in a case study, one or several cases are investigated and analysed. As a solution is the primary objective of a case study, it is never self-evident, or indifferent how the cases are chosen, limited and justified.<sup>80</sup>

Gagnon discusses about reliability in relation to case study as a research strategy. He claims that reliability has two sides: internal reliability and external reliability. By internal reliability he refers to other researchers getting the same findings that you did if they were to analyse and interpret the same data. External reliability on the other hand refers to that an independent researcher would obtain the same data if she or he were to perceive the same environment.<sup>81</sup> The data collection and sample selection processes as well as the methods used to analyse the data in this research are discussed more thoroughly in the following chapters 3.2 and 3.3.

---

<sup>78</sup> Gagnon 2010, 3.

<sup>79</sup> Gillham 2000, 1.

<sup>80</sup> Eriksson & Koistinen 2005, 4.

<sup>81</sup> Gagnon 2010, 23.

The terrorist attacks that happened in Paris on the 13<sup>th</sup> of November 2015 are used as a case study in this research. It is a single case but can be linked to the wider phenomena of rising of terrorism and terrorist attacks that are targeted against western values. As Gagnon states, using case as a research method can contribute to a phenomenon by developing or testing a theory. The purpose is to contribute to the theory by identifying and analysing differences between the proposed explanation and the existing theory. If support from previous literature is found, the internal validity of the research is reinforced and the results can be generalised.<sup>82</sup> The case of this research is contributing to the broader academic discussion on how social media is used in the crisis situations, how people make sense of crisis such as a terrorist attack, and what kind of role religion plays in the sense-making.

I as a researcher seek to report data from a real-life context in a truthful and unbiased manner. According to Amerson, using replication logic, each case study should be viewed as a single experiment. When a researcher identifies an important finding within a single case, the next step is to replicate it with more experiments. Each subsequent case study either predicts comparable results or predicts different results, but for expected reasons.<sup>83</sup> Although this thesis focuses on this specific case, it aims to provide insights on the topic also on a general level.

### ***3.2. Data collection and sample selection***

While using resources from the internet, one of the main questions is how to limit the information available in a reasonable way to get a research sample that serves the purpose. The trustworthiness of the information available is another essential issue. Even if the material is limited with carefully chosen criteria, the results may end up being irrelevant.<sup>84</sup> This might be the case for instance if the data does not provide answers to the research questions or is unsuitable for the research objective. Twitter is a suitable channels to collect data as, unlike in many other social media channels, all content in Twitter is public. As Twitter is a common place for discussions and sharing information and it can contain a large amount of information on a certain topic, it is useful to be able to limit the amount of data when using Twitter as a source of research material. Setting time limits and using specific hashtags are convenient methods to limit the amount of data, also approved in previous studies.<sup>85</sup> In this

---

<sup>82</sup> Gagnon 2010, 90

<sup>83</sup> Amerson 2011, 427

<sup>84</sup> Kuula 2006, 170.

<sup>85</sup> Eriksson 2016, 369.

research, both of the above-mentioned data limitation methods are used in addition to language limitation.

My research data consists of a large number of tweets retrieved from Twitter at the time of the terrorist attacks in Paris in 2015. The data was gathered from Twitter and Instagram's application programming interface (API) by using a social media listening tool called Pulsar. The collection time was limited in order to get a sample that is suitable and manageable for research purposes.

The interest of this research is to concentrate on the purposes for which people use the microblogging tool, Twitter, after a terrorist attack, how individuals try to make sense of such a disaster, and what kind of role religion plays in the sense-making process. So, the focus is to gain an understanding of the use of Twitter during the critical period of such crisis. The data was collected from the moment the wave of terrorist attacks started to a few days after, from the 13<sup>th</sup> November 2015 7.34 pm to 16<sup>th</sup> November 2015 8.05 am. The amount of the tweets is claimed to decline dramatically within a week after a terrorist attack<sup>86</sup> which is why this research concentrates on the early reactions.

Twitter users aim to share the latest crisis information as quickly and efficiently as possible, and therefore they seek to establish unified hashtags that concern the information related to the crisis. These processes do not always proceed smoothly and may result several, competing hashtags. However, over time, the tendency is that a small number of key hashtags become the most commonly used due to a tendency to use those hashtags that users already encounter in large volumes in their incoming Twitter feeds.<sup>87</sup> The hashtags chosen for this research are #parisattack, #parisshootings and #paristerror. These hashtags were considered to be the most relevant ones at the time the tweets were collected. During a critical crisis event, users conscientiously hashtag any tweets that interest other people following the crisis, and encourage others to do the same. As #Parisattack became one of the most used hashtags for this event<sup>88</sup>, the dataset used for this thesis constitutes an accurate representation of Twitter feed experienced by users who followed the selected hashtags at the time.

Often the popularity of certain hashtags is, however, possible to see only after time passes. For instance, #prayforparis could have been an interesting hashtag to include in the research and might have given more expression of solidarity related tweets. Therefore, it is worth acknowledging that the data collected for this research does not represent all

---

<sup>86</sup> Eriksson 2016, 371.

<sup>87</sup> Bruns & Burgess 2014, 375.

<sup>88</sup> Niemeläinen & Ahlroth, 2015.



communication on the Paris attacks and certainly leaves a large amount of interesting data outside the scope. It is also possible that the selected hashtags handle some other topics that are not related to November 2015 Paris attacks or are not relevant for this study. And not all tweets contain a hashtag, thus researchers should be aware of the incompleteness of a sample based on hashtags, words, or phrases.<sup>89</sup>

The location of the Twitter users is largely unknown, so it is uncertain how communication streams moved across geographical space. The languages used in the tweets were limited to English and French. It must be noted that the language may have had an impact on the content of the data; for instance if Arab language tweets were included in the data, the content could have been different. The selected hashtags were also in English, which may have influenced the data sample of this research.

The sample size received from Twitter was in total 590 486, including both tweets and posts on Instagram. This sample was limited to concentrate only tweets (in total 569 554) from which pure retweets were excluded. In total 103 831 tweets remained. This sample was considered to be too large for the purposes and methods chosen for this research, thus, a random sample of 600 tweets was taken to the analysis by using Excel's random sample command. 600 tweets as a sample size was considered to be appropriate to be able to get a sense of the content and draw conclusions. To get an answer to the research problem, with these 600 tweets, the first two sub-questions were addressed: *Which themes were central in the users' early response in Twitter after the Paris attacks the 13<sup>th</sup> November 2015?* and *What were the main uses of Twitter after the Paris attacks and how does the use of Twitter contribute to the sense-making during the first days after the attack?*

An additional sample was taken to be able to answer to the third sub-question: *What role does religion play in the tweets after a terrorist attack executed in the name of Islam?*. From the data a sample was derived by using keywords "religion", "Islam" and "Muslim". These keywords were considered as relevant ones in order to reach the tweets with religious features. There were in total 3555 tweets including at least one of these keywords, representing only three percent of the total sample of tweets (excluding retweets). From this 3555 tweets, 300 tweets were coded and analysed to get a sense of the content of religion-related tweets. The sample size that was coded and analysed represented 10 percent of the religion-related tweets and was considered to be appropriate for gaining an understanding of the content and purpose of these tweets

---

<sup>89</sup> Einspänner et al. 2013, 100.

Figure 1 illustrates the data selection process and how large amount of information drawn from two social media channels were limited to a sample size that was reasonable for the purposes of this research.

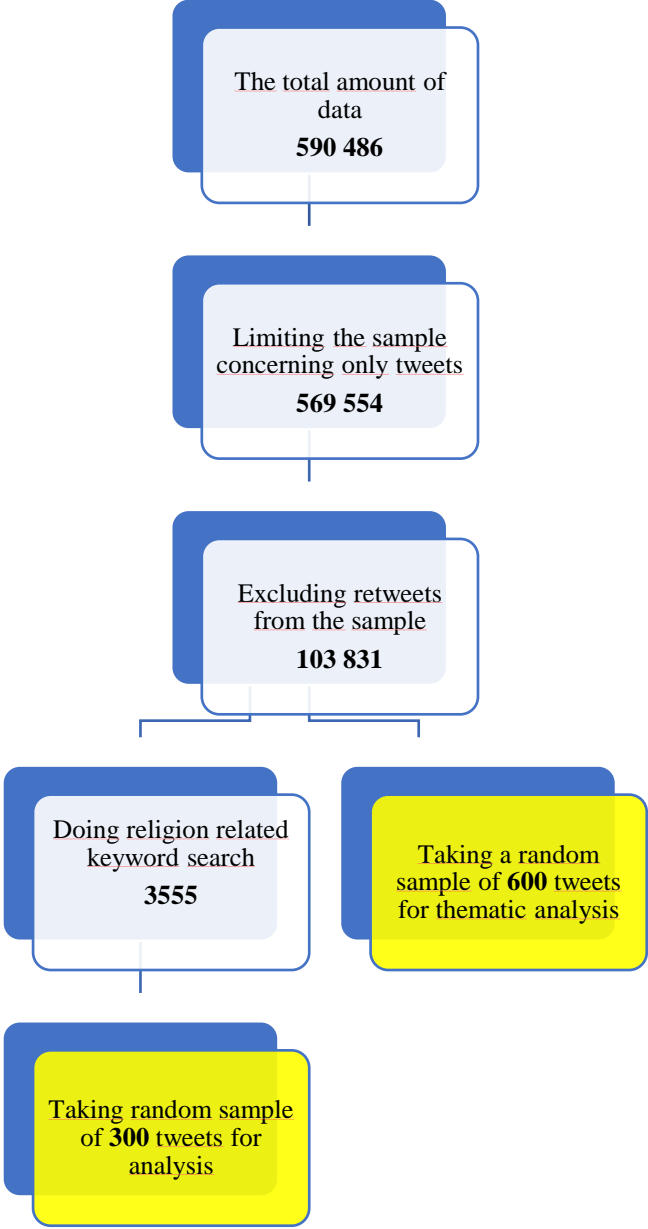


Figure 1: Sample selection process

### **3.3. Content analysis**

The method chosen for this thesis is thematic content analysis. This was considered to serve well this research as the aim was to gain an overall picture of the contents and themes that came up in a micro-blogging platform after a terrorist attack, and how this kind of communication channel was used in such a crisis. Thematic content analysis may use qualitative or quantitative emphasis. Typically, the aim is to categorize, thematise and codify the content regardless whether the emphasis is on the qualitative or quantitative research.<sup>90</sup> To date, most studies on Twitter have been quantitative.<sup>91</sup> For the purposes of this research, both quantitative and qualitative features of the content analysis is used to get a profound understanding of both the popularity and the content of the topics and purposes of the tweets.

A code is a label that a researcher attaches to piece of data.<sup>92</sup> Coding of Twitter content can be done in several ways and the right method depends on the research questions of the study. For the thematic content analysis, inductive or deductive approaches can be used in the coding process. Deductive approach usually begins with a hypothesis and aims to test an existing theory. Inductive coding on the other hand is concerned to generate a new theory emerging from the data.<sup>93</sup> For this research, I used a combination of inductive and deductive approaches to coding. Due to the multifaceted needs of this study, the tweets were coded manually and no automatized coding techniques were used. I started the coding process by conducting a pilot coding to get an idea of the content and themes that appear repeatedly. This way of working has been encouraged by Eriksson who stated that when the coding is done manually, creating a codebook based on pilot coding is helpful, rather than relying entirely on grounded theory methods where categories come up during coding.<sup>94</sup> Thus, I analysed the data and formed a codebook on the basis of the themes that arouse from the data.

Nevertheless, at the same time I reviewed an amount of studies that had used similar kinds of methods and mirrored the codes to these. So my codebook has inductive and deductive features; it contains codes created to this particular research but has also borrowed codes that has been used also in other studies before.

Creating a codebook for this research was useful. As the research is two-folded in a sense that the first part of the analysis will concentrate on the overall themes raising from Twitter after the terrorist attack, and the latter part on the representation of religion and how

---

<sup>90</sup> Laaksonen, et al. 2013, 209.

<sup>91</sup> Marwick 2013, 118.

<sup>92</sup> Fade & Swift 2011.

<sup>93</sup> Braun & Clarke 2006, 83

<sup>94</sup> Marwick 2013, 118.

religion is part of the sense-making, two different codebooks were needed. Marwick encouraged to have a fixed reference for coding as it usually saves time even though the codebook will change during the coding process.<sup>95</sup> The codebooks created for this research will be discussed more thoroughly in chapters 4 and 5.

In order to deepen the understanding on how the Paris terrorist attacks were handled in Twitter, how Twitter was used as a sense-making tool, and how religion was portrayed in the tweets, close reading of the data was needed. A small sample of tweets from each coding category were chosen for deeper qualitative content analysis. Close reading is a main method in literary criticism, in which texts are read concentrating on individual words, syntax, and phrasing.<sup>96</sup>

The selection criteria for the tweets in closer analysis in this research are:

- Representation: The selected tweet is representative of the coding category
- Repetitiveness: There are several tweets that are like the one selected to the qualitative content analysis.

### ***3.4. Researcher's position***

In a qualitative research, it is important to acknowledge the researcher's positionality. Researchers need to establish to what extent they are part of the phenomenon under investigation and define their position. They must consider how their position may be influencing their view and how they organize the reality they are observing.<sup>97</sup> A researcher interprets the tweets based on his/her nationality, age, gender, social and economic status and previous experiences.<sup>98</sup> Therefore, when researching the use of Twitter during 2015 Paris terrorist attacks, I, as a researcher, must acknowledge my pre-conceptions and background. I am a highly educated Finnish woman with two small children. I study the role of religion in conflicts and I am interested in the root causes that lead to terrorism. I appreciate western, liberal and secular values. I have lived in France and visited Paris several times. I have friends living in the city and can easily relate to the horror the people in Paris experienced. All these facts have an impact on how I interpret and code the data. And all these facts certainly influence the analysis of the data. To limit the inconsistency of interpretations, peer-coding is

---

<sup>95</sup> Marwick 2013, 117.

<sup>96</sup> Marwick 2013, 118.

<sup>97</sup> Gagnon 2010, 26

<sup>98</sup> Eriksson 2015, 370.

sometimes used in content analysis. However, for this research I did not have resources for this kind of reliability checking.

In the following two chapters, the findings from the Twitter data are analysed and discussed addressing the research problem: What are the early-reactions to a terrorist attack in a micro-blogging platform and how religion is portrayed within the tweets? In chapter 4, the themes that were central in the users' early response in Twitter after the Paris attacks are discussed, as well as what were the main uses of Twitter after the Paris attacks, and how Twitter contributed to the sense-making during the first days after the attack. Chapter 5 will go deeper into analysing the religion-related tweets aiming to find insights on religion's role in the sense-making of terrorism and the attacks. This will be researched by concentrating on how religion was portrayed in the tweets after a terrorist attack that was executed in the name of Islam.

## 4. Early reactions and reasons for tweeting

### 4.1. Overview of the data

This chapter provides analysis of the early reactions on Twitter, and how this micro-blogging platform was used in making sense of the Paris terrorist attacks. Due to Twitter's character limitation, the tweets were with no exception very short in nature (maximum 140 characters). The character limitation was originally 140 because SMS messages could contain maximum 160 characters and Twitter wanted to save 20 characters for the pseudonym. Short messages are, however, thought to be efficient in social media in general. As the information flood is massive, longer messages may often remain unnoticed.

As explained earlier in the chapter 3, content analysis was used as a method to gain an outlook of the data. The first thing that has to be done with the data is to organize and classify it to make it easier to analyse.<sup>99</sup> Therefore a multifaceted codebook was created in order to get an understanding of the content and to keep the coding-system consistent. The coding method is the most widely recommended approach to manage rich and complex evidence according to Richards and Richards (1994) presented in Gagnon's publication.<sup>100</sup> Therefore, each tweet of the sample was read through and coded to an Excel file. After, it was easy to assess the data by sorting the content in Excel by different categories and codes. In the codebook, five different dimensions were looked at and the codebook was constructed accordingly. The focus was on a tweet's purpose, topic, whether it was directed to another user, the link inclusion, and the link destination. So each tweet was coded among these five dimension; For instance a tweet may have 1. Shared emotions (purpose), 2. Expressed solidarity (topic), 3. Was directed to another user (interaction), and 4. Did not have a link (link inclusion).

Some of the tweets contained so many grammatical errors or informal abbreviations that the meaning or the purpose of the tweet was impossible to understand and so these were elided from the analysis. In table 1, the different categories and codes are presented. The coding system was exclusive, meaning that only one code per category was enabled.

---

<sup>99</sup> Gagnon 2010, 72

<sup>100</sup> Gagnon 2010, 72

<b>Category</b>	<b>Code</b>
Purpose	Sharing information (information-related) Sharing opinion (opinion-related) Expressing emotions (emotion-related)
Topic / Sense-making theme	Attack related information Reactions/consequences of the attack Talking cure/expression of solidarity Sharing personal experiences Call for action Event-related hashtags only Most of the attacks happen elsewhere
Directed to another user	Yes No
Link inclusion	Yes No
Link destination	News media Social media Another website (opinion, gossip, personal websites, blogs)

Table 1: Coding categories for the sample of tweets

The coding categories presented in table 1 were chosen based on the popularity and frequency of these topics, and to gain the best possible understanding of the purposes Twitter was used for after the Paris terrorist attacks. I found it interesting also to look at the interactional nature of the tweets as the need for communications and exchanges have been emphasized in the previous research on the sense-making during crisis. In Twitter it is easy to see if a tweet is targeted to someone (in that case @-sign is used) or whether it is more general in nature without any targeted recipient. In the case of Paris attacks, only 16 percent of the tweets had @-sign.

The link inclusion and link destination provide information about the purpose and the content of a tweet. Including a link to a tweet refers to the tweeter's willingness to share content created by someone else. In this research, 79 percent of the tweets had an URL-link included. This refers to the fact that most of the tweets shared content that was created by

another instance. When the link destination was viewed, 43 percent<sup>101</sup> of the links led to different news media agencies' websites. The content originating from different social media channels were also widely shared, representing 33 percent of the links. The rest of the sample's links (24 percent) led to the other types of webpages such as different opinion websites, gossip websites, and blogs.

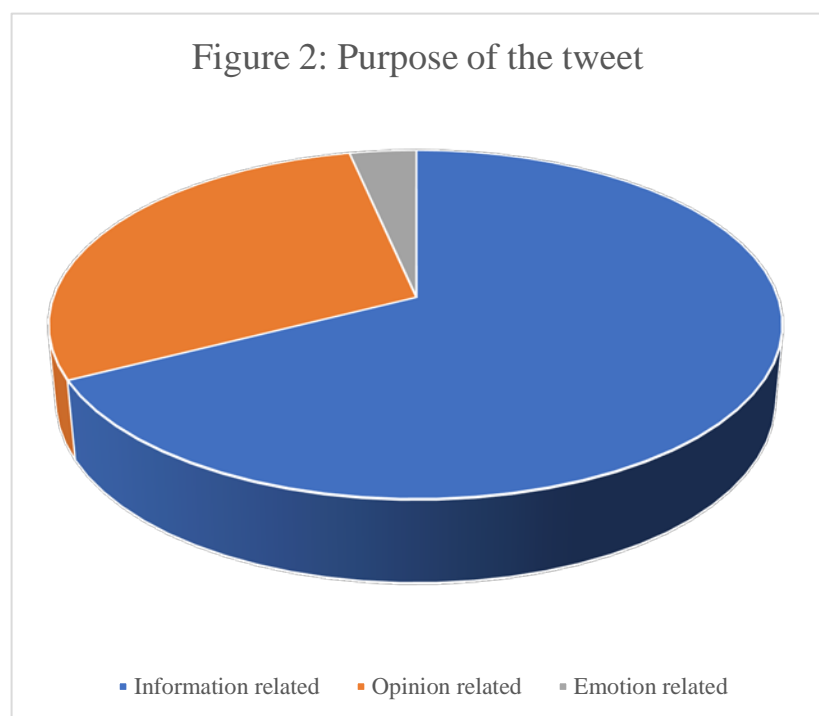
#### ***4.2. Sharing information is the main motive for tweeting***

This chapter provides an overview of the drivers to tweet after the Paris terrorist attacks. After making broad analyses of the data, three different purposes for tweeting arouse from the sample: to share information, to express opinions or personal views, and to show emotions, feelings or express solidarity to the victims and the people

close to them. The tweets were coded to the following three categories depending on the content:

- information-related tweets
- opinion-related tweets
- emotion-related tweets

Tweets that contained information or facts were coded to the information-related category. Tweets that clearly expressed a person's own or another person's opinions or views were coded to the opinion-related category. And finally tweets that consisted of expressions of emotions, feelings or solidarity fell into emotion-related category. Sometimes the difference between for instance opinions and emotions was rather blurry but the borderline



<sup>101</sup> This percentage number is from the links that were still working at the moment this thesis was written.



was drawn based on the words in a tweets; if a tweet contained an adjective expressing the persons feeling, it was coded to the emotion-related category even though it might have contained features of opinion. Figure 2 illustrates the shares of information-, opinion- and emotion-related tweets. The tweets that were random in nature and could not be coded to any of the above-mentioned categories, are excluded from the figure and analysis, totaling 8 percent of the sample.

From the sample of 600 tweets, 63 percent were information-related tweets. These tweets mostly consisted of information and facts about the terrorist attacks. Need for gaining information in the early phases is significant in making sense of the crisis, as also previous research has proved. This need was clear also in the case of Paris attacks as can be seen from the large number of information related tweets. This can also be justified by the fact that 79 percent of the tweets included URL link.

Sharing opinions was also popular within the sample. In total 27 percent of the tweets contained opinions. These are either the tweeter's own opinions, commenting on someone else's opinions or sharing another person's opinions. The topics of this category vary a lot from calling to action, expressing wishes, looking for reasons, to expressing critic. This opinion-related category contains tweets from most of the themes and topics handled in more detail in the chapter 4.3.

Sharing emotions had significantly smaller share of only three percent of the sample. The tweets that include emotions contained expressions of solidarity, horror, sadness, worry, fear and disbelief. Hashtags such as #JeSuisParis and #PrayForParis were common within these tweets.

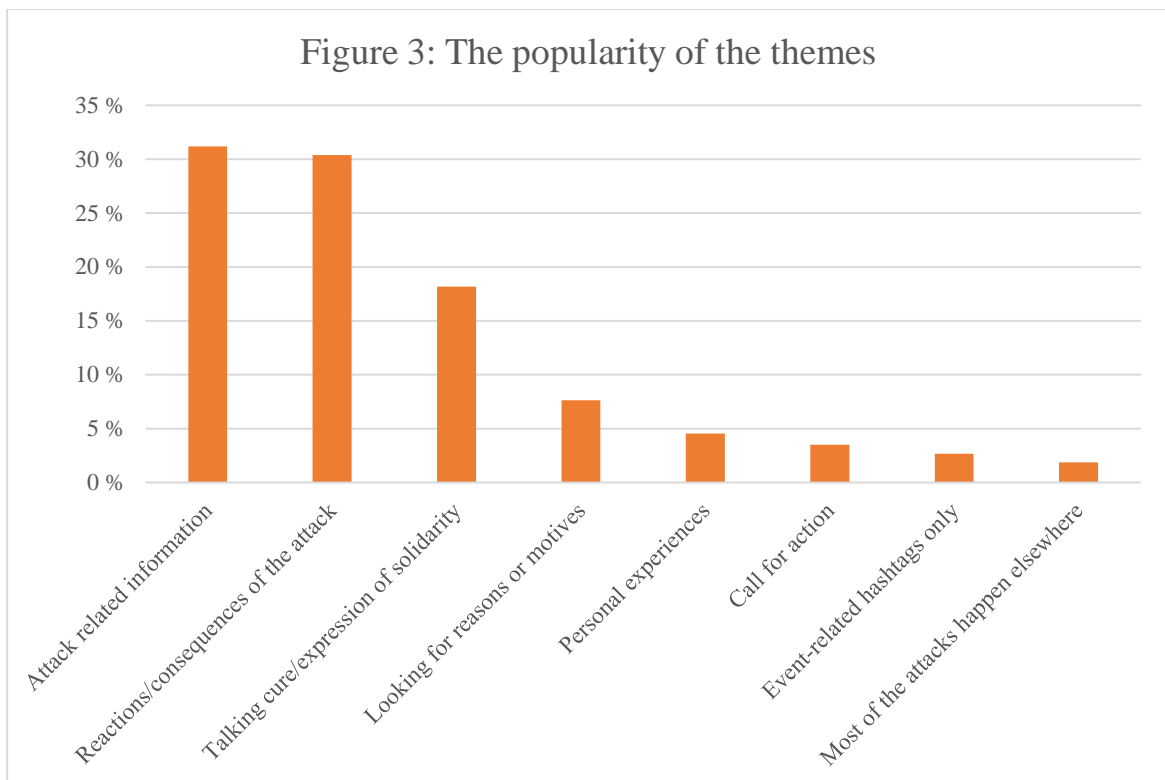
### ***4.3. Analysis of the sense-making themes***

Researching more closely the content of the tweets was considered essential to understand which themes and topics arise, and how people make sense of the terrorist attacks and draw the script of the chain of shocking events. The sample of 600 tweets was read and analysed, and the following eight different themes repeatedly appeared:

- Attack related information
- Reactions / consequences of the attack
- Talking cure / expression of solidarity
- Looking for reasons
- Sharing personal experiences

- Call for action
- Event related hashtags
- Most of the attack happen elsewhere

The tweets were coded according to the above listed eight themes. In figure 3, the representation and popularity of the different themes are presented. Tweets that were impossible to categorise due to their randomness or abstruse nature, have been excluded from the figure and the analysis. These tweets represent 19 percent of the total sample.



After analysing the data, two themes came to the fore by having the biggest shares of the tweets: Attack related information and Reactions or consequences of the attack. Talking cure or expression of solidarity was the third most common theme with significant share of the sample. The themes of looking for reasons, sharing personal experiences, call for action and most of the attacks happen elsewhere repeatedly appeared but represented smaller shares of the sample.

This chapter will now go deeper into the analysis by selecting few sample tweets from each theme and by using qualitative content analysis as a close-reading method. As the sample of tweets are interpreted by the author, it is necessary to describe how I have

understood each tweet and the purpose for sharing it. The tweets in French are freely translated by the author of this research. The grammatical errors of the tweets are not corrected, but the pi characters and the URL links are removed to ease the readability. In addition, if the tweet was directed to someone, the @username is removed.

**Attack related information** consists mainly of the tweets sharing information, mostly news, about the details of the happenings in Paris, or more general event-related information such as what happened before the crisis took place. These tweets represented one-third of the sample of tweets, totalling 31 percent<sup>102</sup>.

The need for sharing information was inevitable in the early phases after the Paris terrorist attacks as it helps in the sense-making of the others who are following the hashtags.<sup>103</sup> These tweets provide details of the chain of events, as well as wide-ranging information concerning the event and terrorism in general. The content of the tweets was created mainly by different news agencies and the link inclusion was high. Most of the links led to different news agency sites. Below some example tweets are presented to illustrate the theme for further analysis.

*Suicide vests used in Paris attack mark change of tactics, new threat.*

*Here's What We Know About The Muslim Terrorist Attack In Paris*

The above tweets provide insights of the attack. The purpose is to share information and tell the audience about the tactics used in the attack. As discussed earlier, the need for information is strong during the early phases of a crisis, and these types of tweets serve to fulfil that need. Similar kinds of tweets are common among the sample.

*Video: At Least 60 People Killed In Multiple Terrorist Attacks In Paris!*

*Tragic list of the lost: Photos of the victims from the deadly Paris attacks emerge*

Videos and photos are common within this category of sharing information about the attack. Most of the pictures contained photos of the suspects, people's reactions to the terrorist

---

<sup>102</sup> The percentage figures presented here are the shares of each topic from the sample of tweets that were able to categorise according to the eight different codes.

<sup>103</sup> Heverin & Zach 2011, 42.

attack, as well as content from the scene of the attacks. Pictures are often considered to gain more visibility compared to only text, and are, therefore, efficient when it comes to the spreading information.

In the above examples, the need for sharing the newest information of a crisis is clearly visible. The tweets contain current information of the event, execution of the terrorist attack, list of victims, and video footage of the attack. In majority of these tweets, URL links are included which refers to the fact that the content was created by someone else than the tweeter.

Sharing information during the early phases after a crisis is typical behaviour in making sense of what has happened.<sup>104</sup> Using hashtags is popular as the tweeters often want to contribute to the collective conversation about the event. Heverin and Zach state that conversations on Twitter not only help those that write a post to make sense of their situations but enable also others who follow the conversation to make sense of what is happening.<sup>105</sup> This is why the using hashtags is so common and essential in tweeting, especially when there is an important larger discussion going on where contribution is needed for instance due to lack of factual information.

The second most common theme of the tweets was **Reactions/consequences of the attack** including both people's reactions to the attack as well as information and speculations on the consequences of this fatal event. These tweets represent 30 percent of the tweets that were able to be categorized. Many of these tweets address people's reactions to the event and how the international community and different states reacted to the Paris attacks. News about how France was going to respond to the terrorist attacks for instance were commonly shared. Also expressing own thoughts and views and sharing information about the consequences were frequently shared via Twitter. Even though this theme was manifold, the combining feature is the concern about the consequences that the terrorist attack have, as well as the reactions that the state, the international community, people or individuals might have. The concerns about the future is well present within this theme. Below are some examples showcasing the tweets that share information of the overall consequences that the event had.

*#Analysts see stock, oil price declines due to Paris attacks, but markets should recover*

---

<sup>104</sup> Heverin & Zach 2011, 42.

<sup>105</sup> Heverin & Zach 2012, 34.

In above tweet information of the impact that the terrorist attack has in global scale is addressed. The tone of the tweet is neutral and the prospect is optimistic.

*#DavidCameron to boost #security spending after #Paris #attacks*

Tweets that share information on how other states and international community reacted to the Paris terrorist attacks were common within the sample. This above presented tweet shares insights on how the then UK prime minister David Cameron reacts to the attack and what consequences it will have on Great Britain. The use of hashtags is widely used in this tweet with #DavidCameron, #security, #Paris, and #attacks.

Another common topic was France's reactions to the Paris terrorist attacks. Information and speculations, such as the examples below, were frequent within the sample.

*BREAKING: France drops 20 bombs on Islamic State jihadi training camp in revenge for Paris shootings*

*Sarkozy proposes defining the visit to the jihadist websites as a crime #TF1 #ParisAttacks  
[Sarkozy propose de qualifier comme délit la consultation de sites djihadistes.. #TF1 #ParisAttacks]*

These tweets contained information of the harsh actions that France is taking to respond to the Paris attacks and terrorism in general. In some of the tweets, France's actions in the Middle East were defined and information of President Sarkozy's statements and actions he was planning to take were shared.

The topic of 'the reaction and consequences of the attack' also contained a vast number of tweets providing information on how people and individuals had reacted to the crisis, as well as sharing the tweeters' own personal reactions on the terrorist attack. Religion plays a significant role in many of these tweets.

*French Muslims fear repercussions from Paris attacks*

There were numerous tweets sharing information on how Muslims are concerned of the tightening attitudes towards them after the terrorist attacks, and how they fear the revenge.

*Muslims around the world condemning Paris attacks using hashtag #notinmyname*

Tweeting about the Muslims reactions to the Paris attacks were also popular within the sample. Most of these types of tweets shared information how Muslims are condemning the Paris attacks and terrorism in general. #notinmyname was a widely used hashtag within such tweets.

*helping in the refugee-crisis and not-funding #IS would be a better sympathy-showing than idiotic lights... #ParisAttacks*

Criticism was also common. Often the state's reaction, the way people reacted to the terrorist attack, or the way solidarity was expressed were criticised. In the above presented case, the tweeter is sharing his/her own opinion on how France (and maybe other states) should react to terrorism. "Idiotic lights" refers to the expression of solidarity that France and many other cities of the world had showed by illuminating the world land-marks (such as Eiffel Tower, London Eye and Sydney Opera House) into the colours of the French flag.

Sharing personal views, concerns and opinions were also common when the consequences and reactions of the attacks were handled.

*Do you think this is going to lead to the world war?#syrie #ParisAttacks*  
*[Vous pensez que ça va se finir en guerre mondial ? #syrie #ParisAttacks]*

In this tweet a question is raised. Posing questions was also typical. The questions mainly asked what will happen next and what will be the consequences of such an attack.

*If #ParisAttacks lead to demonization of refugees and migrants then the terrorists win.*

The tweet above showcases the types of tweets that shared information or views on how certain type of reaction the terrorist attack would mean; looking for solutions to how to handle the situation and how people should react to such a crisis.

**Talking cure or expression of solidarity** was also significant theme that repeatedly appeared within the sample. Talking cure is a code used by Heverin and Zach when they researched the use of microblogging for collective sense-making during three different campus shootings. The term was created and introduced by Dervin (1999), and it was

originally used in psychoanalysis. It refers to people's needs to express different emotions such as fears, hopes, relief, and anger.<sup>106</sup> Talking cure or expression of solidarity was the third largest category with 18 percent share of the sample. Talking cure refers to people's need to communicate their feelings and thoughts during crisis without necessarily expecting to receive any response. This has been used as a coding-category in similar kinds of researches on sense-making of a crisis in social media.<sup>107</sup> Talking cure does not help in collective sense making in a way the information-related tweets did. However, these tweets provide people a mean to express their inner thoughts and feelings<sup>108</sup>. Expressions of solidarity was one of the most repeatedly appearing topic. Below are some examples of the tweets that were representative in the theme of talking cure.

*I don't have words is it France? #shooting #ParisAttacks*

*[Je n'ai pas les mots c'est la France ? #fusillade #ParisAttacks]*

Unbelief and confusion were typical feelings within the messages shared in Twitter. In these kinds of tweets questions such as "Is this real?", "Is this really happening?" and "How is this possible?" were commonly asked. These may be more common here than in other cases due to the fact that only six months earlier there was another terrorist attack taking place at Charlie Hedbo, a satirical weekly magazine in Paris. This may have deepened the feeling of unbelief. The hashtag #JeSuisCharlie was created during that terrorist attack, and have widely used after. #JeSuisParis was a common hashtag also during the Paris terrorist attacks researched in this thesis.

*When I saw his message I was relieved that he got home well. #ParisAttacks*

*[quand j'ai vue son message j'ai été soulagée qu'il soit bien rentrer. #ParisAttacks]*

Also expressing emotions of relief were typical within the sample. In the above tweet, the relief after realising that his/her loved one is safe is visible. There were several such tweets.

*It's just horrible, there are no other words #ParisAttacks*

---

<sup>106</sup> Heverin & Zach 2012, 43.

<sup>107</sup> Heverin & Zach 2011, 43.

<sup>108</sup> Heverin & Zach 2011, 43.

*[C'est juste horrible, il y a pas d'autre mots #ParisAttacks]*

Expressing feelings such as shock, horror and astonishment existed in the sample. As in the example above, the only purpose is to express the tweeter's own emotion and wordlessness.

*I'm really scared #WarInFrance #ParisAttacks*

*[J'ai vraiment peur 😱 #GuerreEnFrance #ParisAttacks]*

Tweets containing emotions of fear were also visible within the sample. In these tweets the tweeter does not expect any response but has a need to express his/her feeling.

The two last examples below represent tweets that contain expressions of solidarity and sympathy. These types of tweets were popular within the theme of 'Talking cure and expression of solidarity'. In these tweets, the purpose is to express support to the victims, their loved ones and the people in France, and that the Paris attack is in the mind of the tweeter. In some of the tweets, the Parisians were encouraged to stay strong and resist the power of terrorism. #PrayForParis was a commonly used hashtag in these tweets.

*#ParisAttacks Stay Strong Citizens of France! Know that the entire world is with you all and praying for those lost!!!*

*Our thoughts and prayers go out to the people and families affected in the Paris attacks.  
#PrayForParis*

The examples above provide an extensive view of the types of tweets this theme consisted of. In this theme, the number of French language tweets was higher compared to other themes. This refers to the fact that tweeters who expressed solidarity or personal feelings were French speaking. This is logical as the feeling of closeness of the events and impact that the attacks have are most likely stronger for people who are for instance originally from France, who are interested in France and French language or have visited France. Social media is an arena for public mourning as has been shown for instance when the school shootings have been studied. It helps both the people who were involved in the crisis as well



as bystanders to make sense of the tragedy and participate in collective mourning.<sup>109</sup> This is true also in this case where tweets that shared personal feelings, or emotions were typical. Also tweets that showed expressions of solidarity, or shared information about how solidarity was expressed globally were common.

**Looking for reasons or motives** was the fourth largest theme within the sample of tweets. These tweets were mainly asking questions of why this attack did happen, what were the reasons for it, and what could have been the possible motives of the terrorists. The tweets from this theme contained a lot of opinion-related tweets, and many of the tweets were asking questions. These tweets represented eight percent of the sample. Below are presented representative examples of the tweets of this category.

*Paris attacks: closing migration routes into France won't stop terrorism – resisting xenophobia might*

*Will politicians finally admit that the Paris attacks had something to do with Islam?*

*If there wasn't Islam in the world, people would have found other excuses to kill each other  
#ParisAttacks #Lebanon #Tunisie*

*[S'il n'y avait pas eu d'islam dans le monde, les gens auraient trouvé d'autres prétextes pour s'entretuer #ParisAttacks #Lebanon #Tunisie]*

Tweets that share opinions on the solutions how to prevent terrorist attacks or fight against terrorism were common in the sample. The opinions were either more critical towards immigration, Muslims and religion by promoting more conservative values, or looking for the solutions from more liberal and inclusive options.

Also tweets that shared insights on the motives and objectives that the terrorists might have were popular. One reason for sharing these types of tweets may be to encourage people to resist the terrorists' aims and continue the normal life. One example of such a tweet is presented below.

*This is the biggest objective of terrorist attacks. To create fear #ParisAttacks*

---

<sup>109</sup> Hakala 2012, 267.

The examples presented above illustrate how motives, reasons and solutions were handled in Twitter early after the terrorist attack. Religion was widely present in this category; people expressed their opinions on religion's role as a motive or reason for conducting such a terrorist attack. Tweets in this theme were widely polarized as part of them claimed that the religion is the reason for terrorism as the other part stated that Islam should not be blamed for terrorism. How religion is portrayed in the tweets will be discussed more thoroughly in the following chapter 5.

Other themes that were present within the sample were tweets of people sharing their personal experiences of the event, called for taking action, or wanted to underline that most of the attacks do not happen in the Western world. These themes appeared repeatedly but represented smaller share of the sample. The tweets that were **sharing personal experiences** represented only five percent of the sample. These tweets could have been considered to be part of the information-sharing category but was coded separately as the content of information was specific (personal experiences) by mostly sharing the first-hand-experiences of the attack and these types of tweets repeatedly appeared within the sample. This theme, however, contributes to fulfilling the need for gaining information and understanding what has happened. Most of these tweets were not from the people who actually experienced the attack on the spot but shared other people's personal first-hand experiences. The below presented tweets are representatives of this category.

*Here's one woman's horrific first-hand #account of the Paris attacks inside the Bataclan*

The above tweet had an URL link after the tweet. It shared a woman's personal experiences during the terrorist attack that happened in the Bataclan concert hall.

*Woman who survived Paris terror attack by pretending to be dead shares harrowing account of her experience*

In the above tweet, the tweeter shares personal experience of someone who was a victim of the Paris terror attacks. It also provides information how the victim survived from the attack and shares her personal experiences. This tweet also had a URL link to the victim's own social media account.

*Two #Nottingham students escaped #ParisAttacks unharmed and talk of the experience*

This tweet is very similar to the above presented two tweets. Tweets that shared information and experiences of the eye witnesses were popular within this category. Most of these types of tweets included URL link sharing content of another person's experiences. So, the tweets that contained the tweeter's own, personal first-hand experience were scarce, but the few tweets with the personal experiences were widely shared by other users.

*It felt like scenes from a war Paris doctor says after #ParisAttacks*

Tweets containing information of the people's personal experiences of the consequences of the attack were also common within the sample. Tweeters shared their own experiences of the terrorist attack or its consequences.

Tweets in which there was a **call to action** also repeatedly appeared within the sample, though representing a smaller share of four percent. These tweets had an active tone, but the content varied. Many of these tweets shared views on how people should react to the event. These tweets had an active tone, encouraging people to take action. Below are presented some examples of the tweets of this theme.

*We do not wait that the Nazis take action so have to do the same with them  
[On attendez pas que les Nazis passe a l'acte pour les arrêter donc maintenant faite pareil  
avec eux ! #ParisAttacks #Prayers4Paris]*

This tweet draws a parallel between the Nazis and the terrorists that conducted the Paris attacks. The tweeter states that as the Nazis were defeated, these terrorists should be defeated as well.

*#FranceUnderAttack #ParisAttacks #Paris #NarendraModi #IntoleranceDebate  
Don't promote terrorism by talking*

The tweeter underlines in the above presented example the strength of words. Here the hashtag for the then Indian Prime Minister Narendra Modi and #IntoleranceDebate probably refer to the debate that had been going on in India, where at that time actors, writers, academics and scientists have expressed concern over growing intolerance and the weak

response by the government.<sup>110</sup> The writer is drawing parallels between the attacks that happened in Paris and killings and other horrible events in India and linking them to rising intolerance and bigotry.

*#FACEBOOK #AVATARS DON'T HELP ANYTHING - SPREADING AWARENESS DOES  
#ParisAttacks #ParisFalseFlag*

This tweet is fairly similar to the previous one. The tweeter encourages people to spread awareness. These types of tweets were characteristic within this category. The tweets of this category calling to action shared tweeters' opinions on how people should react to the attacks or what actions they should take after such crisis. This can be considered to contribute to the tweeters' sense-making as the tweeter processes his/her own opinions or emotions on the reasons of the crisis by sharing own views on how to react.

There were also several tweets stating that most of the **terrorist attacks do not happen in the Western world**. Many of these tweets contained criticism on how much media attention the Paris terrorist attacks received compared to the media's interest towards the attacks that happen weekly in the less-privileged corners of the world. Criticism was very common. Some of the tweets criticised the Western media for giving so much space for the attacks that happen in a Western country compared to the media space that an attack for instance in Middle East or Africa gains. These types of tweets represented only two percent of the categorised sample yet repeatedly appeared. The below presented tweets were typical within this category.

*i guarantee if there wasn't an attack in Paris, that these people saying what about lebanon huh? wouldn't be saying anything about Lebanon*

The above tweet shares the tweeter's doubt that people would not care if a terrorist attack happened in Lebanon. The tweeter believes that people would not be talking about a terrorist attack if it had not taken place in Paris.

*Syrian Refugee Puts Paris Attacks Into Perspective In One Simple Sentence*

---

<sup>110</sup> Biswas 2015.

The tweet asks people to put the Paris terrorist attack into perspective. The tweeter refers to the situation of the Syrian refugees and encourages to compare the situation in Paris to the situation of the Syrian refugees.

*Not taking anything away from the tragedy, but... It's only #terrorism when it's close 2 home.  
#ParisAttacks #think*

In the above presented tweet, the tweeter challenges the reader to think what is considered as terrorism. He/she claims that terrorism is only terrorism when it happens close to your home; if a terrorist attack happens far away, it is not considered as terrorism, according to the tweeter. In the beginning of the tweet, the tweeter however, claims that he/she does not want to discount the tragedy that happened in Paris.

*Beirut, Also the Site of Deadly Attacks, Feels Forgotten: A global outpouring of grief followed the Paris assassination...*

Similar types of tweets were very common within this category. The tweeter reminds about the attack that has happened in Beirut and claims that it is forgotten. In this category, hashtags were used to underline the lack of attention to terrorist attacks that happened in other parts of the world. For instance #prayforsyria or #paryforlibanon were used in some tweets to take a stand.

There was also several tweets that contained only the attack-related hashtags with no other content, totalling to three percent of the sample. The motive for this could be to express solidarity and, or contribute to information sharing by sharing a hashtag common for an event. People tend to find out what has happened if a certain hashtag is suddenly shared in different social media channels and starts appearing to people's social media news feed. People want to know what the hashtag stands for. If a hashtag is, for instance, to express solidarity to the victims of a terrorist attack, people tend to share the same hashtag to his/her own follower.

## 5. The concept of religion portrayed in Twitter

### *5.1 Overview of the religion-related data*

The previous chapter provides a good understanding of the different purposes for which Twitter was used during and soon after the terrorist attacks in Paris, and what themes and contents were widely shared. In this chapter the focus is on how religion is portrayed in the tweets after the terrorist attacks conducted in the name of Islam. Religion plays a significant role in this research as it is considered to be the one major motivation for ISIS to conduct the terrorist attacks. Religion is considered to be one sense-making theme while people are looking for reasons for the terrorist attacks and terrorism. The chapter concentrates on investigating how religion is part of the sense-making and this will be approached by researching the religion-related tweets. As explained in chapter 3.2, the sample was derived from the data by using “religion”, “Islam” and “Muslim” as keywords.

Religion was not a widely tweeted topic in the early reactions after the Paris terrorist attacks. Only three percent of the data (excluding retweets) included one of the above-mentioned three keywords. It is good to acknowledge, however, that the search for the religion-related tweets is not comprehensive, as there might be tweets that handled religion but did not contain any of the three keywords. For the purposes of this thesis, I took a random sample of 300 tweets that contained at least one of the above-mentioned keywords. The sample selection process was described more thoroughly in chapter 3.2.

With the sample of 300 religion-related tweets, a pilot coding was conducted, and based on that, a codebook was created. The codebook differed to some extent from the one formed for the general analysis of the tweets presented in chapter 4. The tweets were manually coded to different categories. The focus was on the purpose of a tweet, the topic or theme of a tweet, whether a tweet created confrontation or consensus, the URL-link inclusion, and the link destination.

In table 2, the categories and different codes used for analysing the tweets with religious features are presented.

<b>Category</b>	<b>Code</b>
Purpose	Information-related Opinion-related Emotion-related
Topic / Sense-making theme	Don't blame Muslims - it's not about religion Muslims condemning the attack It is about religion / Muslims are accountable for the attack Details of the attack Protests against Muslims / Muslims fear the revenge Looking for reasons / solutions
Confrontation versus peace	Confrontation Neutral Peace Unclear
Link inclusion	Yes No
Link destination	News media Social media Another website (opinion, gossip, personal websites, blogs)

Table 2: Coding categories for the religion-related tweets

Most of the religion-related tweets contained links to other sites in the internet. In total 71 percent of the tweets contained URL-link, being little bit less compared to the share in the general sample (79 percent) presented in chapter 4. The working URL-links led to different social media channels representing 22 percent of the tweets with links, to the news websites and other websites (such as opinion-related sites, blogs etc) both with 20 percent shares of URL-links. The role of news websites was significantly lower compared to the link destinations of the general sample (43 percent of the URL-links). When the interactional nature of the tweets was looked at, 21 percent of the religion-related tweets included @-sign,

so was directed to someone. This is five percentage points higher compared to the general sample of tweets.

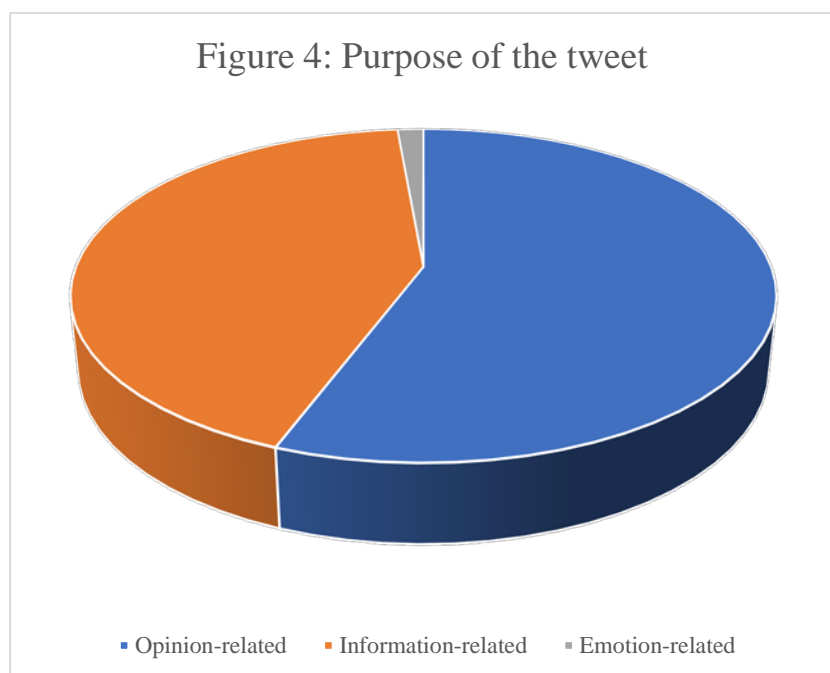
## 5.2 When it comes to religion, opinions are shared

In the sample of the tweets including one of the following keywords “religion”, “Islam” or “Muslim”, the coding process started by looking into the purpose of each tweet. Three different purposes that repeatedly appeared were identified: sharing information, sharing opinions and expressing feelings. Tweets that consisted of fact-based information such as details of the attacks were coded to the information-related category. All tweets that included the tweeter’s personal views or opinions fell into the opinion-related category. The emotion-related category included tweets in which the tweeter’s feelings or emotions were explicitly expressed.

Figure 4 visualises the shares of information-, opinion-, and emotion-related tweets. Fifty-three

percent of the religion-related tweets share opinions or personal views. Information-related tweets represent the second largest category with 41 percent share. Sharing emotions play a smaller role within the tweets, with only 4 percent share of the sample.

If these results are compared to the findings from the sample of all tweets presented in chapter 4.1, the opinion-related tweets play significantly more crucial role within the sample of religion-related tweets whereas within the general sample the information-related tweets are extensively represented with 63 percent. This means that when it comes to religion, opinions are widely shared, whereas when the sample is not limited with any specific keywords the content is more information-oriented.

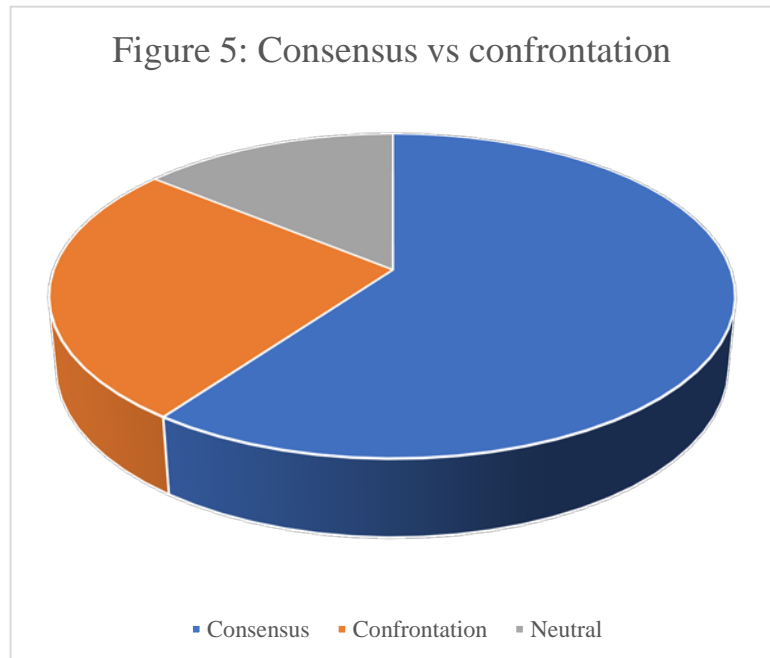




### 5.3 The aim is to gain consensus rather than cause confrontation

Terrorism and the potential motivations behind terrorist attacks often raise emotions and strong opinions. The reasons for terrorism and the recent attacks may often be searched from religion, Islam or Muslims. This was also the case in the Paris attacks as these terrorists belonged to the Belgium branch of the terrorist organisation ISIS. Due to this, I found it interesting and important to look at a tweet's confrontational nature. I wanted research whether a tweet was hostile or aggressive or caused confrontation in anyway, or whether a tweeter aimed to consensus and peaceful coexistence. I coded the religion-related tweets to three categories: tweets that caused confrontation, tweets that were more or less neutral, and tweets that aimed to promote consensus and peace.

In the figure 5, the shares of the tweets' consensus, neutral or confrontation promoting nature are presented. From the tweets that were able to be coded according to the above-mentioned three categories, 60 percent promoted consensus whereas 26 percent created confrontation. Fourteen percent of the tweets were neutral. Due to the ambiguous



nature of some of the tweets, the share of tweets that were not able to be coded to any of the categories represented 26 percent of the sample.

The tweets that were considered to promote consensus were mostly about Muslims condemning the attack, promoting peaceful coexistence and avoiding stigmatizing all Muslims to terrorists. There were also several tweets stating that Islam is not a violent religion and that religion should not be blamed of the attack. Below are some examples illustrating the tweets that were coded to "consensus" category:

*Irrespect of everything I condemn Paris attacks Because I am a muslim and we are the victims of terrorism.*

The tweeter says that even though he/she is a Muslim, he/she condemns the Paris attacks. The tweeter states that also Muslims are victims of terrorism.

*Terrorism has no religion!! These terrorists are not Muslims! #ParisAttacks*

This tweeter argues that terrorism has nothing to do with religion – terrorism does not have religion. The tweeter also states that the terrorists conducting the Paris terrorist attacks are not Muslims.

*Muslims are muslims, terrorist is absolutely terrorist. Islam has nothing to do w/ ISIS nor with the attack in Paris. So stop blaming islam.*

This tweeter underlines the difference between Muslims and terrorists. He/she claims that Islam has nothing to do with ISIS or the terrorist attacks in Paris. The tweeter asks people to stop blaming Islam for what has happened. These two examples presented above very clearly underline the difference between a terrorist and a Muslim, and between terrorism and Islam. These types of tweets were very popular within the sample. Also tweets where Muslims were condemning the terrorist attack and terrorism in general were commonly shared.

Tweets that were considered to create “confrontation” shared variety of opinions and views. These tweets presented one-fourth of the religion-related tweets and the share was significantly lower compared to the share of tweets that promoted consensus. Many of these tweets claimed that Muslims should be kept accountable for terrorism and requested punishment for them. Below are some examples showcasing how confrontation was present within the sample:

*all Muslims should be killed #ParisShooting*

In the above presented tweet, the tweeter claims that all Muslims should be killed. He/she clearly blames Muslims of the Paris terrorist attack and thinks that right punishment for conducting the attacks would be to kill all Muslims.

*Looks like #Paris may need a few dozen more #ParisAttacks before they decide to fix the problem. #Slow #Special #MuslimsAreTerrorists*

The tweeter criticizes that Paris needs to have more terrorist attacks before it learns from its mistakes and takes action. The hashtag #MuslimsAreTerrorists reveals the tweeters stance when it comes to Muslims.

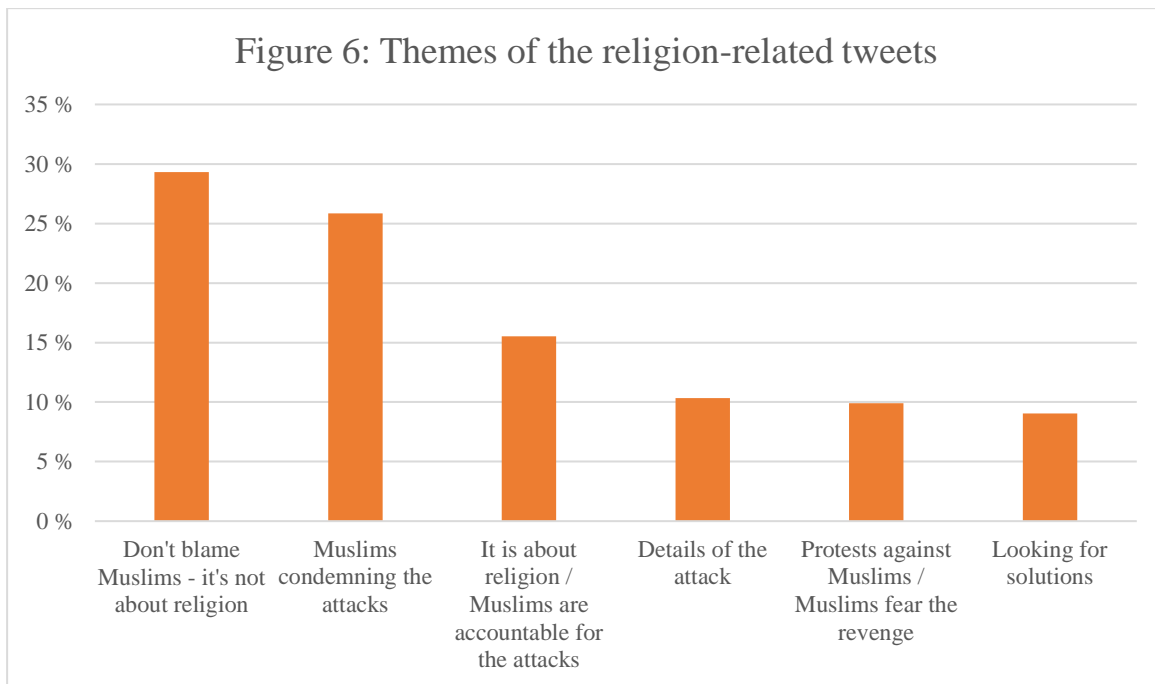
These tweets that took a clear stand included strong opinions and views. In many cases it did not remain unclear, what the tweeter's position on the reason for these attacks was. It was widely communicated that Muslims are not to be blamed for the attacks. Many of these tweeters were Muslims themselves. However, it is notable that 26% of the tweets were ready to say that Islam as a religion and Muslims in general were responsible for the attacks, instead of individual people working in a terrorist network.

#### ***5.4 Analysis of the concept of religion in the tweets***

In order to understand how religion was portrayed in Twitter after the Paris terrorist attacks, the content of the tweets had to be researched thoroughly. To find out in which light religion was seen in Twitter, I conducted a sample coding to gain understanding of the themes that were repeatedly appearing within the religion-related tweets. After having a sense of the common themes, a sample of 300 tweets was close-read and analysed. A codebook was created and the sample was coded according to six themes or topics that rose:

- Don't blame Muslims – it's not about religion
- Muslims condemning the attacks
- It's about the religion – Muslims are accountable of the attacks
- Details of the attacks
- Protests against the Muslims / Muslims fear the revenge
- Looking for reasons or solutions

Figure 6 presents the popularity and the shares of these themes. The shares presented here are from the sample of religion-related tweets. Tweets that could not be coded to any of the above-mentioned categories represented 18 percent of the total sample of religion-related tweets. Those tweets have been removed from figure 6 and the analysis that follows.



When the themes from the religion-related tweets are looked at, the most common topic was **Don't blame Muslims – it's not about religion**. In total 29 percent of the tweets stated that we should not be keep Muslims accountable of the terrorist attacks or that the terrorist attacks have nothing to do with religion. Majority of these tweets contained tweeters' own opinions and views. The below examples illustrate the variety of tweets within this theme. These examples have been chosen based on representation; similar kinds of tweets were common within the sample.

*Muslims are 'no more to blame for Paris than you are': Open letter goes viral following terror attacks*

The above tweet is trying to make the reader realize that Muslims are no more responsible of the attacks than anyone else. The tweeter aims to make a connection between 'Muslim' and 'you'. By sharing information about how 'open letter goes viral', the tweeter is both sharing information and showing that this type of thinking is supported by many.

*#everydayMuslims were not responsible for #ParisAttacks*

The aim of the tweet is to distinguish the terrorists from the majority of Muslims. The hashtag #everydayMuslim is making this difference between terrorists and Muslims in

general. From the tweet, it can however be seen that the tweeter realizes that the terrorists who committed the attacks were Muslims.

Tweets claiming that religion is not the reason for the terrorist attacks were numerous within this theme. Below are few examples of such tweets:

*Islam has been around for 1400 years. ISIS for 10. Think about it.*

This tweet points out that Islam has long roots and history whereas ISIS has emerged only recently. Therefore Islam cannot be the reason for ISIS.

*These monsters have no religions.*

*[Des monstres n'ont aucunes religions.]*

In this tweet the tweeter is calling the terrorists monsters, distinguishing them from general population. The tweeter also states that they [the monsters] do not have religion. This can be interpreted so that even if the terrorists commit the attacks in the name of Islam, the tweeter thinks that they do not really have any religion as no religion approves such extreme actions.

Most of the tweets that had a call to action were asking people to stop blaming Muslims. These types of tweets were numerous within the sample. Below are some tweets showcasing these types of tweets:

*Stop blame the Muslims about what happened in #paris because we are also suffering from Terrorists! We r equal!*

This tweet stress the equality stating that we are all equal. The Muslims are suffering from terrorism as anyone else. Muslims are also affected by the terrorist attacks, so they should not be blamed for actions that they are not responsible of. The tweet has an active tone; it is directed to the reader saying you, 'Stop blame..'.

*We don't blame Christians for the KKK, we don't blame Germans for Hitler, so DON'T blame Muslims for ISIS*

This tweet associates the Christians to KKK<sup>111</sup> and Germans to Hitler. The point is to make the reader understand that all Christians are not kept accountable for the actions that KKK committed or ideologies it represented, and neither are Germans responsible for the actions Hitler took, or the ideologies he believed in. The purpose is to underline that with the same logic, Muslims should not be considered accountable for ISIS. The tweeter is directing his/her message to the reader, stating that you ‘DON’T blame Muslims for ISIS’.

Heroic stories about Muslims were also popular. The purpose of these tweets was to emphasize that Muslims are good people and that they are suffering from terrorism as anyone else.

*The #Muslim security guard who stopped a suicide bomber entering the football stadium in Paris #hero #ParisAttacks*

In this tweet, the role of a Muslim security guard is emphasized. This #hero can be interpreted to have saved many Parisians’ lives by stopping a suicide bomber entering the football stadium. The fact that this guard was a Muslim is emphasized by using the hashtag #Muslim. The reason for using this hashtag may also be to share positive, heroic stories about Muslims during the crisis and to underline the fact that Muslims are not to be blamed for the attacks.

*Group of Muslims distributing food to the homeless were killed in #ParisAttacks #terrorismhasnoreligion*

The above tweet underlines firstly that Muslims are good willing people as they are distributing food to the homeless, and that these people are also victims of terrorism as they were killed in Paris attacks. The use of the #terrorismhasnoreligion refers to the tweeter’s willingness to state that religion is not the reason for terrorism.

The above examples and analysis illustrate that four topics could be identified within this theme: Muslims are not responsible of the attack, religion has nothing to do with terrorism, tweets demanding to stop blaming Muslims (with an active tone), and underlining that Muslims are good people, even heroes who are saving lives. Hashtags were widely used

---

<sup>111</sup> Ku Klux Klan, the US hate organizations that employed terror in pursuit of their agenda.

in these tweets, #terrorismhasnoreligion and #MuslimsAreNotTerrorists being the most common ones.

The second most popular theme was **Muslims condemning the attacks**. These tweets shared information, insights and views on how Muslims, either individuals or Muslims as a community, are condemning the terrorist attacks and terrorism in general. These tweets consisted of one-fourth of the religion-related tweets (26 percent). The use of hashtags were also common, especially #notinmyname. Below are some examples illustrating this theme.

*My name is Sher Ahmed Sheikh and I am a Muslim. I, along with 1.5 Billion Muslims, condemn Paris Attacks.*

This tweet can be interpreted to have two aims. The tweeter provides his name in the tweet to give a Muslim an identity; “Muslims” are not just an anonymous group of people who all are terrorists. The tweeter underlines that he as a real individual who has a name and identity and who is a Muslim, condemns the Paris attacks, and that he is not the only Muslim doing so. One and a half billion other Muslims think in a similar way too.

*Irrespect of everything I condemn Paris attacks Because I am a muslim and we are the victims of terrorism.*

In this sample the tweeter emphasizes that also Muslims suffer from the terrorist attacks. Muslims are victims of terrorism in a similar way as other people, and they do not accept terrorism. These types of tweets were very common within the sample.

*Muslim leaders from around the world have condemned the Paris attacks*

Tweets that shared information of the statements of Muslim leaders and the heads of Muslim communities were also common. Many of these tweets shared video footage on different Muslim leaders speaking to their followers. The message in these videos and tweets in general was clear: the Muslim leaders and the community are condemning the terrorist attacks, and that the way the terrorists are interpreting Islam is wrong.

In addition to the tweets supporting Muslims and rejecting their role in the terrorist attacks, or those that were tweeted by the Muslims who condemned the attacks, there were also contradictory voices on Twitter. A theme that repeatedly appeared from the sample was

representing tweets claiming that **Muslims should be kept accountable of the Paris terrorist attack and that religion is the reason for terrorism**. In total 16 percent of the religion-related tweets stated that religion is the reason for terrorism or that Muslims are responsible of the Paris attacks. Below are some example-tweets illustrating the variation of this topic. These tweets differed to some extent on their content; the topic was handled in many different ways.

*“Terrorism has no religion” BUT why is that 99% of the time there is a terrorist attack “Allahu Akbar” is mentioned? #paris #PrayForFrance*

The tone of this tweet is critical. The tweeter acknowledges that many people do not think that terrorism is about religion. The line, “Terrorism has no religion”, was used by many within the sample of tweets. However, the tweeter challenges this view by asking that if terrorism is has nothing to do with religion, why in most of the attacks, the terrorist says “Allahu Akbar” which is freely translated to “God is the greatest”. This phrase is related to the Islam pray. Therefore, it can be interpreted that the tweeter thinks that religion has something to do with terrorism.

*Everywhere MUSLIMS immigrate to, people have to arm themselves against them!  
#Trump2016 #CloseOurBorders #ParisAttacks*

In this tweet, Muslims are considered as a threat. The tweeter states that non-Muslims, should arm themselves against this threat. The use of hashtags clearly points out the tweeter’s stance towards immigration. The US presidential elections were held in 2016, the year after the Paris attacks happened. Donald Trump’s rhetoric on closing the borders was clearly supported by the tweeter.

*If your god or your religion teaches to kill, destroy and revenge, you better stay infidel.  
#ParisAttacks*

This tweet does not directly blame Muslims for terrorism. However, the message of the tweet can be interpreted to blame religion for the terrorism. As the tweet was posted at the time of Paris attacks and as the #ParisAttacks hashtag was used, based on the tweet it can be interpreted that the tweeter thinks that Islam is a religion which teaches to kill, destroy and revenge. Thus the role of religion is emphasized as a cause for terrorism.



*Barbarism is their normality #parisattacks #islam “#religion*

*[LA BARBARIE EST LEUR NORMALITÉ #PARISATTACKS #ISLAM #RELIGION]*

The above tweet is interesting as it is ambiguous. As the hashtag #islam is used in the tweet, it can be interpreted that by using the term “their”, the tweeter refers to either terrorists or Muslims. Even though this tweet does not explicitly blame religion for the terrorism, it can be interpreted to take that stance as the hashtags #Islam and #religion are attached to the tweet.

These examples illustrate well how religion is linked to the terrorist attacks within the sample. In many of the tweets religion, and more precisely Islam, was considered to be the root cause for terrorism, and Muslims were portrayed as enemies to be scared of. #MuslimsAreTerrorists was a popular hashtag within the tweets that fell into this theme.

The tweets that **shared information and details about the attack** were also common within the religion-related tweets. The share of the tweets with details of the event was however significantly smaller compared to the general sample presented in chapter 4, totaling to 10 percent. This is in line with the findings discussed earlier: the religion-related tweets contain more opinions than factual information. The purpose of these tweets was to spread information. Below are examples of the tweets to showcase this theme.

*Here’s What We Know About The Muslim Terrorist Attack In #Paris*

*Horrific! Muslim Terror Attack in Paris – Over 150 Dead, More Injured, Chaos Reigns*

The two tweets above share information about the attack. Interesting is, however, how the terms “Muslim” and “Terrorist Attack” are linked together. It is impossible to know whether this is done consciously or not. Nevertheless, the terrorist attacks and a Muslim are interconnected in these tweets.

*BBC News - Paris attacks: Police seek dangerous Salah Abdeslam #TerrorismHasNoReligion*

Many of the tweets that shared information were neutral in nature as the one presented above. It shares the news about what is happening, and from the hashtag the tweeter takes the stance.

Information and news about the **protests against Muslims and on how the Muslims fear the revenge** and consequences of the Paris terrorist attacks were popularly shared in Twitter. These tweets represented 10 percent of the sample. Below are some representative examples of these kinds of tweets:

*French Muslims fear reprisals in wake of Paris terrorist attacks*

*French Muslims fear repercussions from Paris attacks: The shocking wave of violence on Friday #ParisAttacks*

The tweets on Muslims' fear of the violence were common. Majority of these tweets were neutral in a sense that they did not contain Muslims' strong personal views on the topic.

*French citizens riot, protest against Muslims after Paris attacks #Paris #Terror #IS #Islam*

The example above represents tweets that shared information on riots and protests against Muslims after the Paris terrorist attacks. Many of the tweets shared information on the hardening attitudes towards the Muslims. As these tweets contributed to fulfilling the informational needs.

The sixth theme that arose from the sample of religion-related tweets was the one concentrating on **looking for reasons** or solutions for the terrorist attack. These tweets were popular and repeatedly appeared, totaling nine percent share of the sample of religion-related tweets. In this category the content of the tweets varied a lot, and in many cases political criticism was expressed. Below are examples to showcase the types of tweets that were representatives of this theme.

*Cultural separation and marginalization of Muslims is a problem. It's not surprising they go radical. #ParisAttacks*

This tweet looks for the reason for terrorism from cultural separation and marginalization. The tweeter sees radicalization as a logical result, if Muslims are not integrated into the society.

*To resolve a problem, you must first admit the problem.*

*#ReligionPoisonsEverything #ParisAttacks #Secular #Atheist*

The tweeter suggests in the above tweet that the problem is not admitted. To be able to solve the problem, it first needs to be identified and admitted. The use of hashtags reveals what is considered as the problem in this case according to the tweeter. Hashtags #ReligionPoisonsEverything, #Secular and #Atheist refer that the tweeter does not believe in any religion and thinks that religion is the reason for terrorism and the initial problem.

*Merkel says she will “fight terror”. But Germany will still allow unlimited Muslim immigration forever. #ParisAttacks #merkeloutnow*

Many of the tweets looked for reasons for terrorism from political decisions in general, and immigration policies in particular. The tone of these tweets was often critical. Above is an example of such a tweet, where German chancellor Angela Merkel and her liberal immigration policy following the migrant crisis of late 2010's is criticised. Using the hashtag #merkeloutnow emphasizes the tweeter's discontent towards Merkel. Using hashtags were very common among the tweets and they provided vital information on the stance of the tweeter and helped understanding the content of the tweet.

As this chapter has shown, the religion-related tweets contained a lot of opinions and the content and stance of these tweets varied significantly. These tweets can, however, be considered to be part of the sense-making process, as they either tried to look for an answer to the question “Why did this happen?” and “Who to blame?”, or contributed to the information needs that are characteristic for sense-making in the early phases of a crisis. The emphasis on the need for information discussed in the previous chapter 4 explains the rather small share of religion-related tweets.

## **6. The sense-making process in Twitter in the early phases after the Paris attacks**

In chapters 4 and 5, the findings from the data have been presented. A large amount of data was coded and analysed in order to get an understanding of how Paris terrorist attacks were handled in Twitter, what themes rose from the tweets, what were the purposes for tweeting, and what kind of role religion played in making sense of such crisis in Twitter. This chapter focuses on providing the reasons and further analysing the findings from the data sample presented in the earlier chapters.

This research has shown that Twitter is used in multiple ways during crisis. The range of uses varies depending on the scale and stage of the event. It may be used to seek help, to provide information and assistance, to evaluate the situation and to share political statements and critique, or to express emotions, mourn and show support.<sup>112</sup> The analysis of the data in this research proves that Twitter provides its users a platform to share information and to interact during and after a crisis. People use social media channels for their personal needs. Therefore individuals' role in the interaction, content creation and sharing of this content is essential. This has been verified also by other researchers.<sup>113</sup> Twitter is above all a communication channel created for interactions between people.

During and after the Paris terrorist attacks, Twitter was mostly used for information and opinion sharing and to express feelings. This research validates that Twitter is an important platform in the sense-making processes such as acquiring information, understanding what has happened and why, and contributing to discussions by sharing own views and enabling conversations on the opposite viewpoints. It is also essential tool for expressing emotions, gaining feeling of togetherness and showing solidarity. The need to acquire information about the details of the attacks was clear within this sample as 63 percent of the tweets shared information. This is very typical as the need for information is largest in the early phases of crisis. Getting an understanding of what has happened is crucial in the sense-making process as "Information is a human tool to make sense of the reality assumed to be both chaotic and orderly.", as Dervin puts it.<sup>114</sup>

The high share of tweets that contained URL-links can also be explained by the need for sharing information and gaining an understanding of the event. The fact that most of the

---

<sup>112</sup> Shaw et al. 2013, 25.

<sup>113</sup> Laaksonen et al. 2013, 9.

<sup>114</sup> Dervin 2003, 327–328.

URL-links led to different news media indicates that there is a need for getting accurate and trustworthy information about what has happened. On the other hand, social media was also popular link destination, which shows that there was a need for sharing personal views, opinions and experiences. The content in social media was more conversational, and the tweeters' personal views were often explicit.

The share of tweets that expressed the tweeters' opinions totalled to 27 percent. According to Heverin and Zach, information sharing dominates the early response phase of violent crisis in micro-blogging platforms, whereas opinion sharing increases as the time passes.<sup>115</sup> The timeframe from which the data for this research was collected was four days starting from the time the attacks happened. This largely explains the rather small share of opinion-related tweets. If the timeframe was longer, or if this study had concentrated on the reactions at the recovery phase, the share of opinions most likely would have been larger.

Previous research argues that emotions, attitudes, feelings and instincts are vital elements that are used in the sense-making.<sup>116</sup> Sense-making is a rather long process, where people interact and in which discussions and reactions are central. Social media is an arena for public mourning, as has been shown for instance when school shootings have been studied. It helps both the people who were involved in the crisis, as well as bystanders, to make sense of the tragedy and participate in collective mourning.<sup>117</sup> In this research, sharing emotions was the third most popular purpose for tweeting, even though it played a smaller role, representing only three percent of the tweets. The rather small share of tweets containing expression of emotions can also be explained by the domination of information-related tweets in the early stages after a crisis, and the need to find facts to understand what has happened. The need for expressing emotions is usually emphasized only after the emergency phase has passed. French was commonly used as a language in the tweets that expressed emotions. This is because most of the emotion-related tweets expressed solidarity to the victims of the Paris attacks, and many who had a strong emotional connection to the attacks were French speaking.

In the early phases after the Paris terrorist attacks, the tweets covered a number of different themes. Heverin and Zach claim that talking cure tweets do not help in collective sense making, as the information-related tweets do, but these tweets provide people means to express their inner thoughts and feelings<sup>118</sup>. Expressions of solidarity was one of the most

---

<sup>115</sup> Heverin & Zach 2012, 34.

<sup>116</sup> Dervin & Frenette 2003, 239.

<sup>117</sup> Hakala 2012, 267.

<sup>118</sup> Heverin & Zach 2011, 43.

repeatedly appearing topic in addition to sharing facts on the event. One reason for the big share of the tweets expressing solidarity to the victims can be explained by the target of these terrorist attacks. It is easy to sympathise with the victims in Paris, as many people have visited the city and may know someone from there. A crisis such as a terrorist attack has a lot bigger influence on a person, if it happens closer to the person's home. People living in Paris are similar to people living in any Western city, and that is why the feeling that this could have happened to any of us is common and encourages show sympathy and solidarity by tweeting. French language was also more common within this theme, compared to for instance the tweets that purely shared information. This indicates that people who expressed solidarity were French speaking and wanted to tweet in French. It is, however, important to keep in mind that due to the data selection criteria such as language, and the selection of hashtags, the data content was largely westernized.

Tweets in which the tweeter was looking for reasons, or motives were also common within the sample. These tweets contained opinions and indicate that the reasons and the terrorists' motivations for the attacks were unclear. People provided their own views on why the terrorist attacks happened. Criticism was common but there were also several tweets explaining that terrorists want confrontation, and that is why people should promote cohesion and stay together. Religion was portrayed as one reason for terrorism in several tweets within this theme.

In addition to researching the sense-making themes and the purposes of the use of Twitter after Paris terrorist attacks, the aim of this thesis was to investigate in which light religion was portrayed within the tweets, as this had not been done in previous research.. Before starting this research, my personal hypothesis was that religion would play a significant role within the tweets, and that these tweets would be opinion-charged. It is interesting and somewhat surprising to find out how small share the religion-related tweets consisted of the whole database, totalling only to three percent. As discussed before in this thesis, the need for factual information was essential in making sense of the Paris attacks in the early phases. This can be considered to be one of the reasons also for the small share of opinion-related tweets concerning religion.

When the religion-related tweets were investigated separately, opinions were widely represented. From the sample of religion-related tweets, 53 percent contained opinions. This share was significantly higher compared to the share of opinions in the general sample (27 percent). This proves that when it comes to religion in the terrorist attacks, people have views and opinions. Religion was one theme in the sense-making process, and people were trying to

find reasons for the terrorist attacks in religion, Muslims and Islam. Many times religion is also a personal issue that may include strong insights and opinions. The large share of opinions indicates that as there is little factual information on the role of religion to these terrorist attacks, people share their own views and opinions. This can be seen in that most of the links included in the religion-related tweets led to different social media channels, instead of news sites.

From the religion-related tweets, I found it interesting to look at the tone of the tweets. I coded the tweets according to whether a tweet promoted consensus or confrontation. Based on the sample, 60 percent of the tweets promoted consensus. This was relatively high share compared to 26 percent that promoted confrontation. Religion related tweets handled somewhat different themes compared to the general sample. Almost half of the religion-related tweets (43 percent in total) shared views on how Muslims should not be blamed of the Paris terrorist attack, how terrorism is not about religion, or that Muslims, either individuals, or Muslims as a community, are condemning the attacks and terrorism in general. The need for Muslims to take a clear stance to underline that they are also victims and that they are condemning the terrorist attacks may be result of the harshening political atmosphere and the rise of populist parties promoting stricter immigrant policies and xenophobia in Europe and around the Western world. Many of the Muslim tweeters were afraid of the consequences the attack might have on their lives. And if we look at the political situation and general atmosphere today, five years after these terrorist attacks, their fear has been somewhat justifiable. The populist parties have gained more popularity throughout Europe, it seems that the polarization has grown and the distinction between “us” and “them” is stronger than before.

Tweeters who were blaming Muslims of the terrorist attacks represented one-fourth of the sample, which is quite significant if we think that most of the consensus-promoting tweeters were Muslims. If the tweets coming from the Muslims themselves has been eliminated from the sample, the share of confrontational tweets would have resulted more substantial and the segregation between Muslims and other people would have been even stronger.

Using hashtags in a tweet is a way to express broader involvement during a crisis. The use of hashtags during a crisis, such as a terrorist attack, has been common as tweeters often want to contribute to a wider discussion on the topic, or express solidarity to the victims. During the Paris terrorist attacks hashtags were widely used, with certain hashtags emerging to be the ones that characterised these exact attacks. The data for this research was selected

based on specific hashtags, to get the tweets that were considered most likely to handle the Paris terrorist attacks, and be relevant for this research. The hashtag selection naturally had an impact on the content of the data. If different kinds of hashtags had been chosen, the data would have been different. For instance hashtags such as #PrayForParis may have resulted in larger share of tweets expressing solidarity. In addition, the selection the language used in the hashtags for collecting the data certainly defined the content of the tweets as well.

In the religion-related tweets it was common that the hashtag revealed the tweeter's opinions even if the tweet itself was neutral. Thus hashtags can also be used to take a stance and express a viewpoint. By using certain hashtags, such as for instance #terrorismhasnoreligion, people contribute to the same-minded discussion. Tweeters that included #terrorismhasnoreligion most likely agree that religion is not the reason for terrorism. Thus following only these discussions by the like-minded people may result that a person may forget that there are also people with different viewpoints as people tend to read social media content that is aligned with their own views and look for opinions that strengthen their own interpretations. This may result people to live in their own bubbles and enhance the polarization further.

Previous research has emphasised the interactional nature of sense-making process. Rimé et al. claim that after experiencing an emotive event, people pledge interpersonal behaviours in which discussions and reactions are central.<sup>119</sup> Heverin and Zach agree with this by emphasizing the importance of communication and interaction in bridging the cognitive gaps and making sense of a crisis.<sup>120</sup> In this research, however, tweets indicating directed interaction with other users was limited. Only 16 percent of the tweets of the general sample were targeted to someone, that is to say included @-sign. It is, however, notable that even though a tweet did not contain @-sign, it has interactional features. A person that sends a tweet, interacts with other people even though the tweet did not have the @-sign. @-sign refers mostly to the direct conversation between two or more users. The reason for this rather low share of conversational tweets can be explained again by the high demand for information. Most of the tweets contained information-related content and shared information conducted by others, mostly news agencies. The aim of these types of tweets was to spread information as widely as possible, and therefore they were not targeted to a specific person. In the case of religion-related tweets, 21 percent were directed to someone by including @-sign. This is five percentage points higher compared to the general sample of tweets and can be

---

<sup>119</sup> Rimé et al, 1991, 436.

<sup>120</sup> Heverin & Zach 2012, 36–37.



explained by the higher share of opinions, often including conversational content. If the time frame for the data collection had been longer, most likely the need for interaction and direct communication between individuals would have been more significant.

Using Twitter, people can mix the information and opinion, and thus, negotiate and reinterpret the meaning behind news events. Dervin and Fernette argue that these discourses and negotiations are vital for creating a collective understanding of the event.<sup>121</sup> I, however, argue based on this research, that in order get a collective understanding of the event, it is necessary that people agree on the basic facts on what has happened and why. This I find challenging in today's information-loaded world where people can find justifications and consolidations from internet for almost any ideas they might have. Internet has made the spread of biased views and alternative truths easier than ever, and this may reinforce people living in their like-minded bubbles and increase the polarization between different-minded people. Thus my point is that when it comes to collective understanding, it is ok to have alternative views of what a fact means but you cannot have alternative facts. And people often tend to have alternative facts especially on the reason for terrorism as this research and the data sample have also proven.

---

<sup>121</sup> Eriksson 2015.

## 7. Conclusion

This research investigated the way Twitter was used during the Paris terrorist attacks in 2015, and how people made sense of the event in the microblogging platform. Religion was a special focus of the research as the terrorist attacks were conducted in the name of Islam, and the hypothesis of the research was that religion would have a significant role in the sense-making process. Through the analysis presented in this research, we can better understand the communicative and information needs of both local and distant stakeholders during a crisis such as Paris terrorist attack.

Based on this research, Twitter was widely used during and after the Paris terrorist attacks to help make sense of the crisis mostly by gaining information, but also by sharing opinions and expressing emotions, support and care for others. The need for gaining information was, nevertheless, emphasized in the early phases after the crisis. Religion played a smaller role when the data sample as a whole was investigated. Based on this research it was essential for the tweeters to first ask what had happened. After gaining an understanding of the event, the question of why and what are the consequences appeared. This need for sharing and gaining factual information is typical in the early phases after crisis and therefore explains the rather small share of religion-related tweets.

The findings from this research are in line with earlier research, when it comes to the sense-making during the early reactions after crisis. Earlier research emphasises the significance of gaining actual and relevant information in the early phases after a crisis. The role of religion in the sense-making process after a crisis, such as a terrorist attack is scarcely researched, and the view on how religion is portrayed in social media after such crisis is brand new angle for research. This thesis contributes to that niche of research.

There were seven different themes that came to the fore when researching the content of the tweets. These were 1. Attack related information, 2. Reactions / consequences of the attack, 3. Talking cure / expression of solidarity, 4. Looking for reasons, 5. Sharing personal experiences, 6. Call for action, and 7. Most of the attack happen elsewhere. In addition many tweets contained only event-related hashtags. The first two themes dominated with 61 percent share of all tweets, thus the content was very much information-driven.

When the religion-related tweets were investigated, sharing opinions and personal views came to the fore. The themes differed to some extent from the general sample with six different themes standing out. These were 1. Don't blame Muslims – it's not about religion, 2.

Muslims condemning the attacks, 3. It's about the religion – Muslims are accountable of the attacks, 4. Details of the attacks, 5. Protests against the Muslims / Muslims fear the revenge, and 6. Looking for reasons or solutions. Here, the first two themes dominated the sample with 54 percent share, and results as the high share of consensus-promoting tweets. A substantial share of the tweets that promoted consensus were tweeted by Muslims themselves, who condemn the attacks or are afraid of the tense atmosphere that the attacks may cause. Tweeters who were blaming Muslims of the terrorist attacks represented one-fourth of the sample, which is quite significant. In order to be able to assess the general atmosphere and attitudes after the attacks, it is useful to separate the tweets posted by the Muslims. If we exclude these tweets from the sample, the share of tweets that caused confrontation grows significantly. This reveals that even though majority of sample promoted consensus, there was also significant share of people who blamed Muslims, Islam or religion of the attacks. These findings prove that religion was one essential theme in the sense-making process and reasons for the terrorist attacks were searched from the religion, Muslims and Islam.

After conducting a research, it is good to evaluate the work done with a critical eye. Twitter is widely used to communicate on channels where people share information, their thoughts, opinions, views, and interact and communicate with each other. It has become a popular communication channel also during crisis, as often the tweets are the first pieces of information available.<sup>122</sup> There are several aspects that need to be taken into account when social media content is analysed, and when conclusions are drawn from the material taken from Twitter, or social media in general. First, potential selection bias has to be considered.<sup>123</sup> This research limited the data according to specific hashtags and a timeframe. These hashtags do not by no means represent all discussions on Paris attacks. Also the rather short timeframe selected for this research limits the data focusing on the early reactions to the attack. In addition the language decision has an impact on the results of the study by making the study overly representative of Western and European tweeters, resulting in obvious bias towards Western culture. For this research, the sample size was selected according to the criteria of representation and repetitiveness. These two criteria were fulfilled, and the sample size was considered to be appropriate for the purposes of this thesis. In this research I coded and analysed the sample manually. I viewed and interpreted the tweets from my personal perspective, thus it is necessary to acknowledge the possibility of misunderstanding or misinterpreting some meanings of the tweets.

---

<sup>122</sup> Weller et al. 2014.

<sup>123</sup> Lin et al. 2017, 1596.

By taking into consideration all the above-mentioned limitations, I argue that this research has, nevertheless, provided interesting and valuable insights to the discussions on how Twitter is used during crisis such as a terrorist attack, how people make sense of such an event by using a micro-blogging tool, and what kind of role religion plays in the sense-making process on Twitter after terrorist attacks conducted in the name of Islam. This case study reinforces the findings from previous studies on people's need to get accurate information in the early phases after a crisis to make sense of the event, and provides new, insightful information on the role of religion in the sense-making process.

While thinking of the possibilities for future research, there are several topics that would be interesting fields of deeper research. Such topics could be for instance investigating what kind of impact people's location have on the content shared via social media. How individuals, who are in areas closer to the threat, use social media compared to those who are more distant? The findings from this research on the religion-related tweets that promoted consensus rather than conflict were fascinating. Investigating how longer timeframe of the sample could impact the results, and what kinds of tweets were sent in other languages could be interesting. Also taking longer time-period to collect data and separating tweets that are clearly tweeted by Muslims, and researching how religion is portrayed in these tweets sent by other people would be interesting and could provide insights of the general atmosphere. Also expanding the language selection to include for instance Arab language could give very different view on the topic. This research did not pay any attention to the comments of the tweets; concentrating on the conversations within Twitter by investigating the comments could provide deeper understanding of the sense-making process as well.

## Bibliography

- Alexander, Jeffrey C., Eyerman, Ron, Giesen, Bernard, Smelser, Neil J., Sztompka, Piotr. (2004). *Cultural Trauma and Collective Identity*. Berkeley, CA: University of California Press.
- Allan, Stuart & Thorsen, Einar (2009). *Citizen Journalism: Global Perspectives*. New York: Peter Lang.
- Amerson, Roxanne (2011). Making a Case for the Case Study Method. *Journal of Nursing Education*. 50(8), 427–428.
- Anderson, Benedict (1983). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Azzimonti, Marina, Fernandes, Marcos (2018) *Social Media Networks, Fake News, and Polarization*. NBER Working Paper Series, No. 24462.
- Bakshy, Eytan, Hofman, Jake, Mason, Winter, Watts, Dundanc (2011). *Everyone's an Influencer: Quantifying Influence on Twitter*. Michigan: Michigan Interactive & Social Computing.
- Bawer, Bruce (2006). *While Europe Slept; How Radical Islam Is Destroying the West From Within*. Random House Digital.
- Bat, Ye'or (2006). *Eurabia: the Euro-Arab Axis*. Farleigh Dickinson University Press.
- Bat, Ye'or (2001). *Islam and Dhimmitude; Where Civilizations Collide*. Farleigh Dickinson University Press.
- Bechman, Anja, Lomborg, Stine (2013). Mapping Actor Roles in Social Media: Different Perspectives on Value Creation in Theories of User Participation. *New media & society* 15(5), 765–781.
- Bennett, W. Lance, Segerberg, Alexandra (2013). *The Logic of Collective Action: Digital Media and the Personalization of Contentious Politics*. Cambridge University Press.
- Biswas, Soutik (2015) 'Intolerant India': Is criticism against Modi's BJP justified? *BBC News*. <https://www.bbc.com/news/world-asia-india-34943206>. (viewed 2.1.2020).
- Bollen, Johan, Pepe, Alberto, Mao, Huina (2009). Modeling Public Mood and Emotion: Twitter Sentiment and Socio-Economic Phenomena. In: *AAAI conference on weblogs and social media (ICWSM 2011)*, Barcelona, November 2009.
- Braun, Virginia, Clarke, Victoria (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2), 77–101.
- Bruno, Nicola (2011). Tweet First, Verify Later? How Real-Time Information Is Changing the Coverage of Worldwide Crisis Events. *Reuters Institute for the Study of Journalism*. Oxford: University of Oxford.

Bruns, Axel & Burgess, Jean (2014). Crisis Communication in Natural Disasters. Weller, Katrin, Bruns, Axel, Burgess, Jean, Mahrt, Merja, Puschmann, Cornelius (eds.), *Twitter and Society*. New York: Peter Lang, 373–385.

Böckler, Nils, Seeger, Thorsten, Sitzer, Peter (2012). Media Dynamics in School Shootings: A Socialization Theory Perspective. Muschert, Glenn, W., Sumiala, Johanna (eds.), *School Shootings: Mediatized Violence in a Global Age*. Bingley: Emerald Group Publishing Limited, 25–47.

Castillo, Mariano, Haddad, Margot, Martinez, Michael, Almasy, Steve (2015) Paris suicide bomber identified; ISIS claims responsibility for 129 dead. *CNN*.  
<https://edition.cnn.com/2015/11/14/world/paris-attacks>. (viewed 3.3.2018).

Couldry, Nick, Hepp, Andreas, Krotz, Friedrich (2009). *Media Events in a Global Age*. Routledge.

Dervin, Brenda (2003) Chaos, order, and sense-making: A proposed theory for information design. Dervin, Brenda, Foreman-Wernet, Lois, Lauterbach, Eric (eds.) *Sense-Making Methodology Reader: Selected Writings of Brenda Dervin*. Hampton Press, 325–340.

Dervin, Brenda, Frenette, M (2003) Sense-making methodology: Communicating communicatively with campaign audiences. Dervin, Brenda, Foreman-Wernet, Lois, Lauterbach, Eric (eds.) *Sense-Making Methodology Reader: Selected Writings of Brenda Dervin*. Hampton Press, 233-249.

Eide, Elisabeth & Kunelius, Risto, Phillips, Angela (2008). *Transnational Media Events: The Muhammed Cartoons And the Imagined Clash of Civilizations*. Göteborg: Nordicom.

Eriksson, Moa (2016). Managing Collective Trauma on Social Media: The Role of Twitter after the 2011 Norway Attacks. *Media, Culture & Society* 38(3), 365–380.

Eriksson, Päivi, Koistinen, Katri (2014). *Monenlainen tapaustutkimus*. Helsinki: Kuluttajatutkimuskeskus.

Eskola, Jari, Suoranta, Juha (2008). *Johdatus laadulliseen tutkimukseen*. Tampere: Vastapaino.

Fade, Sa, Swift, Ja (2011). Qualitative Research in Nutrition And Dietetics: Data Analysis Issues. *Journal of Human Nutrition and Dietetics* 24(2), 106–114.

Feldhaus, Fabian, Hennig-Thurau, Thorsten, Wiertz, Caroline (2012). Exploring the “Twitter Effect:” An Investigation of the Impact of Microblogging Word of Mouth on Consumers’ Early Adoption of New Products. *SSRN Electronic Journal. Working Paper*, city.ac.uk.

Fischer-Prebler, Diana, Schewemmer, Carsten, Fischbach, Kai (2019) Collective sense-making in times of crisis: Connecting terror management theory with Twitter user reactions to the Berlin terrorist attack. *Computers in Human Behavior* 100, 138–151.

Finkel, Se, Muller, En., Opp, Kd (1989). Personal Influence, Collective Rationality and Mass Political Action. *American Political Science Review* 83(3), 885–903.

Gagnon, Yves-Chantal (2010) *The case study as research method: a practical handbook*. Presses de l'Université du Québec.

García-Albacete, Gema, Theocharis, Yannis (2014). Opportunities and Challenges of Analysing Twitter Content: A Comparison of the Occupation Movements in Spain, Greece and the United States. Cantijoch, Marta, Gibson, Rachel, Ward, Stephen (eds.), *Analyzing Social Media Data and Web Networks*. Basingstoke: Palgrave Macmillan, 119–153.

Gillham, Bill (2000) *A Case Study Research Methods*. London: Bloomsbury Publishing PLC.

Githens-Mazer, Jonathan, Lambert, Robert (2010). *Islamophobia and Anti-Muslim Hate Crime: A London Case Study*. European Muslim Research Centre, University of Exeter.

Global Terrorism Database 2018. <http://apps.start.umd.edu/gtd/>. (viewed 2.1.2020).

Gruber, Daniel, Smerek, Ryan, Thomas-Hunt, Melissa, James, Erika (2015). The Real-Time Power of Twitter: Crisis Management And Leadership in an Age of Social Media. *Business Horizons* 58(2), 163–17.

Gruzd, Anatoliy, Wellman, Barry, Takhteyev, Yuri (2011). Imagining Twitter as an Imagined Community. *American Behavioral Scientist* 55(10), 1294–1318.

Hakala, Salli (2012). The Mediatized Victim. In Muschert, Glenn W. & Sumiala, Johanna (2012) *School Shootings: Mediatized Violence in a Global Age*. Bingley: Emerald Group Publishing Limited. 255–279.

Hakala, Salli (2013). Verkkokeskustelut ja sisällön erittely. Laaksonen, Salla-Maaria, Matikainen, Janne, Tikka, Minttu (eds.), *Otteita verkosta. Verkon ja Sosiaalisen median tutkimusmenetelmät*. Vastapaino, Tampere.

Henley, Jon, Traynor, Ian, Murray, Warren (2015) Paris attacks: EU in emergency talks on border crackdown. *The Guardian*. <https://www.theguardian.com/world/2015/nov/20/paris-attacks-france-launches-un-push-for-unified-declaration-of-war-on-isis>. (viewed 7.3.2018).

Hermida, Alfred (2010). Twittering the News: The Emergence of Ambient Journalism. *Journalism Practice* 4(3), 297–308.

Heverin, Thomas, Zach, Lisl (2012). Use of Microblogging for Collective Sense-Making During Violent Crises: a Study of Three Campus Shootings. *Journal of the American Society for Information Science and Technology* 63, 34–47.

Hjorth, Larissa, Kim, Kyoung-Hwa Yonnie (2011). The Mourning After: A Case Study of Social Media in the 3.11 Earthquake Disaster in Japan. *Television & New Media* 12(6), 552–559.

- Iqbal, Asma, Danish, Malik Haq Nawaz, Iqbal, Farah (2014). Critical Discourse Analysis of Attributive Words Used with the Word Muslim: A Corpus Based Study. *International Journal of Linguistics* 6(4), 1.
- Java, Akshay, Song, Xiaodan, Finin, Tim, Tseng, Belle (2007). Why We Twitter: Understanding Microblogging Usage and Communities. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* 5439, 118–138.
- Kuula, Arja. (2011). *Tutkimuseetiikka: Aineistojen hankinta, käyttö ja säilytys*. Tampere: Vastapaino.
- Laaksonen, Salla-Maria, Matikainen, Janne, Tikka, Minttu (2013). *Otteita verkosta. Verkon ja sosiaalisen median tutkimusmenetelmät*. Tampere: Vastapaino, 193–215.
- Laine, Markus, Bamberg, Jarkko, Jokinen, Pekka (2007). Tapaustutkimuksen käytäntö ja teoria. Laine, Markus, Bamberg, Jarkko, Jokinen, Pekka (eds.), *Tapaustutkimuksen taito*. Helsinki: Gaudeamus University Press, 9–40.
- LeFebvre, Rebecca Kay, Armstrong, Crystal (2016). Grievance-based Social Movement Mobilization in the #Ferguson Twitter Storm. *New Media & Society* 20(1), 8–28.
- Lin, Yu-Ru, Margolin, Drew, Wen, Xidao (2017). Tracking and Analyzing Individual Distress Following Terrorist Attacks Using Social Media Streams. *Risk Analysis* 37(8), 1580–1605.
- Lin, Yu-Ru, Margolin, Drew (2014). The Ripple of Fear, Sympathy And Solidarity During the Boston Bombings. *EPJ Data Science* 3(1), 1–28.
- Lindgren, Simon (2012). Collective Coping through Networked Narratives. Muschert, Glenn, Sumiala, Johanna (eds.), *School Shootings: Mediatized Violence in a Global Age*. Bingley: Emerald Group Publishing Limited, 279–299.
- Marwick, Alice E (2013). Ethnographic and Qualitative Research on Twitter. Weller, Katrin, Bruns, Axel, Burgess, Jean, Mahrt, Merja, Puschmann, Cornelius (eds.), *Twitter and Society*. New York: Peter Lang Inc., 109–123.
- Matsa, Katerina, Silver, Laura, Shearer, Elisa, Walker, Mason (2018) Younger Europeans are far more likely to get news from social media. *Pew Research Center*. <https://www.journalism.org/2018/10/30/younger-europeans-are-far-more-likely-to-get-news-from-social-media/> (viewed 2.1.2020).
- Muhren, Willem, Gerd Van Den, Eede, Van de Walle, Bartel (2008). Sensemaking and Implications for Information Systems Design: Findings from the Democratic Republic of Congo's Ongoing Crisis. *Information Technology for Development* 14(3), 197–212.
- Niemeläinen, Jussi, Ahlroth, Jussi (2015) Näin Pariisin terrori-isku näkyy sosiaalisessa mediassa: omaisia ja läheisiä etsitään Twitterissä. Helsingin Sanomat. <https://www.hs.fi/ulkomaat/art-2000002866405.html> (viewed 3.3.2018).



Oxford Dictionary.

[https://www.oxfordlearnersdictionaries.com/definition/english/crisis\\_1?q=crisis](https://www.oxfordlearnersdictionaries.com/definition/english/crisis_1?q=crisis). (viewed 3.3.2018)

Papacharissi, Zizi, De Fatima Oliveira, Maria (2012). Affective News and Networked Publics: The Rhythms of News Storytelling on #Egypt. *Journal of Communication* 62(2), 266–280.

Pennebaker, James W, Harber, Kent D (1993). A Social Stage Model of Collective Coping: the Loma Prieta Earthquake And the Persian Gulf War. *Journal of Social Issues* 49(4), 125–145.

Potts, Liza, Seitzinger, Joyce, Jones, Dave, Harrison, Angela (2011). Tweeting Disaster: Hashtags Constructions and Collisions. *Proceedings of the 29th ACM International Conference on Design of Communication*. Italy: ACM SIGDOC.

Pulkit, Garg, Himanshu, Garg, Virender, Ranga (2017). Sentiment Analysis of the Uri Terror Attack Using Twitter. *International Conference on Computing, Communication and Automation (ICCCA)*.

Qu, Yan, Wu, P.F., Wang, Xiaoqing (2009) Online Community Response to Major Disaster: A Study of Tianya Forum in the 2008 Sichuan Earthquake. *Paper presented at the 42<sup>nd</sup> Hawaii International Conference on System Sciences*. Hawaii.

Rauchfleisch, Adrian, Artho, Xenia, Metag, Julia, Post, Senja, Schäfer, Mike S (2017). How Journalists Verify User-generated Content During Terrorist Crises. Analyzing Twitter Communication During the Brussels Attacks. *Social Media + Society* 3(3).

(2015) Timeline of Paris attacks according to public prosecutor. *The Reuters*. <https://www.reuters.com/article/us-france-shooting-timeline/timeline-of-paris-attacks-according-to-public-prosecutor-idUSKCN0T31BS20151114>. (viewed 3.3.2018).

Rimé, Bernard, Mesquita, Batja, Boca, Stefano, Philippot, Pierre (1991). Beyond the Emotional Event: Six Studies on the Social Sharing of Emotion. *Cognition & Emotion* 5(6), 435–465.

Rosen, Aliza (2017) *Tweeting Made Easier*.

[https://blog.twitter.com/official/en\\_us/topics/product/2017/tweetingmadeeasier.html](https://blog.twitter.com/official/en_us/topics/product/2017/tweetingmadeeasier.html). (viewed 20.2.2018)

Savolainen, Risto (1993). The Sense-making Theory: Reviewing the Interest of a User-centered Approach to Information Seeking and Use. *Information Processing & Management* 29(1), 13–28.

Shaw, Frances, Burgess, Jean, Crawford, Kate, Bruns, Axel (2013). Sharing News, Making Sense, Saying Thanks: Patterns of Talk on Twitter During the Queensland Floods. *Australian Journal of Communication* 40(1), 23–39.

Shearer, Elisa, Matsa, Katerina (2018) News Use Across Social Media Platforms 2018. *Pew Research Center*. <https://www.journalism.org/2018/09/10/news-use-across-social-media-platforms-2018/> (viewed 2.1.2020)

Stafel, Eleanor, Mulholland, Rory, Sabur, Rozina, Malnick, Edward, Trotman, Andrew, Harley, Nicola (2015) What happened in Paris?. *The Telegraph*. <https://www.telegraph.co.uk/news/worldnews/europe/france/11995246/Paris-shooting-What-we-know-so-far.html> (viewed 3.3.2018).

Starbird, Kate, Palen, Leysia (2010). Pass it on? Retweeting in Mass Emergency. *Proceedings of the 7th International ISCRAM Conference*, Seattle, USA, May 2010.

Stein, Mark (2004). The Critical Period of Disasters: Insights from Sense-making And Psychoanalytic Theory. *Human Relations* 57(10), 1243–1261.

Stepinska, Agnieszka (2011). *News in Europe, Europe on News*. Berlin: Logos, 204.

Stieglitz, Stefan, Mirbaie, Milad, Milde, Maximilian (2018) Social Positions and Collective Sense-Making in Crisis Communication. *International Journal of Human-Computer Interaction* 34(4), 328–355.

Twitter Investor Relations (2019) <https://investor.twitterinc.com/> (viewed 30.7.2019).

Vieweg, Sarah, Palen, Leysia, Liu, Sophia B, Hughes, Amanda Lee, Sutton, Jeanette (2008). Collective Intelligence in Disaster: Examination of the Phenomenon in the Aftermath of the 2007 Virginia Tech Shooting. *Proceedings of the 5th International ISCRAM Conference*, Washington DC, USA, May 2008.

Walton, Justin (2019) Twitter vs. Facebook vs. Instagram: An Overview. *Investopedia*. <https://www.investopedia.com/articles/markets/100215/twitter-vs-facebook-vs-instagram-who-target-audience.asp>. Investopedia Stock Analysis Blog June/2019. (viewed 2.1.2020)

Weller, Katrin, Bruns, Axel, Burgess, Jean, Mahrt, Merja, Puschmann, Cornelius (2014), *Twitter and Society*. New York: Peter Lang.