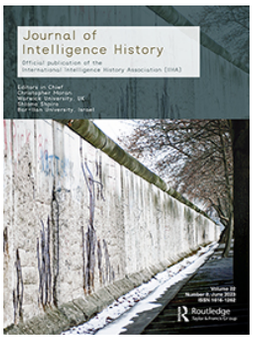

Journal of Intelligence History

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rjih20

The long history of OSINT

Ludo Block

To cite this article: Ludo Block (14 Jun 2023): The long history of OSINT, Journal of Intelligence History, DOI: 10.1080/16161262.2023.2224091

To link to this article: https://doi.org/10.1080/16161262.2023.2224091

JOURNAL OF INTELLIGENCE HISTORY
https://doi.org/10.1080/16161262.2023.2224091

Routledge
Taylor & Francis Group

The long history of OSINT

Ludo Block

Institute for Security and Global Affairs, Leiden University, The Hague, Netherlands

ABSTRACT

This article presents the findings of exploratory research into the origins of OSINT for which it discusses three case studies from, respectively, the United States, Germany and the Netherlands. Many authors writing on open source intelligence assume that the first OSINT practices emerged at the eve of the Second World War with the establishment of the BBC Monitoring Services and the Foreign Broadcast Monitoring Service. Building on existing studies, which are supplemented with original archive research, this article demonstrates that OSINT has a much longer and richer history. Methodical efforts to collect and exploit information from publicly available sources to fulfil intelligence requirements are documented as early as halfway the 19th century in the United States and early 20th century in Europe.

ARTICLE HISTORY
Received 17 August 2022
Accepted 7 June 2023

KEYWORDS
OSINT; open source; intelligence; Zeitungsrecherche

Introduction

Many authors writing on open-source intelligence ('OSINT') let the history of this discipline start at the eve of the Second World War with the establishment of the BBC Monitoring Service in Great Britain in 1939 and of the Foreign Broadcast Monitoring Service (FBMS) in 1941 in the United States.[1] While these two services, set up in response to radio broadcast as a new technology, are certainly well-known early examples of structured efforts to collect and exploit information from open sources, this paper argues that OSINT has a much longer institutional history.

OSINT has especially in the past decades received increasing attention. With the coming of the information age in particular, the rise of the Internet and the digital domain for production and storage of information, the nature and volume of publicly available information has changed fundamentally. These technological advancements

CONTACT Ludo Block block@fgga.leidenuniv.nl Institute for Security and Global Affairs, Leiden University, The Hague, Netherlands

[1]See for example Colquhoun, C. (2016) A Brief History of Open Source Intelligence. Bellingcat available at: https://www.bellingcat.com/resources/articles/2016/07/14/a-brief-history-of-open-source-intelligence/ (last visited 2 August 2022); Glassman, M. and M. Kang (2012) 'Intelligence in the Internet Age: The Emergence and Evolution of Open Source Intelligence (OSINT)', in *Computers in Human Behavior* 28(2): 673–82; Mercado, S. (2004) 'Sailing the Sea of OSINT in the Information Age', in *Studies in Intelligence*, 48(3): 45–55; *Saunders, K. (2000) Open Source Information: A True Collection Discipline. M.A. thesis, Royal Military College of Canada;* Studeman, W. (1993) 'Teaching the Giant to Dance: Contradictions and Opportunities in Open Source Information within the Intelligence Community', pp. 11–18, in *American Intelligence Journal* Spring/Summer 1993; and Williams, H. and I. Blum (2018) *Defining Second Generation Open Source Intelligence (OSINT) for the Defense Enterprise*. RAND Research report.

resulted in an amplified collection and exploitation of information from open sources by the intelligence community and many others. Following that development, also increased attention for open sources in the intelligence studies literature emerged. The first public use of the phrase 'open-source intelligence' and the acronym 'OSINT' in the intelligence studies literature can be traced back to an article from 1990 by Robert Steele.[2] More prominently, a special issue of the American Intelligence Journal in 1993 was dedicated to open-source intelligence[3] and collated the papers presented at a first open-source intelligence conference organized in 1992.

Although prior to that moment the collection and exploitation of information from open sources received less attention[4] the importance of information from open sources for intelligence purpose has been recognized long ago. For example, the much-quoted 1946 publication by William Donovan[5] points to that importance and includes illuminating examples of the practical use of open sources during the Second World War. Also, Kent as well as Dulles point in their classical works to the importance of 'overt information' or 'overt intelligence' in the intelligence process.[6] However, it took till the 1990s until the acronym 'OSINT' started to be used and it took another two decades before that use was widespread in intelligence studies literature.[7]

Some authors argue that what we now call open-source intelligence has actually been practiced for millennia. For example, Westcott notes in this context: 'Viking explorers, Roman legionnaires and Silk Road traders were familiar with the process of observing the world around them, attempting to understand it and then explaining what they knew to others.'[8] Schaurer and Storger make a similar point and argue that the history of exploiting openly available information reaches back to the 'very emergence of intelligence as an instrument to support a government's decisions'.[9] They however immediately also note that 'it was not a methodical effort until the United States (US) pioneered the institutionalization and professionalization of a stand-alone capacity for monitoring foreign media, with the establishment of the Foreign Broadcast Monitoring Service'[10]

[2]Steele, R. (1990) 'Intelligence in the 1990's: Recasting National Security in a changing world', in *American Intelligence Journal*, Summer/Fall 1990.

[3]Often cited contributions in that 1993 special American Intelligence Journal issue include Steele, R. 'National Intelligence and Open Source: From School House to White House', pp. 29–33, Studeman; Wallner, P. Open Sources and the Intelligence Community: Myths and Realities', pp. 19–24; Holden-Rhodes, J. 'Unlocking the Secrets: Open Source Intelligence in the War on Drugs', pp. 67–71.

[4]It has to be noted that most of the contributions on this subject were published in the CIA's classified journal *Studies in Intelligence*, and only later declassified. See for example Bagnall, J. (1958) 'The Exploitation of Russian Scientific Literature for Intelligence Purposes', *Studies in Intelligence*, 2(3): pp. 45–49; Becker, J. (1957) 'Comparative Survey of Soviet and US Access to Published Information', *Studies in Intelligence*, 1(4): pp. 35–46; and Croom, H. (1969) 'The Exploitation of Foreign Open Sources', in *Studies in Intelligence*, 13: pp. 129–30. However, see also, for example, Ghoshal, S. (1983) *Corporate Intelligence Gathering – Scanning for International Business Information*. Thesis, Massachusetts Institute of Technology; and Harper, M. (1961) 'A New Profession to Aid Management', *Journal of Marketing*, 25(3): pp.1–6.

[5]Donovan, W. (1946) 'Intelligence', in *Life Magazine*, 30 September 1946, pp. 108–121.

[6]Kent, S. (1949) *Strategic Intelligence for American World Policy*. Princeton University Press, p. 215; Dulles, A. (1963) *The Craft of Intelligence*. Boulder, CO: Westview Press, p. 55.

[7]See: Evangelista, J. R. G., Sassi, R. J., Romero, M., & Napolitano, D. (2020). 'Systematic Literature Review to Investigate the Application of Open Source Intelligence (OSINT) with Artificial Intelligence', in *Journal of Applied Security Research*, 16(3), 345–369.

[8]Westcott, C. (2019) 'Open Source Intelligence, Academic research, journalism or spying?', in Gearon, L. (ed.) *The Routledge International Handbook of Universities, Security and Intelligence Studies*, chapter 28, p. 383.

[9]Schaurer and Storger (2013) The Evolution of Open Source Intelligence (OSINT)', in *The Intelligencer, Journal of U.S. Intelligence Studies*, 19(3), p.53.

[10]Ibid.

That ambiguity shows that before we can explore the history of OSINT, we first need to define what we exactly understand it to be.

Defining OSINT

Should any collection of information[11] from publicly available sources in 'an attempt to understand the world around us', or to 'support a government decision', be defined as open-source intelligence? Can we, for example, say that reading foreign newspapers by rulers, diplomats and other civil servants to stay abreast of developments in the world, qualifies as OSINT? Here we argue that such a broad definition has little diagnostic value as it does not distinguish casually observing the world – which we all do all the time – from a purposefully organized approach to information collection and exploitation which we would expect in an intelligence context. If we strive to research how the use of data from open sources emerged in an intelligence context, a precise definition is needed.

Therefore, it is proposed to follow the intelligence cycle and align the definition of OSINT with the collection phase in the intelligence process. For the purpose of this research OSINT is thus defined as *the methodical collection and exploitation of information from publicly available sources to fulfil an intelligence requirement*. This definition regards OSINT as a collection discipline, and explicitly does not include analysis and dissemination, nor perceives OSINT as a finalized product as sometimes is proposed.[12] Nonetheless, the definition does highlight that OSINT is more than just collecting information; instead, the collection and exploitation from open sources should first of all be purposeful – i.e. directed based on an intelligence requirement. Secondly, the collection and exploitation should show a methodical approach before it qualifies as OSINT, in other words repeated and structured (bureaucratic) efforts should be visible. The definition thus aims to aid the identification of practices that indicate an understanding of the value of information from open sources, and the identification of rational structures and repeated methods for the collection and exploitation of that information.[13]

Preconditions allowing OSINT to emerge

Logically we can expect to see first OSINT practices not before the moment that relevant information on, for example, societal, technical, economic, military and political developments, became publicly available in our societies in an aggregated

[11]For the sake of brevity, this articles uses 'information' and 'data' interchangeably as the distinction is not relevant to the argument.

[12]See, for example, DNI (2013) *US National Intelligence. An Overview*, p. 46, where OSINT is defined as 'intelligence produced from publicly available information that is collected, exploited, and disseminated in a timely manner to an appropriate audience for the purpose of addressing a specific intelligence requirement.' This definition originates from the 'National Defense Authorization Act for the Fiscal year 2006' (US Public Law 109-163, section 631.

[13]This approach with a focus on bureaucratic practices follows the work of Iordanou on identifying early-modern organization of intelligence, see Iordanou, I. (2019) *Venice's Secret Service. Organising Intelligence in the Renaissance*. Oxford University Press.

form. Andrew dates the first signs of OSINT in the early 16th century, when he writes about the agents deployed by the Council of Ten (Venice's intelligence apparatus) that: 'Much of their information on both commercial and political developments came from open sources – among them newsletters (*avvisi*)'.[14] These *avvisi* which usually contained news on a single event, can be seen as the forerunners of today's modern newspapers.[15] However, it is unclear whether *avvisi* indeed qualified as 'publicly available sources'. Research by Barker suggests that *avvisi* were usually only shared with trusted contacts[16] and as such were not available to the general public. Additionally, the research by Iordanou shows that intelligence practices were primarily aimed at exploiting networks of diplomats and merchants – so using HUMINT as a primary collection discipline.[17] There appears to be no direct evidence that a methodical collection and exploitation of the *avvisi* existed, and – perhaps more importantly – if there was any evidence of such practices, obtaining non-public *avvisi*, for example through the use of agents, appears to qualify more as HUMINT rather than OSINT.

So we would be actually looking for a critical mass of printed news available to the general public as a prerequisite to drive a methodical and structured collection of information; just like the expansion in the late 1930s of public radio broadcast was a driver for the establishment of the BBC Monitoring Service and the FBMS.[18] The theoretical starting point for OSINT practices would therefore be the moment in time and place where printed media would be periodical and would have a sufficiently widespread circulation to be realistically available as an open source. Generally, the launch of Renaudot's Gazette in 1631, is regarded as the moment when the newspaper first becomes established as public news medium.[19] It took, however, until the second half of the 18th century before newspapers were widespread in Europe and the US, with a regular frequency of publication and larger circulation numbers.[20] Hence, it would be more likely to encounter OSINT practices from then onwards, and less likely before.

Another relevant precondition for OSINT practices is an actual need for the insights that these efforts may yield. Hence OSINT practices are more likely to emerge in situations of animosity, especially during war and the preparation thereof, because these are the moments where actors would have clear intelligence requirements. And surely, it appears that, for example, Napoleon relied on British newspapers as a source of military information, as did the Tsar during the Crimean war[21] although it is unclear how methodical their collection efforts were. There exist however multiple early accounts of other collection efforts which do suggest methodical and structured exploitation of open

[14]Andrew, C. (2018) *The Secret World A History of Intelligence*. Yale University Press, p.122.
[15]Ettinghausen, H. (2016) 'International Relations: Spanish, Italian, French, English and German Printed Single Event Newsletters Prior to Renaudot's Gazette', In Raymond, J. and Moxham, N. (eds.) *News Networks in Early Modern Europe*. Brill.
[16]Barker, S. (2016) 'Secret and Uncertain: A History of Avvisi at the Court of the Medici Grand Dukes', in Raymond, J. and Moxham, N. (eds.) *News Networks in Early Modern Europe*. Brill, p. 722.
[17]Iordanou, above, p. 37–39.
[18]See, for example, Calkins, L. (2011) 'Patrolling the Ether: US – UK Open Source Intelligence Cooperation and the BBC's Emergence as an Intelligence Agency, 1939–1948', in *Intelligence and National Security*, 26(1): pp. 1–22; Mercado, S. (2001) 'OSINT from the Airwaves: FBIS Against the Axis, 1941–1945', in *Studies in Intelligence*, 11: pp 33–43.
[19]Ettinghausen, above, p.262.
[20]See, for example, Harris, M. (1978) 'The structure, ownership and control of the press, 1620–1780', in Boyce et al. (eds.) *Newspaper history from the seventeenth century to the present day*. London: Constable.
[21]Parrit, B. (2011) *The Intelligencers: British Military Intelligence from the Middle Ages to 1929*. Barnsley, p. 80.

sources for intelligence purposes. We will discuss these in the case studies in the next section.

Case Studies

In order to obtain a better insight in the 'pre-history' of OSINT we explore three cases – from, respectively, the United States, Germany and the Netherlands[22] – by exploiting existing studies and supplementing these with original archival research.

The first case study looks into OSINT efforts in 19th century US, primarily building on the work of Fuhlhage on the use of journalistic information gathering during the American Civil War.[23] The second case study builds on the studies by Foley, Pöhlmann and Schmidt on the exploitation of open sources by the Germany military intelligence service prior to and during the First World War.[24] The third and last case study focusses on the use of information from open sources by the military intelligence service in the Netherlands. This case study uses the work of Engelen[25] and supplements that with the findings of recently conducted archival research by the author.

OSINT during the American civil war

In his *Yankee Reporters and Southern Secrets,* Fuhlhage examines the journalistic information gathering during the American Civil War. As he notes, armies have always spied; however, the explosion in journalistic information gathering vastly expanded the possibilities for obtaining civil and military intelligence about threats. In fact, Fuhlhage argues that especially the American press at the time, due to their partisan allegiances, can be seen as a large surveillance network.[26]As he notes, Unionist correspondents actually 'began to use elements of spycraft that included cover stories, disguises, ciphers and countermeasures to evade detection'.[27] Fuhlhage in addition shows how information collected from published newspapers – so not purposefully collected by loyal journalists – was equally exploited by both sides in the conflict.

To investigate how much relevant information the newspapers actually contained, Fuhlhage drew a sample from 18 newspapers published between 13 and 28 December 1860. He identified 3,079 items about secession of which 1,423 items contained potentially actionable information[28]and sorted the potentially actionable

[22]The case studies were chosen based on the availability of existing research and on reasons of practicality. A scan of archives in other countries shows more indications of early 20th century OSINT practices, for example the French Defence Ministry archives show for 1914–1918 also entries for '*Revues de presse*' and '*Etudes des renseignements de presse*.', see https://www.servicehistorique.sga.defense.gouv.fr/en/node/1130033 (last visited 12 August 2022).

[23]Fuhlhage, M. (2019) *Yankee Reporters and Southern Secrets. Journalism, Open Source Intelligence and the coming of the Civil War*. Peter Lang: New York, USA.

[24]Foley, R. (2005) 'Easy Target or Invincible Enemy? German Intelligence Assessments of France Before the Great War', in *Journal of Intelligence History*, 5(2): pp. 1–24; Pöhlmann, M. (2005) German Intelligence at War, 1914–1918, *Journal of Intelligence History*, 5(2): pp. 25–54; Schmidt, J. (2005) 'Against Russia: Department IIIb of the Deputy General Staff, Berlin, and Intelligence, Counterintelligence and Newspaper Research, 1914–1918', in *Journal of Intelligence History*, 5(2), pp. 73–89.

[25]Engelen, D. (1999) *De Militaire Inlichtingendienst 1914–2000*. Dick Engelen is a Dutch historian and wrote the institutional history of the (military) intelligence services in the Netherlands.

[26]Fuhlhage, p. 33.

[27]Fuhlhage, p. 41.

[28]Fuhlhage, p. 82–83.

information in the newspapers in five categories, i.e. political, economic, military, cultural and technological. Most of the information with potential value from an intelligence perspective was of a political nature, generally related to the progress of the secession convention. The second largest category of information with potential value was of a military nature and was about troop strength, organization and movement. Then, thirdly the newspapers contained relevant economic information on matters, such as currency shortages and disruptions in commerce. Lastly some relevant cultural (societal) and technical information was present in the newspaper items.[29] In sum, there was plenty information with potential intelligence value printed in the newspapers, ready to be exploited. A case in point are General Alexander's remarks in his memoirs that the military information from newspapers on troop strength and organization was actually better than the information from his own agents:

> *The principal business of these agents was to supply us with the Northern papers although for some time careful account was kept of arrival of new troops at Washington. But this was found less reliable than the accounts in the daily papers. From them we learned not only of all arrivals, but also of assignments to brigades and divisions, and, by tabulating these, we always knew quite accurately the strength of the enemy's army.*[30]

A similar picture is drawn by Maslowski, who concluded that 'with so much vital information being printed, enemy papers were worth acquiring systematically'.[31]

Details published about troop strength, position, morale, etc. can be easily exploited as operational intelligence. However, as Fuhlhage describes, both sides in the Civil War also were on the lookout for strategic intelligence in the form of overarching philosophy, the ultimate goal and intermediary steps planned.[32] Based upon archival records, he further researched to which extent information from the newspapers was used in decision-making, while he simultaneously mapped the emergence of the first intelligence outfits. Whereas in 1860 no formal intelligence agencies existed in the US Federal government, in 1863 the Army of the Potomac's Bureau of Military Information was established which began to systematically exploit information from the press. In 1864, the Bureau of Military Information was providing nearly daily briefings of the content of the leading Confederate press,[33] which according to Fuhlhage were increasingly used in the decision-making.[34]

If we summarize the research by Fuhlhage, it clearly demonstrates that during the American Civil War both sides of the conflict put effort in the methodical collection and exploitation of information from newspapers. Their efforts were driven by more than a general hunger for information from the other side and in fact were focused on fulfilling specific intelligence requirements such as the strength of the enemies' army and their intentions. These practices hence meet the definition of OSINT and show that OSINT practices in the US have a history, which predates the establishment of the FBMS

[29]Fuhlhage, p.83–98.
[30]Alexander, E. (1907) *Military Memoirs of a Confederate. A Critical Narrative*. New York: Charles Scribner's Sons, p.55.
[31]Maslowski, P. (1988) 'Military Intelligence Sources during the American Civil War', in Hitchcock, W. (Ed.) *The Intelligence Revolution. A Historical Perspective*. Proceedings of the Thirteenth Military History Symposium, US Air Force Academy, Colorado Springs, pp.39–70., p.48. Interestingly, Maslowski classifies newspapers as a distinct HUMINT source, see p.47.
[32]Fuhlhage, p. 219.
[33]Ibid., p. 224.
[34]Ibid., p. 224–225.

by nearly 80 years. In the next case study, we direct our focus to early 20th century Europe to see if the same practices are also visible there.

OSINT practices in Germany

The German military unit responsible for (collecting) intelligence, formally named *Sektion IIIb* – after its place in the organization of the General Staff of the army – was established in 1889. It was commonly referred to as the *Nachrichtendienst*.[35] Interestingly, *Sektion IIIb* was during peace time only responsible for collecting information, while analysis was the task of other the General Staff departments, each with a geographical focus. These departments were directing the collection efforts of the *Sektion IIIb* to their needs.[36]

Sektion IIIb employed four main collection methods,[37] which first of all were the use of military attachés and of agents. Thirdly, German army officers were encouraged to travel to and take vacations in foreign countries. A significant proportion of the staff of *Sektion IIIb* – which grew from 22 in 1914 to 83 in 1918[38] – was however involved in the fourth collection method, in German called '*Zeitungsrecherche*' (newspaper research) for which structurally foreign newspapers were collected and exploited.

In fact, as Pöhlmann argues, open sources were among the most important forms of pre-war intelligence for German military intelligence. Military journals and the international daily press were readily available, and offered insights into debates on doctrine, developments in armament, but also into questions of military policy or grand strategy. With the outbreak of the First World War, the availability of these sources decreased, and the value of the information therein was reduced by censorship.[39] However, as studies of the history of German military intelligence show, also during war time successful collection of information from open sources continued.

From Spring 1915 onwards, *Section IIIb* disseminated their insights in bi-weekly 'impressions gleaned from foreign newspapers' (in German: '*Eindrucke aus der Auslandspresse*') to several German army supreme commands and selected intelligence officers.[40] These *Eindrucke aus der Auslandspresse* were structured into a military, a political, and an economic section.

The periodical dissemination was possible because newspapers from France and Russia were structurally collected. For example, from Russia an array of 24 newspapers, spread over government, economic, industrial and general newspapers was collected by *Section IIIb*.[41] As Schmidt observes, especially Russian newspapers again and again provided relevant details on these subjectsfor example, on estimates of the contemporary political situation as well as observations of changes in personnel in high-ranking positions in the Russian bureaucracy and military leadership. But also details on Russian mobilization and on the war economy were picked up, including, for example,

[35]Pöhlmann, p. 27. The German term *Nachrichten* is difficult to translate into English. It can mean 'news', 'information', 'message', but also 'intelligence'.
[36]Foley, p. 3.
[37]Foley, p. 4.
[38]Schmidt, p. 88.
[39]Pöhlmann, p. 47.
[40]Schmidt, p. 79.
[41]Schmidt, p. 89.

prices for raw materials. Moreover, as Schmidt notes, careless press releases even informed *Sektion IIIb* about Russian troop transfers.[42] The situation thus shows a striking resemblance to the use of information from newspapers during the American Civil War as discussed in the previous section.

France was another obvious focus for *Sektion IIIb*. Pöhlmann observes that efforts towards France were direct from Switzerland and that the military attaché in Berne was amongst those who cooperated very closely with *Sektion IIIb*.[43] Interestingly, those efforts did not go unnoticed in France which is showcased by a 1918 internal Gendarmerie contra-espionage booklet. The booklet discusses that an increased interest had been detected from Swiss businesses in the acquisition of certain local and regional newspapers by taking subscriptions.[44] The booklet further explains that there is always something to glean (from newspapers), because censors sometimes miss detail on facts or local incidents that could be relevant information for the enemy.

In his research, Foley examined multiple German *Nachrichtendienst* reports on France in detail. *As Foley describes* these reports focused not only on (perceived weaknesses of) French military tactics, but also on more strategic subjects, such as political influence on army officers, declining birth rates and societal developments in France. Foley concludes that these reports to a large extent drew on publicly available sources.[45] Also, in relation to French war plans, German intelligence drew heavily on open sources, including, for example, on data on army spending. According to Foley none of these sources alone was sufficient to fully understand French intentions in wartime, however 'together they allowed German intelligence to draw conclusions that served as the basis for German war plans.'[46] Especially in order to obtain insight about French deployment intentions, the German analysts relied heavily upon military periodicals, such as *Revue militaire générale* and *Sciences militaire,* as well as on general newspapers, such as *Le Temps* and *Écho de Paris*. The analysts believed that the French form of government meant that information was shared with a much wider circle of people than in Germany and that, consequently, a good deal of intelligence about French intentions and plans leaked out via the press.[47]

Lastly also Great Britain was an obvious focus for Germany before and during the First World War. From 1901 onwards, information about Great Britain was, however, gathered by the intelligence department of the German Admiralty due to the naval origins of Anglo-German antagonism.[48] This may explain why most of the research articles related to *Sektion IIIb* primarily show a focus on their activities against France and Russia. Nonetheless, there is an interesting account of the collection and exploitation of information from open sources in relation to Great Britain by a German military attaché stationed in the Netherlands. As the Netherlands were neutral in the First World War, military attachés from different countries in the conflict used the country as a base from

[42]Schmidt, p. 81.
[43]Pöhlmann, p. 35 and 47.
[44]Inspection Générale de la gendarmerie aux Armées (1918) *Contra-espionnage. Notes sur la participation de la Gendarmerie a ce service*, p. 32.
[45]Foley, p. 11–16.
[46]Foley, p. 17.
[47]Foley, p. 19.
[48]Pöhlmann, p. 28.

where they collected information on one another.[49] An entry dated 30 June 1919 in the dairy from army captain Van Woelderen, who was the deputy head of the Netherlands military intelligence service, describes a meeting with the German military attaché, Oberst Renner, in The Hague. According to the entry, Renner took pride in the fact that he was able to deliver the best information on Great Britain based on open sources. In the entry, Van Woelderen describes how Renner argued strongly against the use of paid agents and instead maintained subscriptions on 160 English provincial newspapers, which he methodically studied, especially the obituaries.[50] Whether his activities were part of a structured collection strategy directed from *Sektion IIIb* or the German Admiralty, remains unclear.

In sum, several publications based on archival material demonstrate that German military intelligence at least from 1889 onwards collected and exploited information from open sources to fulfil (parts of) their intelligence requirements. Their efforts had predefined military, political and economic aims and the surviving records show methodical approaches, such as the covert acquisition of newspapers from France, and the exploitation of broad selections of newspapers from Russia and England. As such, these efforts in Germany clearly meet the definition of OSINT. In the next section, we will shift our attention to the Netherlands.

OSINT practices in the Netherlands

In the Netherlands, an interest in information from open sources for intelligence purposes predates the establishment of a (military) intelligence service. Already in the 1870s the General Staff of the army started collecting information on 'foreign armies' for which it relied on reports from the foreign service and on open publications.[51] For example, the General Staff archives from 1879 show that the '*Revue Militaire d'Etranger*' was read and excerpts were made of articles on subjects such as the Austrian-Hungarian *Handbuch Für Offiziere Des Generalstabes*.[52] The archives also contain an account from 1899 on the army budget discussions in the German parliament which was obtained from German newspapers.[53] Likewise, the Dutch military journal '*Militaire Spectator*' from 1870 onwards contained every month brief excerpts of articles published in foreign military journals.[54] These practices do show an understanding of the value of information available in open sources, as well as some collection efforts. There is, however, insufficient material to conclude that these efforts were methodical and could qualify as OSINT.

A structured collection of information from open sources becomes visible some decades later in the practices of the military intelligence service, which was the first intelligence service formally established in the Netherlands in 1914. Initially, this

[49]Engelen, p. 27.
[50]Nationaal Archief, Den Haag (Netherlands' National Archives, hereafter: 'NL-HaNa'), 2.04.53.21, inventory (#)17, page 83. This account is also discussed in Wolting, A. (1965) 'De eerste jaren van de Militaire Inlichtingendienst (GS III 1914–1917)', in *Militaire Spectator*, p. 570, although Wolting dates the entry incorrectly in 1918.
[51]Engelen, p. 13–14.
[52]NL-HaNa, 2.13.15.01, # 60.
[53]NL-HaNa, 2.13.15.01, # 193.
[54]See the index of the *Militaire Spectator* for the year 1870, page III, showing 12 entries named '*Overzicht van buitenlandsche Tijdschriften' (*Overview of foreign journals). These overviews are visible for the first time in the index of 1870 and continue in the years after.

military intelligence service was hardly a 'service'. It was a one-man bureau that informally started its preparations in 1912 and at some moment was named Study Bureau Foreign Armies ('*Studiebureau Vreemde Legers*').[55] When after two years, the bureau was formalized on 25 June 2014, it was organizationally placed as the third section in the General Staff and from then on was commonly referred to – just like in Germany – as *GS III*.[56] A letter from 1951 written by the first head of *GS III*, General Fabius[57] shows that by 1918 the service had grown to a staff of 23.

Especially in the preparatory period from 1912 to 1914, open sources were in fact the only sources available for *GS III* as a result of which Engelen notes that the bureau actually gained quite some expertise in exploiting these sources.[58] Fabius himself published an article in 1921 in which he describes how press and public documents ('*pers en openbare geschriften*') were a key source from which relevant information was obtained. In these contemporaneous notes on how GS III functioned, he explains how, for example, published data on losses of the German Army, as well as French obituaries, provided detailed and accurate insights in the remaining strength of both armies.[59] Fabius further writes in his article that it had been possible to identify the English military organization based on meticulous reading of what he refers to as 'large and small press' ('groote en kleine pers').[60] And indeed, as will be discussed further below, the reports GS III disseminated on these subjects are quite detailed.

From 1914 onwards *GS III* would also gain access to additional collection methods, most notable a network of scouts[61] and military attaches.[62] While the military attachés organizationally were not placed in *GS III* and formally received their instructions from the head of the General Staff,[63] their information collection work was one of their core-tasks and de-facto coordinated by *GS III*.[64] Interestingly, the military attachés were under the strict instruction that their sources were limited to personal observations and conversations, and specifically should include open sources such as press publications, announcements, parliamentary minutes, military and economic publications.[65]

How structured and methodical the collection and exploitation of information from open sources by *GS III* was, is due to a lack of archival material,

[55]Engelen, p.14.
[56]Engelen, p.18–19. After the outbreak of the First World War *GS III* would be expanded and later was divided in three units: *GS IIIa* focused on foreign intelligence, *GS IIIb* tasked with internal intelligence and *GS IIIc/d* tasked with contra-espionage and censorship, see Engelen, p. 40 and p. 56.
[57]Netherlands Institute for Military History (hereafter: 'NIMH'), inventory (#)488, collectie Fabius, #81, letter dated 16 August 1951. NB. At the time Fabius started as the first head of *GS III* in 1914, he held the rank of Lieutenant. Later in his career he obtained the rank of General.
[58]Engelen, p. 23.
[59]Fabius, H. (1921) 'De Inlichtingendienst bij den Generalen Staf', in Militaire Spectator, 90(8), p.402. It is striking how Donovan in his 1946 article on intelligence gives a similar example of gleaning information from obituaries in German local newspapers, which after thorough analysis enabled them to estimate the strength of the German army with surprising accuracy. See Donovan, p.116.
[60]Fabius, p. 402.
[61]These scouts ('*kondschapsdiensten*') were not scouts in a military meaning, however mostly civil servants such as border guards, customs officers and telegraph operators on positions from where they could potentially glean relevant military information. Engelen, p. 14
[62]Engelen, p. 25–26.
[63]Vinke, A. (1989) De Nederlandse Militaire Attaché 1907–1923', in *Militaire Spectator*, 158(8), p. 368.
[64]NIMH #488 Collectie Fabius, letter of 27 November 1947, see also Engelen, p. 26.
[65]Vinke, p. 369.

unfortunately not easy to answer. The inventory overview of the General Staff archives as available with the Netherlands' National Archives explicitly states that archives from *GS III* are fragmentary[66] due to the fact that most of the archives were destroyed in May 1940, when the Netherlands were invaded by Germany.[67] Fabius writes in a letter in 1947 that he ordered in May 1940 to burn the full *GS III* archives of 20 years a few days after the Netherlands government capitulated. He did so in order to avoid these archives to fall in the hands of the Germans.[68]

The preserved sources on the early days of *GS III* are most notably the personal archive of Fabius, the previously mentioned diary of the deputy head of *GS III*[69] and various separate documents spread throughout the archives of the General Staff. In the archive files, so far no documents on direction, collection or analysis methodology as applied by *GS III* have been identified. The analysis of the early practices of *GS III* with respect to the use of open sources therefore relies on deductions based on the limited material, which was preserved, as well as on secondary sources, such as the contemporary publication by Fabius.

Most of the documents related to *GS III* as available in the archives, are disseminated reports; to a much lesser extent the archives contain some raw collected information such as some foreign newspapers clippings. The available files with news clippings[70] date from after the First World War and show that these were mostly obtained via military attachés. Other than perhaps some underlining of relevant parts, no comments or reflection are present with the clippings. A few archive files related to *GS III* contain newspaper clippings taken from Dutch newspapers in 1939 and 1940, categorized by country (e.g. on Russia, England, Germany).[71] The markings shown on the files suggest that these clippings were collected by unit D of *GS III* which was involved in censorship especially of press, radio and film.[72]

Similarly, the surviving archive files show that early 1940, on the eve of the Second World War, *GS III* started to listen to foreign short wave radio broadcasts. This can be inferred from a number preserved batches with raw transcripts of broadcasts from radio stations in England, France, Germany, Italy and Australia.[73] These preserved transcripts all relate to Dutch language broadcasts from these foreign radio stations and are void of any comment or analysis. The focus on especially Dutch language broadcasts can most likely be explained by the fact that these files are part of the archives of unit D[74] of *GS III* as discussed above. Some direction in the collection effort is visible in the extent to which the broadcasts are transcribed. For broadcasts on subjects clearly irrelevant from a political or military perspective – such as a talk on cultural subjects – generally only the

[66]Nationaal Archief (2020) Inventaris van het archief van de Koninklijke Landmacht: Generale Staf en daarbij gedeponeerde archieven, (1906) 1914–1940 (1941), p. 39.
[67]See also Engelen, p. 50.
[68]NIMH, 488, Collectie Fabius, #79.
[69]NL-HaNa, 2.04.53.21, #17.
[70]See for example NL-HaNa, 2.13.70, #1555, 1562, and 1633.
[71]See for example NL-HaNa, 2.13.70, #1620.
[72]Engelen, p. 56.
[73]See NL-HaNa, 2.13.70, #1656–1659.
[74]Nationaal Archief (2020), p. 231.

station, date, time, title and a very brief reference of the content is typed out. In contrast, broadcasts on political and military subjects are transcribed in detail and sometimes verbatim.[75] The transcripts show that *GS III* at the end of the 1930s possessed the technical and organizational capacity to structurally collect information from radio broadcasts, although no archive material is available showing how this information was further exploited.

Although no internal *GS III* documents on organization and instruction have been preserved, some insight on the methodology applied in relation to the exploitation of the information collected from open sources can be deduced from the reports as disseminated by *GS III*. Surviving files in the archives show that *GS III* disseminated daily briefings as well as more detailed reports on specific subjects. The preserved daily briefings disseminated by *GS III*[76] contain both raw (unconfirmed and unanalyzed) information, as well as some analysis, such as, for example, in 1918 on remaining army strengths.[77] Unfortunately, only a few of these daily briefings have been preserved.

The archive files do hold various more detailed and extensive reports disseminated[78] by *GS III*. These reports mostly relate to the military organization and strength of the armies of specific countries including France, Germany, England, Russia, Austria, and Italy.[79] Other reports focus on the course and outcome of the latest battles[80] or track the organization of, especially, the German army over time.[81] These reports frequently contain references to the use of press and other open sources, and sometimes even mention these sources by name, such as specific newspapers, publications on losses by the German army, and statistical yearbooks. The intricate detail visible in the reports, such as on the losses, demographic reserves, changes in organization and weaponry, suggests methodical collection and exploitation of the information from open sources over time.[82]

As noted above, *GS III* formally obtained the formal capacity to use other collection methods, including agents, in 1914. A report disseminated on 6 April 1915 by *GS III* on the strength of the battling armies[83] explicitly mentions that it is partly based on secret sources, while simultaneously the report also refers to statistical year books and press publications as sources for parts of the information in the report. Nonetheless, while *GS III* apparently had the capacity to collect information in different ways and to synthesize

[75]See, for example, NL-HaNa 2.13.70, #1658 showing the different levels of detail in the transcriptions.
[76]See also Engelen, p. 28–29 for a description of the dissemination practices of *GS III*.
[77]See NL-HaNa, 2.12.18, #140, *GS III* dagberichten 295, 296, 297.
[78]Some preserved distribution lists for briefings in 1917 and 1918 shows that the number of recipients was up to fifty-one, see for example NL-HaNa 2.12.18, #138 (*GS III* 8267) #140 (*GS III* 9333), #141 (*GS III* 12023), NL-HaNa 2.13.91, #417 (*GS III* 7649).
[79]See for example NL-HaNa, 2.13.91, #414, #476 G (1 October 1914 'Nadere bijzonderheden over het Engelsche leger'), #578 G (15 October 1914 'Gegevens betreffende het Russische leger'), #592 G (19 October 1914 'Gegevens betreffende het Oostenrijksch-Hongaarsche leger').
[80]NL-HaNa, 2.13.91, #414, #506 G (9 October 1914 'De Duitsche operatiën in België en Frankrijk'), #526 G (10 October 1914 'Operatiën van het Fransche en Engelsche leger tot begin October').
[81]See NL-HaNa ,2.13.91, #417 (*GS III* 7649, 12 September 1917 'Gegevens over de oorlogsorganisatie van het Duitsche leger')
[82]See for example a very detailed overview of German regiments and divisions in NL-HaNa 2.13.91, #435 (*GS III* 11679, 'Duitsche leger. Overzicht van de regimenten en divisien waartoe zy behooren')
[83]NL-HaNa, 2.13.91, #414, 1108 G, *GS III* 1085 'Mededeelingen over de sterkte verhoudingen der Strijdende Legers'

an all sources product,[84] most of the preserved reports suggest that the use of open sources remained paramount.

Interestingly, from halfway 1914 onwards the head of *GS III* disseminated – albeit without making himself known as the author – military political monthly overviews in the Dutch military journal, the *Militaire Spectator*.[85] Also 'short announcements on military issues in various countries' were published by *GS III* in the *Militaire Spectator*[86] again without any author information. These disseminations show that *GS III* structurally collected military and politically relevant information from various open sources.

Engelen notes that little is known about the way intelligence was organized at the time in the Netherlands' Admiralty however that it is not likely that this role was fulfilled by more than one officer. [87] In the preserved archive files one apparent co-production between *GS III* and a naval officer has been identified in relation to a briefing on Turkey. In this report, which bears a *GS III* marking, the part on the Turkish political and army developments is signed by Fabius and the part on the Turkish navy by a naval officer.[88] A 1917 report on the damages done by submarines which also bears a *GS III* marking is only signed by Fabius. That quite detailed report also mentions multiple open sources from which information was collected and used for the analysis, which included French, Italian, and English newspapers, UK parliamentary records, announcements by both the German and the English Admiralties, and commercial (insurance) announcements. [89]

Nonetheless, most of the reports on the naval organization and strength of different countries as preserved in the General Staff archives, do not bear a *GS III* marking and are signed by a naval officer.[90] Just like the reports produced by *GS III*, also these naval reports reference open sources, including newspapers and government documents. For example, a briefing on naval skirmishes in 1915 shows that use was made of information from English, German and Russian newspapers.[91]

In an internal Netherlands' Admiralty memorandum from 1935 written by a newly appointed officer to perform the intelligence task, the officer takes stock of the sources of information available to him. He identifies eleven sources, of which nine are open sources, including various press clipping services and libraries at different places in- and outside the Ministry of Defense.[92] The memorandum further discusses the pros and contras of different approaches to the collection of information from open sources and especially the way of retrieving the information after it is collected when it is needed for

[84]According to Engelen there is insufficient material to draw any conclusions on whether *GS III* possessed the analytical capacity to produce all sources intelligence reports (Engelen p. 19.) Apart from the report referenced here, no other reports have been encountered in this research which clearly show an all-source approach.

[85]Engelen, p. 19. These overviews show an interesting mix between raw information sometimes accompanied with some reflection (analysis), see for example *Militaire Spectator* 1914, pp. 525–538 and pp. 609–621; *Militaire Spectator* 1915, pp. 245–262.

[86]See for example *Militaire Spectator* 1914, pp. 539–544, 771–772, and pp. 841–844.

[87]Engelen, p. 25.

[88]NL-HaNa, 2.13.91, #414, #658 G (6 November 1914, 'Turkije en de oorlog').

[89]NIMH, 488, collectie Fabius, #23, *GS III* 7536, 'Beschouwingen over de resultaten van den duikbootoorlog' dated 22 August 2017 and supplement dated 3 November 1917.

[90]See NL-HaNa, 2.13.91, 414, #604 (23 October 1914 'Overzicht van de zeemachten der oorlogvoerende mogendheden'), #620 (26 October 1914 'Gegevens betreffende de Duitsche- en Oostenrijksche vloot'), #779 G (19 December 1914 'Overzicht van de krijgsverrichtingen ter zee'), #1406 (7 June 1915 'Overzicht der krijgsverrichtingen ter zee'), #1990 (23 September 1915 'Overzicht der krygsverrichtingen ter zee').

[91]NL-HaNa, 2.13.91, #414, #1990 G (23 September 1915 'Overzicht der krygsverrichtingen ter zee').

[92]NL-HaNa, 2.12.18, #148, Marine staf #10/1/1 (without title, 19 December 1935).

analysis. A follow-up memorandum from 1936 details how the officer has been working on better organizing the collection and indexing of information from open sources.[93]

The above findings on the use of information from open sources for intelligence purposes in the Netherlands at the beginning of the 20th century, show that in the first period after its establishment in 1914 *GS III* had only open sources at its disposal. Nonetheless, *GS III* was able to disseminate very detailed reports assessing the troop strength of the Germany, French and British armies. Importantly, these reports do not only explicitly mention the use of information from open sources, they also contain considerable detail, which demonstrates a methodical approach of collection and the exploitation of information from those open sources. The article written by Fabius 1921 confirms that a structured exploitation of specific open sources took place by *GS III* and also discusses the need of formulating operational and strategic intelligence requirements.[94] While parts of his article could perhaps also be interpreted as a blueprint and not necessarily as a reflection on the actual past practices of *GS III*, the concrete examples Fabius provides nonetheless suggest actual practices were indeed as he describes them.

That said, the practices and intelligence focus by *GS III* may show not to be as structured as seen with the German *Sektion IIIb*. The preserved disseminations largely show a focus on military information and lack the broader focus as visible in the disseminations by the German *Sektion IIIb*. Then again, the lack of preserved archive material may be to blame here, while additionally we need to realize that *Sektion IIIb* had in 1918 a staff of 83 compared to 23 staff of *GS III* in the Netherlands. As such *Sektion IIIb* was better equipped to have a more diversified focus.

Separately, the findings indicate that also Dutch naval intelligence structurally exploited information from open sources, even though this was likely on a very limited scale. Altogether, based on the findings we can conclude that in the Netherlands at least since the start of the First World War, a methodical collection and exploitation of information from open sources took place by military intelligence, as such meeting the definition of OSINT.

Conclusion

This paper set out to explore early OSINT practices and to that extent examined three case studies. In each of these three case studies, the findings show that methodical and structured practices aimed at the collection and exploitation of information from open sources to fulfil intelligence requirements existed decades before the establishment of the BBC Monitoring Service and the FBMS. OSINT hence did not start at the eve of the Secord World War as frequently is assumed, however has a much longer and richer history.

Research by Fuhlhage demonstrates that in the US structured collection and exploitation of publicly available information already existed since 1863, when the Bureau of Military Intelligence was established. Those activities were more than casually reading newspapers, and both sides in the conflict understood they could

[93]NL-HaNa, 2.12.18, #148, Marine staf #10/1/57 (without title, 15 May 1936).
[94]Fabius, p. 397 and 402.

obtain an understanding of the societal, technical, economic, and military political aspects of the adversary from these open sources. The same conclusion can be drawn about the military intelligence efforts prior and during the First World War in Europe. Although there are differences to observe, the case studies on Germany and the Netherlands both show a methodical approach to the collection and exploitation of information from open sources in the early activities of the respective military intelligence services. In all three cases discussed above, it is clear that substantial amounts of relevant information were publicly available at the time, including in press and official sources. That condition, as well as an actual need by the involved actors for insight in the situation unsurprisingly led to the OSINT practices.

The findings in this paper are exploratory in nature and while they show that OSINT without doubt has a longer history than previously assumed, these are not yet complete. Further scrutiny of archives is likely to reveal much more about early OSINT practices than so far has been published in the intelligence literature. Especially comparative research in other countries in and outside Europe could augment our understanding of the establishment of the practices of collection and exploitation of open sources. For example, how did the practice of the collection and detailed scrutiny of obituaries to estimate the (remaining) strength of armies, as mentioned by different authors, emerge? Did the same idea come up in different places at the same time? Or were these practices copied from one another? Can different approaches to the use of open sources be distinguished, how can these be explained, and what can we learn from these differences? If the findings of this paper have shown anything, it is that historical research into OSINT practices has only just begun.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Ludo Block is a lecturer at the Institute of Security and Global Affairs at Leiden University where he teaches Structured Analytic Techniques and OSINT methodology. He has a practitioner background in policing and focuses in his current research and publications on the history of OSINT and intelligence analysis methodology.

ORCID

Ludo Block http://orcid.org/0000-0001-7682-9112