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JIHADISM ONLINE - A study of how al-Qaida and radical Islamist groups use the Internet for terrorist purposes

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8) ABSTRACT

This report offers an analysis of how al-Qaida and likeminded groups use the Internet for terrorist purposes. The phenomenon, referred to in the report as 'jihadism online', has increased dramatically over the past few years. The study aims at analysing the present structures and functions of 'jihadism online'. Contrary to public perceptions on cyberterrorism, digital attacks on computer networks do not seem to be particularly important in the jihadist use of the Internet. Rather, the report finds that the main objectives of jihadism online are of communicative and informative character and include activities such as proliferation of illegal material and propaganda, training and recruitment. The report concludes that the Internet has been, and most probably will become an even more important instrument for the global jihadist movement, and it will continue to influence the nature of terrorism in general.

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1   INTRODUCTION

The Internet is an American invention, dating from the period of the Cold War and was originally developed as a communication system for state and military leaders.[1] Since the establishment of the 'World Wide Web' by the European Organization for Nuclear Research (CERN) in 1989, the Internet has experienced an explosive growth. It has become a multi-functional tool for the 'world wide population', and a pervasive ingredient of everyday life in modern society.

In the Arab world, the information revolution began in the mid-1990s and coincided with a wave of Islamic political activism and extremism. Elements of this extremism have evolved into what we call today 'global jihadism'[2], and this global jihadism, as a numerically speaking marginal, but nevertheless powerful tendency among Muslims in both Arab and Western societies, is indeed today present on the Internet.

This report aims to analyze the jihadist Internet. The focus will mainly be on Arabic jihadist websites, but online jihadism in Europe will also be commented upon. The main questions that will be treated are 'Who are the online jihadists?', 'What kind of jihadist websites exist?' and, finally, 'What is the structure and function of the jihadist Internet?'. The report also aims to determine the scope of the jihadist Internet, as well as its strengths and vulnerabilities.

During several years of research on the global jihadist movement, FFI has used the Internet as a unique source of information. Researchers have made use of the enormous amount of information about the jihadist movement, published by the jihadists themselves, and available on the Internet. This first-hand knowledge of how terrorist networks in the past have been using, and today are using, the 'World Wide Web' has enabled us to reach the following conclusions concerning online jihadism:

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[1] This report is written in the context of the "Transnational Radical Islamism Project" (TERRA-III) at the Norwegian Defence Research Establishment (FFI), see www.ffi.no/TERRA. Since 1999, the project has focused on Islamic terrorism, and has lately also incorporated the use of the Internet for terrorist activities as a field of research. This report builds partly on and borrows from the article "Al-Qaida online: understanding jihadist internet infrastructure" written by Dr Brynjar Lia, head of the TERRA-III-project, and published in the January 2006 edition of *Jane's Intelligence Review* and in the journal's online version on 2 December 2005. The report also relies on other research conducted by Dr Brynjar Lia and Truls H. Tønnessen, (PhD Candidate) and TERRA IIIs research assistant.

[2] Global Jihadism is usually understood as the ideology of al-Qaida and its affiliated organisations and networks, often referred to as the 'international jihadist movement.' It emphasises the obligation upon the individual Muslim to fight the 'Crusaders', a term which refers to the United States and its allies, using all means possible, in particular mass casualty suicide attacks which are sometimes referred to as 'quality operations'.

The Internet is of major importance to the global jihadist movement today. It facilitates ideological cohesion and network-building within a geographically scattered movement, and all levels of the jihadist network are present on the Internet. The jihadist websites differ enormously in nature and are run relatively independently of each other. However, many sites are inter-related in the sense that they frequently redistribute and circulate the same material. This indicates that despite a large number of sites, the scope of *new* material that appears on these sites every day is not necessarily very large. Concerning the functions of the jihadist Internet, it fulfils different objectives, most importantly of communicative character. The much feared cyber terrorism, i.e. destructive attack on information systems, does not, so far, seem to be a main objective for the jihadist use of the Internet.

2   DEFINITION OF TERMS

2.1   Jihadism and jihadist

One of the main problems to be addressed in this report is the question 'How do global jihadists use the Internet?' The term 'global jihadism' consequently requires a definition. Within the history of modern militant Islamism, dating back to the 1930s, global jihadism is a relatively new phenomenon. It appeared in the mid-1990s when Osama bin Laden declared the U.S. and the West to be the greatest enemy of the Muslim world and urged his followers to fight this enemy, irrespective of natural and territorial boundaries. Their focus thus shifted from the near enemy (local 'kufr', or infidel, regimes) to the far enemy (the West), and supporters of this global Jihad started carrying out attacks in the West as well as on western interests in the Muslim world. The al-Qaida organization was the base for global jihadism, and its training camps in Afghanistan provided the supporters with ideological information, paramilitary training, and personal relations. With the U.S.-led invasion of Afghanistan in 2001, this organization was dissolved and its remnants reorganized themselves into a decentralized movement, today often referred to as "al-Qaida inspired Islamism" or "the global jihadist movement".[3] Consequently, the term 'jihadist' covers every follower of the 'global jihadism movement', from its leaders to its grassroots supporters.

2.2   Jihadism online

The literature about terrorism on the Internet reveals a multitude of often partly overlapping terms. Frequently used terms are 'cyber terrorism', 'cyber extremism', 'cyber crime', 'cyber attack', 'cybotage' and 'hacking'. Some of these terms are inventions of journalists. However, some are also used by researchers. According definitions used by NATO, the term 'Computer Network Operations' (CNO) comprises all kinds of warfare in cyberspace. It includes Computer Network Defence (CND), Computer Network Attack (CNA) and Computer Network Exploitation (CNE).

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[3] Thomas Hegghammer 'Irak-konflikten i radikal islamistisk ideologi', *Internasjonal politikk*, 63 [4] 2005.

Most of the above mentioned terms represent variations of 'hacking'. In computer security, a hacker designates a person able to exploit a system or gain unauthorized access to it by creating and modifying computer software and hardware. However, the terms embed different intensities of violence and destruction as well as different levels of ideological motivation. Jihadism online may range from non-violent, low-scale hacking, to destructive, strategic information attacks, although it is always strongly ideologically motivated by jihadist thought. Furthermore, and most importantly in this report, jihadism online denotes the general, often communicative and informative, use of the Internet by the jihadists for terrorist purposes.

2.3 Cyber terrorism

Most researchers operate with a clear division between terrorism activities that aim to harm information systems and thereby harm the societies dependent on them, on the one hand, and the general use of the Internet for terrorist purposes, for example the communication and spreading of propaganda, on the other. Both categories are part of jihadism online in general. Strictly speaking, it is only the first category that qualifies as cyber terrorism, but since there are hardly any empirical examples that online attacks have caused real-world violence, the research literature usually uses the term to refer to online activities by terrorist groups.

The Internet is a system for communication and access to information. In its name 'the World Wide Web' (www) lies the concept of global availability, and with its growth of 80% per year it is becoming the world's most extensive communication network.[4] Thus, the very nature of the Internet, i.e. as an open source for information and communication, makes it vulnerable to exploitation. Significant parts of Western countries' critical infrastructure, including financial services, power grids and transport networks, to mention a few, are to a smaller or larger extent dependent on the Internet, and therefore vulnerable to attacks via the Internet. This poses the threat of potential terrorist attacks against these infrastructures. Governments have been aware of the threat – and have taken measures against it – and since the early 1990s, the term 'cyber terrorism' has been in use frequently. Other expressions, such as 'an electronic Pearl Harbor', 'an electronic Waterloo' and 'a digital 9/11' convey the fear that exists in Western societies of computer attacks inflicting immense harm.

However, no fatal cyber terrorist attacks have been recorded so far and no information attacks have been seriously threatening to human life. There have been a very large number of serious incidents of attacks on computer systems, ranging from hacking into sensitive computer systems to the spreading of very damaging malware, but none of these can be identified as cyber terrorism in the true sense of the term. The term 'cyber terrorism' merges cyberspace and terrorism, and as defined by Dorothy Denning, refers to unlawful attacks against computers, networks and stored information, carried out, with a political or social motivation, in order to coerce a government and its people. Another important characteristic of cyber

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[4] Iver Johansen, 'Cyberspace som slagmark', *FFI-Rapport* No. 04/01666 (Kjeller, FFI, 2004).

terrorism is its result in violence or serious threats of violence against persons and property.[5]
There is, consequently, a difference between cyber terrorism and hacktivism. The latter term
refers to politically motivated computer attacks that, are *not* intended to disrupt essential
services or lead to violence. This term will be dealt with as one of the main areas of use of the
jihadism online.

How likely, therefore, is cyber terrorism? Low-effort attacks can inflict damage, but there is a
need for high-level technological knowledge and great efforts in order to carry out attacks
matching the definition of cyber terrorism. It is evident that advanced technological skills exist
and are increasing within jihadist environments, but so far there have not been very determined
efforts to embark on cyber terrorism. Furthermore, as contemporary terrorist groups
increasingly rely on the Internet, attacks against this infrastructure would be
counterproductive. Rather, technological knowledge is channelled into the development of the
internal use of information technology, e.g. within the jihadist milieu itself. Consequently, this
is the kind of Internet use that will be treated in this report under the collective term of
'jihadism online'.

3   PREVIOUS RESEARCH

Several prominent researchers have been working within the field of terrorism and new
information technologies. Some have written books and articles dealing with this subject in-
depth, while others run websites, commenting on a daily basis upon the development of
terrorist networks on the Internet. In the following, a brief survey of previous research about
jihadism online, along with a few comments, will be presented.

Early research, from the beginning of the 1990s, includes the works of Arquilla and Ronfeldt.
A 1993 article entitled 'Cyberwar is coming', deals with new modes of war in the Information
Age. The authors argue that "the information revolution will cause shifts both in how societies
may come into conflict, and how their armed forces may wage war".[6] In order to define these
new modes of war they introduce the terms 'cyberwar' and 'netwar', both as "forms of war
about 'knowledge'", revolving around information and communication matters. But while
cyberwar relates mainly to the military level, netwar describes "societal-level conflicts waged
in part through internetted modes of communication". Arquilla and Ronfeldt state that a netwar
is an information-related conflict, including methods such as public diplomacy measures,
propaganda and psychological campaigns, interference with local media and efforts to promote
an opposition movement through computer networks. The main actors are nations or societies
and a netwar may consequently occur either between governments of rival nation-states,
between governments and non-state actors, or between rival non-state actors. The present
international situation of the al-Qaida network targeting Western states, and the Western

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[5] Dorothy E. Denning, 'Activism, Hacktivism, and Cyberterrorism: The Internet as a tool for influencing foreign
policy', in Arquilla and Ronfeldt (ed.), *Networks and Netwars: The Future of Terror, Crime and Militancy*, Rand
Corporation, 2001, pp. 239-288.
[6] Arquilla and Ronfeldt, 'Cyberwar is coming', *Comparative Strategy* 12 (2), 1993, p. 27.

alliance waging war on terrorism, provides an example of both netwar and cyberwar, between governments and non-state actors. This is the authors' conclusion in a later article, entitled '*Networks, Netwars and the Fight for the Future*', published shortly after 9/11, 2001.[7] Furthermore, the authors examine the agents of netwar, and explore these agents' networked organizational structure. They claim that the information revolution is favouring non-hierarchal network forms of organization, doctrine and strategy, and that the rise of networks means that power is moved to non-state actors, such as terrorist networks.[8]

Other researchers have also focused on the power of the Internet for creating communities and building strong networks, in particular terrorist networks. Marc Sageman states that "the revolution in communication technology in the 1990s […] coincided with the rise of the global Salafi jihad" and that it was actually this new technology that made the global jihad possible.[9] When the leaders of al-Qaida returned to Afghanistan in 1996 they were, through new communication methods, able to wage a global jihad, based on a decentralized network of *mujahedeen*, at the same time protected by their geographical isolation. The Internet has created a new kind of relationship between individuals through the creation of virtual communities, and the nature of this relationship is indeed suitable for the Salafist ideology, claims Sageman:

> "The virtual community is no longer tied to any nation, a condition that corresponds to the mythical umma of Salafism, which specifically rejects nationalism and fosters the global Salafi jihad priority of fighting against the 'far enemy' rather than the 'near enemy'".[10]

Being part of such a community is perhaps even more important among Muslim extremist diasporas. Deborah Touboul's study on francophone jihadist Internet forums finds that the participants have two main objectives: sharing information and community building. A virtual community provides them with religious, moral, emotional and material support and it seems that social solidarity within this virtual community is more prominent in Islamist sites in Europe than in the Arab world, reflecting the sense of being a minority in Europe.[11]

According to Olivier Roy, the use of the Internet for political and terrorist action is based on typical western models and most users of the Islamist sites are actually Muslim immigrants, converts or students, living in the West. Their virtual 'ummah' thus represents a search for identity rather than a desire to act. Difficult access to information systems and censorship in many Arab states are among the reasons for the low representation of the Middle East on the

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[7] Arquilla and Ronfeldt, 'Networks, Netwars and the Fight for the Future', *First Monday*, http://www.firstmonday.org/issues/issue6_10/ronfeldt/#r5, accessed 210905.
[8] Arquilla and Ronfeldt (eds.), *Networks and Netwars: The Future of Terror, Crime and Militancy*, Rand Corporation, 2001, 'The advent of netwar (revisited)', pp. 1-25.
[9] Marc Sageman, *Understanding Terror Networks*, University of Pennsylvania Press, 2004, p. 158.
[10] *Ibid*, p. 161.
[11] Deborah Touboul, 'Francophone Internet forums shed light on concerns and issues of islamists', *PRISM Occasional Papers* Vol. 3 No. 6 (27 September 2005), http://www.e-prism.org/images/PRISM_no_6_vol_3_-_Islamic_sites_in_French.pdf.

Internet, according to Roy. However, Roy's field of research is not solely focused on jihadist websites.[12]

Numbers do demonstrate that there are relatively few Internet users in the Middle East. 2003 figures show that the number of Internet users per 100 inhabitants in the U.S. is 50. In the Arab world numbers of users per 100 inhabitants range from 0.2 in Sudan to 8.8 in Kuwait, and countries such as Egypt, Saudi-Arabia and Syria have 0.9, 1.3 and 0.4 users respectively.[13] However, with the growth of internet cafes in many Arab countries, these numbers may be strongly increasing, in particular among young people. It is also important to bear in mind that the supporters of the global jihad in general belong to and are recruited from a young and educated strata in the Middle East. Furthermore, according to FFI research, online supporters of the jihadist ideology in the Middle East are, to an increasing extent, visible and in fact expressing a desire to act.

Roy also mentions the simplification of the religious content on Islamist websites, adapted to a public living outside a Muslim community. Furthermore, Sageman too points to this generalization of Islam on the Internet, stating that "The mass nature of Internet communication encourages sound bites and other reductionist answers to difficult questions" and that "these views encourage extreme, abstract, but simplistic solutions, without regard to the reality and complexity of life".[14]

While this is true in many cases, it also glosses over the enormous diversity of Muslim websites and online information about Islam.

"Al-Qaeda loves the Internet", states Lt. Colonel (retired) Timothy L. Thomas in a 2003 article.[15] He explores the different areas of application of the World Wide Web among terrorist groups and suggests that "cyberplanning may be a more important terrorist Internet tool than the [..] cyberterrorism option". He describes cyberplanning as "digital coordination of an integrated plan stretching across geographical boundaries that may or may not result in bloodshed".[16] In his articles he describes a number of likely ways in which terrorist groups can use the Internet.[17] The following are the main Internet terrorist methodologies, according to Thomas:

- **Data mining**
  Gathering of detailed information, such as photos, maps and diagrams, concerning potential targets

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[12] Olivier Roy, *L'Islam mondialisé*, Editions Seuil, 2002, pp. 165-169.
[13] UNDP Human Development Indicators, 2003.
[14] Marc Sageman, *Understanding Terror Networks*, University of Pennsylvania Press, 2004, p. 162.
[15] Timothy L. Thomas, 'Al-Qaida and the Internet: The danger of Cyberplanning' *Parameters*, Spring 2003.
[16] *Ibid*, p. 113.
[17] *Ibid*, see also 'Information-Age "De-Terror-ence"', *Military Review,* Jan-Feb 2002, via
http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&requesttimeout=500&folder=10&paper=501.

- **Communication**
  Communication of sensitive information, encrypted;
  Communication between supporters of a common cause, providing connection between disparate and geographically distant groups

- **Recruitment**
  Recruitment and mobilization of potential and existing supporters

- **Propaganda**
  Initiation of a huge propaganda machine with few resources

- **Publicity**
  Instant reach to a worldwide audience

- **Psychological warfare**
  Possibility for any group to appear more important than it in fact is, thus producing groundless fear;
  "Cyberfear" - fear of invisible things, such as a cyber attack

- **Financial support**
  Gathering money;
  Manipulating stock options;
  Extortion, in exchange for freedom from attacks

Though we have not seen examples of the two last mentioned methods for gaining financial support, the terrorist areas of use of the Internet mentioned by Thomas are in general consistent with FFI research, in particular his statement about cyberplanning being more important than cyber terrorism.

Gabriel Weimann is another scholar who has written extensively on the use of the Internet among terrorist groups. He also distinguishes between the instrumental use of the Internet (cyber terrorism) and the communicative use of the Internet, and states that "at this point, terrorists are using the Internet for propaganda and communication more than they are attacking it".[18] He explains why the Internet is such a convenient tool for terrorist networks with its easy access, little regulation or censorship, anonymity of communication, potentially huge audience, fast flow of information, and inexpensive development. Furthermore, the Internet offers a multimedia environment that combines text, graphics, audio and video. Information available on the Internet is also increasingly used by the traditional mass media, thus creating wider propagation of the material.[19] This phenomenon is what Weimann calls a

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[18] Gabriel Weimann, 'Terror on the Internet: The New Arena, the New Challenges', Paper for the International Studies Association Convention 2004, p. 7.
[19] Gabriel Weimann, 'www.terror.net: How Modern Terrorism Uses the Internet', *United States Institute of Peace*, Special Report 116, March 2004.

"two-step flow of information: terrorists to journalists via the Internet to the public".[20] Furthermore, Weimann suggests three different audiences for the Internet terrorists. These are, first, current and potential supporters, targeted for example by a site in their local language. Secondly, there is international public opinion, and in particular foreign journalists, targeted by site versions in several languages. And finally, there is the enemy public. This last group is not always clearly a target, states Weimann, yet, some sites aim at demoralizing the enemy, arousing public debate and changing public opinion in the enemy state. As for the content of terrorist sites, this will normally include information about the organization and its activities, its social and political background, its exploits, its political and ideological aims, biographies of its leaders, founders and heroes and criticism of its enemies. Despite the groups' often violent focus, the sites do not necessarily refer to violent activities, according to Weimann.[21] The rhetoric of terrorist sites is nevertheless employed to justify the use of violence. Weimann's article lists common rhetorical tactics. These include the "no choice motive", presenting violence as the only means possible to fight an oppressive, brutal enemy, thereby also "demonizing and de-legitimizing the enemy". Furthermore, terrorists stress their weakness, claiming that violence "is the weapon of the weak". Finally, Weimann reveals "the rhetoric of non-violence", used by violent organizations claiming to seek peaceful solutions. [22]

Also in accordance with FFI's research, it seems that some militant groups present themselves on their websites as less violent than they in fact are. The website of, for example, Hamas' militant wing, the *al-Qassam* brigade, clearly focuses on the violence committed against the Palestinians and describes their own attacks on Israeli targets only as a response to Zionist violations.[23] However, it is inaccurate to say that terrorist groups in general do not refer to violent activities. The jihadist groups operating in Iraq, Saudi-Arabia, Afghanistan, Algeria, and to some extent Chechnya, publish online accounts of attacks including video footage of operations. Iraqi groups also post videos of beheadings on their websites.

There has been an increased interest in jihadism online over the past few years. In addition to a growing volume of academic studies on 'jihadism online', several individuals and organizations monitor and analyze global terrorist groups' daily activities on the Internet, presenting their findings on their own websites.[24] These websites offer comments on terrorist videos and documents, translations of statements by al-Qaida leaders, and translations of discussions held in jihadist chat forums, etc. They also provide descriptions of new jihadist sites and sometimes new url-addresses to well-known jihadist sites. Such monitoring websites

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[20] By JINSA Editorial Assistant Aaron Aft., 'Weimann explains terror groups use of the Internet', *JINSA Online*, August 04, 2004, www.jinsa.org/articles/view.html?documentid=2621, accessed 240805.
[21] Gabriel Weimann, 'www.terror.net: How Modern Terrorism Uses the Internet', *United States Institute of Peace*, Special Report 116, March 2004.
[22] Gabriel Weimann, 'Terror on the Internet: The New Arena, the New Challenges', Paper for the International Studies Association Convention 2004, p. 11.
[23] www.alqassam.ws/arabic/.
[24] See for example 'Global terroraltert', *www.globalterroralert.com/index.htm,* 'The Counterterrorism blog', http://counterterror.typepad.com/the_counterterrorism_blog/; The Site Institute, *www.siteinstitute.com/index.htm;* Internet Haganah, *www.internet-haganah.us/haganah/index.htm;* 'Sofir for Internet Research', www.sofir.org/sofir/.

consequently supply anyone interested in the subject, ranging from individuals and journalists to law firms and governments, with unique information.

It is worth noting that some of these websites, in their common struggle of countering terrorism, take a different stand on methods of counterterrorism. Whereas an organization such as the Site Institute describes the jihadist Internet as an invaluable resource for intelligence gathering on jihadist groups, Internet Haganah, using the same sources, openly encourages the closing down of terrorist websites. The closing remarks of this report will further comment on the counterterrorism debate

4   JIHADISM ONLINE

In the following, a study of jihadism online based upon FFI research will be presented. It offers an analysis of participants, the main types of jihadist websites, and the websites' main areas of use.

4.1   Participants

The global jihadist movement consists of several categories of participants, covering the movement's full hierarchical range. They all use, to a larger or smaller degree, the Internet in order to fulfill their function within the movement. First, the *leadership* of the former al-Qaida, namely Osama bin Laden and Ayman al-Zawahiri, who still exercise important ideological influence, communicate through audio- and video files. These files are usually broadcast on TV channels such as al-Jazeera, and on the Internet. Secondly, the *Muslim clerics* provide theological guidance on legitimate ways of fighting Jihad, issuing frequent fatwas and publishing other religious literature on the Internet. Thirdly, the *strategic thinkers* give ideological and strategic advice, publishing articles and books about the most effective ways of waging Jihad on the Internet. The fourth category of participants is the *militant organizations*. Through their official or semi-official websites, they spread their message and information about the group to the world. Finally, the largest category of cyber extremists consists of the *radical grassroots movement* including active and passive supporters of Jihad. They use the many Internet forums in order to keep themselves updated on the jihadist situation. However, it seems that these users are mostly 'armchair jihadists', not directly involved in terrorist operations, although some are and have been radicalized, partly through exposure to jihadist online material.[25]

The anonymity offered by the Internet has already been mentioned as one of the big advantages for terrorist users. This anonymity makes it very difficult to determine both the identity and the number of the users. Nevertheless, it seems clear that the number of websites has increased enormously over the last years. Some researchers have attempted to give exact numbers, and Weimann suggests an increase from less than 28 sites in 1997 to about 5000 sites

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[25] Thomas Hegghammer 'Irak-konflikten i radikal islamistisk ideologi', *Internasjonal politikk*, 63 [4] 2005.

today.[26] However, we notice that a lot of the terrorist material on the Internet, for example articles, statements and photos, circulates on the various websites, and that this reproduction of the material possibly makes the scope of the jihadist Internet appear larger than it in fact is really. Still, the redirection of the material does require a considerable amount of active users. Active users consequently consist of *producers* of content and *distributors* of content, producers often being official terrorist media groups and jihadist Muslim clerics and strategic thinkers, whereas distributors often are individuals supporting the jihad, i.e. the grassroots movement. Regarding the redirection and spreading of terrorist content, the programs employed for uploading files, such as Megaupload, Turboupload, Yousentit, etc, which are widely used among jihadists, may provide information about both the users and level of activity. The number of times a link offered on a jihadist website has been downloaded indicates the level of activity; download numbers vary from just a few to thousands. Furthermore, a program such as Megaupload cites the source of the files, in some cases revealing interesting information: The source of a jihadist video reported to be *C:\Documents and Settings\Ägaren\Mina dokument\Filmer\16.wmv* shows that the person who uploaded the document used a Swedish word-version, indicating his knowledge of the Swedish language. Some sites, in particular the forums, give information about the number of both their active and passive users, as the forums report how many postings are made on the site, as well as how many comments and readings one posting receives. These numbers vary considerably from site to site and from subject to subject. For example, the jihadist web forum *Muntadayat Shabakat al-Hesbah* reported their number of visitors for the last 24 hours to be 832. The total number of members for *al-Hesbah*, perhaps the most popular jihadist web forum at the time of this research, was 6132, whereas another popular forum *Muntadayat al-Farouq* reported to have 1511 members and *Muntadayat Nusra wa-l-Jihad* only 762 members.[27]

Concerning identity, some users voluntarily give out information about themselves when they register as forum participants. Possible available information is name, age and nationality. However, the names are almost exclusively code names and the commonly used birth date 9/11 2001 is clearly rather an indication of the person's convictions than of his actual age. Most members, judging from their name and from actual reported gender, are male, although allegedly female participants are not unknown.

4.2   Main types of websites

It is possible to categorize the different types of jihadist websites into three main groups.[28] First, there are official websites, representing both jihadist organizations and Muslim scholars. Secondly, there are discussion forums and blogs, where leading personalities, but mostly

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[26] Gabriel Weiman, Key note speach at OSCE Workshop on Combating the Use of the Internet for Terrorist Purposes, Vienna, October 2005.
[27] Data gathered November 4, 2005 from www.al-hesbah.org/, www.al-farouq.com/vb/, and www.alnusra.net/.
[28] The following subsection is borrowed from Brynjar Lia, 'Al-Qaida online: understanding jihadist internet infrastructure', *Jane's Intelligence Review*, January 2006.

'ordinary jihadists', participate. Finally there are sites of a different nature that can be classified as distributor sites.

These sites are run by various parties and operate independently of each other. However, there is a certain interaction between the sites as one site links to another and as material migrates from one site to the next. As one site goes down, its new address will be published on a still open site. Thus, these sites live side by side, supporting each other's existence and thereby the "jihadist online infrastructure".[29]

4.2.1 Official websites – jihadist clerics and organizations

Many radical Muslim scholars, i.e. clerics and strategic thinkers, maintain their official websites. Whether they are scholars living in exile, far from the community they address and comment on, or scholars living among their target groups, the Internet is a crucial means to easily reach a wide audience and spread often controversial and illegal propaganda. The scholars' official websites are established to spread their ideas and ideologies and they normally contain articles and books written by the scholar, and also references to other recommended readings. Moreover, the sites are means for communication between the scholar and his audience, as they often contain contact information (the e-mail address) of the scholar and sub-sites for questions and answers, fatwas, etc. Interactive communication, via Paltalk, Skype and instant messenger systems, is also commonly used.

An example of an official site of a jihadist strategic thinker is the site of the prominent Abu Musab al Suri.[30] In al-Suri's own presentation of the site, one can read that the site contains most of his works since 1987, including books, articles, recordings and videos. Much of the recorded material was produced in Afghanistan during the Taliban rule. However, the focus of the site is his post-9/11 publications and the most important document on the site is the 1600 page-long document entitled "Call for global Islamic resistance", which contains guidelines and instructions for methodology, strategy and the practice of Jihad. Furthermore, the site contains a biography of Abu Musab al-Suri, and communiqués. Yet, despite the impressive collection of material on this site, much of it often becomes inaccessible, as the links usually work only for a short period of time. New links to his production have recently been circulating on a number of top jihadist web forums and have thus been made widely accessible.

Finally, it is interesting to note that his website was for a period of time located at www.fsboa.com, which is actually the address to a U.S. Internet-based real estate company. Abu Musab al-Suri's supporters had apparently installed his site as a parasite in a subdirectory of the legitimate www.fsboa site. From this 'hijacked site' he published his illegal material.

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[29] Brynjar Lia, 'Al-Qaida online: understanding jihadist internet infrastructure', *Jane's Intelligence Review*, January 01, 2006.
[30] www.fsboa.com/vw/index.php, www.carriagehouseglass.com/peepingcam/peeping/index.php.

This is a quite common phenomenon among jihadist websites and is, for example, how one of the first known al-Qaida sites, al-Neda, operated.[31]

An influential cleric present on the Internet is Abu Basir al Tartousi.[32] Like Abu Musab al-Suri, he offers archives of his publications, books, articles, fatwas, questions and answers. Many of Abu Basirs publications are comments upon recent events taking place in society, both in the Middle East and in the West, and in particular Britain, where he resides.

Sheikh Omar Bakri, founder of the Muhajiroun movement[33], also used to maintain his website from the UK. For several years, Omar Bakri headed the group and spread his message through his official Internet site, *muhajiroon.com*. This site reflects Omar Bakri's views, but contains other sheikhs' works as well as his own. The site is thus both his official site and a distributor site, which will be dealt with below. It is worth mentioning that shortly after the London bombings in July 2005, Bakri was banned from Britain and he lives today in exile in Beirut, Lebanon. However, Bakri is still active, using Internet sermons, recordings, videos and the Paltalk chat network to communicate with his followers in Britain and elsewhere.[34]

One of the most important websites maintained in the name of a Muslim cleric is the site called '*Minbar al-tawhid wa-l-jihad* ('Pulpit for unity and Jihad'). It belongs to the Palestinian Sheikh Abu Muhammad al-Maqdisi ('Isam al-Barqawi), and has been located on at least four different mirror sites. The site offers articles, books and recorded material on the salafist-jihadist ideology, shar'ia, and jurisprudence, etc. Again, this site, in addition to being al-Maqdisi's official website, is a distributor site. In fact, the site contains a rich and very well organized library of jihadist literature of other sheikhs, ranging from 14th century Ibn Taymiya to 21st century Osama bin Laden.[35]

In general, the Muslim clerics' official websites are often well organized and more stable than other jihadist websites.

Many of the militant jihadist organizations, operating both in the Middle East and elsewhere, have found it suitable to promote their existence on the Internet. Many groups have established separate 'media battalions' responsible for maintaining official websites and reaching the largest possible audience. These specialized wings of jihadist organizations often possess the necessary technological knowledge to produce and present very professional and sophisticated material, such as high-quality videos. The general objective of these official websites is to

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[31] www.internet-haganah.us/haganah/archives/001047.php#001047.
[32] www.abubaseer.bizland.com/taarif.htm or www.altartosi.com/index.html.
[33] Al-Muhajiroun (Arabic for 'the emigrants') was founded in the UK in 1996 by Omar Bakri Mohammed when Bakri split from the British branch of Hizb Ul-Tahrir. Al-Muhajiroun essentially follows the ideology of Hizb Ul-Tahrir, an international Islamist movement dedicated to the creation of a united Khilafah (Islamic state). Where it is deemed necessary, the Khilafah will be established by Jihad, which Hizb Ul-Tahrir sees as a physical war to be fought against the non-believers. http://www.ict.org.il/articles/articledet.cfm?articleid=484.
[34] Yaakov Lappin, "British Muslim group declares new jihad," *YnetNews.com,* 19 October 2005, www.ynetnews.com/Ext/Comp/ArticleLayout/CdaArticlePrintPreview/1,2506,L-3156809,00.html.
[35] www.tawhed.ws, www.alsunnah.info, www.almaqdese.net, www.abuqatada.com.

propagate the organization's cause, their ideology, the political situation where they operate, general news, their latest activities, etc. Jihadist organizations' websites are in general quite unstable and thus difficult to track, although some official websites have been located on the same url address for protracted periods of time.

An example is the website of the Algerian Salafist Group for Preaching and Combat (GSPC), a group ideologically close to al-Qaida. Their website has been relatively stable, but located on a number of different addresses.[36] In November 2005, the site was accessible, but occasionally overloaded and not operating. The address is situated at prohosting.com, a company located in the U.S. that offers web hosting with e-commerce support. The site offers, on its main page, information about the group and its ideology, as well as links to subdirectories for 'Official communiqués' and 'Information about operations'. The latter has suggestive graphics of blood dripping, and a typical account goes: "The mujahedeen carried out a precise ambush on a military convoy […] that led to the death of 12 and many wounded among the soldiers, and our brothers captured all the [soldiers'] weapons and returned safely to their bases".[37] In addition to giving information about the group's operations to an outside public, this account clearly also aims at demoralizing the enemy and encouraging 'the brothers' inside the organization. Furthermore, the GSPC website has subdirectories for interviews, often with famous sheikhs, videos, articles and books, of different authors. The website also publishes the online magazine entitled al-*Jama'ah* (the Group), issued in five editions.

Many of the salafist-jihadist groups operating in Iraq maintain official websites on the Internet. One of them is the 'Islamic Army in Iraq' (IAI).[38] The site, as with that of GSPC, relies on free web hosting providers, frequently migrating from one address to another. Regarding the content of the site, it offers information about operations, communiqués, articles, books and online magazines, called *al-Fursan* (the Knight) and *al-Kata'ib* (the Battalions). The Islamic Army in Iraq also has a subdirectory named "Fight [exercise jihad] with us", where they encourage visitors to take part in the Jihad. 'The Islamic Army in Iraq' website hence expresses their wish to mobilize supporters and gives detailed advice on how to practice Jihad.

Other Iraqi groups present on the Internet include, for example, 'The Army of the Rightly Guided in Iraq' (*Jaysh al rashideen fi-l-Iraq*)[39] and 'al-Qaida in Iraq' (*Qa'idat al-Jihad fi bilad al-Rafidayn*) which has an unofficial website 'the Voice of the land of the two rivers' (*Saut al-Rafidayn*).[40] The latter site is maintained by Zarqawi sympathizers and supporters and contains only a small fraction of the online media material which the group's media department releases.

An example of a well-established organization with similarly well-established websites is Hamas. Hamas, which is not considered a jihadist organization, is nevertheless an organization

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[36] http://salafia.balder.prohosting.com/, (accessed November 2005).
[37] http://salafia.balder.prohosting.com/.
[38] http://iairaqws.temp.powweb.com/.
[39] http://alrashedeen.net/right.htm.
[40] www.soutweb.ne1.net/.

promoting politically motivated violence, and is interesting in this study because of its long tradition of using the Internet. The websites are usually unofficial pro-Hamas websites that do not explicitly speak for Hamas. One such site, *palestine.info.net*, exists in six different languages, namely French, English, Malaysian, Urdu, Russian and Arabic, reflecting the objective to reach a worldwide audience. [41] This site offers Palestine related news and information about leading figures within the Palestinian resistance movement. The Arabic site also has more specific information about Hamas, but does not openly promote violent operations, etc. Unlike other official sites that are constantly changing addresses, this site has existed for several years at the same address. This is probably due to the fact that Hamas, and especially its political and social sub-organizations, are generally tolerated to a much higher degree than jihadist pro-al-Qaida groups. Hamas' military wing, the *Ezzedeen Qassam Brigades* also has its own website, but it has repeatedly changed url-addresses.[42]

4.2.2   Chat forums and blogs

Forums (*Muntadayat*) represent another category of websites that are increasingly popular among jihadists. The forums are mainly arenas for individuals, where users of the forums make their viewpoints public and discuss almost any subject. Users publish short messages or longer articles, and comment on other postings. Many of the forums are password protected, and the process of becoming a member varies from simply signing up to contacting the mediator of the site applying for membership. The password protection is normally not implemented in order to screen members, but rather to prevent the forums from being overloaded. However, the forums are subject to internal censorship, and the mediator's job is to control the postings published on the site and remove postings that do not meet the terms of the site. Regularly, one can find messages from the mediator announcing that postings that do not conform to the jihadist ideology or concern a certain controversial topic will be removed. This was the case, for example after the London bombings in July 2005.

The forums normally have subdirectories for different topics, ranging from politics via economics to family life, evidently always with a salafist-jihadist perspective. In addition to posting their own opinions, many members of the forums redistribute articles of famous sheikhs, movies and audio-recordings, while encouraging others to distribute the material further. Some forums also have a subdirectory for communiqués, where spokesmen of jihadist groups post official information. For example, al-Qaida in Iraq appointed an official spokesman, Abu Maysara al-Iraqi, in July 2004, at the same time warning their supporters not to believe postings by other people. Consequently, the forums frequently serve as a mouthpiece for jihadist groups that do or do not maintain official websites or whose official websites are very unstable.

As mentioned above, the forum *al-Hesbah*[43] (*www.alhesbah.org/*) is currently one of the most popular jihadist forums. In the following, a short description of the site's structure and

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[41] Also www.palestine-info.net.
[42] www.alqassam.info, accessed October 2005; www.alqassam.ws/arabic/, accessed December 2005.
[43] *Al-Hesbah* in Arabic may translate into "the Account".

examples of its content will be presented. The forum is divided into several sub-forums or subdirectories. The following list shows the different subjects and the paragraphed numbers indicate the total number of postings, collected in December 2005, in each sub-forum:

General forums

- Forum for *ihtisab[44]* in politics and shar'ia (170 920)
  (designated for discussion about political and Islamic cases)

- Forum for communiqués (58 759)
  (designated for archives of communiqués from different groups)

- Forum for *ihtisab* in economics (922)

- Forum for methods of *ihtisab* (6 946)
  (designated for scholarly methods, such as religious proselytism and education, and technical methods, such as audio-visual effects)

- Forum for general *ihtisab* (14 226)
  (designated as a basic forum, suitable for all postings)

- Forum for technical *ihtisab* (6 590)
  (designated for discussion about computer systems)

- Forum for *ihtisab* for Muslim women and families (2 043)

Seasonal forums

- Forum for *ihtisab* for Pilgrimage (139)

- Forum for *ihtisab* for Ramadan (506)

In each sub-forum, the administration of *al-Hesbah* has selected the most important postings, which are presented as permanent postings on top of the page for easy viewing, along with messages from the administrator. Then, postings from the members follow, in chronological order. The most popular sub-forum is dedicated to "politics and shar'ia", and subjects here range from general discussions of shar'ia to current political incidents. On 12 November 2005, a couple of days after the Amman bombings for which al-Qaida in Iraq took responsibility, this incident was the dominating topic, as expressed by both the members and the administration of

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[44] *Ihtisab,* in a religious context means, "to bring into account, to anticipate a reward in the hereafter by adding a pious deed to one's account with God", *The Hans Wehr Dictionary of Modern Written Arabic.*

al-Hesbah. Postings contained links to newspaper articles about the incident as well as members' praise of the bombings and the suicide bombers.[45]

Other forums are organized very much in the same way; however, the themes of the sub-forums vary greatly. For example, many forums have a very popular sub-forum called 'electronic jihad', where methods of hacking, in addition to various aspects of how to wage a propaganda war on the Internet, are discussed.

The use of blogs (*mudawanat*) among jihadists is a more recent phenomenon. Over the last year, several Arabic-language blogs have appeared on the web, but very few are closely associated with the jihadist movement. Furthermore, several jihadist blogs that recently appeared do not function as mediums for expressing points of view and promoting discussion, but rather as distributor sites, offering links to top jihadist websites.[46]

A possible advantage in using blogs may be the blog-owner's increased control over the content of the site, avoiding the near-anarchy that sometimes dominates the traditional chat forums. The use of blogs is a phenomenon that we may see more of in the future, although responsibility for the content of the website lies more explicitly with the blog-owner than is the case with the forums, which regularly post disclaimers on their front page.

4.2.3   Distributor sites

The category of distributor sites groups various sites. However, these share the common objective of sustaining the jihadist online infrastructure by distributing material from and links to important jihadist websites. The distributors also play an essential role in recruiting new jihadists as they represent a main source of information about the jihadist movement and provide links to reliable jihadist websites. The distributor sites are both interactive and non-interactive. Some sites are exclusively distributor sites, while others, as we have seen above, are forums or official sites which also are mother-sites or sources of new, original material, in addition to serving as distributors. A common feature of many distributor sites is their relatively high technological standard.

One subcategory of distributor sites is the 'directories'. These sites present updated lists of links to jihadist websites as well as material such as audiotapes and videos. An example of a long time authoritative directory is the *Dalil Meshawir*.[47] Its front page shows pictures of Osama bin Laden, Ayman al-Zawahiri and Musab al-Zarqawi, and then follows a long list of links to jihadi websites, forums, news sites, sheikhs' sites, sites with lists of martyrs, etc. The *Dalil Meshawir* features English and French versions.[48] Another directory is the '*Dalil Sultan* - the Sultan guide to Arabic websites' that offers links to sites with information within categories such as the Qur'an, sheikhs and scholars, science, Islamic magazines, Muslim

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[45] See for example http://www.alhesbah.org/v/showthread.php?t=38905 and, http://www.alhesbah.org/v/showthread.php?t=39037.

[46] See http://ansary.blogspot.com/ or http://mlfatjehad.blogspot.com/.

[47] The Arabic word *dalil* means *directory*.

[48] www.haywired.com/meshawer/.

women and family, news, and religions.[49] However, only a few of its links are of jihadist nature.

A second subcategory of the distributor sites is that of sites maintained by jihadist sympathizers who pay tribute to a certain cause or group. They facilitate the redistribution of material, such as general information, communiqués, videos, etc, related to their cause or produced by the group they support. These sites seem to be maintained by Internet-savvy individuals, as the sites in general are well organized and the material easily accessible. One such site is *Ansar-Jehad,*[50] claiming to be one of the most popular sites with 10 000 participants. The site states that it is private and independent of any organization and is dedicated to spreading information about the *mujahideen* to enlighten people about the jihadist cause in general. Another example is the *al-Qaedun* website that is "established by a group of mujahideen sympathizers concerned by redistributing publications of the al-Qaida Organization in the Arab Peninsula".[51] They consequently offer communiqués, audio- and video files, the magazines *Sawt al-Jihad* and *al-Battar,* as well as works of famous Muslim scholars such as Yusuf al-Ayiri. A similar site is the 'Voice of Jihad' dedicated to "redistribute the publications of al-Qaida in the Land of the two Rivers (Iraq)". Material presented on the site includes, among other things, Abu Musab al-Zarqawi's statements, the monthly online magazine of al-Qaida in Iraq, the *Thurwat al-Sinam* (The Camel's Hump) first published in March 2005, jihadist videos from Iraq, and links to other useful jihadist sites.

A third category of distributors is the media groups. Jihadist media groups do not necessarily belong to a specific organization, but are producers and publishers of jihadist material in general. They also redesign material, such as publications and videos, from scholars, jihadist organizations and Arabic and Western news media, and redistribute it on their websites. Examples of such sites are 'the Global Islamic Media Front' (GIMF), [52] formerly known as 'the Global Islamic Media Center', 'the Islamic Media Center' (IMC), 'the Information Jihad Brigade',[53] and 'the Electronic Media Battalion'. An example of a GIMF production is the "Top 10 Video of Insurgent attacks in Iraq", published in July 2005. Another GIMF release is the "Jihadist Candid Camera," showing attacks on U.S. forces in Iraq, with added sound effects such as applause and laughter. Recently, a jihadist Internet TV channel was established by the GIMF, called the 'Voice of the Caliphate'. 'The Voice of the Caliphate' follows the format of a network news program reporting weekly events from Iraq, Palestine and Afghanistan, the latest films released by the insurgency groups, and operations executed by the Taliban, Ansar al-Sunnah Army, and al-Qaida in Iraq. So far it has broadcast three programs and two special broadcasts, one special broadcast concerning the sentencing of Taysir Alluni, an al-Jazeera journalist, by a Spanish court, and the other showing an interview with Abu Osama, the media spokesman for the Victorious Army Group. The Voice of the Caliphate has received much attention both in the Middle East and in the West.

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[49] www.sultan.org/a/.
[50] www.ansar-jehad.com/pages/01.html.
[51] http://qa3edon.100free.com/index.htm.
[52] http://online2005.100free.com/.
[53] http://advertiser119.bravehost.com/s/7.html.

One media group that is said to belong to the al-Qaida organization is *as-Sahab* media group.[54] They produce, in particular, videos of the al-Qaida leadership and events such as the 9/11 attacks. An example of an as-Sahab production is the video "A letter to the people of the West, in occasion of the four year anniversary of the attacks of New York and Washington", which is a 45 minute interview with al-Zawahiri, produced in September 2005 but released only in December 2005.

4.3   Main areas of use

Once the Internet was established, it soon became a tool for facilitating communication and the flow of information. While the Internet today serves many purposes for the jihadist movement, its primary online objectives are still of a communicative and informative character.

4.3.1   Spreading of propaganda and ideology

Perhaps the most important function of 'jihadism online' is the spreading of ideology and propaganda. As seen above, al-Qaida leaders, radical Muslim clerics, and strategic thinkers provide their supporters with political, theological and ideological writings, and militant groups and net activists distribute jihadist material on the various websites. The Internet has become a virtual library of jihadist material, granting easy access to everything from political, ideological and theological literature, via fatwas and khutbas, to videos of assaults and beheadings. In November 2003 (redistributed in October 2005), the "deputy general emir" of the Global Islamic Media Center, Ahmad al-Wathiq bi-Llah, described the Internet as an "al-Qaeda University of Jihad Studies" where the graduates undergo military training but also intensive ideological and morale training.[55]

Along with propaganda, some strategic documents are also posted on the Internet. In December 2003, a jihadist Yahoo Message board published a document entitled 'Iraqi jihad: hopes and risks'. This document presented a strategy for forcing the U.S.-led coalition forces out of Iraq, and with its secular, analytical and pragmatic style it stood out from other ideological writings.[56] Another example is the 16 page document 'The Roadmap to the *Mujahideen*', issued by The Abu Hafs al-Masri Brigades. The document was first published in July 2004, after the Madrid bombings, and then redistributed on jihadist websites after the London bombings in July 2005. The 'Roadmap' mixes jihadist propaganda with strategies for

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[54] www.as-sahaab.com/.
[55] Ahmad al-Wathiq bi-Llah, 'Al-Qaida University of Jihad Studes', *Yahoo Groups*, posting no. 191, November 19, 2003,http://groups.yahoo.com/group/globalislamicmedia/post?postID=jiKrLUUaXm-13H4NXk-TNOvikmSpu9SaTeMoSN1BL--
M8M7iRvJPDQHEaUA1wb10ZQPCZ6cW83XWGAYhYo9GBsSEFwOm71tM.
[56] For a thorough analysis of the document, see Brynjar Lia and Thomas Hegghammer, 'Jihadi Strategic Studies: The Alleged Al Qaida Policy Study Preceding the Madrid Bombings', *Studies in Conflict and Terrorism*, 27 (Sept.-Oct.) 2004, pp. 355-375.

individual Muslims as well as the Muslim Ummah, stressing patience and physical and mental preparedness for Jihad.[57]

Primarily, the propaganda is disseminated in order to legitimize the jihadist cause, and it targets both an internal and an external audience. Internally, it aims at religious education and at creating common theoretical and ideological ground. Furthermore, it incites and enhances the morale of the jihadists. Externally, the propaganda is part of a psychological warfare aiming at demoralizing the enemy. This morale aspect is exemplified by videos such as the 'jihadist candid camera' clearly seeking to raise the morale of the mujahideen and demoralize the U.S. soldiers in Iraq.

Propaganda is also the basis for recruiting new jihadists and for fundraising.

4.3.2   Communication and creation of an e-community

The spreading of propaganda and ideology on the Internet creates a common base for the jihadists and represents a sort of one-way communication. However, in order to preserve the infrastructure of the loosely knit global jihadism movement of today, additional online contact, for communication and the creation of relations, is certainly required and indeed carried out by the jihadists through the Internet.

Communication among jihadists takes place on different hierarchical levels; it is both internal and external and is effectuated as one-way communication or interactively. As seen above, leaders of the jihadist movement, such as Osama bin Laden and Ayman al-Zawahiri, contribute to the online practice by publishing their communiqués on the Internet. Their contributions seem to consist exclusively of one-way communication, but are targeting both an internal jihadist and an external non-jihadist audience. Also, leading figures such as Muslim scholars and leaders of militant groups participate online. Most of their communication is one-way, but there are also examples of leaders and clerics engaging in interactive communication with their followers, by answering questions and issuing fatwas online. The Internet also facilitates real-time communication, for example, via chat rooms and PalTalk. Finally, the grassroots jihadists communicate with other supporters through the Internet, particularly interactively in chat forums.

This kind of 'internetted' communication is of tremendous importance, in particular to supporters of jihadism, who are scattered throughout the world. Communication with fellow sympathizers creates a virtual community, a sense of unity and of belonging to a group and a cause. The appearance of jihadist websites, and particularly chat forums in non-Arabic languages, such as English, French, Dutch and Swedish, reflects, first, the desire among

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[57] The Abu Hafs al-Masri Brigades (al-Qaida), 'The roadmap to the Mujahedeen', July 1, 2004. www.hostinganime.com/abu-hafs.

'diaspora *mujahedeen*' to be part of a jihadist community and, secondly, the importance of the Internet for creating such communities.[58]

Communication on the Internet thus clearly contributes to the creation of online groups. However, the question is whether or not it fosters non-virtual, real-life terrorist groups. A discussion on an al-Qaida affiliated message board, regarding the execution of operations, comes to the conclusion that one should "create a virtual cell over the Internet with likeminded members for the exchange of thoughts, work plans, strategies and educational material. If a degree of trust is fostered between the cell members, then, the group can meet in reality and execute operations".[59] Despite such discussions, it is difficult to determine if this kind of shift, from the virtual to the actual, has taken place.

4.3.3   Training

In the 1990s training of jihadists took place primarily in camps in Afghanistan and to a lesser degree in Pakistan, Sudan, Indonesia, the Southern Philippines and Chechnya. As the Afghan camps were destroyed by the U.S.-led invasion in 2001, the Afghan-Arab jihadists were scattered and training moved to new locations. There is little reliable information about where possible new training camps are situated, rumors name locations in Europe, on the Syrian-Iraqi border, in Iraq, in addition to new and smaller training facilities in Afghanistan and Pakistan. In the meantime, it is clear that jihadist training, to a certain extent, is effectuated in cyberspace.

On a rather symbolic level, some of the jihadist forums are named after famous al-Qaida training camps in Afghanistan. *Muntadayat al-Ma'sada al-Jihadiyya* (the Lion's Den Jihadist Forums) and *Muntadayat al-Farouq*[60] are such examples. Both websites have a special section named the 'jihadist cells forum' where training manuals, among other things, are posted. In fact, jihadist training manuals flourish on the Internet. These are distributed by media groups and by individuals in the forums, and the formats range from comprehensive terrorist encyclopedias to brief military instruction manuals. They accordingly offer instruction on, for example, how to produce homemade explosives and poisons, how to use weapons, and how to carry out reconnaissance operations, guerilla warfare, urban warfare, hostage-taking, etc. The most well known manual is al-Qaida's extensive 700 megabyte 'Encyclopedia for the Preparation for Jihad', compiled in Afghanistan and later made accessible online in updated versions. Most manuals are published in written form, frequently accompanied by explicative photos. However, a limited number of audio-visual training manuals also exist. Some of them are of high quality and give detailed step-by-step instructions, for example, on how to produce explosives and how to manufacture an explosive belt for suicide operations.

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[58] See for example http://www.noor.se/phpBB2/, http://www.mujahedon.net/forums/index.php?, http://stcom.net/.
[59] Site Institute, Suggestion to Join Virtual Terrorist Cell, Rather than Operating Alone, Posted to Jihadist Forum, July 20, 2005
http://siteinstitute.org/bin/articles.cgi?ID=publications71005&Category=publications&Subcategory=0.
[60] Farouq is the name of the second caliph Umar bin Khattab (634-644).

Again, we should not forget the jihadists' own idea that al-Qaida is a university; "a decentralized university without geographical borders, present in every place".[61] "It began with the Bureau of Services, the Bait al-Ansar and the al-Farouq Training Camp…until it reached the present stage", claimed Ahmad al-Wathiq bi-Llah explaining that "graduates of the al-Qaida University are specialists in electronic jihad, media jihad, spiritual and financial jihad, passing through the 'faculties' of both morale and explosive package technology and exploding cars and trucks".[62]

However, the extent of virtual training and online jihadist instruction manuals does not compare to real-life training and can so far only be considered a supplement to the latter. Amateur jihadists will certainly get ideas from reading these manuals, but with nothing but a virtual instructor, home made explosives could be most dangerous to the jihadist himself. Therefore, most manuals come with safety precautions. One such manual, posted on a jihadist forum in October 2005, describes acetone peroxide "as being sensitive and it has killed its makers many times, and that is why we ask anyone who wishes to prepare it to have an expert near him or to follow what is written to the letter".[63]

4.3.4   Hacktivism

Hacktivism, the convergence of hacking and activism, is described above as entailing politically motivated attacks on computers, which do *not* disrupt essential services or lead to violence. Thus, this concept does not equal cyber terrorism. Hacktivism, in our context, defines small-scale computer attacks motivated by the jihadist ideology. By the jihadists themselves, this activity is generally called 'electronic jihad', and members of web forums frequently refer to and call for participation in their electronic jihad. Osama bin Laden and Syrian-born Muslim cleric Omar Bakri Muhammad threatened to initiate such attacks in mid-2002.[64] Furthermore, an online fatwa, published on the moderate Islamic website Islam Online in October 2004 states that:

> "[...] there is no harm or prohibition to hack any site meant to destroy Muslims or occupy our lands. It is a legitimate right to defend ourselves by using all means and tools including hacking and destroying those evil sites [serving American and Israeli interests]".[65]

'Electronic jihad' is a quite common subdirectory on jihadist web forums. However, it is worth mentioning that perhaps the majority of the discussions on these forums evolve around the general use of computers, and the postings include links to legal programs such as photo shop

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[61] Ahmad al-Wathiq bi-Llah, 2003.
[62] *Ibid*.
[63] Site Institute, 'A Manual for Several Varieties of Explosives and Charges – History, Instructions, and Applications', October 20, 2005,
http://siteinstitute.org/bin/articles.cgi?ID=publications108705&Category=publications&Subcategory=0.
[64] www.ericumansky.com/2005/08/jihadis_chattin.html.
[65] www.islamonline.net/livefatwa/english/oldresult.asp.

and download- and anti-virus programs. The online 'Islamic Hacker Organization'[66] also lists links to websites offering security- and anti-virus programs and to general online IT magazines, in addition to the jihadist web forums dedicated to 'electronic jihad'. Nevertheless, these 'electronic jihad' forums do focus on the practice of hacktivism. A widespread form of hacktivism is simultaneous denial of service (DoS) attacks on enemy websites. DoS attacks are attacks designed to disrupt network service by overwhelming the target system with millions of requests every second, causing the network to slow down or crash. Methods and software used for directing such attacks are presented on the forums along with web addresses to target sites. There have also been incidents of spreading of viruses.

Relatively few actual instructions for hacking have been observed on the websites. The forum al-Nusra posted in October 2005 a link to a hacker training video[67], and the forum al-Farouq has, since August 2005, published postings calling for intensified electronic jihad against U.S. and allied government websites. These postings include a hacker library that comprises software to defeat password-protected systems and tools to hide the user's IP address, among other things.[68] Furthermore, official proposals to unite the jihadist hacking knowledge have been presented on the forums. In August 2005, a member of the forum al-Farouq suggested forming an operations unit within the 'Islamic Hacker Army' (*Jaysh al-Hacker al-Islami*). The jihadist forum *al-Saf net* published a "Call for participation in establishing the Farouq Electronic Army' (*Jaysh Farouq al-Elektroni*).[69] The Farouq Electronic Army (FEA) was presented as a Media group consisting of several brigades, one of them, called the 'Ali bin Abi Talib Brigade', responsible for attacking and taking down websites on the Internet. It is difficult to validate the existence of the two proclaimed groups, or if they have accomplished their goals at all. However, two weeks after the alleged establishment of the FEA, a "Letter to the Farouq Electronic Army" appeared on the al-Saf web forum, requesting assistance in a DoS attack.[70] It might, thus, seem to be the case that jihadist hacktivism is quite innocent, or perhaps just still in its infancy.

However, the jihadists are aware of the threat of 'counter-hacking', and members of the forums are regularly encouraged to take security measures when using the Internet, for example by hiding their IP address, clearing their browser histories and protecting their passwords. The defensive, rather than the offensive, aspects of hacktivism therefore seem to be the focus of the jihadists.[71]

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[66] http://sdnho.org/.
[67] *Muntadayat al-Nusrah al-Islamiyyah*, www.alnusra.net/vb/showthread.php?t=41.
[68] Jeffrey Pool, 'New Forum Postings Call for Intensified Electronic Jihad against Government Websites', *The Jamestown Foundation*, Volume 3, Issue 8 (August 29, 2005), www.jamestown.org/terrorism/news/article.php?search=1&articleid=2369777.
[69] www.al-saf.net/vb/showthread.php?t=14491.
[70] www.al-saf.net/vb/showthread.php?t=15074.
[71] Brynjar Lia, 'Al-Qaida online: understanding jihadist internet infrastructure', *Jane's Intelligence Review*, January 2006.

4.3.5 Recruitment

It is certain that the Internet plays an important role in recruiting new jihadists. The jihadist material propagated on the net is free and easy to access for those interested in the subject and includes guides for both novices and experts. It thus creates a basis of knowledge and possibly recruits new supporters of the jihadist ideology.

Requests to spread material to more supporters, and thereby also newcomers, are frequently published on the Internet. Also, in the online article about the 'University of Jihad', the author explicitly calls for "more students in the cause of striving for the Caliphate".[72] In early November 2005 a month-long campaign was announced on the web forum *al-Hesbah* offering members the opportunity to swear loyalty to the al-Qaida leaders online. The *bay'ah* (a Muslim's oath of loyalty to Muslim leaders) was dedicated to Osama bin Laden, Ayman al-Zawahiri, Mullah Muhammad Omar and Abu Musʿab al-Zarqawi. The announcement, posted by an individual nicknamed 'Al-Ashiq lil-Jihad' (the lover of Jihad), said that the oath should be passed on to the other web forums, in order to enlarge the army in Afghanistan and Iraq and also create a standby army [on waiting list] on the Internet. Furthermore, the announcement stated that "this is the Internet, that Allah employs in the service of jihad and the *mujahideen* and that has become [used] in their interest, so that half of the *mujahedeen* battle is [fought] on the Internet sites".[73] Members reacted to the posting by answering directly, most of them giving their oath, but also by participating in the poll organized by *al-Hesbah*. After two weeks of voting, 173 had voted in favor of the oath of loyalty, 1 against it:

مشاهدة نتائج الإستفتاء :هل تود مبايعة الشيخ اسامة بن لادن حفظه الله على درب الجهاد والاستشهاد			
This poll will close on **13-12-2005** at **09:26 PM**			
99.43%	173		نعم
0.57%	1		لا
عدد المصوتين. 174 :			

The cases mentioned above exemplify online invitations to learn about jihadism and to swear allegiance to the cause. This thus points to a form of indirect recruitment. However, there are few examples of direct recruitment on the Internet. Recent revelations of radical Islamic groups in Europe have shown attempts to use the Internet for recruitment. In Italy, Egyptian Rabei Osman Sayed Ahmad, awaiting his trial in January 2006, is indicted as a "recruiter of numerous people" and the police reports charge that he used "computers as recruitment tools".[74] Regarding the disclosure of the Hofstad network in the Netherlands, online chat

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[72] Ahmad al-Wathiq bi-Llah, 2003.
[73] , 'First day of the month of the big bay'ah', *Al-Hesbah*, posted by Al-Ashiq lil-Jihad, November 13, 2005, www.alhesbah.org/v/showthread.php?t=39251.
[74] Elaine Sciolino, "From Tapes, a Chilling Voice of Islamic Radicalism in Europe," *The New York Times,* 18 November 2005

conversations between arrested members have been published, revealing the key role played by the Internet. American-Dutch Jason Walters trained in camps in Pakistan and had been ordered to return and recruit as many as possible. "That is why I am also looking for possible extremists in Internet chat rooms", he declared during an Internet chat, in the fall of 2003.[75] Jason Walters successfully recruited at least one person for the Hofstad network, according to a Dutch article.[76] However, it is clear that Jason Walters was also in personal contact with the recruits. It thus seems as if the Internet is not used as a direct means of recruitment, but that it functions merely as a facilitator for the recruitment process. Physical contact, in addition to online communication and propaganda, is essential. Furthermore, the need for anonymity on the Internet most likely prevents it from becoming a primary recruitment tool.

4.3.6   Reconnaissance and operational orders

It is evident that jihadists, as with everyone else, use the Internet to obtain information of various kinds. The Internet is indeed an almost unlimited source of information and it offers information of both general and very specific and detailed character. Individuals, companies, organizations and states, deliberately or not, supply the Internet with information of sensitive nature. This information can be tracked down and used for terrorist purposes. However, also seemingly innocent information, such as maps, routes and timetables, for example for air traffic or the subway, can be misused in the wrong hands.

It is most likely that jihadists planning terrorist attacks use the Internet for reconnaissance and gathering of information. However, it is rare to see this kind of information passed on through the Internet. Nevertheless, a recent example is the website *Ansar al-Muslimin*, linked to the Indonesian Jemaah al-Islamiyya group, which encourages attacks on westerners. The site published "detailed maps and attack sites and escape routes" and recommended "attacks in lunch areas, overhead walkways and traffic snarls, where westerners would be trapped in their vehicles".[77]

Concerning the exchange of operational orders on the Internet, it is rare to find specific orders that go beyond recommendations and encouragements for attacks, such as the one on the website *Ansar al-Muslimin*, mentioned above. Again, it is likely that operational orders are given, but probably encrypted. The use of steganography, a computer technology that hides messages inside images, is frequently mentioned as a possible terrorist method. While security programs can determine whether the apparently innocent photos of landscapes and flowers that flourish on jihadist websites contain secret messages, the deciphering of the messages is difficult. Also, less sophisticated methods, such as using simple code words in e-mails, are employed, a technique which was used in the planning of the 9/11 attacks.

www.nytimes.com/2005/11/18/international/europe/18milan.html?hp&ex=1132376400&en=0b3f6d5fd2a4291a&ei=5094&partner=homepage.
[75] 'Chatting with terrorist' *Dutchreport*, January 31, 2005, http://dutchreport.blogspot.com/2005_01_01_dutchreport_archive.html.
[76] *Ibid*.
[77] AAP, 'Website's blueprint for terror', *The Age* 23 November 2005, www.theage.com.au/news/world/websites-blueprint-for-terror/2005/11/23/1132421689107.html#. Accessed 6 December 2005.

4.3.7   Financial support

"The violent history of al-Qaida [has for years] served as a fundraising tool" stated the Ansar al-Islam media chief in October 2003.[78] At that time, the use of the Internet did not dominate the infrastructure as it does today, and video recordings of attacks carried out by the militant group were burnt on CDs and sent to donors:

> "After one successful attack funding came 'like rain… from everywhere'. […] people from rich countries, Kuwait, Saudi and Qatar […] who would not dare to take part, but sent support to establish Islamic rule".[79]

From sending CDs of jihadist attacks to defined supporters a couple of years ago, the Internet today provides supporters all over the world with videos and other kinds of propaganda, thus increasing the foundation for fundraising significantly. The publishing and spreading of propaganda is consequently a sort of indirect means of gaining financial support, by showing off the jihadist movement's abilities and strength. Another indirect method, employed by Ansar al-Islam, is to publish the group's budget. In 2003, the anticipated cost, given in American dollars, of the group's activities, such as housing homeless families, producing weapons, and spreading knowledge about Islam, was posted on the group's website. Although no allusion was made to outside funding in this case, this was probably one of the desired effects.

Direct calls for financial support are not so common, especially not in recent times. Looking back to the time of the U.S.-led invasion of Iraq in 2003, there are more examples of groups that posted direct requests for financial support. For example, in August 2003, Ansar al-Islam published a letter entitled "Call for victory... of the jihad in Kurdistan... the brothers are in need of money and support", where they claimed that "the brothers are entering the most important stage of Jihad and victory is our duty. […] Everyone who is able to do so must spend money [..]."[80]

Due to security purposes, bank account numbers are usually not posted on the Internet sites. This appears to have been more common in the past. For example, Mulla Krekar, the founder of the Ansar al-Islam organization, posted bank account information on the Internet in order to solicit funding during the late-1990s.[81] It thus seems like the group Ansar al-Islam, over time, has employed both direct and indirect methods for funding.

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[78] Scott Peterson, "The rise and fall of Ansar al-Islam" *The Christian Science Monitor,* October 16 2003, www.csmonitor.com/2003/1016/p12s01-woiq.html.

[79] *Ibid.*

[80] "Urgent Message for the Victory of the Mujahidin Brothers among the People of Kurdistan in Northern Iraq," (in Arabic), *Ansar al-Islam* website http://66.246.51.215 dated 12/10/1423. Document on file with the TERRA III project at FFI.

[81] See for example interview with Sheikh Fateh Karikar [Mulla Krekar] in 'A Comprehensive Analysis of the Kurdish Cause', *Nida'ul-Islam* September-October 1997, www.islam.org.au/articles/20/kurds.html. Accessed November 1997. Document on file with the TERRA III project at FFI.

Finally, despite the covert nature of online funding, it is most likely that jihadist supporters have succeed in funding terrorist groups via the Internet.

5   CONCLUSION

5.1   Influence of the Internet on the nature of terrorism

Over the last ten years the Internet has become increasingly important to the jihadist movement and has been actively used for various terrorist activities. It is therefore likely that the Internet has also exercised a certain influence on the nature of terrorism and will continue to do so in the future. An apparent characteristic of the development of terrorism in general and jihadism in particular, is the increased level of intensity of global terrorism. The many terrorist attacks that have taken place across the world, from New York via London and Madrid to Bali, have clearly other reasons than the use of the Internet itself. However, the Internet has offered new ways in which to promote terrorism or Jihad, and thus facilitated its intensification. The Internet has probably also increased the effect of certain terrorist methods and thereby supported the use of these methods rather than others. For example, during spring 2004, we witnessed a wave of abductions of foreigners in Iraq. Without the Internet that allowed the spreading of self-made videos and provided enormous publicity about this kind of terrorist action, we would perhaps not have seen such a significant growth in abductions. Furthermore, it is evident that the Internet has transmitted its concepts of borderlessness, possible anonymity, and far-reachedness, to jihadism. Moreover, this may, as already mentioned, point to a less hierarchical structure of the movement. However, on the other hand, it can also be argued that the Internet creates a scale-free structure with links between individuals and a hub. This indicates centralized control and a more hierarchical structure. Nevertheless, both views represent the possible influence of the Internet on the jihadist movement. Another aspect is the development of computers into true weapons. With the enhanced technological insight that future terrorist generations may acquire, and a higher dependence on information technology in society generally, the chances for cyber terrorism to occur may well increase.

5.2   The capacity of jihadism online

The Internet assists jihadists in reaching out to a significant audience. It is apparent that online propaganda is spread on a wider basis than traditional written material. The Internet also encourages the publication of a wider range of jihadist material, combining text and audio-visual methods. However, one should not exaggerate the scope of jihadism online. First, the number of Internet users in the Middle East is relatively low, a fact that implies the difficulty of jihadism online to reach the masses, at least in Arab countries. Secondly, as stressed above, one important function of jihadism online is to reproduce and spread material. Furthermore, many jihadist websites change url-address regularly. These movements of sites and material on the World Wide Web, might make the jihadist Internet appear more extensive than it in fact is.

It might also provide, for outsiders, the impression of a chaotic arrangement of jihadism online. However, there is, to a large extent, a structure and relations between various jihadist sites as they complement and link to each other in order to fulfill the total range of objectives of jihadism online. Finally, one may speculate whether the, most likely overstated, appearance of jihadism online is presented deliberately by the jihadists as part of a psychological warfare against their enemies. Nevertheless, and regardless of the outward scope, jihadism online has had tremendous importance within the jihadist movement, and its importance will most likely increase in the future, as improved bandwidth, increased functionality, and the fast growing number of users will make the Internet a far more vital nerve in modern society than it is today.

5.3   The counterterrorism debate

Jihadist websites provide a large amount of information about the movement, on ideological, operational, and structural levels. The websites may thus represent important sources for western governments collecting intelligence on terrorism and seeking to prevent new terrorist attacks. In this regard, a first question revolves around the reliability of the information available on the Internet. Is it possible that jihadists would lead a deliberate campaign of disinformation on the World Wide Web? There are several examples of jihadist groups taking responsibility for attacks that they never executed and enlarging the number of casualties of the attack. The Abu Hafs al-Masri Brigades are infamous in this regard.[82] In general, the Internet is used in order to exaggerate the strength, capacity and influence of the jihadist movement. However, it is perhaps unlikely that the jihadists would publish proper disinformation online. This is due to the fact that the websites are, perhaps the sole, sources of information for many supporters. Disinformation would thus deceive not only observers but also the jihadists themselves. It is certainly possible for non-jihadists to spread false statements and rumors in order to discredit the jihadists. However, internal online censorship and security are heavily practiced and postings which appear to contain false or misleading information are frequently commented upon, warned against and sometimes removed from jihadist websites.

The counterterrorism debate continues with the question as to whether or not it is appropriate to close down terrorist sites. On the one hand, one loses a remarkable amount of information by closing the websites. Furthermore, it is almost impossible to close all jihadist sites. And as site content normally is copied to back up sites, material from a closed site would soon reappear on the World Wide Web. One the other hand, some postulate that allowing the websites to stay online gives the movement a certain degree of legitimacy.

5.4   Areas for future research

The counterterrorism debate is rather an issue for law and policy makers, than a field of research. Meanwhile, and as long as terrorist websites remain open, researchers should make

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[82] The Abu Hafs al-Masri Brigades claimed responsibility for both the Madrid and London attacks in 2004 and 2005. They have also taken responsibility for actions that have later been proved not to be terrorist acts, such as a power blackout in the United States in 2003.

use of the available information on the Internet in order to create a thorough and systematic understanding of the jihadist, and other terrorist, movements.

An important aspect of jihadism online is the structure and hierarchy of the websites. Further research aiming to identify key nodes or mother sites[83], i.e. sites offering authoritative information, would facilitate the monitoring of jihadist websites, and grant more accurate knowledge about the movement. Another important aspect of jihadism online which seems noteworthy is the development of hacktivism or electronic jihad. Hacktivism today seems to operate on a basic level. However, with, perhaps most importantly, the motivation to use existing human and technical capacities, as well as the future progress within this field, hacktivism may possibly evolve towards cyber terrorism. This potential development should be closely followed.

In general, further research on jihadism online would also provide interesting information about the already established, and still developing, influence of the Internet on the nature of terrorism.

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[83] For a more detailed description of this concept, see Brynjar Lia, 'Al-Qaida online: understanding jihadist internet infrastructure', *Jane's Intelligence Review*, January 01, 2006.

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