Disrupting Radicalisation Online:
The Implications of Role Differentiation in Radical Networks

May 2017
Glasgow Student Number: 2226756G
Charles Student Number: 24484252

Presented in partial fulfilment of the requirements for the
Degree of
MSc International Security, Intelligence and Strategic Studies

Word Count: 20416

Supervisors:
Glasgow - Andrew Hoskins
Charles - Tomas Karasek
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>8</td>
<td>54</td>
</tr>
<tr>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>10</td>
<td>62</td>
</tr>
<tr>
<td>11</td>
<td>67</td>
</tr>
</tbody>
</table>
1. Introduction

The spread of terrorism and political extremism has been a major concern among many western countries due to the attacks in the US on September 11, 2001. However, recently these same concerns have been compounded by the rise of the Islamic State (IS) in Syria and Iraq. As a result a lot of attention has been placed on countering radicalisation processes which could fuel radical groups by increasing their membership. More specifically, however, due to the proliferation of modern communication technology, the internet has become a significant avenue for radical groups to attempt to expand their influence and reach new people. Therefore, understanding how radicalisation functions in online spaces has become an important area of research.

Despite research already being conducted into IS’s, and other Islamic groups’, use of the internet, there has been much less research into how radical far right groups use online spaces to expand their influence and recruit new members. While IS is likely to continue to be a security priority for many states in the near future, the radical far right has been growing and has been becoming more and more prominent. This can be seen from the rapid expansion of the ‘Alt-Right’ movement, which is formed of a loose nit association between various far-right groups, from the more regular forms of neo-Nazism combined with American paleo-conservatism, through counter-enlightenment philosophies and online ironic and meme cultures, as well as fringes of the men’s rights movement and conspiracy theory communities (Van Zuylen-Wood et. al., 2017). One variant of the contemporary radical right, known as Identarianism, in reference to its core value of European identity, has caused concerns of increased radicalisation in Germany, prompting German domestic intelligence agencies to keep the movement under surveillance (Knight, 2017).

In the case of IS, combatting their presence on social media websites may be difficult due to the volume of accounts, but identifying IS as a group worthy of banning is straightforward due to their clear extremism and use of violence. This makes the targeting of online accounts straightforward despite being time consuming or difficult to maintain in the long term. However, when it comes to combatting the radical far right in online spaces, the challenge is different due to the greater levels of ambiguity. The problems associated with tackling extremism online, particularly in the case of far right extremism, were recently raised in a report by the UK’s Home Affairs select committee which suggested that social media companies were failing to effectively deal with abusive and extreme content on their platforms (BBC, 2017). Specific concerns raised by the Members of Parliament on the committee were surrounding anti-Islam content, anti-Semitic content, and content which purported to be countering ‘White
Genocide’ (Ibid.); a term used by far right groups to suggest that there exists a conspiracy to utilise immigration policies to reduce the white population by deliberately encouraging non-white immigration.

Part of the difficulty in tackling radicalism from the far right is that observing radicalism or extremism is often not as clear cut as in a case like IS, which is directly violent. This often means that extreme far right groups and less extreme groups can exist side by side in online communities, and how to effectively prioritise groups can prove difficult to discern. As a result, the close links between far right groups, combined with the lack of effective counter-radicalisation, may have the effect that the far right, online, become increasingly radical and dangerous. This can be seen in the case of the British neo-Nazi group National Action, which came to prominence after the murder of Labour MP Jo Cox. The individual who murdered Jo Cox was from the far right, however he was not directly associated with National Action. Instead, National Action became a concern to UK authorities as a result of posting a Tweet suggesting that more MPs be murdered (Armstrong, 2016), as well as adopting the phrase “Death to traitors, freedom for Britain”, used by Jo Cox’s murderer, as the slogan of the group. This behaviour resulted in National Action being banned. Making them the first far right group to be banned in the UK. The case of National Action demonstrates, therefore, how the far right have been able to emerge as a problem online regarding increasingly radical behaviours and attitudes.

This paper seeks to address this lack of understanding into the online organisation of the radical far right by understanding the far right’s online community structures, and how these structures may facilitate the radicalisation process of other online users. More specifically, through understanding how far right community structures may facilitate radicalisation, this paper discusses how the radicalisation process may be disrupted. By understanding the susceptibility of radical online communities to disruption, more effective online counter-radicalisation policies can be constructed and implemented.

Currently, the primary avenue open to social media companies, in cooperation with law enforcement agencies, to disrupt radical online networks is to suspend, or ban, users and accounts using their platform to spread radical messages. This, in theory, has the effect of disrupting the radicalisation process as if radical users are unable to spread radical messages online then new users do not come into contact with these radical ideas. Resulting in radical groups or communities no longer growing their membership, with the groups or communities instead being slowly pushed off the platform. However, of interest to this paper is the discussion surrounding the effectiveness of suspension and banning as a tool to disrupt
radicalism online. There exists a core divide in the expectations of the effectiveness of account suspension as a counter-radicalisation tool. On the one hand, one side warns of ineffectiveness due to the ease at which suspended accounts can return to the platform, while, on the other hand, the other side suggests that even if accounts do return, they return with less influence than before; making suspension effective, if slow. The literature review section of this paper tackles the divide in expectations, and the logic behind them, in greater detail.

As this divide in expectations is central to the research being conducted by this paper, this research seeks to answer the question as to why this divide, regarding the success of account suspension as a tool for disruption, exists and what its implications are for the creation of future disruption based policies aimed at countering radicalisation online. The purpose of this paper, therefore, is to explore how the structure of a radical group’s community may be responsible for these mixed expectations regarding the effectiveness of account suspension as a tool for disrupting the radicalisation process in online communities. More specifically, however, the aim of this paper is to analyse the network structures of accounts connected to a radical group in order to demonstrate how different accounts can, either consciously or unconsciously, perform different functions within the radicalisation process online. This allows for a greater understanding of how to effectively create disruption based counter radicalisation policies online.

This paper claims that different social media accounts within radical groups serve different functions, or fulfil different roles, in the radicalisation process. Furthermore, these different roles are determined by different positions within the immediate local networks of the radical group’s online community. These different positions mean that some accounts will be more susceptible to process disruption through account suspension, while other accounts will be less susceptible. This results in account suspension differing in effectiveness when targeting different accounts due to their differences in network structures. This paper’s claim is different to previous approaches as previous approach have typically treated radical social media accounts as functionally similar. This means that all radical accounts fulfils the same roles within the radicalisation process; spreading radical content. The only differences considered previously are the differences in follower counts, as a larger number of followers would be expected to imply a greater disruption effect. Therefore, by accounting for network structure in differentiating the roles, and therefore susceptibility to disruption, between radical accounts, this paper hopes to add nuance to the discussion surrounding the disruption of radicalisation processes online.
In order to analyse the structure of a radical group’s online community, this paper makes use of a social network analysis methodology in order to map and analyse the ego networks of several different accounts belonging to a radical group in order to demonstrate empirically how differences in network structures can be observed.

In analysing different accounts, this paper distinguishes between three different roles accounts may hold within the radicalisation process. These are known as the Beacon role, the Recruiter role, and the Group Maintenance role. Accounts with a Beacon role function as passive hooks to draw in new users who are curious about the radical group’s ideas and messages. Recruiter accounts then actively engage with users to draw them deeper into the radical group’s online community, acting as a bridge between the group’s periphery and the group’s core. Finally, Group Maintenance accounts ensure ideological commitment by actively spreading the radical content and messages of the group to its membership. By distinguishing between the roles accounts may hold within a community, whether consciously or unconsciously, accounts are no longer seen as functionally similar to one another; they perform different functions.

As a result of functional differentiation, disruption through account suspension will have different implications when targeting accounts with different roles. For example, Group Maintenance accounts are likely to be the most prominent form of accounts as they act as the glue holding a community together, ensuring ideological rigidity. However, as they are deeply connected within the core of the group’s network, they are also going to find it easy to restore their follower numbers post-suspension due to high levels of interconnectivity among their followers. On the other hand, Beacon accounts will have the most to lose from suspension as a more significant proportion of their follower base will be permanently lost as a result of account suspension, due to the fact that followers new to the community, finding it for the first time, will not have had time to become fully interconnected. Finally, Recruiter accounts, due to their role as the bridge between Beacon and Group Maintenance accounts, if suspended also yield greater disruption results as it would cut off an important avenue for community growth, as new users fail to enter the group’s core community.

For the purpose of this research, this paper explores the case of National Action’s online community due to the contemporary relevance of National Action. Furthermore, National Action presents an interesting case for analysis due to its reliance on the internet to spread its messages. Twitter has been chosen as the platform on which to explore National Action’s online community due to National Action creating numerous official Twitter accounts which can be systematically and empirically compared in order to demonstrate role differentiation.
Furthermore, Twitter as a platform was chosen due to the ease of data collection due to Twitter’s API. This is important as it allows for data to be collected in a similar fashion for all accounts of interest, making direct comparison possible. All Twitter data for National Action was collected before the group was banned.

This paper is broken up into several sections. First, this paper addresses previous literature in the literature review in order to expand on the prior expectation regarding the success of account suspension as a disruption policy. Second, the theoretical framework covers theories of radicalisation and different understandings of the process in order to develop a framework for how the process may be disrupted. Third, the methodology of the paper is clarified, this section clarifies the data collection and data analysis processes utilised. Fourth, a section introduces and gives an overview for National Action in order to provide context for the group. Fifth, the ego networks for the different National Action accounts are analysed and compared empirically. Sixth, the overall network structure for National Action’s Twitter community is covered. Seventh, leading on from the empirical network sections, this paper attempts to abstract and generalise its findings by developing rules for disruption based counter-radicalisation policies. Finally, this paper briefly addresses the UK government’s ban of National Action in order to understand the implications of the decision in light of the analysis of National Action’s community structure.
2. Literature Review

The current body of literature, when it comes to research into the disruption of radical networks online, is limited. Not much has been written on methods to disrupt radicalisation, the effects of those methods to the networks, or the effectiveness of those methods in tackling radicalisation. Therefore, the subject of how radical groups operate online, and how to best tackle them, is a poorly understood topic. This is impart due to the rapid emergence of the internet as an environment for radicals to organise, the novelty of the social media websites as tools for radical groups to recruit new members, and the difficulty in collecting data on naturally secretive groups. As a result, and due to the importance of understanding the topic, this paper aims to fill the gaps in the literature by exploring the online structure of a radical network in order to better understand how they operate. This would enable a greater understanding of how disruption based counter-radicalisation policies could counter radical groups online. In order to do this, it is first necessary to understand the previous literature relating to the disruption of radical or extremist groups, the literature on radicalisation online, and the literature on the disruption of online radicalisation.

The idea of tackling radicalisation, violent political extremism and terrorism through disruption based policies is not new and is not specific to the internet and social media. The purpose of disruption based policies is to stop or slow a process. For example, in the case of radicalisation, disruption would stop or slow individuals transitioning between a non-radicalised and radicalised state. Alternatively, counter-terrorist disruption may focus on making it difficult for terrorist groups to effectively plan and carry out attacks. Disruption, therefore, can be seen as an indirect approach to tackling radical or terrorist groups. It doesn’t seek to totally eliminate the groups, but instead attempts to prevent them from acting; to the point at which the threat they pose is significantly reduced. Reedy et. al. (2013), in discussing the importance of small groups for acts of political violence, describe three forms of disruption. First is repression, which seeks to degrade a group’s capacity to act by killing or capturing its members; as well as other destructive acts (p. 606). Second is manipulation, which aims to create disorganisation among the groups decision making processes (Ibid.). Finally there is persuasion, which attempts to convince the group to moderate their behaviour and become less extreme (Ibid.). These three disruption strategies are all aimed at reducing the risk posed by radical groups. When looking at disruption, therefore, it is important to consider how a particular policy will affect the functions of the group.

The proliferation of the internet and social media, however, has presented radical groups with an important domain to conduct their affairs and communicate with one another.
Disruption based policies targeting radical groups must therefore adapt to this new environment and the difficulties it can pose. There are several problems when it comes to conducting disruption online. First, anonymity can cause problems when it is unknown who is being targeted. Second, proximity is no longer a necessary condition for group communication as individuals can interact from anywhere in the world. Third, the barriers to entry, when it comes to joining social media websites, are low, making it easier for people to engage with radical communities. Finally, as social media companies are private companies that operate in many different countries, there can be legal problems when it comes to tackling particular users that may be considered extremist.

When it comes to conducting disruption policies on social media sites ‘manipulation’ is more difficult compared to ‘repression’ and ‘persuasion’ strategies. For example, Twitters suspension of over 235,000 extremist accounts (Benner, 2016) can be seen as a repression based disruption strategy as it seeks to destroy the ability of accounts to spread their message. While ‘persuasion’ on the other hand can be seen as the overlap between disruption and counter-narrative strategies. Greenberg (2016, p. 172) gives the examples of how anti-ISIS counter-messaging has been used in two different ways, first to suggest that ISIS’s ideology is based on a misreading of the Koran, second to suggest that life in ISIS territory is not as good as ISIS propaganda suggests. However, the interest of this paper is more oriented toward repression based disruption policies and the role that account suspensions can play in tackling radical networks.

Despite the prevalent use of account suspensions in efforts to reduce online extremism, there have been doubts about their effectiveness as a counter-extremism tool. The challenge of fighting extremism online, particularly in the case of ISIS, has been described as being like “a game of digital whack-a-mole.” because “as soon as one is shut down, another pops up under a new account or on a different site” (Goldman, 2014). This is the case of extremist accounts on platforms such as Twitter, Youtube or VKontakte among others. This is largely due to the problem of low barriers to entry when it comes to joining social media platforms. Accounts are free to create and take little time to create. Therefore banned or suspended users can create new accounts and return to the activities they were engaging in before. Furthermore, due to the large numbers of accounts, it can often be difficult for the social media companies to identify these new accounts from banned or suspended users. However, despite this assumption of online disruption being a losing battle there is research that suggests account suspensions are, in fact, effective.
Berger (2016a, p. 10) argues, in discussing process disruption policies, that the perspective that user account suspensions don’t work, as a counter-extremism tool, is flawed. This is because, while it is true that radical users are able to eventually return to the social media platform with new accounts, their follower counts are unable to return to the levels they were prior to the original suspension. Furthermore, successive waves of extremist and radical account suspensions can effectively deny certain groups a footing on the platform in order to spread their messages. This has the effect of making social media websites, like Twitter, inhospitable environments for radical groups to spread their message. Even in instances where radical users may escape long term suspension, the declining radical population, as well as the disorganisation fostered by account suspensions, make spreading extreme and radical messages very difficult to achieve consistently. This can primarily be seen in research conducted by Berger and Morgan (2015) and Berger and Perez (2016). In both studies they observed the Islamic State’s Twitter presence and found that account suspensions had managed to prevent Islamic State from expanding and had been successful in reducing the reach of users which had been specifically, and regularly, targeted by account suspensions. This perspective on the role of account suspensions in disruption is important and adds nuance to previous ideas as it includes the ‘audience’ of radical messages. Whereas previous views may have taken a binary view on online extremism, purely looking at whether radical accounts where present on a platform or not. Understanding radical users’ followers as being a vital resource to radical communities, and understanding how account suspensions affect that audience, it enables a more developed view on how suspension tackles the problem of radicalisation online. This is because as radical users get suspended they bleed off their audience, with only some returning, and the radical users become contained to the fringes of the social media website; unable to effectively grow and expand their reach.

The idea of ‘audience’ is important when it comes to conducting counter-radicalisation policy, particularly through disruption. While counter-narrative based policies seek to engage the radicals’ audience and change their views, disruption seeks to break up the audience. Thompson (2011, p. 177) notes how online social connections, particularly the density of online social connections, played an important role in encouraging political activity during the Arab Spring as the same information coming from multiple sources has the effect of bringing people into events and provoking an emotional reaction in individuals, making them want to participate further. This fits with research from Lee and Leats (2002) who found that far-right communities online relied on ‘persuasive storytelling’ in order to recruit new members. The most effective stories in the short term were found to involve high-narratives and implicit
messages, while low-narrative and explicit messages had greater effects over time (Ibid.). This may imply that in the short term, high-narrative messages make community members emotionally reactive and feel like they belong to the group, while the low-narrative messages dictate community values and beliefs in the long term. Therefore, the importance of ‘audience’ and network, or community, structure cannot be understated. Further research into the far-right’s use of online spaces, however, is limited.

Berger (2016b), again demonstrating his importance to the study of extremism online, provides an account of the far-right’s use of Twitter through comparing their presence and activities to the presence and activities of Islamic State. The importance of this study finds that on Twitter far-right accounts tended to have higher follower counts than Islamic State linked accounts and that this was likely due to accounts suspensions not targeting far-right accounts to the same extent as accounts linked to, or sympathising with, the Islamic State often are. For this reason, the far-right has been better able to establish and entrench itself on online social media platforms. Compared to Islamic State, which organises its online operations hierarchically (Cohen, 2015), the far-right’s online organisational structures are comparatively less understood as the far-right is seen as a lesser priority to Islamic State. Furthermore, much of the previously mentioned literature has discussed online radical social networks, without taking a network based approach. As such, literature has typically focused on follower counts and the reach of hashtags. In order to add more nuance to the discussion surrounding the disruption of extremist communities, therefore, this paper seeks to apply social network analysis methods to differentiate between the functions of radical accounts due to the differences in the structure of their immediate networks; or their local audience.

Previous perspectives on disruption found it to be ineffective due to a binary perspective on the presence of radicals online; meaning the continued presence of radicals was considered a failure of policy. Subsequent perspectives considered disruption, through account suspension, to be effective due to its effects when it comes to reducing the audience for radical content. However, this paper seeks to add to the debate by suggesting that an accounts immediate community, or audience, structure can expose different roles among radical accounts. Furthermore, differentiated roles and different network structures may carry implications for disruption through account suspension as it can imply that to effectively deal with a group, there cannot be a one size fits all disruption approach. This is the gap that has been left by previous research which typically treats radical users as being functionally similar, just with different audience sizes. Furthermore, this paper seeks to fill the gap in the literature when it comes to the understanding of far-right communities online and the implications for disruption.
While it may be the case that Islamic State linked accounts may be functionally similar due to the process of new accounts being created, far-right communities may exhibit more complex and differentiated network structures of interest for the creation and functioning of disruption based counter-radicalisation policies.
3. Theoretical Framework

The two concepts central to guiding this paper’s analysis are ‘radicalisation’ and ‘social networks’. The radicalisation process is necessary to understand as the purpose of disruption based counter-radicalisation policy, the focus of this paper, is to halt radicalisation; meaning affecting radicalisation is the end goal of disruption. Social network structures, this paper maintains, are necessary to understand as they form the mediating variable in the process of process disruption. This means that while disruption can be observed through follower counts, as has been the focus of previous research, the structure of radical communities’ social networks can play an important role in determining how the radicalisation process manifests. Therefore, this section first covers the different theoretical understandings of how the radicalisation process can occur and attempts to synthesise them into their common features. This is in order to present a coherent concept of the radicalisation process utilised by this paper. Second, this section of the paper introduces the social network analysis concepts used to distinguish between radical social media users and outline their roles in the radicalisation process. Furthermore, this sections justifies the choices of social network analysis concepts in order to ground the research.

It is important for this paper to first consider radicalisation. Radicalisation is the process by which an individual transitions between a non-radical and a radical. The purpose of disruption policies, therefore, is to disrupt this process, making it difficult, or even impossible, for the radicalisation process to occur. Successful disruption policies would, in effect, prevent susceptible individuals from becoming radicals or extremists; or at least successful policies would prevent people becoming radicalised in the same numbers. In order to understand the implications of social network structure for disruption policies it is necessary to understand the typical steps an individual may progress through before becoming fully radicalised. There are several approaches to codifying the steps involved in the radicalisation process.

One particular theory worthy of consideration is Social Movement Theory. While not ostensibly about the process of radicalisation, it does seek to understand the process by which individuals are persuaded into participating in political groups or movements. This theory is important as it looks at political groups as rational entities which seek to maximise their efficiency when they grow their membership. Brady et. al (1999) suggest that the recruitment process of groups is composed of two stages. First, recruiters, acting as ‘rational prospectors’, use information about individuals to find targets for recruitment. Second, once a target has been found, the recruiters attempt to gain the targets agreement to participate by offering them information on opportunities to participate, as well as incentives to participate. By using
information to find individuals likely to agree to participate in the movement or group, recruiters can be seen as rational as they attempt to save time and effort, allowing them to target more people with greater efficiency. When considering radicalisation, therefore, it is important to consider that recruiters for radical groups are likely to be looking out for individuals already susceptible to their views, rather than attempting to convince everyone they come across.

While Social Movement Theory looks at individuals joining groups from the perspective of the group, a second theory, Conversion Theory, considers the same process from the perspective of the individual joining a group. Conversion Theory, similarly to Social Movement Theory, is also not explicitly about radicalisation. Instead it looks at the process by which an individual becomes religious, or converts to another religion. However, as a process, it can be applied to individuals adopting radical ideologies and joining corresponding groups (Borum, 2011). Conversion Theory can be seen in a seven stage model (Rambo & Bauman, 2011, pp. 882-889). First, there must be an appropriate social or cultural context. Second, the individual experiences a personal crisis which opens them to new options. Third, the individual goes on a quest for meaning and purpose in their life. Fourth, the individual encounters an advocate of a new ideology. Fifth, through interaction with the advocate the individual learns more about the ideology and its proponents. Sixth, the individual is expected to openly display their commitment to the ideology upon conversion. Finally, seventh, the individual experiences the consequences of conversion. The important aspects of Conversion Theory for the radicalisation process is that, in line with Social Movement Theory, individuals becoming radicalised are also in a state where they are already susceptible. Therefore recruiters, or advocates, target these same individuals looking for meaning in, or a purpose to, their life.

Berger (2016a, pp. 13-14) also presents a model for the radicalisation process; this time specifically geared toward radicalisation. Berger suggests a six stage model: First, curiosity, as the individual discovers the ideology. Second, consideration, as the individual evaluates the ideology for credibility and relevance. Third, identification, as the individual considers themselves as an adherent of the ideology. Fourth, self-critique, when the individual asks if they are doing enough for the movement. Fifth, decision to act, where the individual may either act on behalf of the movement, or either disengage or return to a previous step. Sixth, movement critique, where the individual considers whether the movement is worthwhile. If they do not consider it worthwhile, then they may disengage, otherwise they continue in the movement. Interestingly, recruitment plays no role in Berger’s radicalisation model, instead it focuses on

1 Italicised words represent the names of the process stages.
the individual. However, Berger (pp. 14-15) offers a separate process of recruitment. First, *discovery*, when the individual encounters the recruiters. Second, the recruiters *create a micro-community* surrounding the individual. Third, recruiters *isolate the target from the mainstream*, for example their friends and family. Fourth, recruiters *shift to private communications*. Finally, fifth, recruiters *encourage action* from their target.

For the purposes of the analysis of this paper, therefore, it is important to draw out the commonalities to the radicalisation process. This paper makes use of a much simpler approach to understanding the radicalisation process based on common aspects of these three approaches. First, through experiences in their personal life, an individual becomes susceptible to recruitment by a radical group which speaks to their grievances. Second, recruiters from the radical group become aware of this individual through their actions, behaviours or statements. Third, recruiters from the radical group approach the individual in an attempt to draw them into their network. Finally, fourth, the individual is enclosed within the radical community of the group and subject to prolonged interaction with group members and proponents of the radical ideology. While this is not a comprehensive overview of the steps required for an individual to become a violent extremist, it is sufficient to guide the analysis of this paper. The significance of this four step process is that each step represents an opportunity for disruption policies to stop radicalisation.

Having established the framework understanding of radicalisation employed by this paper, it is necessary to consider the concepts and approaches of social network analysis. Theoretical perspectives on the radicalisation process make it clear that recruitment, community, narrative and audience all play a significant role in facilitating radicalisation. For this reason, when considering the disruption of radicalisation, analysis cannot simply look at individuals, but instead needs to look at individuals contextualised within their immediate social ecosystem. This is why it is important to consider the interlinked and interrelated networks that radical, and pre-radical, individuals find themselves within. The implications for disruption policy, therefore, are the methods required to break up these connections between radical individuals, but more importantly to break up the links between radicals and pre-radicals; to prevent individuals susceptible to radicalisation from becoming radicalised through interaction with recruiters. By understanding, analysing and mapping the linkages forming the radical network it can allow for greater efficiency in the targeting of disruption policies, as pivotal users in the radicalisation process can be more accurately observed. Therefore, it is necessary to introduce the social network concepts that will underpin the analysis of this paper.
There are three core concepts which need to be addressed through social network analysis in order to capture and analyse the structure of radicalisation. All three concepts relate to audience, but in slightly different ways, which adds nuance to the way the radicalisation process may be observed. First is the concentration of the radical community. This is important for analysis of radicalisation to consider as if a community is highly concentrated, users will likely hear the same narrative repeated from different users in their immediate network. This would aid radicalisation as it adds credibility to radical narratives. However, it is also important to consider as radical users deeply embedded in a surrounding radical network will be more difficult to disrupt through conventional account suspension approaches. This is due to the fact that it becomes easier for connected users to make each other aware of a user’s new account, created in order to side step the account suspension. This is observed through the measurement of network density. The second concept is the proportion of the radical user’s audience that would be permanently lost in the event of account suspension; or at least very difficult to recover. The implications of this will be clear as previous literature has suggested that the success of account suspensions has been to reduce their follower counts. However, this paper seeks to measure the proportion of a radical users surrounding network that would be cut off from the rest of the network should the radical user be banned. This can be done by finding the percentage of single degree users in any given network. ‘Degree’ represents the number of linkages between accounts, therefore if a user has only one degree, to the radical user, they lack opportunities to find out about new accounts being created to side step bans similar to more deeply embedded followers might. Finally, third, it is important to consider the directionality of the flow of information within the networks. This is important as it helps better identify the role each account can play within the broader network as some users may be actively promoting content and putting out their messages, while others may be passively consuming the same content. For this it is important to consider the proportion of a user’s ‘out-degree’, the rate at which they put out content, versus the user’s ‘in-degree’, the rate at which they consume content. For the purposes of making disruption more efficient, this is important as it can more effectively separate between producers and consumers of radical content.

This paper therefore utilises these concepts to differentiate between users belonging to a radical group in order to understand the roles they may play in recruiting new members, as well as maintaining their membership. Contrary to previous literature that treated radical accounts as functionally similar, putting out radical content which would attract new people, this paper suggests that radical accounts act as part of a group within their own ecosystems with different roles; these roles may be informally defined and unconsciously maintained
However, Table 3.01 outlines the different group roles, the stages of the radicalisation process they relate to, as well as the issues associated with process disruption at each stage.

**Table 3.01 – Process stages and associated group roles**

<table>
<thead>
<tr>
<th>Radicalisation Process</th>
<th>Group Role</th>
<th>Disruption Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Individual becomes susceptible to radicalisation</td>
<td>[External to group / No group role]</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Private event</td>
</tr>
<tr>
<td>2 Individual becomes aware of the radical group</td>
<td>Beacon</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>• Passively spread message / Raise Awareness / Content Producer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Large audience but low community density</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• High proportion of one degree users</td>
<td></td>
</tr>
<tr>
<td>3 Recruiters from radical group approach the individual</td>
<td>Recruiter</td>
<td>Medium – High</td>
</tr>
<tr>
<td></td>
<td>• Active engagement / Content Producer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Large audience but low community density</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• High proportion of one degree users</td>
<td></td>
</tr>
<tr>
<td>4 Individual becomes embedded within radical community</td>
<td>Group Maintenance</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>• Actively reinforcing ideology / Greater balance between content production and consumption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• High community density</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Low proportion of one degree users</td>
<td></td>
</tr>
</tbody>
</table>

The purpose of exploring network structures through these concepts, therefore, is to draw distinctions between the roles different accounts play in the radicalisation process. This is because different environmental contexts for a user’s immediate network pose different challenges for disruption policies targeting these users.
4. Methodology

This paper now turns to the methodology of the research in order to clarify the process of the data collection and the data analysis, as well as the overarching structure of the research process. The important aspects of this paper's methodology are that, as social network analysis based research, it is a mixture between qualitative and quantitative methods. Furthermore, while the research ostensibly focuses on an in-depth exploratory analysis of a single case, within this case there are comparisons between sub-cases. Finally, it is important for the reasons behind the choice of the case to be made clear. Beyond these concepts this section addresses the data demanded by the methodology of this research, how this data was then systematically collected, as well as how this data is analysed and how it is used for comparative purposes between sub-cases in order to draw conclusions regarding the implications for disruption based counter-radicalisation policies.

The principal analytical method employed by this paper is that of social network analysis. As an analytical method, social network analysis represents a mixture between qualitative and quantitative methods. It is quantitative as it relies on the operationalisation of social relationships so that these relations can be measured numerically and quantitatively analysed. However, as the purpose of this paper is to utilise these quantitative measures, derived through social network analysis methods, to distinguish between the qualitative roles played by radical accounts online, this analysis is neither purely quantitative nor qualitative. However, it represents the synthesis between qualitative and quantitative methods, as quantitative data is used to draw qualitative conclusions. The strength of mixing quantitative data and qualitative conclusions in this way is that the numeric data allows for systematic data collection, as well as the systematic comparison of different networks. Drawing qualitative conclusions, supported by quantitative data, meanwhile, allows for greater depth when it comes to analysing role differentiation among user accounts. The difficulty, however, when it comes to combining methods in this way is in making sure that the qualitative conclusions follow logically from the quantitative data. Ensuring the objectivity of conclusions is therefore an important consideration.

In order to explore how the role social network structures play in the radicalisation process for the far right online, this paper utilises the case of National Action. National Action is a British Neo-Nazi group primarily oriented toward young people and students. National Action was chosen for the purposes of this study due to four factors. First, they were chosen due to the high profile media attention they attracted after their actions and demonstrations; these include public protests, spreading anti-Semitic posters and stickers, as well as inciting for
the murder of British Members of Parliament. Second, they have been selected for their radical ideology, which is extreme due to its Neo-Nazi nature, as well as being in tune with the contemporary ‘alt-right’ phenomenon. Third, despite being a small organisation, they have grown rapidly and emerged relatively quickly, making them an interesting candidate case for investigating the radicalisation process. Finally, fourth, the group has been connected to extremist actions. At least one individual associated to National Action has committed a murder, while another was found to have constructed a pipe bomb. These factors, therefore, make National Action an interesting case for exploration.

As the research interest of this paper, however, is the online organisation of National Action, this paper specifically looks at the social network structure of National Action on Twitter. Twitter has been selected as the platform on which to observe National Action’s organisational structure for several reasons. First, Twitter is a hugely influential social media platform with many users for all aspects of life, as well as all sides of the political spectrum. Second, Twitter’s ease of account creation, and therefore low barriers to entry, make it an important platform for radical individuals and groups to make accounts and begin to spread their ideas. Third, National Action already had an established Twitter presence with several different accounts and a community developed around them. Finally, Twitter’s API presents a convenient method for systematic data collection.

The group National Action forms the overarching case which is explored by this paper. However, in order to apply social network analysis to the case of National Action sub-cases are used. These sub-cases are the different Twitter accounts for National Action branches. The main group is represented by ‘@national_action’, their north west group is represented by ‘@NorthWest_NA’, their London group is represented by ‘@NA_LONDON’, their Yorkshire branch is represented by ‘@YorkshireNA’, the midlands branch is represented by ‘@NA_Midlands’, and finally, their Scottish group is represented by ‘@NatActScot’. These sub-cases represent the points of comparison for establishing this paper’s claims regarding role differentiation in the radicalisation process. This is done by assessing how they fit differently into National Actions online social fabric. These sub-case accounts are the seed accounts for developing the ego networks for the analysis. However, there were two other branches found to be associated with National Action branches on Twitter, one for Ulster and the other belonging to the north eastern branch. However, the north east account was private, making data collection not possible, while the Ulster account was not able to be conclusively linked to National Action. Therefore only the six aforementioned accounts are included in the analysis of this paper.
The National Action accounts, for the purposes of this research, are seed accounts for the creation of comparable ego networks. These ego networks consist of each account at their centre and the user accounts that surrounds them, as well as the connections between them. Figure 4.01 depicts an example of a small, hypothetical, ego network.

*Figure 4.01 – Example Ego Network*

![Ego Network Diagram](image)

Figure 4.01 shows the ego user at the centre of the diagram. This is the position occupied by each of the six National Action accounts. The Alters represent users directly connected to the ego user under investigation. Furthermore, ego networks look at the connections between an ego user’s alters in order to comprehensively map the ego user’s immediate social environment. The arrows linking between users represent the directionality of their connection. This paper collects two different ego networks for each of the six National Action accounts. One for active relations and another for passive relations. In the active ego networks the relations are tweets replying to, or mentioning, other users. Specifically, outward relations represent users replied to by each user, while inward relations represent both mentions and replies. This disparity was chosen due to the convenience of Twitter’s API. However, despite this disparity between outward and inward relations, the important aspect is that the method is applied the
same way to all users. Therefore the active ego networks represent choices among users to engage other users directly. Passive ego network relations, on the other hand, are comprised of friends and followers. The directionality of the passive category, similar to the active, is defined by message flow. Therefore outward relations go from the user to their followers, as their tweets are being sent out to their followers, while inward relations are between a user and their friends; the users they themselves follow. Therefore the passive ego networks represent a longer term perspective of an accounts ‘audience’.

In order to collect data for the creation of the ego networks this paper made use of R scripts to interact with Twitter’s API. The time period in which the data was collected was between September 26, 2016, and October 2, 2016. This means that the passive networks of each National Action account represent their followers within this window. However, the tweet histories available within this window are greater due to information provided by Twitter’s API. Table 4.01 presents the time windows for available tweets for each account; each time window ends at October 2, 2016. Information on when each account was created has also been provided to show the activity present in the time frame returned by Twitter’s API.

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Beginning of Window</th>
<th>Account Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>@national_action</td>
<td>05/10/2014</td>
<td>September 2013</td>
</tr>
<tr>
<td>@NorthWest_NA</td>
<td>30/06/2016</td>
<td>May 2016</td>
</tr>
<tr>
<td>@NA_LONDON</td>
<td>10/08/2015</td>
<td>April 2015</td>
</tr>
<tr>
<td>@NA_Midlands</td>
<td>02/08/2016</td>
<td>December 2015</td>
</tr>
<tr>
<td>@NatActScot</td>
<td>01/09/2016</td>
<td>April 2016</td>
</tr>
<tr>
<td>@YorkshireNA</td>
<td>21/08/2016</td>
<td>August 2016</td>
</tr>
</tbody>
</table>

The process of conducting this data collection followed several steps. First, the six National Action accounts, as target accounts, were located. Second, the outward and inward relations, for both passive and active networks, were collected for each of the National Action accounts and edgelists were created. This step in the data collection process can be seen depicted by figure 4.02. Third, the individual alters, separately for the passive and active network, were then put into a list and the second step of the data collection process was then repeated for each alter. This allows for the relationships between alters to be established for the purposes of
completing the original ego networks. However, while active networks followed the same process of step two, seen in figure 4.03, passive networks were slightly different. Due to Twitter’s rate limit being higher for the collection of followers than for tweets, as well as the greater computing power required, collecting all user’s followers would have taken a significant amount of time and would have resulted in an unmanageable amount of data. However, to drop outward passive relations from alters does not harm the research as an ‘A to B’ relationship is the same as the ‘B from A’ relationship detectable by collecting user friends. Figure 4.04 depicts the difference in method for alters from passive networks.

*Figure 4.02 – Incomplete Ego Network*  
*Figure 4.03 – Active Alter Relations*
Once the data has been collected for the ego users and all their alters, any alter of an alter which is not an altar of one of the egos can be removed from the data set, leaving a data set comprised of the National Action group and its community. From here the ego networks of each National Action account can be studied individually.

Once the final ego networks have been assembled, analysis of the networks and, importantly, how they differ from each other, can then begin. There are three metrics used by this paper to describe and compare between the ego accounts. First is network density; specifically for a directed network. This is defined as the number of connections divided by the potential number of connections. Potential connections is the number of nodes multiplied by the number of nodes minus one. Second is the proportion of accounts with one degree. Finally, third is the proportion of the ego’s out degree. For demonstrative purposes table 4.02 shows these metrics between the networks depicted in figure 4.01 and figure 4.02.

<table>
<thead>
<tr>
<th></th>
<th>Figure 4.01</th>
<th>Figure 4.02</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network Density</strong></td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>One Degree Proportion</strong></td>
<td>14%</td>
<td>86%</td>
</tr>
<tr>
<td><strong>Out Degree Proportion</strong></td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>
By comparing the networks empirically in this way it allows for the drawing of conclusions according to the theoretical logic of this paper. For example, Figure 4.02’s higher proportion of one degree users and lower network density suggest that Figure 4.02’s ego would be a higher priority for disruption as the potential effects would be further reaching. This is because it has more audience to lose permanently and it’s unlikely to quickly build its base again if it attempts to return. Figure 4.01, on the other hand, would present a lower priority as it would be more likely to retain its audience beyond suspension. By utilising these methodological process on the actual National Action network data, it allows for this paper to develop a prioritisation framework for online radicalisation disruption policies.
5. National Action Background

Having established the approach this paper takes, as well as its methods, it is now necessary to introduce the case that this paper focuses on. This paper focuses on the case of National Action. A British far-right, neo-Nazi group which aims at recruiting young members. They describe themselves as a “patriotic youth organisation” and as “a growing community of young Nationalists in the United Kingdom, united in a mission to save our race and generation.” (National Action Website, 2016). Furthermore, they state that they “carry out demonstrations, publicity stunts, and other activities in order to grow and spread our message, that of National Socialism” (Ibid.). The group National Action is of interest to this paper’s research as they are a formal group which actively campaigns and actively attempts to recruit new members; an important aspect for considering radicalisation. However, they have also become associated, either directly or indirectly, with extremist actions, from legitimising murder, through the act of building a bomb, and finally an actual act of murder. As a result, the group was banned by the home office in December 2016, making National Action an important group to consider when discussing counter-radicalisation policies aimed at disrupting the radicalisation process.

The exact origins of National Action are difficult to discern due to the privacy of their members. They state that the “group is masked to protect the identities of its supporters who not only have to worry about their work and education” (National Action Website, 2016) as the reason for this privacy. However, the two individuals who founded the group are known. Benjamin Raymond, a former student at Essex University, and Alex Davies, a former student at Warwick University, formed the group in 2014 as an alternative to the British National Party (BNP), of which Davies was previously a member (International Business Times, 2014). As a group led by students, aimed at other young people, they were able to focus much of their recruitment toward students and other young people associated with far-right politics. This resulted in National Action gaining traction with former members of the BNP’s youth group.

The manner in which National Action uses the internet and online spaces makes them interesting to this research. Benjamin Raymond, the co-founder of National Action, has stated that the internet has been an important avenue for finding new recruits as in the early period they would find new members from 4chan’s news board (Greg Johnson Interviews Benjamin Raymond Part 1, 2016). Additionally, Raymond suggested that the aim of National Action has been the build a tight nit nationalist community (Ibid.). As a result National Action forms an ideal case for assessing community structure and its role in the radicalisation process online, as online organisation has been a core aspect of National Actions growth and sustenance.
However, Raymond also suggested that National Action’s reach online has mostly been limited to those already from the far-right and recruiting beyond that group has been difficult (Ibid.).

Ideologically National Action presents an interesting case worth investigating further. As a self-proclaimed national socialist group they accept that they are a radical group, but distance themselves from, and reject, claims that they are extremist, despite actions by members, or associated individuals, which may be perceived as extreme. National Action, on their website, suggest that “an extremist is somebody who uses or encourages illegal violence or terrorism to achieve their goals” and goes on to state that extremist in the UK typically comes from the left and anarchists (National Action Website, 2016). As a counterpoint they openly claim that “National Action is radical – which means it is at the far end of the political spectrum but only advocate legal violence, i.e. through the Law” (Ibid.). However, in defence of the notion that they are not extremist they offer the fact that the group has never been proscribed by the government, which in retrospect, post-ban, comes across as ironic.

Despite National Action’s suggestion that extremism consists of the use of violence, the UK PREVENT strategy defines extremism as “vocal or active opposition to fundamental British values, including democracy, the rule of law, individual liberty and mutual respect and tolerance of different faiths and beliefs” (PREVENT, 2011, p. 107). This means that National Action can be seen as extremist if they espouse views intolerant of other groups in society. While there is little content on their website which espouses intolerant views, focusing instead on National Action itself, the views espoused on demonstrations do contain many themes which would be considered highly anti-Semitic and racist. An example of this can be seen in speeches given by Jack Renshaw, a prominent member of National Action and the former organiser of the Youth BNP. At a demonstration in Blackpool he gave a speech suggesting that

“the refugee problem is part of a bigger problem. It’s the symptom of a disease. That disease is international Jewry… [The National Socialists] were there to remove Jewry from Europe once and for all. That’s what the final solution was. Instead we let these parasites live among us. . . . And we are pointing fingers at the symptoms and not the disease. Let’s cure the disease and then cure all of the symptoms by default”. (Jack Albion National Action Blackpool, 2016).

Additionally, when referring to the anti-fascist protesters he stated that “When the time comes they’ll be in the chambers . . . We’ll give them a nice trial, they’ll be found guilty, and we’ll execute them” (Ibid.). Finally, in keeping with National Action’s acceptance that it is a radical group Renshaw stated “Yes, I am a national socialist. I’m not scared of that label. You can call me Nazi. You can call me Fascist. That is what I am” (Ibid.). The combination of anti-Semitic
comments, which appear to legitimise genocidal policies, as well as calling for far-left opponents to be executed, and the open declaration of being Nazis and fascists make National Action appear to be an extremist, as well as radical, group. Therefore, the choice of National Action as the case study for research into online counter-radicalisation is appropriate.

In addition to statements made that indicate National Action’s extreme positions, their actions also demonstrate their extreme attitudes. Aside from protests and street demonstrations, National Action subgroups have also pursued other methods for gaining attention. One method employed by National Action’s Midlands group was spreading stickers around the University of Leicester campus which read “One day the world will know that ADOLF HITLER was right!” (Denman, 2016). This tactic was successful in gaining much attention for National Action. However, as Alex Davies, the co-founder of National Action, was unaware of the action, it suggests a lack of hierarchical leadership within National Action. This event also drew condemnation from the Union of Jewish Students (Speyer, 2016). Another, more extreme action committed by National Action Midlands was to deface a Jewish memorial in Cannon Hill Park, in Birmingham, and hang a swastika over it (Cortbus, 2015). In addition to negative campaigns aimed at things National Action is against, for example Jewish people, National Action’s Scotland and Yorkshire subgroups have attempted to employ more positive methods of gaining coverage. The Scottish and Yorkshire groups more positive approach took the form of feeding homeless people, inspired by the Greek Golden Dawn’s strategy of community engagement. However, the controversial aspect of National Action approach was in only opting to provide food to white homeless people, dubbing the campaign “White Rescue” (Poulter and Childs, 2016).

The event that brought National Action the most attention, however, was the murder of the Labour Member of Parliament Jo Cox. This is not due to any participation in the act itself by National Action, or National Action members, but due to their reaction to it. When Thomas Mair, the individual found guilty of Cox’s murder, appeared in court, instead of give his name he declared “Death to traitors, freedom for Britain” (BBC, 2016). This phrase was then adopted by National Action as their slogan in apparent agreement with Mair’s intent. This was compounded by National Action’s North East subgroup tweeting “Only 649 MPs to go #WhiteJihad #ChurchillAkbar #BritainFirst #NationalAction #DayOfTheRope” (Religious Reader, 2016), suggesting that more MPs should be murdered. This tweet then attracted the attention of Northumbria police (Armstrong, 2016) and the Twitter account for National Action North East was suspended.
There are, however, actions associated with National Action which are yet more extreme. In 2015 an individual in Wales, named Zach Davies, murdered an Asian man, named Sarandev Bhambra, with a machete and a claw hammer in a supermarket. During the murder Davies shouted “White Power” and later claimed that the attack was revenge for Lee Rigby, a fusilier murdered by Islamic extremists in 2013 (Smith, 2015). It was later discovered that Zach Davies possessed National Action paraphernalia, for example National Action flags, and it has been suggested that he became radicalised online after coming into contact with National Action’s content (Whelan, 2015). Additionally, an unnamed teenager with Nazi sympathies in Bradford was found guilty of constructing a pipe bomb (Black, 2017). However, the teenager had specifically been associated with National Action and had praised Thomas Mair, Jo Cox’s murderer, as a hero on the day of her murder (The Yorkshire Post, 2017). Despite National Action’s claims to non-violence, its inability to restrain individuals associated with it means that National Action, as a group, creates problems when it comes to radicalisation on the far-right.

The combination of all these actions, among a few others, eventually led to the decision of the Home Secretary Amber Rudd, with the support of Parliament, to officially proscribe, ban, National Action. The final decision was made by Parliament on December 12, 2016. The implications of this ban means that any individual becoming a member of National Action, or encouraging support for the group, faces up to ten years in prison. A press release from the UK government states that

“[National Action] has been proscribed following an assessment that it is ‘concerned in terrorism’. The group’s online propaganda material, disseminated via social media, frequently features extremely violent imagery and language. National Action also promoted and encouraged acts of terrorism after Jo Cox’s murder.” (UK Government Press Release, 2016).

The press release goes on to quote Home Secretary Amber Rudd’s rationale behind the decision to proscribe the group. Rudd suggested that

“National Action is a racist, antisemitic and homophobic organisation which stirs up hatred, glorifies violence and promotes a vile ideology. It has absolutely no place in a Britain that works for everyone. Proscribing it will prevent its membership from growing, stop the spread of poisonous propaganda and protect vulnerable young people at risk of radicalisation from its toxic views.” (Ibid.)

This demonstrates the importance of disruption policies aimed at halting the process of radicalisation and stopping people joining radical groups. Of particularly importance is the
weight put on National Action’s online propaganda and the use of social media for communication and gaining new members.

The purpose of this section has been to establish National Action’s background and contextualise both National Action’s extremist credentials, as well as the choice of National Action as the case for this research. As an extremist group with a large online presence aimed at encouraging young people to get involved with its activities, National Action presents an important opportunity to learn about far-right online community structures and their implications for disruption based counter-radicalisation policies. Therefore, this paper now turns to an empirical analysis of National Action’s online social networks.
6. Ego Networks

Having established the previous literature on the subject of online disruption, the theoretical framework of this paper, and the background of the National Action group, this paper now turns to present and analyse the empirical findings of this research. In order to present the empirical data this section looks in detail into the network structures, both active and passive, for the six National Action Twitter account. For each account’s active and passive ego network, the network’s density is addressed, the proportion of one degree users is tackled, and the ego’s out degree proportion is also covered. In addressing the ego’s out degree for their active network, this section also draws on qualitative data on the content of their tweets in order to contextualise the tweets they would send out in order to better understand their role in their local network. The statistics derived from the ego networks are then used in order to understand how the different egos relate to their network and how susceptible they would be to account suspension as a tool of network disruption. In addition to addressing the statistics of the networks, network visualisations are also used, for both active and passive networks, in order to provide more information to the reader. Finally, using the derived statistics, this section makes use of cluster analysis to further demonstrate how role differentiation can be observed in the different National Action accounts.

The first of National Action’s Twitter accounts to be analysed is their main account. This is the overarching account for the entire group, rather than one for a specific regional group. It goes by the screenname ‘@national_action’. The statistics to describe the ego network for ‘@national_action’ can be seen in table 6.01.

<table>
<thead>
<tr>
<th>Network</th>
<th>Active</th>
<th>4.94%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>Passive</td>
<td>1.89%</td>
</tr>
<tr>
<td>One Degree</td>
<td>Active</td>
<td>46.88%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>8.22%</td>
</tr>
<tr>
<td>Out Degree</td>
<td>Active</td>
<td>19.35%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>98.05%</td>
</tr>
</tbody>
</table>

While much of the relevance of these statistics becomes apparent latter when compared against the statistics of the other ego networks\(^2\), several things stand out as important. First, regarding

\(^2\) A full comparison table appears later in the section.
network density, it is noticeable that both active and passive networks, defined by tweeting habits and follows respectively, have very low network densities. The implication of this is that @national_action’s immediate network environment does not form the solid echo-chamber which may be expected of many radical communities. This, combined with the statistics for ‘one degree proportion’ demonstrate that @national_action has many accounts in its surrounding network which have no links to other accounts in the network. 46.88% and 8.22% both represent high levels of single degree users for their respective active and passive network forms. Finally, the ‘out degree proportion’ measure demonstrates that the @national_action account is not frequently used to engage directly with the account’s surrounding network. 19.35% for the active network suggests that @national_action does not regularly tweet at other users, but is more often tweeted at by other users. Furthermore, 98.05% reinforces this as it shows that much of @national_action’s message is spread through its followers consuming the content on its timeline. However, regarding the qualitative aspect of the content of @national_action’s tweets, @national_action is highly cautious in what they tend to post. Their tweets principally refer to the actions of National Action and are self-promotional in nature. However, the account tends to avoid drawing attention to the different National Action branch accounts, it avoids overly contentious language which could invite account suspension, and it avoids participating in Twitter hashtags.
Figure 6.01 - @national_action Active Network Diagram

Figure 6.02 - @national_action Passive Network Diagram
Figures 6.01 and 6.02 add more information necessary to understanding the @national_action account. @national_action is identifiable by the black dot in the diagrams, while the yellow dots are its alters. The diagrams demonstrate the clear preference for passivity on behalf of @national_action as it has many followers, but does not engage with many users. Furthermore, in both diagrams it is clear that there are many single degree users who stand to be permanently lost should the account be suspended. However, it is also noticeable in the passive network diagram that @national_action possess a highly dense network core in addition to many single degree users at the periphery.

The next account of National Action’s to be analysed is their North West branch account. While National Action’s branch accounts are intended to represent regional groups, it is important to note that these region distinctions do not necessarily hold in an online space where geography is irrelevant, meaning role differentiation between accounts can still occur online. The North West branch account goes by the screenname ‘@NorthWest_NA’ and the statistics for its ego network can be observed in table 6.02.

<table>
<thead>
<tr>
<th>Network</th>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>4.18%</td>
<td>3.32%</td>
</tr>
<tr>
<td>One Degree</td>
<td>Active</td>
<td>21.25%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>12.82%</td>
</tr>
<tr>
<td>Out Degree</td>
<td>Active</td>
<td>20.24%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>97.56%</td>
</tr>
</tbody>
</table>

Looking at table 6.02 several important factors stand out. First, similar to @national_action, the network densities for @NorthWest_NA are very low. However, while the active network density is very similar, the passive network density is noticeably larger for @NorthWest_NA. This, coupled with the fact that @NorthWest_NA has a very high proportion of one degree users in its passive ego network suggests that @NorthWest_NA has both a large permanently losable audience for its content and that also it has an even more tightly interconnected core. From this perspective, therefore, @NorthWest_NA can be seen as a bridge between the sparse periphery of National Action’s online community and its tighter inner circle. The role as a bridge between core and periphery can be seen from its much lower one degree proportion measure for the active network. This means that @NorthWest_NA is much more actively
engaged in its local online community than @national_action. Finally, while @NorthWest_NA’s out degree proportion measures are similar to @national_action’s, in both active and passive network, it is important to note the differences in the content of its messages. While @national_action was very cautious in its approach to tweets, choosing to avoid tweeting at other users and avoid hashtags, @NorthWest_NA was much more accustomed to courting controversy. Its profile description, for example, was “Warm Up The Ovens, It’s Time To Get Baked #HitlerWasRight”; referring to the Holocaust. Furthermore, @NorthWest_NA would frequently tweet at other users, making use of derogatory slurs and anti-Semitic terms. This was in addition to more standard self-promotional tweets which could also be found from @national_action. However, the qualitative aspect of @NorthWest_NA’s tweet habits demonstrate how they were more likely to put on a show for their audience and engage directly with them.

*Figure 6.03 - @NorthWest_NA Active Network Diagram*
Figures 6.03 and 6.04 show @NorthWest_NA’s active and passive ego networks respectively. The network diagrams help to show how, in absolute terms, @NorthWest_NA was more likely to actively engage with its network than @national_action, but also had a slightly smaller passive network, again in absolute terms.

The third account to be looked at is National Action’s London branch account. It goes by the screenname ‘@_NA_LONDON’ and the statistics for its ego network can be seen in table 6.03.
Table 6.03 – Ego Network Statistics for @NA_LONDON

<table>
<thead>
<tr>
<th>Network</th>
<th>Active</th>
<th>8.99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>Passive</td>
<td>4.57%</td>
</tr>
<tr>
<td>One Degree</td>
<td>Active</td>
<td>22.86%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>1.43%</td>
</tr>
<tr>
<td>Out Degree</td>
<td>Active</td>
<td>39.47%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>89.49%</td>
</tr>
</tbody>
</table>

The statistics presented in table 6.03 represent a sharp distinction from the statistics derived from the ego networks of both @national_action and @NorthWest_NA. Beginning with network density, it is clear that @NA_LONDON’s active and passive networks are both much denser. This is particularly true for the active network. This demonstrates how @NA_LONDON is far more integrated within its local online community than both @national_action and @NorthWest_NA. High network density measures, as in this case, represent how, in the event of account suspension, it would not be difficult for the community to spread a message about a new account, created to sidestep the suspension. Furthermore, the low figures for one degree proportion in both active and passive networks means that @NA_LONDON does not have a large permanently losable audience, meaning it is potential to return to pre-suspension levels with a new account is quite high. Finally, the high score for active out degree proportion and lower score for passive out degree proportion shows that @NA_LONDON is very actively engaged with its immediate community, more so than @NorthWest_NA. Furthermore, regarding the qualitative content of @NA_LONDON’s tweets, the account is similar to @NorthWest_NA in that it regularly tweets at other users, makes use of hashtags, as well as using more combative language; also on top of regular self-promotion.
Figure 6.05 - @_NA_LONDON Active Network Diagram

Figure 6.06 - @_NA_LONDON Passive Network Diagram
Figures 6.05 and 6.06 show the active and passive network diagrams for @_NA_LONDON respectively. Visually, compared to the networks for @national_action and @NorthWest_NA, it can be seen how @_NA_LONDON lacks a large amount of single degree users; the users which would be permanently lost in the event of account suspension. @_NA_LONDON’s networks, especially its passive network, is clearly more tightly interconnected, meaning individuals are much more likely to hear similar content from everyone surrounding them in the network.

The three remaining National Action accounts bare many network similarities with @_NA_LONDON, therefore they will be addressed more briefly in order to avoid repetition. The fourth account is for National Action’s Midlands account, which uses the screenname ‘@NA_Midlands’; its network statistics are presented in table 6.04.

Table 6.04 – Ego Network Statistics for @NA_Midlands

<table>
<thead>
<tr>
<th>Network</th>
<th>Active</th>
<th>7.67%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>Passive</td>
<td>6.40%</td>
</tr>
<tr>
<td>One Degree</td>
<td>Active</td>
<td>30.30%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>0.93%</td>
</tr>
<tr>
<td>Out Degree</td>
<td>Active</td>
<td>52.97%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>86.15%</td>
</tr>
</tbody>
</table>

The statistics in table 6.04 show that @NA_Midlands also possess highly dense ego networks. It also shows how @NA_Midlands has very few single degree users in its passive ego network, meaning little in the way of a permanently losable audience. However, the higher proportion of one degree uses in the active ego network suggests that much of its engagement with other users was purely one way, meaning users may have been unlikely to respond to @NA_Midlands. This can also be seen from @NA_Midlands out degree proportion measure for its active network. @NA_Midlands was the only account to be found to have a score higher than fifty percent for all the National Action accounts. Meaning that it was more likely to tweet at other users than it was to be tweeted at by other users. @NA_Midlands, therefore, can be seen as engaged in its immediate network, but potentially trying to foster cooperation and cohesion within the National Action community. Regarding message content, @NA_Midland’s tweets were mostly for the purpose of promoting National Action, its own
branch, and the other branches. While it would occasionally make use of charged and contentious language, it wasn’t to the same level as @NorthWest_NA.

**Figure 6.07 - @NA_Midlands Active Network Diagram**

**Figure 6.08 - @NA_Midlands Passive Network Diagram**
The fifth National Action account is for their Scottish branch, it goes by the screenname ‘@NatActScot’ and its network statistics are presented in table 6.05.

<table>
<thead>
<tr>
<th>Network</th>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Degree</td>
<td>Active</td>
<td>32.39%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>1.01%</td>
</tr>
<tr>
<td>Out Degree</td>
<td>Active</td>
<td>48.78%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>92.53%</td>
</tr>
</tbody>
</table>

@NatActScot’s tweeting habits can be seen to be very similar to @NA_Midlands in the way that it’s very likely to tweet at other users yet still possess a high one degree proportion in its active network. Furthermore, the low active network density suggests that @NatActScot is busy trying to engage many different users from different parts of National Actions wider community. However, regarding the content of those tweets, @NatActScot is much more combative and more willing to use offensive terms than @NA_Midlands. The high passive network density means these highly charged and inflammatory messages are likely to be repeated within an echo-chamber like community. Finally, the low passive one degree proportion of users means @NatActScot does not have much of a permanently losable audience for their content.
Figure 6.09 - @NatActScot Active Network Diagram

Figure 6.10 - @NatActScot Passive Network Diagram
Figure 6.09, for @NatActScot’s active network, shows @NatActScot’s preference for active community engagement given the absolute rate at which they are likely to engage other users, compared to other National Action accounts.

Finally, the last National Action account to assess is their Yorkshire branch, which goes by the screenname @YorkshireNA. Its network statistics can be seen in table 6.06.

<table>
<thead>
<tr>
<th>Network</th>
<th>Active</th>
<th>3.40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>Passive</td>
<td>14.07%</td>
</tr>
<tr>
<td>One Degree</td>
<td>Active</td>
<td>20.21%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>1.49%</td>
</tr>
<tr>
<td>Out Degree</td>
<td>Active</td>
<td>34.95%</td>
</tr>
<tr>
<td>Proportion</td>
<td>Passive</td>
<td>65.28%</td>
</tr>
</tbody>
</table>

@YorkshireNA is notable for is extremely high passive network density, being almost double the value of the second highest from @NatActScot. Furthermore, its much lower value for out degree proportion in its passive network is notable as it suggests that @YorkshireNA is much more likely to consume the content of other users than any other National Action account. Regarding the active network statistics @YorkshireNA appears more as a participant within the National Action Twitter community than as an organiser of it; like, for example @_NA_LONDON. This is due to the low density, implying wider engagement in the community, and the lower one degree proportion, implying greater reciprocity of communication.
Figure 6.11 - @YorkshireNA Active Network Diagram

Figure 6.12 - @YorkshireNA Passive Network Diagram
Similar to @NatActScot, figures 6.11 and 6.12 for @YorkshireNA’s active and passive networks, respectively, show that @YorkshireNA is more engaged with its local environment on the active level, in absolute terms, compared to many other National Action accounts. Furthermore, its smaller passive network shows that, while denser, @YorkshireNA has much less passive influence, perhaps explaining the preference for active community engagement.

Having established each national action ego network individually, it is important to present the network statistics in a more easily comparable manner. To this end, table 6.07 presents the previously all the, previously shown, network statistics side by side for comparison. Furthermore, table 6.07 includes the mean average of each statistic in order to better demonstrate how each account’s statistics compare to the group wide statistic.

Table 6.07 – Full Comparison Table (including mean average of values)

<table>
<thead>
<tr>
<th>User Account</th>
<th>Network Density</th>
<th>One Degree Proportion</th>
<th>Out Degree Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Passive</td>
<td>Active</td>
</tr>
<tr>
<td>@national_action</td>
<td>4.94%</td>
<td>1.89%</td>
<td>46.88%</td>
</tr>
<tr>
<td>@NorthWest NA</td>
<td>4.18%</td>
<td>3.32%</td>
<td>21.25%</td>
</tr>
<tr>
<td>@NA_LONDON</td>
<td>8.99%</td>
<td>4.57%</td>
<td>22.86%</td>
</tr>
<tr>
<td>@NA_Midlands</td>
<td>7.67%</td>
<td>6.40%</td>
<td>30.30%</td>
</tr>
<tr>
<td>@NatActScot</td>
<td>4.02%</td>
<td>6.59%</td>
<td>32.39%</td>
</tr>
<tr>
<td>@YorkshireNA</td>
<td>3.40%</td>
<td>14.07%</td>
<td>20.21%</td>
</tr>
</tbody>
</table>

Average: 5.53% 6.14% 28.98% 4.32% 35.96% 88.18%

Through comparing accounts relative to the group average it is easier to see how many of the accounts differ. For example, regarding active network density, @_NA_LONDON and @NA_Midlands stand out for having considerably denser networks than the rest of the group, cementing their role in actively engaging their local community. On the other hand, for passive network density, @national_action and @NorthWest NA are notable for their much lower network densities, meaning they are much greater links to National Action’s online peripheral community. Furthermore @YorkshireNA’s very high passive network density, over double the group average, demonstrates how embedded they are within National Action’s Twitter community. Regarding active one degree proportion it is notable how @NorthWest NA and
@YorkshireNA have much more in common than with @national_action, demonstrating how @national_action relies much more on accumulating a passive audience compared to @NorthWest_NA which appears to attempt to cultivate both active and passive audiences. This can also be seen from the passive one degree proportion statistics which show a clear divide between @national_action and @NorthWest_NA on one side, and the rest of the National Action accounts on the other. This can be explained by the other accounts being more embedded in National Action’s online sphere and not immediately obvious to potential new members, while @national_action and @NorthWest_NA are more high profile, meaning new members are more likely to find these accounts first. For @national_action this is the case as it is the main account for the group, therefore it would be the first point of contact for many individuals. However, as @NorthWest_NA is more likely to put out offensive content, its tweets may appeal more, and be seen as more entertaining or engaging, to members of the far, and alt, right, making it more attractive to follow for people already predisposed to National Action’s ideology who may not be that invested in the National Action group itself. Finally, the higher propensity toward active out degree proportion, compared to passive, from the other four accounts show how they are more likely to put out content, whether self-promotional or to entertain their immediate network, demonstrating their role as community organisers more than community expanders like @national_action or @NorthWest_NA.

By utilising average-link clustering on the data presented in table 6.07 it is possible to analyse further the similarities between the network measures for the National Action Twitter accounts. The resulting cluster dendrogram is presented in figure 6.13.
Figure 6.13 depicts how the different National Action Twitter accounts may be grouped into subgroups by their network characteristics. The first split demonstrates how the accounts can be split into two different clusters, with @national_action and @NorthWest_NA on one side, and the other four accounts on the other. This paper suggests that this cluster difference is due to role differential within National Action’s online community, with @national_action representing community enlargement roles, with the other four accounts representing community engagement and cohesion roles. The further splits in the dendrogram suggest that it is possible to further break down the other four accounts into smaller clusters, however, the interest of this paper's analysis, at this stage, is to demonstrate the key binary split between expansion and cohesion roles.

The distinction between expansion and cohesion roles, and the network characteristics which determine them, are important to assess due to their potential impacts on policies aimed at the disruption of the functions of radical communities. This paper initially presented three core roles of interest when forming disruption policies. These roles are The Beacon, a passive focal point designed to attract users interested in the movement. The Recruiter, an active node which attempts to engage users predisposed to the ideology of the movement and encourage
their participation within the movement. Finally *Group Maintenance*, where nodes actively engage with the community and reinforce the ideology of the group in an attempt to tighten their control of their membership and audience. Of these three roles *The Beacon* and *The Recruiter* are the two group expansion roles, while *Group Maintenance* is the role focused on group cohesion. The purpose of looking into the ego networks of the different National Action accounts is to clarify how @national_action can be seen as *The Beacon*, @NorthWest_NA is *The Recruiter*, while @_NA_LONDON, @NA_Midlands, @NatActScot, and @YorkshireNA function as *Group Maintenance*.

This distinction is important to draw as the previous literature on the success of account suspension as a network disruption tool does not distinguish between these roles. Previous attitudes toward suspension would not consider a difference in how network structure would affect the group’s online organisation. However, when considering network structure @national_action and @NorthWest_NA, if suspended, would yield the greatest disruption effect, compared to the suspension of the other four accounts, due to their high proportion of permanently losable audience. The suspension paradox, however, is due to accounts only becoming suspended when they break Twitter’s rules on offensive and extremist content. Therefore, despite suspending @national_action resulting in the greatest yield, @national_action is also the least likely account to be suspended due to its passivity. The four more active, and explicit, group maintenance accounts are, therefore, more likely to be suspended, despite resulting in the lowest disruption yield as their dense networks make it much easier for them to bounce back from suspension. However, as @NorthWest_NA is a more active account it is also more likely to face suspension and lose its permanently losable audience. Despite this, as @NorthWest_NA acts as a bridge between core and periphery, if suspended alone @NorthWest_NA would be able to return quickly due to its highly dense core and would be able to establish its periphery links by engaging with the permanently losable proportion of @national_action’s audience; therefore returning fairly quickly to its bridge-like function. However, if @national_action and @NorthWest_NA were simultaneous suspended this would have the greatest impact of containing National Action’s online expansion without the need to focus on the other four accounts.

The purpose of this section has been to present the empirical finding of this paper regarding the ego networks for the six different National Action Twitter accounts. Having presented the different ego networks and compared their statistics this section has shown how role differentiation between Twitter accounts is a phenomena worthy of consideration for the choice of account suspension targeting compared to an approach of treating accounts as
homogenous. To this end @national_action has been shown to fit the characteristics of *The Beacon* role, focused on passive signalling to individual users interested in National Action’s ideological perspectives; making it the first point of contact for many potential radical individuals. @NorthWest_NA has been shown to fit the characteristics of *The Recruiter* as it acts as a bridge between National Action’s core and periphery on Twitter, enabling individuals to move from non-engagement to active membership of National Action’s Twitter sphere. Finally, the four remaining accounts have been shown to fit the *Group Maintenance* role through their efforts to engage National Action’s core on Twitter, and that while these accounts tend to be the more likely to be suspended, they are also the least likely targets to have a lasting effect. This paper now turns to look at the entire network structures for National Action, rather than just individual ego networks for different National Action Twitter accounts.
7. Full Networks

The previous section established the differences between the ego networks of the National Action accounts and their impacts on disruption yield. While the observable differentiation in roles from ego networks is the main concern of this paper, it is also necessary, for the sake of completeness, to look at the overall network structure for National Action’s presence on Twitter. This is again done for both the full active and full passive networks. However, it is also important to mention how the full network structure was mapped. The methodology section of this paper described how data was collected. This was by finding the accounts, known as the alters, linked to each National Action account, either by follows or by tweets, then looking at the accounts linked to each of the alters, again by either follows or by tweets. The ego networks were then extracted from this by finding the links between the National Action accounts and the links between all of each National Action account’s alters. The important concern is that if the data for each National Action ego network were combined, this would not form the full network. This is due to the fact that if alter A appeared in one of the National Action ego networks, and alter B appeared in a different National Action ego network, but neither appeared together, if alters A and B shared a connection, either through follows or tweets, this connection would not appear in the naive approach to mapping the full network by combining the ego networks. Therefore, in order for this paper to gain the full network information, a hypothetical node was created with links to all the National Action accounts. A two level ego network was the generated for this hypothetical node. Subsequently, all references to this hypothetical node were removed from the data. This process results in attaining the full networks, preserving alter connections that may otherwise have been missed. Having established this difference in method between Ego and Full networks, it is important to turn to presenting and discussing the full networks.
Figure 7.01 presents the network visualisation for the full passive network. From this visualisation several important things become immediately apparent. First, the black dots in the centre represent the six National Action accounts. For the purposes of the diagram in figure 7.01, the nodes for National Action have been made larger relative to the surrounding accounts, which have been made smaller, in order to aid clarity. Figure 7.01 shows how all six of the National Action accounts are very central to the network. To this end, the second immediately noticeable aspect of the full passive network is the density of the networks core.

Networks with highly dense cores, such as in figure 7.01, are often derisively referred to as ‘hairballs’, as observing relationships between the accounts in the centre can often be difficult. However, when considering radicalisation, the density of the network core is important as this is the main area where National Action’s political and social narratives will have their greatest effect. As users in the core are following many other accounts in the core, and are being followed by many accounts in the core, any content put out by an account will be quickly consumed by all other accounts in the core. Additionally, as the accounts in the core are liable to repeat the content they consume, this creates a situation where the same content is
shared by many users and other users end up consuming the information from multiple sources near simultaneously. This action stands to increase how convincing the information is seen as, therefore lending it more credibility and believability; intensifying the radicalisation process. However, this intensification of radicalisation only applies to individual users already within the network core. The important aspect of disruption policies, however, is to disrupt the recruitment aspect of the radicalisation process; therefore stopping users from reaching the network core in the first place. This leads to the third noticeable part of figure 7.01, the user accounts at the periphery of the network.

The accounts on the outside of the core, linked by one node, or by only a few nodes, are the accounts that have expressed an interest in National Action’s activities and ideology, but haven’t become fully absorbed into the network yet. It is important to note that not all individuals in the periphery will be at risk of radicalisation as simply expressing an interest does not indicate what that interest is. For example, an account on the periphery could belong to a journalist attempting to keep track of National Action. However, any individual at risk of radicalisation would have to start somewhere, and this starting position would be on the periphery of a radical community. The important thing to consider when observing the number of peripheral accounts in figure 7.01 is that the majority of them are following either @national_action or @NorthWest_NA, or both. Only two accounts, therefore, are responsible for the periphery or National Action’s passive Twitter network. This reinforces the notion that the suspension of either @national_action or @NorthWest_NA, or both, would have the greatest impact on disrupting the process by which users on the periphery become absorbed into the core.
Figure 7.02 depicts the full active network for National Action on Twitter. It is important to note that, as tweets are more transitory than followers, a single snapshot of the full active network will not necessarily be fully representative of the active network as it would be changing more rapidly over time. However, despite this, several important things can be observed in the diagram in figure 7.02. First, similar to figure 7.01, the black dots represent the National Action accounts. However, instead of all being central, as in figure 7.01, the National Action accounts instead form a ring around the accounts in the centre. Observing this is not possible from the ego networks alone. From the ego networks it could be seen that each account had many surrounding accounts messaging each other, as well as several surrounding account which were not engaged with others. However, in the full active network it becomes clear that the accounts tweeting at each other in each of the ego networks all overlap between the different ego networks. Therefore, these central accounts represent highly active accounts within National Action’s Twitter community. The second observable aspect of figure 7.02 is the peripheral accounts. In the case of the active network, it is more difficult to make conclusions regarding these accounts as they could be accounts which also appear in the centre if measured at other times. However, it is notable that all the National Action accounts have many links to peripheral users, compared to the full passive network where only two accounts were responsible for the periphery.
In addition to looking at the full passive and active networks, it is also important to look into how the Nation Action Twitter accounts relate to each other within both full networks. Figure 7.03 shows the passive relations between the six National Action accounts.

Figure 7.03 – Passive relations between National Action accounts

For the sake of clarity, the nodes in figure 7.03 have been labelled. The arrows in figure 7.03 represent the same directionality as previous diagrams, however, the arrows are clearer due to less information being depicted. In figure 7.03, it can clearly be seen that five of the six National Action accounts, the exception being @national_action, all follow each other. Furthermore, all the accounts follow @national_action. However, @national_action follows none of the other five accounts. This separation of the main National Action account from the rest of the National Action accounts is important to consider as it reflects @national_action’s role as a passive beacon attracting new people to National Action’s community. Additionally, the separation of @national_action reinforces @NorthWest_NA’s role as a recruiter within the network. As @national_action does not represent a group in National Action already represented by one of the branch accounts, the @national_action account has little need to follow any other National Action account. Furthermore, by not bringing attention to the other branch accounts, the branch
accounts avoid, to some degree, the criticisms and backlash they may provoke from users opposed to their ideology and activities. Therefore, this can potentially be seen as a protective strategy, similar to @national_action avoiding content that may result in the account being suspended. However, this protective approach would have the effect of preventing all users from progressing into the National Action community. This is why this approach solidifies @NorthWest_NA as a recruiter. As all the branch accounts represent members of National Action, who would also be in control of the main account, any user expressing an interest in @national_action would be observable by whichever individual, from a National Action branch, was in control of the @national_action account. As the second biggest National Action account, this controller would likely be from the North West branch. Therefore @NorthWest_NA is in a better position, with regard to information on potential members, than other National Action accounts. This information on interested users can then be used as a guide for engaging with these interested users with the intent on bringing them deeper into the National Action Twitter community.

*Figure 7.04 – Active relations between National Action accounts*
Figure 7.04 depicts the active relations between the National Action Twitter accounts. Similar to figure 7.03, the separation of @national_action can clearly be seen. This time, however, there are no edges linking @national_action to any of the other National Action accounts. As with all the active networks, it is important to note that the relations between the other five National Action accounts do not provide much reliable information as the active relations are more transitory. Therefore, it may be possible, given a long enough observation period, that all the National Action accounts message each other. However, what can be concluded is that @NorthWest_NA is much more engaged in the community. This is also true of @_NA_LONDON, @NatActScot, and @YorkshireNA, which is to be expected given their activity in their respective ego networks. @NA_Midlands, however, is not seen to be actively engaging other National Action accounts; this is likely due to the transitory nature of tweets, however. Despite the problem of mapping temporary networks in a static fashion, the differences between the passive oriented roles, seen in @national_action, and active oriented roles, seen in the other five accounts, is clearly noticeable.

This section has sought to explore the structures of the full active and passive networks in order to gain increased understanding of how the different National Action accounts can work in tandem. From the full passive network it can be seen how crucial @national_action and @NorthWest_NA are for the expansion of National Action’s Twitter community. This is in line with the expectations that the beacon role, fulfilled by @national_action, and the recruiter role, fulfilled by @NorthWest_NA, would result in the greatest disruption yield if suspended, compared with the other four National Action accounts. Disruption of the other four accounts, therefore, would result in less impact as they have less permanently losable audience as well as being more embedded in the network core; making it easier for them to regain followers once suspended as message of their return can spread faster to all followers lost. Additionally, by looking at the relations between National Action accounts, it becomes clearer how the process of community growth can happen. This is due to @national_action gaining the attention of interested users, @NorthWest_NA using information on interested users to engage them and draw them into the community, and finally, the other four accounts engaging interested users once they are fully drawn into National Action’s Twitter sphere. The next section seeks to abstract this process in order to present generalised rules for online radicalisation and the impact of targeting different nodal points in the radicalisation process.
8. Disrupting the Radicalisation Process

This paper has presented its empirical findings of the exploration of National Action’s community structure on Twitter, as well as demonstrated how differences in the active and passive ego networks of specific National Action Twitter accounts can reveal different roles within the community. Furthermore, the interplay between the periphery and the core of the Twitter community has been covered by discussing how the recruiter role can act as a bridge. It is now important for this paper to take these findings and develop them into a more abstract understanding which can inform disruption policies aimed at targeting other radical or extremist online networks. Therefore, this section returns to the radicalisation process and how an individual user, susceptible to radicalisation, would be liable to interact with a radical community structured in a similar manner to National Action on Twitter. Furthermore, this section discusses the implications of this process, and a network based approach, for locating effective interdiction points that would determine the successful disruption of the radicalisation process. It is, however, important to consider that this research was based on the analysis of one radical group and its surrounding community. Therefore, making broad generalisation about the structure of other radical groups, particularly radical groups not of the far right, as well as radical groups on different online platforms, is difficult. As a result, caution should be taken in the broad application of the approaches discussed in this section. Instead, this paper is advocating for the broader use of an ego network based approach to other radical groups and radical groups on different online platforms in order to better identify their specific radicalisation pathways.

For the National Action group specifically, however, the radicalisation pathway for their Twitter community follows the structure proposed earlier in this paper. Within the three distinct roles suggested, there is, first, a clear account to fulfil the Beacon role, @national_action. Second, there is a clear account to fulfil the Recruiter role, @NorthWest_NA. Finally, the remaining National Action Twitter accounts neatly fit into the expected behaviours of the Group Maintenance role specified. Therefore the process by which an individual may become radicalisation along the National Action model of a radicalisation pathway can be easily abstracted. This process is presented in figure 8.01.
Figure 8.01 – Radicalisation Pathway for a Susceptible User

Figure 8.01 depicts the pathway an individual user may take in order to become immersed within a radical group’s community. It is important to note that it is not necessarily the only pathway an individual user may take, however, the purpose of this paper has been to elucidate the different roles accounts may take in order to facilitate this particular pathway. In figure 8.01 the individual user susceptible to radicalisation is depicted by the square labelled with a U. The black circles represent the accounts belonging to the radical group in question. For the purpose of this paper these nodes represent the official group accounts, however, in other cases these accounts do not need to be official accounts. For example, instead they could simply be individual users acting as part of the group, or proponents of the radical ideology. The dotted arrows represent an expression of interest between the source of the arrow and the target. The solid arrows represent active engagement. Finally, the dashed arrows represent the radicalisation pathway; read chronologically left to right. Therefore, the beginning of the radicalisation pathway begins when a user, already predisposed to accepting the particular radical ideology, expresses an interest in the account fulfilling the role of Beacon. This is because this account role acts as the group’s primary means of self-promotion, making it the first account an individual user expressing casual curiosity about the ideology would observe. It therefore acts figuratively as a guiding light for those vulnerable to radicalisation, hence the moniker of beacon. Furthermore, as more users express an interest in this account, its follower count grows, making it stand out more and causing the reach of its message to spread further, in turn drawing in more people. By expressing an interest in the group, the individual user is voluntarily entering the periphery of the radical group’s community.
The next phase is triggered by the expression of interest in the Beacon by the interested user. This then communicates information to the other members of the group, who are able to observe users attempting to interact with the Beacon. Users expressing an interest in the group, as well as displaying symbols relevant to the ideology which may identify the user as sympathetic to the ideology, can then be approached. This can be undertaken by the account with the Recruiter role in the group. An account may adopt this role when they have informational privileges regarding users expressing an interest in the Beacon. The Recruiter is then able to express an interest in the interested user. This can then lead to active engagement of the interested user, resulting in them being drawn slightly deeper into the radical group’s community. This behaviour can be seen from @NorthWest_NA in the case of National Action due to its greater level of activity within its network, while also retaining a large share of users on the periphery of the network. This is in line with the view from Social Movement Theory that sees group recruiters as ‘rational prospectors’ who seek to minimise their effort and maximise their gains by targeting users already predisposed to their ideology. By providing an account to attract users into expressing their interest, then feeding that information back, radical groups can more effectively draw users into their communities.

Finally, if the Recruiter is successful in their interaction with the user, the user may then progress from the periphery of the group in the core of the group’s community. This would then result in a greater amount of interaction between the user and the accounts linked to the group, as well as other users within the group’s community, the Group Maintenance accounts. This is the final stage of the radicalisation pathway as it represents the point at which the most significant aspects of radicalisation would occur. This is due to the fact that the group’s ideology would be presented to the user multiple times from many different users, reinforcing the narrative of the group. If the user were then to internalise the messages and values of the radical group, the radicalisation process would then be complete. Despite this research only looking at a case where there was one Beacon, one Recruiter, and several Group Maintenance accounts, it is important to note that different radical groups may possess different numbers of each account role.

By looking at radical communities through a network approach the radicalisation pathways become easier to distinguish as the way in which a radical online community is oriented is perceived differently to a non-network approach. Figure 8.02 presents a diagram demonstrating how this difference in perception manifests.
Figure 8.02 (a) represents the perception of an online community from a non-network approach. Different accounts are seen as functionally similar as they all possess the same capability to spread their message and interact with other users. All accounts are contained within the boundaries of the community of interest. The differences between accounts largely consists of the follow counts of each different account, as the suspension of an account with a greater number of followers would be expected to yield a greater result on disrupting the functioning of the community. This leads to the expectation that while suspended accounts can return, known as the ‘whack-a-mole’ problem, if they have a lower follower count post-suspension a persistent approach can gradually reduce the size of the radical community. Therefore, a non-network based approach to the online disruption of radicalisation legitimises an attrition strategy to tackle the community regarded as problematic. The purpose of this paper has not been to argue against the viability of this approach, but instead to suggest that a network based approach suggests an alternative strategy of targeting specific accounts.

Figure 8.02 (b) presents how the same community may be perceived using a network approach. There are several important differences to note. First, the nodes are interlinked. This is the reason for the ‘whack-a-mole’ problem as highly interconnected nodes effectively share their audiences, making it easier audiences to return to the accounts post-suspension. Second,
the boundary no longer reflects the entire community, but the core of the community, with the community’s periphery falling on the outside of the boundary. The highly interlinked nodes are, therefore, within the core of the radical community. Third, some accounts have changed position to reflect their relationship to the nodes in the core. The node outside the boundary represents the *Beacon*, acting to lure people to the periphery of the community. The node on the boundary represents the *Recruiter*, acting as a gate keeper to the core of the community. Seen from the network perspective, the radicalisation pathway is clearer. Furthermore, from the network perspective it is easier to see why disruption based on suspension can have mixed effects. Targeting nodes within the core is inefficient, while targeting the peripheral group account which build up the core has a much greater chance of halting the radicalisation process. Observing role differentiation between accounts also demonstrates a core problem with a non-network approach.

The case of National Action demonstrated how their *Beacon* account, @national_action, would typically avoid spreading content which could see the account banned, while the *Group Maintenance* accounts would be more comfortable spreading extreme content. Without differentiating between accounts, a suspension approach would only target accounts within the core and leave the peripheral accounts largely untouched. Therefore, there is a tendency toward inefficiency in current approaches to tackling extremist content in online spaces. If an account does not break a social media platform’s content rules then it is not going to be suspended, even if it were a significant contributor to the growth of a community which regularly spreads extremist or radical content.

In order to more effectively tackle radicalisation online, therefore, it is important to strategically prioritise accounts based on their contribution to growing the community regarded as radical. The important interdiction points for disrupting radicalisation therefore follow the same route as an individual becoming radicalised. The highest priority would be reserved for *Beacon* accounts as they represent the avenue by which the radical group makes themselves known to individuals susceptible to radicalisation. The second highest priority would then go to the *Recruiter* account as they act as the funnel which channels users into the core of the network. Beyond these two peripheral accounts, *Group Maintenance* accounts can be targeted in the same non-network based approach as the lowest priority.

At this point the problem of grounds for suspension is important to address. Having established that some of the accounts most responsible for growing the radical community may also be the most cautious in the content they put out, there would appear to be no grounds to suspend those accounts. In order to effectively target a radical group, individual accounts must
be treated as belonging to that group. A strategy of attempting to disrupt a group by treating its component accounts as separate entities is incoherent and unfocused. Therefore, as a potential solution, social media platforms and law enforcement agencies could approach the problem of disrupting groups by ensuring that accounts related to the group are considered collectively responsible for the content they propagate. This approach of ‘group responsibility’ would then tie the responsibility for the radical content of the community’s core to the peripheral accounts aiming to avoid suspension. This approach can be seen in some instances where the group in question is seen as a major issue. For example accounts linked to, or supportive of, Islamic State will be removed by social media sites upon discovery. However, as radical far-right politics are sometimes seen as skirting the line of acceptability, far-right groups are often allowed to retain their presence on social media platform. Therefore, in instances where the group itself is not seen as worthy of a blanket ban, but instead skirts the line of acceptability, it may be possible to suspend the entire group, through group responsibility, rather than focus on suspending accounts with little impact on the entire radicalisation process.

This section has sought to demonstrate the process of radicalisation from a network perspective in order to show the present problems of inefficiency in methods to tackle radicalisation online. This paper maintains that it is important to prioritise the suspension of accounts based on their contribution to the growth of the radical community. However, the paradoxical nature of suspension means that the accounts most likely to be suspended are the accounts with the least marginal impact on the radicalisation process. Therefore it is important for social media platforms and law enforcement agencies to tie the behaviour of a communities most radical members to those accounts whose suspension would yield the greatest impact for the disruption of the radicalisation process. Before concluding, it is important that this paper reflects on the banning of National Action and what can be learned from the government’s approach.

Up until this point, this paper has been discussing National Action’s Twitter community, and the roles of different accounts within it, as though National Action continues to be an active group. However, it is important to note that National Action was officially banned by the UK government in December 2016. This means that, while the findings of this paper regarding role differentiation of accounts, and its implications for the radicalisation process, do capture National Action’s Twitter community structure, the National Action group no longer exists; at least formally. The purpose of this section, therefore, is to briefly discuss the UK government’s approach taken to tackling the problems of radicalisation posed by National Action. This is in order to point out how the UK government’s approach differs from the perspective on disruption laid out in this paper, as well as how it is similar.

The focus of this paper’s research has been the organisation of groups online. However, in targeting National Action, the UK government was approaching the group in general, rather than purely targeting National Action’s online presence. Therefore, through a complete ban on National Action, National Action’s online presence is also targeted indirectly. This had the result that all of National Action’s Twitter accounts were subsequently suspended by Twitter in cooperation with UK law enforcement and the Home Office, with the exception of one account. The only National Action Twitter account to escape the mass suspension after the group ban was @national_action. The account continues to exist at the time of writing, however it is not viewable from the UK without a proxy. Furthermore, as National Action is banned and continuing to promote it, or be a member of it, carries a possible prison sentence, the account remains inactive.

The approach of the UK government does bare similarities to the approach recommended by the finding of this paper. First, is that this paper looks specifically at a clearly defined group. This makes policy easier to create as a group, similar to National Action, has clearly defined parameters and membership, accounts are clearly linked to National Action. Therefore, the UK government’s approach of targeting National Action didn’t have the possible problems associated with tackling a more diffuse and disorganised community, which would have resulted in unfocused policy. This group approach is important to consider as the second similarity is that the actions of National Action accounts was treated with ‘group responsibility’. The impetus for the ban on National Action, as previously stated, was due to its glorification of the murder of Jo Cox, as well as other extreme behaviours. However, not all members or accounts indulged in this behaviour. By treating the group as responsible for the radical behaviour and attitudes of some members and accounts, this allows for tying the more
openly radical elements of National Action to its more cautious elements. As a result all accounts become susceptible to suspension. This results in the UK government’s approach overcoming the difficulties in account suspension raised by this paper, as the core accounts now bring down the peripheral accounts. The approach taken by the UK government, therefore, would likely successfully result in disrupting the radicalisation process as it applies to National Action. However, it is important to note that group banning is an extreme approach to the problem of radical groups.

The tactic of banning a group seen as radical is not always applicable, particularly for social media companies which wish to preserve freedom of speech on their platforms. Social media companies may not have the same ability of governments to keep up to date with the attitudes of individual groups which may be classified as radical. Therefore, to identify and entirely remove such groups presents a difficulty for these companies. A group ban, like that of National Action, or more extreme cases like Islamic State, is therefore not a practical solution. Additionally, the extremism of cases like Islamic State may be obvious, but far right groups pose problems as their aims, while often radical, are still relevant to the political process. For example, it can be difficult to determine a clear distinction between concerns about immigration policy and more radical racist attitudes among far right groups. This is the reason behind the suggestion of tying behaviour, which breaks site rules, of group related accounts to the other group accounts. This has the effect of systematising the online moderation process by allowing social media companies to not have to study individual group’s offline behaviours. Therefore, while the UK government’s approach can be seen as effective in tackling radicalisation in National Action’s case, it has little applicability to the day to day functioning of tackling radicalisation online by social media platforms.

The banning of National Action by the UK government, therefore, represents one way of successfully countering radicalisation in an online space as it cuts off the radicalisation pathway by removing all accounts which could potentially facilitate radicalisation. However, despite this, this approach is not necessarily the most efficient approach and is not an approach that can realistically be pursued by non-governmental entities, for example social media companies.
10. Conclusion

The purpose of this paper has been to explore the structure of a radical online community in order to understand how community structure can facilitate radicalisation by determining specific radicalisation pathways. Through the analysis of community structure implications for the disruption of online radicalisation can then be drawn. This is in contrast to previous studies which sought to understand the disruption of the radicalisation process without considering specific community structure. These approaches led to different expectations regarding how successful account suspension as a disruption strategy would be. Understanding why this disparity exists by analysing network structures allows this paper to develop a more nuanced understanding of which specific accounts are more susceptible to suspension, yielding a greater impact on disrupting the radicalisation process. This paper made use of the case of National Action’s Twitter community in order to empirically demonstrate the importance of community structures in facilitating far right radicalisation online.

In exploring this topic this paper has shown, using comparative social network analysis of different Twitter accounts connected to National Action, that not all accounts are functionally similar. This means that different accounts do not simply perform the same task of spreading radical content to fuel the radicalisation process. Instead, different accounts perform differentiated roles within the wider radical community. This role differentiation allows for greater efficiency in growing membership, but also greater effectiveness in avoiding disruption measures. This is because the network structures of different roles, and therefore of different accounts, are not similarly affected by account suspension. As a result, if suspension is targeted toward the accounts with the more robust network structures, the disruption of radicalisation will be ineffective. However, this paper has sought to demonstrate that the accounts with networks least susceptible to suspension are also the most likely to be suspended, compared to the more susceptible accounts which become more passive and conservative with the forms of content shared specifically to avoid suspension.

There are three forms of roles observed by this paper. First is the role referred to as the Beacon. This role represents the first point of contact for any new individual or user with an interest in the particular radical ideology being expressed or advocated by the radical group in question; making it the beginning of the radicalisation pathway. This account is likely to be the largest of the group’s accounts and is their primary avenue for self-promotion. As such, this account role is liable to possess a large number of followers not fully integrated into the deeper community of the group. Therefore, should this account role be suspended, many of its followers would be permanently lost to the group as these unintegrated followers would be
difficult to reach, should a replacement account be created, due to their lack of links to the wider group. Furthermore, as this account role is highly valuable to the group and is difficult to replace due to its high proportion of permanently losable followers, this account role is likely to become passive and tend toward being less outwardly controversial and combative in order to avoid being suspended. This account role, therefore, is the most susceptible account suspension for disrupting radicalisation online, but it is also the least likely to be suspended.

The second account role is referred to, by this paper, as the *Recruiter*. This role represents the second point of contact for new individuals or users expressing an interest in the radical group. Once a user has expressed their interest in the group, for example by following or contacting the *Beacon* account, this provides information that the user in question is targetable for recruitment. The *Recruiter* role, therefore, is more active than the *Beacon* as the purpose of its role is to engage with interested users and draw them deeper into the radical group’s online community. This role can be seen as a bridge between the periphery of the group’s online community, and its core. As a result, the *Recruiter* role has access to a large number of potential new users, but should an account with this role be suspended, these users will not progress further along the radicalisation pathway and move into the core of the radical group’s community. Therefore, the *Recruiter* account is also susceptible to suspension. However, if the account is suspended and a replacement account created, as long as the *Beacon* remains, the new *Recruiter* is still able to engage with the new users. This makes this account role less susceptible to suspension than the *Beacon*. Furthermore, as the *Recruiter* is more active in spreading radical content, it is also more likely to be suspended.

The final role is that of *Group Maintenance*. The purpose of this role is to ensure group loyalty, cohesion and adherence to the group’s ideology within the core of the group’s online network. As a result of being deeply embedded in the core of the community, the followers are these accounts are highly interconnected. This means that should any account of the *Group Maintenance* role be suspended, if a replacement account is created word will spread quickly and the new account will find it relatively simple to replace their numbers of followers. This has the effect that *Group Maintenance* accounts are the least susceptible to suspension. However, as these accounts are highly active among the most radical users, the content they tend to spread is liable to be highly offensive and controversial. As a result, these accounts are the most likely of all to be suspended.

In the case of National Action’s Twitter community the role of *Beacon* was fulfilled by the main account for the group @national_action. The *Recruiter* role was fulfilled by the branch account for the North West, @North_WestNA. Finally, the *Group Maintenance* roles
were fulfilled by the remaining branch accounts: @_NA_LONDON, @NA_Midlands, @NatActScot, and @YorkshireNA. Therefore, @national_action represented the account most vulnerable to suspension, @North_WestNA the second most vulnerable, and the others the least vulnerable. However, as National Action was banned by the UK Home Office in December 2016 all accounts were targeted simultaneously, resulting in all accounts becoming either inactive or fully banned; effectively eliminating the radicalisation pathway by removing the group entirely.

By considering radical groups, the accounts that make up those groups, and the radicalisation pathways followed by users, as networks whereby differences in structure affect an accounts susceptibility to disruption, several policy implications can be discussed. For non-network based attitudes to disruption which expect account suspension to be ineffective the resulting policy recommendation is to instead observe and keep track of the behaviours of radical groups online. This is because disruption is seen as a losing battle, whereas observation may enable a better understanding of how the group’s radicalism is developing. On the other hand, non-network based attitudes which expect account suspension to be effective recommend the continued use of suspensions against radical groups and accounts in order to deny them a platform and contain the radical group by making it difficult to retain their follower bases. However, this paper has shown that the accounts that will have the most difficulty in retaining their follower base are also liable to be the accounts more likely to conduct themselves in a manner to avoid being banned or suspended, while accounts which would find it easier to regain their followers are able to be more carefree with their content, making them more likely to face being suspended. Therefore, from a network based approach online disruption based counter radicalisation policies must be able to prioritise the targeting of more vulnerable accounts in order to realise the goal of containing the radical group. This would entail social media companies, or law enforcement, enacting some form of ‘group responsibility’ for the promotion of radical and extremist content. By making the entire group responsible for the content produced by its related accounts, the more radical accounts which produce the more radical content, but are the least susceptible to suspension, would be tied to the least radical accounts, which are more passive in terms of putting out radical content. Tying these accounts in responsibility for radical content would have the effect that the likelihood of being suspended is equal across all of the radical group’s social media accounts. Therefore, the accounts most susceptible to suspension become relatively more prioritised compared to the least susceptible accounts. By integrating ‘group responsibility’ into suspension based disruption policies it
enables for the more efficient targeting of radical groups, beyond the attrition approach of non-network based concepts.

It is important to note, however, that while this paper has identified ‘group responsibility’ as an important aspect of linking together different account roles and equalising their likelihood to be suspended, this paper makes no recommendations as to how accounts should be identified as belonging to a group. In this case of National Action, identifying which accounts belonged to National Action was simple as the accounts were official regional branch accounts, however, when assigning group responsibility for content it would be important for social media companies, or law enforcement agencies, to devise a system for determining which accounts belong to which groups. For example, this could be done by allowing groups to identify their accounts, if incentivised businesses may desire to identify linked accounts in order to benefit from promotion. Therefore, political groups, even radical groups, may also seek to benefit from the added promotion of officially linking their accounts. Alternatively, other social media users could identify the accounts belonging to a group. However, this would have the downside of unreliability. Another option may be that law enforcement agencies inform social media companies about radical groups of interest to them. This would mean law enforcement agencies would have to identify the group’s accounts and update social media companies accordingly. While these are some options, this paper refrains from making specific recommendations on policy and implementation.

The limitations of this study are also important to address. First, the research of this paper only looks at one case. This paper sought to analyse the community structure of a far right radical group. As such the results of this paper are not expected to be generalisable to non-far-right groups. However, as this paper only looks at a single far-right group, in National Action, the results are not necessarily representative of other far-right groups. This means that the three group roles identified, the Beacon, the Recruiter, and Group Maintenance, are not necessarily to be found in all far-right groups, or to be found in the same proportions; for example a group more have more accounts fulfilling a Beacon role. Second, National Action as a case represents a clearly delineated group where the boundaries between membership and non-membership are well defined. Therefore, the findings of this paper may have limited applicability to more amorphous far-right ‘communities’, rather than far-right ‘groups’. Finally, this paper only analyses static networks, meaning that it does not look at the changes in network structures over time, as would be done through analysis of dynamic networks.

In order to overcome the limitations of this study future research should be conducted into a wider variety of far-right groups in order to see if the different role observed by this
paper hold true in other instances. Furthermore, more research should be conducted into the structures of ‘communities’, beyond conventional ‘groups’, in order to understand whether there are differences in networks structures, and account roles, in the radicalisation process. Finally, future research should consider analysing network structures of radical groups over time in order to understand how these network structures evolve. Furthermore, by adding a time variable to future studies it allows for greater testing of the claims presented in this paper by observing the passage of individual users along the radicalisation pathways.
11. Bibliography


