Interdisciplinary Programmes

Academic year 2021-2022

**Digital Approaches to Conflict Prevention:
Agency, Power and Peace**

MINT208 - Spring - 3 ECTS

Course Description

This course explores the increasing role played by digital technologies in international efforts to prevent armed conflict and build peace. We will study efforts by international, national and local organizations to employ technology for a range of activities, including conflict early warning, peace mediation, peacekeeping, long-term peacebuilding and the prevention of cyber conflict, focussing on three guiding questions: How does the use of technology change who or what has the agency to prevent conflict? How does it change power relations? And what kind of peace emerges? To answer these questions, we will draw on a variety of disciplinary perspectives, including from social anthropology, international relations, science and technology studies and postcolonial theory. Through practice-oriented tasks and a simulation exercise, we will explore how the acquired knowledge can be applied in real-word scenarios.

> **PROFESSOR**

Andreas Timo Hirblinger

Office hours: Thursdays, 12.30-13.30

> **ASSISTANT**

Office hours

Syllabus

The COVID-19 pandemic, with its widespread lockdowns and global travel restrictions, has led to radical acceleration of digital approaches to conflict prevention. Until recently, the use of innovative tools, methods and data such as satellite imaginaries, has been mainly the prerogative of security-focussed "hard" interventions, such as peacekeeping. Today, all aspects of conflict prevention rely on tech, which means that even human-centred and politically sensitive processes have gone "digital" and "online". This comes with many opportunities – such as increased participation and more transparency, but also tremendous challenges – such as new exclusions, heightened infrastructural vulnerabilities, protection concerns or how to meaningfully hold dialogue and settle conflicts online. More importantly, the widespread use of technology changes the dynamics of peacebuilding, how people perceive what conflict and peace are about, and who has agency and power.

In the context of fast-paced technological innovation, it is pertinent to better understand how technologies can be designed and used in manners that foster peaceful human co-existence. This requires us to look behind buzzwords such as "PeaceTech" or "ICT4Peace". How can the challenges and opportunities of digitalization be studied in a meaningful manner? And how can practitioners and policy makers respond to them? The course will explore digital approaches to conflict prevention along three interrelated dimensions:

- **Agency:** When technology is designed and used for conflict prevention and peacebuilding, who or what actually "makes" or "build" peace? How can we study the relationships between humans and machines that affect dynamics of peace and conflict? What considerations and approaches exist for addressing, regulating and evaluating the increasing role of technology in conflict prevention efforts?
- **Power:** How does the use of technology change power relations? Can tech democratize conflict prevention, enable "bottom-up" approaches, and give voice to "ordinary" people and "local" populations? Or will it increase the power of the powerful and entrench new societal divisions? Does the increased use of technology create new inclusions, new exclusions or both? How does it (re-)shape hierarchies?
- **Peace:** What kind of peace emerges when technologies are used in peacebuilding? How can a "digital peace" be understood, studied and measured? Is there a danger that digitalization leads to a greater gap between the tangible realities of conflict-affected contexts and digital representations? What systems and approaches can be put in place to make sure that a "virtual" peace is not a "hollow" peace?

The course will introduce students to a variety of disciplinary perspectives, including from social anthropology, international relations, science and technology studies and postcolonial theory. The course can well be combined with the courses "Introduction to Digital Social Science Research" or "AI and Politics". Students who have taken one of these courses are encouraged to apply and expand their methodological skills and knowledge during the group work.

Course Structure:

The course combines lectures and interactive seminars. The first session will consist of an introductory lecture, outlining the most important empirical trends in digital conflict prevention and providing an introduction to the three analytical dimensions that will structure the course: agency, power and peace.

The following four sessions will be led by student groups. Each group will focus on one of the practice fields (early warning, peace mediation, peacekeeping and peacebuilding and explore these from a

research and practice-oriented perspective – starting with an exploration of scholarly literature, to then ask how these insights matter in practice. To this end, each group will discuss a selection of academic and practice-oriented readings. They will also receive scenario description and practice challenge, to which they should respond in their presentation. Session six will be replaced by an online simulation exercise, followed by a concluding discussion and guest speaker in session seven.

Course dates:

Please note that this course will be held in a hybrid block format. Sessions 1,6 and 7 will be held online. Sessions 2-5 are planned to be held in-person.

Session 1: Thursday 24 February 10:15-12:00 (online)

Session 2: Thursday 10 March 10:15-12:00 00 (Room S4)

Session 3: Thursday 10 March 14:15-16:00 (Room S4)

Session 4: Thursday 24 March 10:15-12:00 (Room S4)

Session 5: Thursday 24 March 14:15-16:00 (Room S4)

Session 6: Online Dialogue Simulation (21-28 April) (online)

Session 7: Thursday 28 April 10:15-12:00 (online)

Course Work and Grading:

Students will actively contribute to the seminars in small groups that will jointly develop a course presentation. There can be a clear division of labour, but the overall coherence of the presentation will be taken into consideration for the final joint mark (30% of the grade). In addition, each student will produce a short essay of 1000 words, exploring one particular question related to agency, power or peace in one of the professional fields (50% of the grade). Students are expected to actively contribute to seminar discussions and the simulation exercise (20% of the grade).

Course Schedule

Session 1: Opening Lecture

This session will explore the most important trends in relation to the increasing use of digital technologies in each of the practice fields. Basic concepts, such as peacebuilding and conflict prevention, will be discussed. It will also provide an introduction to the three analytical dimensions (agency, power and peace) and an overview of theoretical and methodological perspectives through which they can be studied. There will also be time to plan the group work and online dialogue simulations.

Primary Readings:

Hoijtink, Marijn, and Matthias Leese. 2019. 'How (Not) to Talk about Technology. International Relations and the Question of Agency'. In *Technology and Agency in International Relations*, edited by Marijn Hoijtink and Matthias Leese, 1–23. Emerging Technologies, Ethics and International Affairs. London ; New York: Routledge Taylor & Francis Group.

Jacobsen, Katia Lindskov, and Linda Monsees. 2019. 'Co-Production. The Study of Productive Processes at the Level of Materiality and Discourse'. In *Technology and Agency in International Relations*, edited by Marijn Hoijtink and Matthias Leese, 24–41. Emerging Technologies, Ethics and International Affairs. London ; New York: Routledge Taylor & Francis Group.

Jasanoff, Sheila, ed. 2004. 'The Idiom of Co-Production'. In *States of Knowledge: The Co-Production of Science and Social Order*, 1–12. International Library of Sociology. London ; New York: Routledge.

Curtis, Devon. 2013. 'Post-Conflict Peacebuilding'. In *Routledge Handbook of African Politics*, edited by Nicholas Cheeseman, David Anderson, and Andrea Scheibler, 202–13. New York, NY: Routledge.

Zartman, I. William. 2019. 'The Ubiquity of Prevention'. In *I William Zartman: A Pioneer in Conflict Management and Area Studies: Essays on Contention and Governance*, edited by I. William Zartman, 497–515. Pioneers in Arts, Humanities, Science, Engineering, Practice. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-06079-4_29.

Kelly, Luke. 2019. 'Uses of Digital Technologies in Managing and Preventing Conflict', K4D Helpdesk Report. Manchester: University of Manchester https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/14538.

Further readings:

Barnett, Michael, Hunjoon Kim, Madalene O'Donnell, and Laura Sitea. 2007. 'Peacebuilding: What Is in a Name?' *Global Governance: A Review of Multilateralism and International Organizations* 13 (1): 35–58. https://doi.org/10.5555/ggov.2007.13.1.35.

Braun, Benjamin, Sebastian Schindler, and Tobias Wille. 2019. 'Rethinking Agency in International Relations: Performativity, Performances and Actor-Networks'. *Journal of International Relations and Development* 22 (4): 787–807. https://doi.org/10.1057/s41268-018-0147-z.

Carment, David, and Martin Fischer. 2016. 'Conflict Prevention: A Policy in Search of a Theory or a Theory in Search of a Policy'. In *The Routledge Handbook of Ethnic Conflict*, edited by Karl Cordell and Stefan Wolff, Second Edition, 169–86. London: Routledge, Taylor & Francis Group.

Fast, Larissa. 2017. 'Diverging Data: Exploring the Epistemologies of Data Collection and Use among Those Working on and in Conflict'. *International Peacekeeping* 24 (5): 706–32. https://doi.org/10.1080/13533312.2017.1383562.

Hoijtink, Marijn, and Matthias Leese, eds. 2019. *Technology and Agency in International Relations*. Emerging Technologies, Ethics and International Affairs. London ; New York: Routledge Taylor & Francis Group.

Jasanoff, Sheila. 2017. 'Virtual, Visible, and Actionable: Data Assemblages and the Sightlines of Justice'. *Big Data & Society* 4 (2). https://doi.org/10.1177/2053951717724477.

Lund, Michael. 2003. 'Conflict Prevention: Policy and Practice in Pursuit of Theory'. In *The SAGE Handbook of Conflict Resolution.* SAGE Publications. https://doi.org/10.4135/9780857024701.n15.

Mitcham, Carl. 1994. *Thinking Through Technology: The Path Between Engineering and Philosophy*. University of Chicago Press.

Panic, Branka. 2020. 'Data for Peacebuilding and Prevention. The State of Play and the Path to Creating a Community of Practice'. New York: Center on Internaitonal Cooperation, New York University. https://cic.nyu.edu/sites/default/files/data_for_peacebuilding_and_prevention_-_ecosystem_mapping_-_october_2020.pdf

Passoth, Jan-Hendrik, and Nicholas J. Rowland. 2015. 'Who Is Acting in International Relations?' In *Human Beings in International Relations*, edited by Daniel Jacobi and Annette Freyberg-Inan, 286–304. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781316337042.015.

Rammert, Werner. 2012. 'Distributed Agency and Advanced Technology. Or: How to Analyze Constellations of Collective Inter-Agency'. In *Agency Without Actors?: New Approaches to Collective Action*, edited by Jan-Hendrik Passoth, Birgit Peuker, and Michael Schillmeier, 89–112. Routledge.

United Nations General Assembly, and United Nations Security Council. 2018. 'Peacebuilding and Sustaining Peace: Report of the Secretary-General'. United Nations.

Session 2: Conflict Early Warning

This session will explore efforts to design, implement and use conflict early warning systems, including regional systems such as the African Union (AU) Continental Early Warning System, as well as national and civil society-led initiatives. Students will learn about the history of these systems, the principal considerations behind the prevention doctrine, the types of data collected analysed, and the multi-level integration of these systems. A particular concern will be with the ability of machine-learning tools and social media analytics to accurately predict conflict events, the need for "actionable" data, as well as with the political uses of data. Students will *inter alia* learn about organisasational and bureaucratic disconnects in early warning systems **(agency)**, the political nature of conflict data **(power)**, and how data models construct ideal-types of peaceful societies (**peace).**

Primary Readings:

Piiparinen, Touko. 2007. 'Putting the Cart before the Horse: Statebuilding, Early Warning and the Irrationality of Bureaucratic Rationalization'. *Journal of Intervention and Statebuilding* 1 (3): 355–78. https://doi.org/10.1080/17502970701592280.

Wulf, Herbert, and Tobias Debiel. 2010. 'Systemic Disconnects: Why Regional Organizations Fail to Use Early Warning and Response Mechanisms'. *Global Governance: A Review of Multilateralism and International Organizations* 16 (4): 525–47. https://doi.org/10.1163/19426720-01604007.

Kahl, Anne, Christy McConnell, and William Tsuma. 2012. 'Crowdsourcing as a Tool in Conflict Prevention'. *Conflict Trends* 2012 (1): 27–34.

Further Readings:

Amao, Olumuyiwa, Nwabufo (Ufo) Okeke Uzodike, Dorcas Ettang, and Clementine Tugizamana. 2014. 'Revisiting the Utility of the Early Warning and Early Response Mechanisms in Africa: Any Role for Civil Society?' *Peace and Conflict Review* 8 (February): 77–90.

Blandfort, Philipp, Desmond U. Patton, William R. Frey, Svebor Karaman, Surabhi Bhargava, Fei-Tzin Lee, Siddharth Varia, et al. 2019. 'Multimodal Social Media Analysis for Gang Violence Prevention'. *Proceedings of the International AAAI Conference on Web and Social Media* 13 (July): 114–24.

Bock, Joseph G. 2016. 'Technology and Vulnerability in Early Warning: Ethical Use of IT in Dangerous Places'. *Information Technology for Development* 22 (4): 696–709. https://doi.org/10.1080/02681102.2014.903894.

Engel, Ulf, and João Gomes Porto. 2009. 'The African Union's New Peace and Security Architecture: Toward an Evolving Security Regime?' *African Security* 2 (2–3): 82–96. https://doi.org/10.1080/19362200903359774.

Mancini, Francesco, and Chris Perry. 2014. 'Use of Technology for Conflict Analysis'. SSRN Scholarly Paper ID 2902504. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=2902504.

Rohwerder, Brigitte. 2015. 'Conflict Early Warning and Early Response'. GSDRC Helpdesk Research Report 1195. Birmingham: GCDRD, University of Birmingham.

Session 3: CyberMediation

This session will look at how mediators and mediation support actors use digital technologies in their efforts to facilitate an inclusive political settlement between the parties to an armed conflict. Online platforms, social media and video conferencing are now commonly used to facilitate dialogues between the constituents of conflict parties, build trust and understanding, and work towards common narratives and perspectives. Artificial Intelligence systems are tested for data analysis. The session will explore how technologies are employed for strategic communication, for conflict analysis and to enhance the inclusivity of processes. We will look at the challenges for mediators to engage online and in social media, the organization of online spaces and interaction, efforts to gather and analyse large amounts of data, as well as protection and security concerns. The session will *inter alia* shed light on questions of access, connectivity and digital literacy **(power)**, human-machine integration and "hybrid" peacemaking intelligence (**agency)** and concerns with the possibility of meaningful online dialogue, through which deep-seated mistrust and grievances can be addressed (**peace).**

Primary Readings:

Höne, Katharina. 2019. 'Mediation and Artificial Intelligence: Notes on the Future of International Conflict Resolution'. Geneva: DiploFoundation. https://www.diplomacy.edu/sites/default/files/Mediation_and_AI.pdf.

Hirblinger, Andreas T. 2022. 'When Mediators Need Machines (and Vice Versa)'. *International Negotiations.* (Online First).

Varela, Miguel. 2021. 'Technology and Peace Mediation: A Shift in the Mediator's Profession'. In *Rethinking Peace Mediation: Challenges of Contemporary Peacemaking Practice.*, edited by Catherine Turner. Bristol: Bristol University Press.

Further Readings:

Eleiba, Ahmed. 2020. 'Digital Technologies: Game Changer for Peace?' The KOFF Peacebuilding Magazine. swisspeace. https://www.swisspeace.ch/apropos/wp-content/uploads/2020/11/november-2020-4.pdf.

Hirblinger, Andreas T. 2020. 'Digital Inclusion in Peacemaking: A Strategic Perspective'. 14. CCDP Working Paper. Geneva: Graduate Institute of International and Development Studies.^

Jenny, Joëlle, Rosi Greenberg, Vincent Lowney, and Guy Banim. 2018. 'Peacemaking and New Technologies. Dilemmas & Options for Mediators'. 8. Mediation Practice Series. Center for Humanitarian Dialogue.

UNDPPA, and HD Centre. 2019. 'Digital Technologies and Mediation in Armed Conflict'. Geneva: United Nations Department of Political and Peacebuilding Affairs and Centre for Humanitarian Dialogue.

Session 4: Peacekeeping

This session will shed light on the use of digital technologies in peace operations and peacekeeping missions. The United Nations (UN) peacekeepers utilise unmanned aerial vehicles and satellite imagery for surveillance and reconnaissance efforts. Big Data and social media analytics are employed to predict and mitigate possible risks that emerge to peace operations. Volunteer-based reporting systems are used to document cease-fire violations and to report forms of local violence that are difficult to detect, such as violence against women. Many missions operate in areas that are characterized by what is often referred to as "fragile" or "weak" states and these places are also often characterized by colonial legacies. Despite the use of advanced technologies, many missions continue to operate with limited data and commonly face uncertainties in decision making. We will *inter alia* ask if and how new technologies lead to new forms of marginalisation (**power).** We will also shed light on how operational, bureaucratic and normative considerations influence how data is produced and used (**agency).** Finally, we will ask if the increasing availability of data enables predictive and pro-active peacekeeping **(peace).**

Primary Readings:

Duursma, Allard, and John Karlsrud. 2019. 'Predictive Peacekeeping: Strengthening Predictive Analysis in UN Peace Operations'. *Stability: International Journal of Security and Development* 8 (1): 19. https://doi.org/10.5334/sta.663

Perera, Suda. 2017. 'To Boldly Know: Knowledge, Peacekeeping and Remote Data Gathering in Conflict-Affected States'. *International Peacekeeping* 24 (5): 803–22. https://doi.org/10.1080/13533312.2017.1383566.

Read, Róisín, Bertrand Taithe, and Roger Mac Ginty. 2016. 'Data Hubris? Humanitarian Information Systems and the Mirage of Technology'. *Third World Quarterly* 37 (8): 1314–31. https://doi.org/10.1080/01436597.2015.1136208.

Further Readings:

Convergne, Elodie, and Michael R. Snyder. 2015. 'Making Maps to Make Peace: Geospatial Technology as a Tool for UN Peacekeeping'. *International Peacekeeping* 22 (5): 565–86. https://doi.org/10.1080/13533312.2015.1094193.

Giardullo, Cono, Walter Dorn, and Danielle Stodilka. 2020. 'Technological Innovation in the OSCE: The Special Monitoring Mission in Ukraine'. In *OSCE Yearbook 2019*, edited by Institute for Peace Research (IFSH), 115–38. Nomos Verlagsgesellschaft. https://doi.org/10.5771/9783748906421-115.

Karlsrud, John. 2014. 'Peacekeeping 4.0: Harnessing the Potential of Big Data, Social Media, and Cyber Technologies'. In *Cyberspace and International Relations*, edited by Jan-Frederik Kremer and Benedikt Müller, 141–60. Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-37481-4_9.

Read, Róisín. 2016. 'Tensions in UN Information Management: Security, Data and Human Rights Monitoring in Darfur, Sudan'. *Journal of Human Rights Practice* 8 (1): 101–15. https://doi.org/10.1093/jhuman/huv018

Shetler-Jones, Philip. 2008. 'Intelligence in Integrated UN Peacekeeping Missions: The Joint Mission Analysis Centre'. *International Peacekeeping* 15 (4): 517–27. https://doi.org/10.1080/13533310802239741.

Session 5: Digital Peacebuilding and "PeaceTech"

Technologies are also increasingly used in long-term efforts to prevent armed conflict and its recurrence, for instance in reconciliation efforts and transitional justice. Such tools are now commonly promoted under the term "PeaceTech". Many organizations now develop and implement dedicated "digital peacebuilding programmes. Social media tools are used to reduce polarization online, for instance through automated content blockers and moderators. Virtual Reality and Augmented Reality promise to enable visceral encounters with the Other. Moreover, peacebuilding is also shaped by the ubiquitous, everyday uses of technologies, such as messenger services and social media. We will explore how narratives of conflict and options for conflict resolution are constructed in human-machine networks and what role the design of technologies plays in such dynamics **(agency)**. We will ask about approaches and efforts that aim to empower those affected by conflict to influence the design and use of technology **(power)**. Finally, we will ask if and how digital peacebuilding efforts that mainly play out online can have tangible, material effects in populations affected by conflict (**peace).**

Primary Readings:

Firchow, Pamina, Charles Martin-Shields, Atalia Omer, and Roger Mac Ginty. 2017. 'PeaceTech: The Liminal Spaces of Digital Technology in Peacebuilding'. *International Studies Perspectives* 18 (1): 4–42. https://doi.org/10.1093/isp/ekw007.
Kahl, Anne, and Helena Puig Larrauri. 2013. 'Technology for Peacebuilding'. *Stability: International Journal of Security and Development* 2 (3): 15. https://doi.org/10.5334/sta.cv.
Tellidis, Ioannis, and Stefanie Kappler. 2016. 'Information and Communication Technologies in Peacebuilding: Implications, Opportunities and Challenges'. *Cooperation and Conflict* 51 (1): 75–93. https://doi.org/10.1177/0010836715603752.

Further Readings:

Dajer, Diana. 2018. 'Cracking the Code of Tech for Peace: International Perspectives of Peacetech Research and Practice'. In *Reflections on Building Inclusive and Sustainable Peace*, 70–79. London. https://www.britishcouncil.org/sites/default/files/j063_peace_and_beyond_essays_final_web_new_0.pdf.
Tellidis, Ioannis. 2020. 'Technology and Peace'. In *The Palgrave Encyclopaedia of Peace and Conflict Studies*, edited by Oliver P. Richmond and Gezim Visoka, 8. Palgrave Macmillan.
Welch, Jennifer R., Susan Halford, and Mark Weal. 2015. 'Information and Communication Technologies (ICTs) and Peacebuilding: A Conceptual Framework'. In *Proceedings of the ACM Web Science Conference*, 1–9. WebSci '15. Oxford, United Kingdom: Association for Computing Machinery. https://doi.org/10.1145/2786451.2786479.
Richmond, Oliver P., and Ioannis Tellidis. 2020. 'Analogue Crisis, Digital Renewal? Current Dilemmas of Peacebuilding'. *Globalizations* 17 (6): 935–52. https://doi.org/10.1080/14747731.2020.1712169.

Sessions 6: Online Dialogue Simulation Exercise and Closing Discussion

Session six will be replaced with an online dialogue exercise, conducted over a period of one week. It will consist of several short live sessions, as well as asynchronous exercises. Students are request to flexibly allocate the equivalent time for the usual course work and seminars for their participation in the simulation. We will hold a short closing discussion (45 minutes) at the end of the course.

Session 7: Closing Discussion

The final session will provide space to reflect on the online simulation. A guest speaker will provide insights from a practice perspective.