

If you are late, you are Beyond help: Disinformation and Authorities in Social Media

Milla Alaraatikka, Pekka Koistinen, Miina Kaarkoski, Aki-Mauri Huhtinen and Teija Sederholm

Department of Leadership and Military Pedagogy, National Defence University, Helsinki, Finland

milla.alaraatikka@mil.fi; pekka.koistinen@mil.fi; miina.kaarkoski@mil.fi; aki.huhtinen@mil.fi; teija.sederholm@mil.fi

Abstract: Fast paced, seemingly vast and ever-growing social media is a challenging environment for public authorities to communicate optimally. One challenge is malicious disinformation, which is intentionally disseminated to deceive and cause harm to citizens and authorities. It is known that exceptional circumstances create opportunities for malicious actors to negatively influence democratic societies. Disinformation is often designed to cause uncertainty towards information that public authorities offer and to decrease the overall trust in public authorities. The aim of disinformation is often to cause polarisation in society and to weaken national security. Furthermore, in a crisis, it is essential that authorities are able to deliver official information quickly, clearly and accurately to citizens. Communication between authorities and citizens in time-sensitive situations is typically online. One challenge to public authorities is how they can mitigate and repair the effects of disinformation and information influencing in complex and time-sensitive circumstances. In this article, our aim is to describe the challenges that public authorities face when communicating in social media spaces where disinformation is present. The empirical data, including 16 government official interviews, was collected in September 2021. The main theme of the interviews was related to how situational awareness about disinformation is formed in their organisations. Our research questions focus on how public authorities detect and counter disinformation in social media and what kind of problems and pressures they have when communicating in such environments. This study follows a qualitative design and the data was analysed using inductive content analysis. This study is part of larger project related to counterforces and the detection of disinformation. The results will provide a broader understanding of how different types of public authorities, from health to security organisations, and from agencies to ministries, communicate in complex environments such as social media.

Keywords: social media, disinformation, public authorities, communications, national security

1. Introduction

Social media has offered an affordable, fast and global network not only to socialise, but also to distribute and consume information. Social media has profoundly changed the way individuals and organisations communicate, co-create and exchange information, creating new pressures and challenges for public authorities to communicate with citizens. However, not everyone on social media has good intentions. One of the challenges societies face today is disinformation, which is understood as an intentionally created, disseminated, and presented false or misleading information which has malicious objectives (European Commission, 2018; Freelon and Wells, 2020). Information always has a meaning, because without it, it would not be informative and thus information. Furthermore, this informativeness depends on context and time (Karlova and Lee, 2011.) Disinformation can also be informative by implying or revealing some information, and what distinguishes it from information is that disinformation is intentionally false or misleading depending on context and time.

Especially during the COVID-19 pandemic it has become clear that efficient communication from public authorities is essential to prepare for, prevent, adjust and manage crises (Kim and Kreps, 2020). The spread of disinformation may harm and disturb public authorities and their communication, since disinformation is generally used to weaken democratic regimes by attempting to polarise views and reduce trust towards state actors, which will eventually damage national security (Slugocki and Sowa, 2021). Furthermore, in open liberal democracies the spread of disinformation may challenge the traditional authoritative and hierarchical information flow from authorities to public audiences (Bennet and Livingston, 2018). Indeed, public institutions have an important communicative function to provide information, collect public opinions for decision making and facilitate public discussion (Canel and Sanders, 2013). The communication work of public authorities ensures that democratic regimes have well informed citizens who are capable of making carefully weighted decisions. Therefore, it is necessary that public authorities have the capability to communicate effectively with citizens regardless of the presence of malicious disinformation.

However, there is very little literature on how public authorities detect and counter disinformation on social media. Instead, research mostly focuses on detecting false news from an individual's perspective or using AI methods for detection (eg. Sepúlveda-Torres et al., 2021; Bontridder and Poulet, 2021; Wolverton and Stevens, 2020). There are some toolkits and guidelines that have been developed to educate and help public institutions to recognise and respond to disinformation. One example is the British RESIST model that helps communication experts prevent the spread of mis- and disinformation and reduce its impact on audiences by using six simple steps (GCS, 2021). These toolkits are not based on academic theory and there is little research on how they are used in practice. It seems that liberal democracies are only beginning to establish concepts on and understand the different actors and their motivations concerning disinformation. It is safe to say that more profound understanding is needed to find solutions to combat the phenomenon (Iosifidis and Nicoli, 2021).

Some advocates of social media argue that it has the potential to increase government transparency, direct communication and citizen engagement, therefore enhancing democratic practices (Criado, Sandoval-Almazan and Gil-Garcia, 2013). From this normative perspective it seems that public authorities should utilise social media to connect with individuals, and there is evidence of increasing expectations for them to participate in ongoing conversations on social media (Small, 2012). In addition, the more satisfied people are with the government's communication on social media, the more confidence and trust they have in the government (Kim, Park and Rho, 2015; Mansoor, 2021). Therefore, active social media interaction with the society by public authorities creates opportunities to positively impact democratic practices.

Governments and public authorities interact with the public using three different standpoints: representation (information pushing), engagement (two-way conversation) or networking (multi-sided conversation) (Mergel, 2013). However, research has demonstrated that public authorities use social media mainly as a channel to distribute and push information, not to interact with audiences (Silva et al, 2019; McInnes and Hornmoen, 2018). Despite the quick reach to audiences that social media offers, public authorities and institutions have had many communication problems during the COVID-19 pandemic (Sun, 2021), which symbolises un-identified problems and challenges regarding public authorities' efficient social media usage. Previous literature suggests that social media has not yet become institutionalised in public authorities' communication work, which explains why most of its potential remains untouched. Referring to the views of Criado and Villodre (2021), the adoption of social media is a process, and several actors can act as a barrier which prevents efficient social media adoption in public institutions. These barriers include organisational culture, absence of resources for maintenance, security, lack of governance framework, accessibility, privacy, legal terms, lack of economic benefits and control over suppliers and files observation.

In this article, we study the challenges that Finnish public authorities face in social media communication where disinformation is inevitably present, and how they detect and counter disinformation. In Finland the trust towards public authorities is very high (OECD, 2021). This creates interesting conditions to study disinformation, since it generally aims to weaken the trust towards public authorities. The aim of this descriptive qualitative analysis is to explore how Finnish public organisations experience challenges and what methods they use regarding detecting and countering disinformation on social media. The results may be used to discuss if the methods used by the authorities appear proper and sufficient, or if there is need for more effective approaches to combat disinformation from the public authorities' perspective. We argue, that to combat the phenomenon effectively, Finnish public authorities need more detailed, commonly shared frameworks and guidelines on how to respond interactively to disinformation in social media.

2. Data and method

The empirical data was collected during September 2021 using semi-structured interviews. The interviews contained 21 questions under 2 themes which were related to disinformation situational awareness. These themes were "Disinformation as a phenomenon from an organisational point of view" and "Current situation and procedures" which contained questions such as "What do you consider as disinformation?" and "Has there been any disinformation cases in your organisation and how did you handle it?".

Interviewees represented several administrative fields including national security, ministries, law, and emergency and rescue services. Invitation letters were sent to organisations in coordinative positions in their administrative fields. Research was conducted using the ethical principles published by The Finnish Advisory Board on Research Integrity (TENK, 2012). Furthermore, the organisations could decide themselves who would

be the best person or persons to represent them in the interview. In total 16 interviews were conducted. The majority of interviews were conducted online. The average length of interviews was 50 minutes.

Inductive content analysis was used to analyse the data. It is a beneficial approach to research themes where there is little existing research, since analysis is mostly data-driven. Inductive content analysis includes open coding, creating categories and abstraction of the data collected (Elo & Kyngäs, 2008). As for the basis of analysis, the text was coded using the qualitative data software Atlas.ti 9 (Atlas.ti, GmbH, Berlin Germany). Firstly, the data was organised by highlighting the parts where the participants talked about social media communication and disinformation. In total, there were 168 specific instances. Secondly, the data was coded, focusing on challenges, difficulties and ways to detect and counter disinformation. A code was typically an utterance, such as a statement, an opinion or an explanation, and there were 71 codes in total, which were further categorised into 13 groups. These 13 code groups formed the 8 final result themes. The open coding process and categorisation of the data was carried out by 2 researchers to ensure the quality of the conclusions based on the data.

3. Results

8 partly limited themes were identified from the content analysis describing the types of challenges and pressures that public authorities face when communicating in a complex environment such as social media where disinformation is present, and how they detect and counter disinformation. Categories are presented in alphabetical order. Identified categories were co-operation and networks, communication practices, disinformation, emotions, trust and reputation, information, interaction, resources and uncertainty. Table 1 is a summary of the main results.

Table 1: Summary of the main results

	<i>Challenges</i>	<i>Detecting and countering disinformation</i>
<i>Co-operations and networks</i>	working with external parties	co-learning, networking
<i>Communication practices</i>	how much disinformation should be detected, how to detect without validating disinformation	passive reacting, indirect correction, active-, transparent-, and well-timed communication
<i>Disinformation</i>	vastness of social media networks, unnecessary information requests, social media logic	media monitoring, media literacy of citizens
<i>Emotions, trust and reputation</i>	hard but important issue, distant authorities, trust, authorities' trustworthy status exploitation	strategic narratives, focusing on customer service, employees' activity
<i>Information</i>	ensuring information quality slows communication, beliefs are hard to correct	ensuring information quality, actively communicating new information, being present in social media spaces
<i>Interaction</i>	authorities' status changes, neutrality, interaction is seen as hard to execute	social media guidelines
<i>Resources</i>	time distribution, work task management, the role of communication work	focus on everyday matters, planning communication in advance, reassessment of resources
<i>Uncertainty</i>	always present, the role of communication	disinformation is important, but no clear procedures to tackle it

3.1 Co-operations and networks

Organisations described that working with external parties, sometimes including other public authorities, is often challenging because they don't necessarily fully understand the role and limitations different public authorities face. This can manifest, for example, in misunderstandings in communication or communication demands that authorities can't satisfy. However, in the interviews, organisations also talked about the importance of co-operation and networks: "So that we all would be on the same line, that we are speaking about the same thing and then could do something about it together". They pointed out that more profound co-operation would help public authorities to learn faster, stay on the track with different trends regarding disinformation and ensure that everyone understands the core of the issue. In addition, a few organisations clearly stated that they felt like outsiders in ongoing co-operation and that may be the reason why disinformation does not appear in their day-to day activities.

3.2 Communication practices

The majority of organisations reported that they intentionally decide not to react to disinformative messages especially in their social media channels, whereas some were more active. Passive reacting was justified by reluctance to give any attention to disinformation and by fears that reacting to disinformative content would legitimise it: *“So then it [disinformation] would have reached its goal. So, we don’t want - we think how we could do it [counter disinformation] without validating these kinds of crazy claims to be a real problem.”* Despite the prevalence of passive reacting, almost all organisations agreed that important things still needed to be corrected and content which would gain a lot of unnecessary attention should be addressed. Few organisations said that they tend to indirectly correct and note the themes in which disinformation is spreading in their other communication channels.

Active, transparent and well-timed communication repeatedly came up in the interviews as the best way to counter and react to disinformation. Active communication in the interviews was described as *“being present”*, quickly reacting to important things and considering when, how and where to communicate or publish information so that there is always enough communication to prevent information vacuums from appearing. Transparency translated to an ability to communicate about uncertain things or lack of information especially when something unexpected happens. However, a variety of concerns were expressed about the practice of transparency. Organisations felt that demands of transparency were increasing but that there is still only little experience on how to communicate uncertain or controversial things. In addition, many constitutional and legal practices cause delays for communication and prevent fast reactions when it comes to communicating with the public. This causes problems, since a few organisations said that being on time is crucial for communication to be effective.

3.3 Disinformation

Organisations reported that there is disinformation present in their social media channels. During the COVID-19 pandemic, the amount of disinformation has been growing, while the need for effective communication has also been increasing. The majority of organisations admitted that they could only react to a small amount of the disinformation. The challenge presented was that the organisations did not know whether they needed to detect disinformation in the first place and if so, how much: *“It is hard to detect disinformation and how much you should do it, how much you should correct it, how much you should pay attention to it, these are a bit of a grey area.”* These uncertainties were reportedly due to the enormous amount of information in social media and internet.

One challenge some organisations highlighted was the vastness of social media networks; organisations can never be sure about all of the places and connections where their content is shared and commented. The platform economy caused frustration because the informative content that organisations usually produced is not as interesting for the algorithms as emotionally catching disinformation, and thus organisations had limited ways to influence social media platforms. One interesting phenomenon some organisations described was unnecessary information requests, which could flood organisations’ feedback channels and emails. Almost all organisations practiced media monitoring as a way to detect disinformation and some of them talked about the importance of the citizens’ media literacy.

3.4 Emotions, trust and reputation

Emotions recurred through the interviews as an important perspective to disinformation: *“I have noticed that people don’t always recognise, some strongly technical expert doesn’t understand these kinds of concepts like feelings of security”*. If emotions are not considered when communicating, the risk is that the public authority will remain distant, which increases potential vulnerability for disinformation. Some organisations tried to reduce the risk by investing in customer service where people’s worries and concerns were actively responded to. To prevent emotion-based challenges, a few organisations discussed strategic communication and creating strong narratives about themselves. These strategies and narratives planned in advance can then be used as a basis of communication during crises.

Trust was a particular emotion that came up in the interviews. Organisations described that regular disinformative gossiping, lies and garbled claims spreading about them had a lot of potential to be damaging and that this kind of communicative behaviour is hard to prevent or detect. Organisations put a lot of trust in their employees’ loyalty and willingness to contact management about suspicious social media activity regarding their organisation: *“I have to say, that in our organisation, there are very conscious people - - so luckily our own*

employees contact us and ask that hey, should we do something about this and I have noticed these kinds of things [in social media]." This willingness to contact management was seen as a factor which builds the reputation of the organisation. At the same time, the organisations admitted that controlling their employees is not possible nor desirable. One problem which some organisations mentioned was that their trustworthy status was taken advantage of by imitating their visual or written communication styles and symbols.

3.5 Information

The organisations highlighted the importance of fact-based information. fact-based information as a self-evident fact for public organisations. This need to refer to quality information and facts could sometimes also pose a challenge, since it can delay efficient communication: *"While we verify the information, the clock is ticking. I mean that when we verify information, then our communication and answers get delayed, because we can't put out any unsure or un-verified information"*. Public authorities can't make exceptions in the trustworthiness of its information, but it is possible to communicate that some information is missing or that there is simply none. The organisations thought that keeping their information base up to date and communicating actively about new information is a good way to prevent disinformation altogether. The organisations admitted that if they don't offer information, someone else with possible malicious intentions will. If there is no information, some organisations thought that simply being there and being present can prevent possible rumours spreading. However, the challenge is that beliefs can't be corrected simply via correct information.

Several organisations mentioned allocated information spreading, where you aim to offer information for some particular groups or about carefully chosen themes. Even if an organisation does not react to disinformation, showing how and where to find quality information remains important: *"Public authorities need to be present in social media. We can't just sit in the ivory tower and think that they will come to us and to good information. We have to go there in some way."* However, the challenge addressed was that the information would probably still not find those individuals who need it the most or are targeted by disinformation.

3.6 Interaction

Some organisations described that public discourse, and the language used, has become harsher and more aggressive. In addition, they recognised that public authorities' status is not as stable as it has been and there is more criticism towards experts than before: *"Even if you are an expert, in an expert organisation, very quickly you get questioned and, maybe in a way, it can be ignorance, feistiness, but also unscrupulously challenging authorities and questioning them."* For public organisations this harsher discussion climate is a challenge; it's expected that they remain neutral and respective, and organisations generally don't want or can't share strong opinions. Some of the organisations have constructed guidelines for social media interaction, but the problem is that they are not considered mandatory.

The majority of organisations felt that engaging in conversations or being interactive in social media is very challenging. Organisations do not want to participate in conversations which are heavily based on sharing opinions, especially if there is disinformation included. Responding to different claims or opinions was considered mainly as unnecessary and it was seen to only stretch the conversation. Furthermore, interaction was seen as difficult because some actors want to have a discussion only about marginal or one-sided perspectives. At the same time, organisations point out that problems arise if people who, for example, genuinely believe in disinformation are not treated as valid discussants as they can easily feel left-out and even radicalise.

3.7 Resources

For many of the organisations, one of the main factors hindering efficient social media usage, and the detection and countering of disinformation was the lack of resources, especially time. For example, communication is considered to be an important part of public authorities' responsibilities, but they cannot communicate with the public at all times: *"It's how it is allocated, how much of someone's employment can be communication, because in other hand communication is essential and important and everyone [in the organisation] needs to do it, but not everyone [in the organisation] can communicate all the time because you have to do the work, other tasks than communication"*. Communication therefore is seen as taking time from other work tasks and the problem is often that countering disinformation, or the need to communicate, does not occur during office hours. Hence, the challenge for many organisations is what kind of a role should communication have in the daily work within the organisation.

In addition, social media is a relatively new element to public authorities and its meaning is not yet comprehensive. The intangible benefits from social media communication could present problems in terms of the adoption of communication strategies by authorities. The lack of resources causes communication practices which are mostly reactive, and where the focus is on everyday matters. In multiple interviews, the organisations described that during the pandemic they have come to understand the importance of communication and have begun to prepare in advance and reassesses the resources available.

3.8 Uncertainty

Uncertainty is always present when making decisions about communication, and the organisations expressed this in multiple ways. A few organisations concluded that the different types of communication styles that different authorities have can certainly cause some uncertainty in public audiences. There is plenty of uncertainty considering the amount of communication that public authorities should be doing, how large part of everyday tasks it should be, and what should be communicated and what should not. In addition, the current ever-growing, seemingly fast and complex social media environment itself causes uncertainty in myriad ways, and no one can foresee clearly what problems new technologies will bring: *"If you think about the communication world at the moment, where fast reactions are expected and if your reaction is delayed, then you are beyond help, the conversation has then moved elsewhere. Of course, it is challenging for public authorities. How should they be engaged in the fast communication sphere?"*.

There is plenty of uncertainty on how disinformation should be handled, how much organisations should be aware of it, and how harmful disinformation can actually be. By a majority of the organisations, disinformation was seen as an important and a potentially harmful problem, but only a few had actually made clear procedures to tackle it.

4. Discussion

The aim of this study was to study public authorities' communication challenges, and ways to detect and counter disinformation, on social media. The analysis revealed that the authorities face a diverse set of challenges on social media and that systematic approaches to detecting and countering disinformation are not commonly practiced.

Uncertainty is one of the main challenges presented in the results: many of the interviewees shared the feeling of uncertainty towards dealing with disinformative content and environments. This uncertainty breaks down into smaller challenges like deciding the importance of detecting disinformation, deciding resource allocation and how to detect disinformation without validating it. Uncertainty may partly come from the lack of shared understanding about how serious of a problem disinformation is in social media and how organisations should deal with it. There is no clear government coordinated frameworks or obligatory guidelines forming this kind of understanding about disinformation, which is one of the barriers Criado and Villodre (2021) identified. In this context, it seems that the lack of shared understanding acts as a barrier to efficient usage of social media when detecting and countering disinformation.

Engaging in discussions and being interactive was seen as challenging in the interviews especially when disinformation was present. This is interesting, since one of the main ways to detect and counter disinformation that public authorities described was active, transparent, and well-timed communication alongside passive reacting. It seems that this active and well-timed communication mainly means information pushing like distributing information actively (Mergel, 2013). The results point out that transparency is seen one of the best ways to counter disinformation but at the same time it's considered difficult to execute.

If authorities don't utilise the interactive features of social media in everyday communication, they probably don't use it when disinformation is present. However, there are citizens who genuinely believe in disinformation and may seek out interaction with public authorities. Bypassing them may be problematic since it can increase the distance between public authorities and citizens. In countering disinformation, it is essential that public authorities' communication with citizens includes interactive dimensions. To conclude, more detailed, top-down and shared guidelines and frameworks are needed especially considering interactive communication and transparency when detecting and countering disinformation.

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References

- Bennet, L., and Livingston, S. (2018). "The disinformation order: Disruptive communication and the decline of democratic institutions." *European Journal of Communication*, Vol 33, No 2, 122-139.
- Bontridder, N., and Pouillet, Y. (2021). "The role of artificial intelligence in disinformation." *Data & Policy* Vol 3, No 32.
- Criado, J., Sandoval-Almazan, R., and Gil-Garcia, J. R. (2013). "Government Innovation through Social Media." *Government information quarterly* Vol 30, No. 4, 319-326.
- Criado, J. and Villodre, J. (2021). "Revisiting Social Media Institutionalization in Government. An Empirical Analysis of Barriers." *Government information quarterly*: 101643-.
- Freelon, and Wells, C. (2020). "Disinformation as Political Communication." *Political Communication*, Vol 37, No 2, 145-156.
- Elo, S. and Kyngäs, H. (2008). "The qualitative content analysis process", *Journal of Advanced Nursing*, Vol. 62, No 1, 107-115.
- European commission. (2018). "Action plan against Disinformation, A. P. Joint Communication to The European Parliament, The European Council, The Council, The European Economic and Social Committee And The Committee Of The Regions."
- Hughes, A. L. and Palen, L. (2012). "The Evolving Role of the Public Information Officer: An Examination of Social Media in Emergency Management," *Journal of Homeland Security and Emergency Management*, Vol. 9, No 1, Article 22.
- Iosifidis, and Nicoli, N. (2021). "Digital democracy, social media and disinformation". Routledge.
- Karlova, N., and Lee, J. (2011). "Notes from the underground city of disinformation: A conceptual investigation". *Proceedings of the American Society for Information Science and Technology*, Vol 48, No 1, pp 1-9.
- Kim, D. K. D., and Kreps, G.L. (2020). "An Analysis of Government Communication in the United States During the COVID-19 Pandemic: Recommendations for Effective Government Health Risk Communication." *World medical and health policy*. Vol 12, No. 4, pp 398-412
- Kim, Park, M. J., and Rho, J. J. (2015). "Effect of the Government's Use of Social Media on the Reliability of the Government: Focus on Twitter". *Public Management Review*, Vol, 17, No 3, pp 328-355.
- Mansoor, M. (2021). "Citizens' Trust in Government as a Function of Good Governance and Government Agency's Provision of Quality Information on Social Media During COVID-19." *Government information quarterly*, Vol 38, No 4, pp 101597-101597.
- McInnes, and Hornmoen, H. (2018). "Add twitter and stir": The use of twitter by public authorities in Norway and UK during the 2014-15 ebola outbreak." *Observatorio (OBS*)*, Vol 12, No 2, 23-46.
- Mergel, I. (2013). "A framework for interpreting social media interactions in the public sector." *Government Information Quarterly*, Vol 30, No 4, 327-334.
- OECD. (2021). "Drivers of Trust in Public Institutions in Finland". OCDD Publications, Paris. Available: <https://doi.org/10.1787/52600c9e-en>.
- Sanders, K., and Canel, M.J.M (2013). "Government Communication: Cases and Challenges London"; Bloomsbury Academic.
- Sepúlveda-Torres, R., Vicente, M., Saquete, E., Lloret, E., and Palomar, M. (2021). "HeadlineStanceChecker: Exploiting summarization to detect headline disinformation". *Web Semantics: Science, Services and Agents on the World Wide Web*. Vol 7, 1-14.
- Silva, P, Tavares, AF, Silva, T and Lameiras, M. (2019). "The good, the bad and the ugly: Three faces of social media usage by local governments". *Government Information Quarterly*, vol. 36, no. 3, pp. 469-479.
- Slugocki, and Sowa, B. (2021). "Disinformation as a threat to national security on the example of the COVID-19 pandemic." *Security and Defence Quarterly*.
- Small, T. (2012). "e-Government in the Age of Social Media: An Analysis of the Canadian Government's Use of Twitter." *Policy and Internet*, Vol. 4, No 3-4, 91-111.
- Sun, W. (2021). "Introduction to the Special Issue: 'Media and Communication During the COVID-19 (Coronavirus) Pandemic': Communication Throughout the COVID-19 Pandemic: Challenges and Hopes." *The Howard journal of communications* Vol, 32, No 5 .
- The Finnish Advisory Board on Research Integrity (TENK) (2012). "Responsible conduct of research and procedures for handling allegations of misconduct in Finland. Guidelines of the Finnish Advisory Board on Research Integrity 2012". Helsinki.
- The Government Communication Service. (2021). "RESIST 2. Counter-disinformation toolkit." Available: <https://3x7ip91ron4ju9ehf2unqrm1-wpengine.netdna-ssl.com/wp-content/uploads/2021/11/RESIST-2-counter-disinformation-toolkit.pdf> Retrieved 14.12.2021
- Wolverton, C., and Stevens, D. (2020). "The Impact of Personality in Recognizing Disinformation." *Online information review* Vol 44, No 1, 181-191.