

Use of Remote Sensing in Naming and Shaming Kelsey Crowley

Executive Summary

Naming and shaming (NS) can reduce violence by imposing reputational costs on an actor that pressures them to change their behavior. The outcomes of NS vary widely and can trigger backlash, potentially worsening conflict. Additionally, NS isn't a long-term solution to reducing violence. Remote sensing (RS) technology may improve the likelihood of success of NS, particularly in improving the initial implementation of an NS campaign through improved identification and publicity. However, RS also introduces unique risks that can exacerbate violence. NS nor RS technology, alone, address the underlying causes of violence.

Introduction

Naming and shaming (NS) is a tactic employed to reduce violence by publicizing actions that deviate from accepted international norms. Remote sensing (RS) can strengthen an NS campaign by providing unprecedented transparency and documentation of previously unseen behaviors. Evidence of intolerable behavior early in NS can lead to swift compliance, however, RS can also accelerate violence and promote new forms of violence. This brief discusses the ways in which RS can facilitate successful NS and provides recommendations and considerations for using RS in NS campaigns.

Naming and Shaming

NS is an instrument used by state and nonstate actors to try to change another actor's behavior to

“get other countries to comply with accepted norms.”¹ This instrument typically “target(s) a range of undesirable behaviors” with economic, political, or reputational repercussions.² For NS to achieve its intended goal of reducing violence, the “shamed actor” must fear retribution or care about the perception others have of them for the factor to be effective.^{3,4}

The outcomes of NS in facilitating peace are highly contingent on the following conditions:

- appropriate identification: being able to clearly see the action that is to be shamed⁵
- publicity: how large of an audience the action draws; whether the public feels moved to condemn the named party⁶

1 Qingli, Wendy He and Haridas Ramasamy. 2020. “Naming and Shaming China: America’s Strategy of Rhetorical Coercion in the South China Sea.” *Contemporary Southeast Asia* 42 (3) (12): 317-345. <https://doi.org/10.1355/cs42-3a>.

2 Ilgit, Asli, and Deepa Prakash. 2019. “Making Human Rights Emotional: A Research Agenda to Recover Shame in ‘Naming and Shaming.’” *Political Psychology* 40, no. 6 (2019): 1297–1313. <http://www.jstor.org/stable/45223193>.

3 Bassan-Nygate, Lotem, and Gadi Heimann. 2024. “Dealing with Guilt and Shame in International Politics.” *International Relations* (London) 38 (2). London, England: SAGE Publications: 256–78. doi:10.1177/00471178221086147.

4 Gilbert, P. 2019. Distinguishing Shame, Humiliation and Guilt: An Evolutionary Functional Analysis and Compassion Focused Interventions. In: Mayer, CH., Vanderheiden, E. (eds) *The Bright Side of Shame*. Springer, Cham. https://doi.org/10.1007/978-3-030-13409-9_27.

5 Pawson, Ray. 2002. “Evidence and Policy and Naming and Shaming.” *Policy Studies* 23 (3): 211–30. <https://doi.org/10.1080/0144287022000045993>.

6 Pawson. “Evidence and Policy and Naming and Shaming.”

- if this factor is paired with another instrument: coupling naming and shaming with tools like sanctions or NGO presence to further persuade the shamed country to change their behavior^{7, 8}

- the composition of the stakeholder group: whether the country doing the shaming is viewed as a dominant global influence and if the country being shamed fears condemnation

Technologies, like RS, improve the efficacy of NS in reducing violence, primarily through improving the first two conditions, identification of violence and publicity or visibility of the violence.

Remote Sensing

RS is “the practice of collecting information about the Earth’s surface without direct contact,” like imagery captured by satellites and drone, extending the “reach of monitors and the quality of information they collect.”^{9, 10} RS is used for a variety of purposes, including but not limited to military missions, meteorological forecasting, disaster monitoring and detecting human rights violations in conflict zones.^{11, 12} RS benefits NS by improving early warning of conflict, improving visibility of compliance, and documenting war crimes.

“Remote Sensing improves the efficacy of Naming and Shaming in reducing violence, primarily through... identification of violence and publicity or visibility of the violence.”

Detecting Potential Conflict

The way in which NS can stop or reduce violence is by identifying potential conflict early and intervening before further escalation. Early detection can manifest as the identification of environmental changes, including: changes in nighttime light emissions that signal the expansion of imprisonment camps, a receding lake that will cause conflict over water access, fortifying military positions and other increased militaristic activity that suggests preparation for conflict, or destroyed food sources that will lead to food insecurity.^{13, 14, 15, 16, 17}

The success of detecting changes requires both the employment of the technology as well as the technical capability and capacity (i.e., analysts) to transform imagery into actionable information.

RS can facilitate detection for naming and shaming in several ways. RS can:

- identify environmental changes
- detect movement changes (e.g., an abandoned village or military movement)
- provide timely and comparative imagery

RS has its limitations, though. RS can capture imagery that illustrates a change, but requires analysts or additional technology (e.g., artificial intelligence) to translate imagery into intelligence. This analytic product then must be effectively used in NS to prevent conflict. Thus, RS requires a team of dedicated analysts who are looking to find early warning indicators in imagery. Additionally, RS

7 Murdie, Amanda M., and David R. Davis. 2012. “Shaming and Blaming: Using Events Data to Assess the Impact of Human Rights INGOs.” *International Studies Quarterly* 56, no. 1 (2012): 1–16. <http://www.jstor.org/stable/41409819>.

8 Peterson, Timothy M, Amanda Murdie, and Victor Asal. 2018. “Human Rights, NGO Shaming and the Exports of Abusive States.” *British Journal of Political Science* 48 (3). Cambridge, UK: Cambridge University Press: 767–86. doi:10.1017/S0007123416000065.

9 Kazanskiy, Nikolay, Roman Khabibullin, Artem Nikonorov, and Svetlana Khonina. 2025. “A Comprehensive Review of Remote Sensing and Artificial Intelligence Integration: Advances, Applications, and Challenges.” *Sensors* 25 (19): 5965. <https://doi.org/10.3390/s25195965>. p. 1.

10 Verjee, Aly. 2025. “How Surveillance Motivates New Violence: Ceasefire Monitoring, Remote Sensing Technology, and Noncompliance.” *Surveillance & Society* 23 (3): 287–302. <https://ojs.library.queensu.ca/index.php/surveillance-and-society/article/view/18908/12805>.

11 Columbia School of International and Public Affairs. 2019. *Defining a Brave New Field*. New York: International Peace Institute. https://www.sipa.columbia.edu/sites/default/files/migrated/downloads/International%2520Peace%2520Institute_Defining%2520a%2520Brave%2520New%-2520Field.pdf.

12 University of Minnesota Polar Geospatial Center. 2026. “Introduction to Satellite Imagery.” Polar Geospatial Center. Last modified January 14, 2026. <https://www.pgc.umn.edu/guides/commercial-imagery/intro-satellite-imagery/>.

13 Robinson, Eric, and Sean Mann. 2021. “Part 1: Investigating the Growth of Detention Facilities in Xinjiang Using Nighttime Lighting.” *Tearline*, February 26, 2021. https://www.tearline.mil/public_page/xinjiang-nighttime-1.

14 Naghizadeh, Mikael Hiberger. 2025. “What We Don’t See: Uncovering Intercommunal Violence through Remote Sensing.” *Political Geography* 116 (January): 103259. <https://doi.org/10.1016/j.polgeo.2024.103259>.

15 Al Achkar, Ziad, Isaac Baker, Brittany Card, Benjamin Davies, Joan Heck, Samuel Plasmati, and Nathaniel Raymond. 2013. *Sudan: Anatomy of a Conflict*. Cambridge, MA: Harvard Humanitarian Initiative. <https://hhi.harvard.edu/sites/g/files/omnuum6866/files/humanitarianinitiative/files/sudan-anatomy-of-a-conflict.pdf>.

16 Dorschel, Martin, and Roxana Duerr. 2017. “Help from Space: Possibilities and Limitations of Remote Sensing in Crisis and Disaster Management.” *KfW Stories*, May 23, 2017. <https://www.kfw.de/stories/kfw/stories/society/social-cohesion/remote-sensing-in-crisis-and-disaster-management/>.

17 Columbia School of International and Public Affairs. “Defining a Brave New Field.”

Case Study: Detecting a Recessing Lake, Destroyed Villages, and an Arms Influx

In a hard-to-access area of Cameroon, remote sensing identified intercommunal violence caused by disputes over water access, which intensified “due to the receding of Lake Chad.” Additionally, RS detected 112 [razed] villages, displacing more than 100,000 people, and “an influx of arms from neighboring Chad.” This detection of environmental changes, displacement, and militaristic activity demonstrates how RS integration can strengthen a NS campaign. Illustrating these changes through before and after imagery provides evidence of imminent violence.

Sources:

Naghizadeh, Mikael Hiberg. 2025. “What We Don’t See: Uncovering Intercommunal Violence through Remote Sensing.” *Political Geography* 116 (January): 103259. <https://doi.org/10.1016/j.polgeo.2024.103259>.

Okpara, Uche T., Lindsay C. Stringer, Andrew J. Dougill, and Mohammed D. Bila. 2015. “Conflicts about Water in Lake Chad: Are Environmental, Vulnerability and Security Issues Linked?” *Progress in Development Studies* 15 (4): 308–325. <https://doi.org/10.1177/1464993415592738>.

often comes with licensing restrictions that limit who can access the imagery or analytic product, which may keep those who can intervene from receiving the necessary information. RS can also put vulnerable populations at further risk by increasing surveillance, raising privacy concerns.



Copernicus Sentinel, processed by Pierre Markuse, 2023. Satellite imagery of fires in Israel and the Gaza strip - 7 October 2023. [https://commons.wikimedia.org/wiki/File:Fires_in_Israel_and_the_Gaza_strip_-_7_October_2023_\(53245908850\).jpg](https://commons.wikimedia.org/wiki/File:Fires_in_Israel_and_the_Gaza_strip_-_7_October_2023_(53245908850).jpg)

Monitoring Compliance

NS can reduce violence by monitoring compliance to agreements and immediately NS someone if they don’t comply with the terms of the agreement. These agreements can include peace treaties, which formally establish terms for peace, or cease fires, to agree to temporarily stop fighting. RS technology helps governing bodies monitor other nation states.^{18, 19}

18 Luna, Javier Canales. 2019. Naming and Shaming in the European Union Emission Trading Scheme: A Legal Review. Master’s thesis, European Law School. https://www.researchgate.net/profile/Javier-Canales-Luna/publication/335368992_Naming_and_shaming_in_the_European_Union_Emission_Trading_Scheme_a_legal_review/links/5e74b7b3a6fdccda8b714cce/Naming-and-shaming-in-the-European-Union-Emission-Trading-Scheme-a-legal-review.pdf.

19 Verjee. “How Surveillance Motivates New Violence.”

20 Durden, Tyler. 2025. “‘Shame & Name’ Climate Activist Satellite Backed by Bezos Lost.” ZeroHedge, July 1, 2025. <https://www.zerohedge.com/technology/shame-name-climate-activist-satellite-backed-bezos-lost>.

21 Kazanskiy, Nikolay, Roman Khabibullin, Artem Nikonorov, and Svetlana Khonina. 2025. “A Comprehensive Review of Remote Sensing and Artificial Intelligence Integration: Advances, Applications, and Challenges.” *Sensors* 25 (19): 5965. <https://doi.org/10.3390/s25195965>.

While peace treaties and cease fire agreements are meant to stop or reduce conflict, their success largely depends on verifiable compliance.

RS can aid in the monitoring of compliance to agreements by:

- immediately detecting any changes to activity
- providing evidence of compliance or non-compliance
- standardizing monitoring; reduces risk of intimidation or pressure on human monitors
- eliminating reliance on self-reporting

“Remote Sensing technology helps governing bodies monitor other nation states.”

However, RS has limitations. RS platforms can be lost and unrecoverable, causing a significant setback for monitoring compliance [to a treaty], or potentially increasing noncompliance as actors are aware they are no longer monitored.²⁰

Additionally, an important aspect of compliance monitoring is identifying non-compliance in real time. “Modern remote sensing technologies present significant challenges in data processing, analysis, and interpretation.”²¹ While human analysis can create a lag between a noncompliant action and identification RS models that integrate AI into their workflow provide “automated, efficient, and precise

Case Study: Ukraine's Abducted Children

Analysis of satellite RS imagery, in conjunction with open source information, concluded that children from Ukraine were taken to various locations in Russia where they are forced into re-education activities including, “cultural, patriotic, or military programming that aligns with pro-Russia narratives.” Imagery from RS shows these re-education schools are continuing to expand and that more than half are directly managed by the Russian government. This data has been shared with Ukrainian law enforcement and Europol, was the “basis for the 2023 arrest warrants issued for Russia President Vladimir Putin” by the International Criminal Court, and is being used to pursue a Genocide Convention case against Russia and the International Court of Justice. This RS documentation for NS has sparked wide condemnation of Russia's actions.

Sources:

Yale Humanitarian Research Lab. 2025. “Ukraine's Stolen Children: Inside Russia's Network of Re-Education and Militarization.” Yale School of Public Health. <https://files-profile.medicine.yale.edu/documents/e6294def-3f80-4d71-9cc7-91f6af70a523>
Tom Lantos Human Rights Commission, 2025, “Ukraine: Abducted Children and Mechanisms for Accountability.” Human Rights Commission. <https://humanrightscmission.house.gov/events/hearings/ukraine-abducted-children-and-mechanisms-accountability#:~:text=Children%20have%20suffered%20violence%20and,accountable%20for%20human%20rights%20violations.>

analysis of vast and complex datasets.”²²

The use of RS is thought to deter noncompliance and improve monitoring of compliance to treaties and ceasefires but it could inadvertently increase violence. The presence of RS “in ceasefire monitoring creates a new class of violations: resistance to [remote sensing] itself.”²³ This is because the actors being monitored may want to understand the capacity and capability of the RS technology and may “devalue classical forms of eyewitness and interview-led monitoring,” helping the monitored actor to “shirk responsibility for violations.”²⁴

This may “train conflict parties in counter measures, thus improving the military capacity of belligerents.”²⁵

Documenting War Crimes

NS can reduce violence by documenting and publicizing war crimes. War crimes generate global attention, particularly when there is strong evidence of the crimes. This documentation can lead to international criticism of the shamed actor and can enable formal accountability through national and international criminal systems.



Alhaj, Abedallah. Aerial view of destruction in Beach refugee camp, Gaza Strip. July 3, 2024. Photograph. UNRWA. Wikimedia Commons. CC BY-SA 3.0 IGO. https://commons.wikimedia.org/wiki/File:Aerial_view_of_destruction_in_Beach_refugee_camp,_Gaza_Strip.jpg. Cropped to fit page; no other changes were made to this photo.

²² Kazanskiy. “A Comprehensive Review of Remote Sensing and Artificial Intelligence Integration.” p. 1.

²³ Verjee. “How Surveillance Motivates New Violence.” p.2

²⁴ Verjee. “How Surveillance Motivates New Violence.” p.2

²⁵ Verjee. “How Surveillance Motivates New Violence.” p.2

Digital Peacebuilding

Documentation for NS plays a particular role in setting the identification condition. High resolution imagery can provide a clear picture of violence.

RS can facilitate documenting evidence of war crimes for use in NS.

- imagery can independently motivate a NS campaign prior to having enough evidence for a formal legal proceeding
- imagery of war crimes can provide enough evidence to the general population to draw conclusions and impose reputational cost on the shamed actor

An important piece of documenting war crimes is keeping the affected population informed of the legal proceedings. While it may be difficult for the deployer of remote sensing to keep people informed, particularly because those with the most vested interest are often displaced, it is possible to deploy the technology and reduce this limitation.

While documentation may be seemingly straight forward and beneficial to reducing violence, RS doc-

umentation can backfire. The “presence of private satellite networks” can create tension between nations, potentially leading to “cyberattacks or sabotage against satellite systems,” and “further widens the digital divide globally.”²⁶ Additionally, when powerful nations are involved, human rights groups may be hesitant to criticize them, incentivizing the human rights group to focus investigations on “less powerful states.”²⁷ The African Union has pointed out that “the international criminal justice system... [focuses] primarily on cases from the Global South,” leading “several African nations” to threaten to “withdraw from ICC jurisdiction because of these concerns,” creating distrust in international criminal law.²⁸ Agreements “between governments and geospatial data companies to blur or otherwise censor sensitive data” can cause human rights investigations to be skewed if investigators have incomplete information.²⁹ This can cause people, including the affected population and the human rights organizations or investigators, to distrust RS technology, and can create friction between human rights agencies, governments, and affected populations.

Case Study: Naming and Shaming China using Aerial Imagery

In 2015, a journalist was embedded on a US Navy surveillance plane to publicize China’s “extensive and fast paced” actions to build artificial islands in the South China Sea. The intent was to “impose reputational costs on China.” This did bring awareness, sparking condemnation from the Philippines, Singapore, Australia, and Japan. However, China responded by threatening their ability and willingness to take violent action, calling the patrol “very irresponsible,” and stating “a Chinese guided missile destroy and navy patrol ship shadowed the vessel... and [China] is not frightened to fight a war with the US in the region, and is determined to safeguard its national interests and dignity.” This case study highlights where NS can achieve triggering global criticism, while also increasing tensions between nations.

Sources:

Campbell, Caitlin. 2015. “Naming and Shaming: U.S. Surveillance over China’s Land Reclamation Projects and Regional Reactions.” U.S.-China Economic and Security Review Commission. GovInfo. https://www.govinfo.gov/content/pkg/GOVPUB-Y3_2_C44-PURL-gpo174872/pdf/GOVPUB-Y3_2_C44-PURL-gpo174872.pdf.

Fox News, “China Calls Navy’s Patrol through Disputed Islands ‘Provocative,’” October 28, 2015, updated May 2, 2016.

26 De Rosa, Sergio. 2025. “The Political Issues of Satellite Networks for Telecommunications.” *Aerotec. Missili Spaz.* 104: 79. <https://doi.org/10.1007/s42496-025-00256-6>.

27 Kannegieter, Hannah. 2023. “Privacy and Veracity Implications of the Use of Satellite Imagery from Private Companies as Evidence in Human Rights Investigations.” *Harvard Human Rights Journal*, November 29, 2023. <https://journals.law.harvard.edu/hrj/2023/11/privacy-and-veracity-implications-of-the-use-of-satellite-imagery-from-private-companies-as-evidence-in-human-rights-investigations/>.

28 Kannegieter. “Privacy and Veracity Implications of the Use of Satellite Imagery.”

29 Kannegieter. “Privacy and Veracity Implications of the Use of Satellite Imagery.”

30 Naghizadeh, Mikael Hiberg. 2025. “What We Don’t See: Uncovering Intercommunal Violence through Remote Sensing.” *Political Geogra-*

Integrating RS technology into a NS framework can lay the foundation for a successful, short-term reduction in violence. NS is not a mechanism for prolonged peace and requires integration with other diplomatic tools to continue peaceful conditions long-term. While RS improves the chances of a successful NS campaign, this technology also presents additional challenges and risks, such as creating distrust by threatening privacy.³⁰ Because of this, actors planning to use NS and RS should:

- analyze all conditions (identification, publicity, instrument pairing, and stakeholder composition), with particular consideration for the other diplomatic instruments that can sustain peace long-term, and RS application for identification and publicity
- if using RS, have deliberate imagery management throughout the imagery lifecycle (collection, distribution, destruction) to prevent exposing vulnerable populations to further violence
- integrate a feedback loop with the affected population
- users of RS must be weary of technology replacing “in-depth knowledge about local social conditions and processes,” to avoid RS creating more distance between human rights activists and conflict³¹
- implement ways to monitor for increased violence or other unintended consequences

30 Paci, Tristan, and Maurice Sayinzoga. 2024. *Space and Democracy: Increasing Transparency and Accountability in Outer Space Governance*. Washington, DC: National Democratic Institute for International Affairs. https://www.ndi.org/sites/default/files/Space_Democracy_Paper.pdf.

31 Naghizadeh, Mikael Hiberg. 2025. “What We Don’t See: Uncovering Intercommunal Violence through Remote Sensing.” *Political Geography* 116 (January): 103259. <https://doi.org/10.1016/j.polgeo.2024.103259>.