

CURRICULUM VITAE
CLAIRE WARDLE

PERSONAL INFORMATION

Address: 121 S Main St, Providence, RI 02903
Phone: 609 906 3377
Email: claire_wardle@brown.edu

EDUCATION

1998 BA, American Studies, First Class Honors, Hull University, UK
2000 MA, Political Science, University of Pennsylvania
2004 PhD, Communication, University of Pennsylvania

ACADEMIC APPOINTMENTS

2004-2009 Lecturer, School of Journalism, Media and Cultural Studies, Cardiff University
2015-2016 Research Director, Tow Center for Digital Journalism, Graduate School of Journalism, Columbia University
2017-2018 Research Fellow, Shorenstein Center for Media, Politics and Policy, Harvard University
Fall 2020 Lecturer, Annenberg School of Communication, University of Pennsylvania
Fall 2021 Public Policy Fellow, Center for Media at Risk, University of Pennsylvania
Fall 2021 Lecturer, Annenberg School of Communication, University of Pennsylvania
Spring '22 Lecturer, School of Communication, Cornell University
January '22 Professor of the Practice, School of Public Health, Brown University

OTHER APPOINTMENTS

2009-2012 Full time consultant to the BBC
2012-2013 Director of News Partnerships, Storyful
2014-2015 Head of Social Media, UNHCR
2018-2019 Research Fellow, TED Talks
2019-2022 Executive Director and co-founder, First Draft
2021-2022 Consultant to the CDC's Vaccine Insights Unit
2021-2022 Consultant to the Office of the Surgeon General
2021-present Consultant to the Under Secretary General for Global Communications
2023 Consultant to the Department of Peace Operations, UN

HONORS AND AWARDS

- 1999-2000 Thouron Scholarship Award, Thouron Family (nationally competitive scholarship providing full tuition and stipend to support MA degree)
- 2022 Wayne A. Danielson Award for Distinguished Contributions to Communication from the University of Texas at Austin.

NATIONAL OR INTERNATIONAL SERVICE

Grant Application Review Boards

- 2021 NSF, Convergence Accelerator on Trust and Authenticity in Communications Systems, Reviewer
- 2023 NSF, Convergence Accelerator on Trust and Authenticity in Communications Systems, Mentor

SERVICE TO OTHER INSTITUTIONS

- 2014-2017 World Economic Forum's Global Agenda Council on the Future of Information and Entertainment, Member
- 2018 European Commission, High Level Expert Group on Fake News and Disinformation
- 2019-2021 SSRC Disinformation Initiative, MediaWell. Advisory Board Member
- 2019-present Journal.list, Board Member
- 2019-present Partnership on AI, AI and Media Steering Committee, Member
- 2020-present BBC's Trusted News Initiative, Steering Group Member
- 2020-2021 Center for Strategic and International Studies (CSIS)- London School of Health and Tropical Medicine (LSHTM) High-Level Panel on Vaccine Confidence and Misinformation, Member
- 2021-present University of Washington, Misinformation Escape Room Initiative, Advisory Board member
- 2021-present Social Media Observatory, Indiana University, Advisory Board member
- 2021 UK government's Counter-Disinformation Policy Forum, Member
- 2021 WHO's Fifth Infodemic Management Conference, Co-Chair
- 2022-present Vaccinate Your Child, Board Member
- 2022-present Full Fact, Trustee
- 2022-present European Digital Media Observatory, Taskforce in Response to the War in Ukraine, Chair
- 2022-present Member of the WHO's Strategic and Technical Advisory Group - Infectious Hazards
- 2023-present Member of the Council of Medical Specialty Societies - Building Trust: Priorities for Research and Action Initiative

2023-present Member of the WHO's Trust and Pandemic Preparedness Initiative
2023-present Council on Quality in Scientific and Health Information and Communication
2023-present Member of Building Trust: Priorities for Research and Action Initiative

Journal Manuscript Reviewer

American Journal of Qualitative Research

Digital Health

Digital Journalism

Health Communication

International Journal of Communication

Journal of Medical Internet Research

Journalism Studies

Nature

Telematics and Informatics

Vaccine

PUBLICATIONS IN PEER-REVIEWED JOURNALS

Wardle, C. "The "Unabomber" vs. the "Nail Bomber": a cross-cultural comparison of newspaper coverage of two murder trials." *Journalism Studies*. 2003; 4.2: 239-251.

Wardle C, West E. The Press as Agents of Nationalism in the Queen's Golden Jubilee: How British Newspapers Celebrated a Media Event. *European Journal of Communication*. 2004;19(2):195-214.

Wardle C. "IT COULD HAPPEN TO YOU". *Journalism Studies*, 2006; 7:4: 515-533.

Wardle C. Monsters and angels: Visual press coverage of child murders in the USA and UK, 1930–2000. *Journalism*. 2007; 8(3):263-284.

Klein B, **Wardle C.** "“These two are speaking Welsh on Channel 4!” Welsh representations and cultural tensions on Big Brother 7." *Television & New Media*. 2008; 9.6: 514-530.

Jones PJ, **Wardle C.** No emotion, no sympathy': The visual construction of Maxine Carr. *Crime, Media, Culture*. 2008; 4(1):53-71.

Wardle C, Williams A. Beyond user-generated content: a production study examining the ways in which UGC is used at the BBC, *Media, Culture and Society*, 2010; 32(5): 1–20

Williams A, **Wardle C**, Wahl-Jorgensen K. "Have They Got News for Us?" Audience revolution or business as usual at the BBC?", *Journalism Practice*, 2010; 5(1): 85-99.

Wahl-Jorgensen K, Williams A, **Wardle C**. Audience views on user-generated content: exploring the value of news from the bottom up. In: *Northern Lights: Film & Media Studies Yearbook*, 2010; 8(1): 177-194

Hänksa-Ahy M, **Wardle C**. Browne, M. Social media & journalism: reporting the world through user generated content. *Participations: Journal of Audience and Reception Studies*, 2013; 1 (1): 436-439.

Wardle C. The Need for Smarter Definitions and Practical, Timely Empirical Research on Information Disorder, *Digital Journalism*, 2018; 6(8): 951-963.

Saltz E, Barari S, Leibowicz C, **Wardle C**. Misinformation interventions are common, divisive, and poorly understood. *Harvard Misinformation Review* 2021; 2(5). doi.org/10.37016/mr-2020-81

Calleja N, AbdAllah A, Abad N, Ahmed N, Albarracin D, Altieri E, Anoko JN, Arcos R, Azlan AA, Bayer J, Bechmann A, Bezbaruah S, Briand SC, Brooks I, Bucci LM, Burzo S, Czerniak C, De Domenico M, Dunn AG, Ecker UKH, Espinosa L, Francois C, Gradon K, Gruzd A, Gülgün BS, Haydarov R, Hurley C, Astuti SI, Ishizumi A, Johnson N, Johnson Restrepo D, Kajimoto M, Koyuncu A, Kulkarni S, Lamichhane J, Lewis R, Mahajan A, Mandil A, McAweeney E, Messer M, Moy W, Ndumbi Ngamala P, Nguyen T, Nunn M, Omer SB, Pagliari C, Patel P, Phuong L, Prybylski D, Rashidian A, Rempel E, Rubinelli S, Sacco P, Schneider A, Shu K, Smith M, Sufehmi H, Tangcharoensathien V, Terry R, Thacker N, Trewhinnard T, Turner S, Tworek H, Uakkas S, Vraga E, **Wardle C**, Wasserman H, Wilhelm E, Würz A, Yau B, Zhou L, Purnat TD. A Public Health Research Agenda for Managing Infodemics: Methods and Results of the First WHO Infodemiology Conference *JMIR Infodemiology* 2021;1(1).

Rubinelli S, Purnat TD, Wilhelm E, Traicoff D, Namageyo-Funa A, Thomson A, **Wardle C**, Lamichhane J, Briand S, Nguyen T. WHO competency framework for health authorities and institutions to manage infodemics: its development and features. *Hum Resour Health* 20, 35 (2022).

Ranney, M.L., Conrey, F.R., Perkinson, L., Friedhoff, S., Smith, R, Wardle, C., "How Americans encounter guns: Mixed methods content analysis of YouTube and internet search data", *Preventive Medicine*, 2022; 165.

Wilhelm, Elisabeth, et al. "Measuring the burden of infodemics: Summary of the methods and results of the Fifth WHO Infodemic Management Conference." *JMIR infodemiology* 2023. 3.1

Smith, R., Chen, K., Winner, D., Friedhoff, S., Wardle, C. A Systematic Review of Covid-19 Misinformation Interventions: Lessons Learned. *Health Affairs*. 42 (12).

BOOKS AND BOOK CHAPTERS

Wardle C. Crime reporting. In: Pulling newspapers apart: analysing print journalism. 1st ed. London: Routledge; 2008. 144-152p.

Williams A, **Wardle C**, Wahl-Jorgensen K. The limits of audience participation: UGC@ the BBC. In: Journalists, Sources, and Credibility. London: Routledge, 2010. 164-178p.

Jones PJ, **Wardle C**. Hindley's ghost: The visual construction of Maxine Carr. In: Framing Crime. Routledge-Cavendish, 2010. 65-79p.

Williams A, Wahl-Jorgensen K, **Wardle C**. 'More Real and Less Packaged': Audience discourse on amateur news content and its effects on journalism practice. In: Amateur Images and Global News. Bristol: Intellect, 2011. 193-210p.

Wardle C. Verifying User-Generated Content. In: The Verification Handbook. Maastricht: European Journalism Centre. 2014. <http://verificationhandbook.com/>

Wardle C. Storyful: New Approaches to Aggregating and Verifying Humanitarian News. In: Humanitarianism & Communications. New York: Peter Lang Publishing, 2015. 229-239p.

Wardle C, Derakshan, H. Thinking about 'information disorder': formats of misinformation, disinformation, and mal-information. In: Journalism, Fake News and Disinformation. Paris: UNESCO. 2018. 44-56p.

Wardle C. How Newsrooms and Human Rights Organizations Use Eyewitness Media. In: Visual Imagery and Human Rights Practice. London: Palgrave Macmillan. 2019. 299-310p.

Wardle C. The Age of Information Disorder. In: Verification handbook for disinformation and media manipulation. Maastricht: European Journalism Centre. 2020. <https://datajournalism.com/read/handbook/verification-3/>

Wardle C. Journalism and the New Information Ecosystem: Responsibilities and Challenges. In: Fake News, Understanding Media and Misinformation in the Digital Age. Cambridge, MA: MIT Press. 2020.

Wardle, C., AbdAllah, A. The Information Environment and Its Influence on Misinformation Effects. In: Purnat, T.D., Nguyen, T., Briand, S. (eds) Managing Infodemics in the 21st Century. Springer, Cham. 2023.

Wardle, C. Making Sense of Information Disorder Today. In: Networks and Disinformation. University of the Basque Country. 2023.

OTHER NON-PEER REVIEWED PUBLICATIONS

Wardle C, Boyce T. Media coverage and audience reception of people with disfigurement or visible loss of function. Cardiff, UK: Cardiff University. 2009.

Wardle C, Williams A. ugc@thebbc: A production and audience analysis of user generated content at a news organisation. Cardiff, UK: Cardiff University. 2008.

Klein B, **Wardle C**. Social Issues in Primetime Television: Production Processes and Audience Responses ESRC Impact Report, RES-000-22-3202. Swindon: ESRC. 2012

Wardle C, Dubberley S, Brown P. Amateur Footage: A Global Study of User Generated Content. New York: Tow Center for Digital Journalism, Columbia University. 2014.

Wardle C. "The V word-and the value of breaking news on social media: journalism next." *Rhodes Journalism Review* 35 (2015): 44-45.

Wardle C, Derakshan H. Information Disorder: An interdisciplinary framework for researchers and policymakers. Strasbourg: Council of Europe. 2017
<https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-research/168076277c>

Wardle C, DiResta, R. Online Misinformation about Vaccines. Meeting the Challenge of Vaccination Hesitancy, Sabin-Aspen Vaccine Science & Policy Group, 2020.

Wardle, C. What role should newsrooms play in debunking COVID-19 misinformation? Nieman Reports, Boston: Harvard University. 2020.

Smith R, Cubbon S, **Wardle C**. Under the surface: Covid-19 vaccine narratives, misinformation and data deficits on social media, New York: First Draft News. 2021.

Wardle C, Singerman E. "Too Little, Too Late: Social Media Companies Failure to Tackle Vaccine Misinformation Poses a Real Threat" *British Medical Journal*, 2021, 372: 26.

Saltz E, Leibowicz C, **Wardle C**. Encounters with Visual Misinformation and Labels Across Platforms: An Interview and Diary Study to Inform Ecosystem Approaches to Misinformation Interventions. Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems. 2021.
<https://arxiv.org/abs/2011.12758>

Wardle, C. Key Drivers Of Vaccine Demand. Building Vaccine Demand. Information Futures Lab, Brown University. 2022. Pp. 14-23
<https://buildingvaccinedemand.org/wp-content/uploads/2022/09/2022-vaccine-demand.pdf>

Wardle, C. "How disinformation actors take advantage of institutional 'own' goals", ESRC SSRC Trust in Democratic Institutions, 2022.

Wardle, C. Tackling Misinformation: A Three-Pronged Approach, NIH: Science, Health and Public Trust.. September 6, 2023.

<https://www.nih.gov/about-nih/what-we-do/science-health-public-trust/perspectives/tackling-misinformation-three-pronged-approach>

Wardle, C. A Conceptual Analysis of the Overlaps and Differences between Hate Speech and Mis- and Disinformation. (2024) UN Department of Peace Operations. (forthcoming).

SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

Dosemagen S, Vis F, **Wardle C.** The impact of digital content: opportunities and risks of creating and sharing information online. World Economic Forum. 2016

Wardle C. How did news organizations handle the Philando Castile Facebook Live video. First Draft. 2016

Wardle C. Fake news, it's complicated. First Draft. 2017

Wardle C. (2018) How we all can fight misinformation. Harvard Business Review. 2018

Wardle C. Misinformation has created a new world disorder. Scientific American. 2019

Wardle C. This video might not be real. New York Times. 2019

Wardle C. How you can help transform the internet into a place of trust. TED. 2019

Wardle C. How to think like a troll. TED-Ed. 2020

Donovan J, **Wardle C.** Misinformation is everyone's problem now. Social Science Research Council. 2020

Wardle C. The drip, drip, drip of misinformation on COVID-19 vaccine. Boston Globe. Nov. 2020

Wardle C. How to get through this election. Scientific American. 2020

Wardle C. The Challenge of Debunking Narratives: How TV News Failed on Trump's Claims of Electoral Fraud, MediaWell. New York: Social Science Research Council. 2021

Wardle C. The information ecosystem that led to the Capitol attack. Boston Globe. 2021

Phillips W, **Wardle C.** Disinformation goes to Hollywood: four lessons from journalism, First Draft. 2021

Wardle C. et al. as Chair of the Taskforce on Disinformation and the War In Ukraine , "10 Recommendations by the Taskforce on Disinformation and the War in Ukraine", European Digital Media Observatory. June 29, 2022

Wardle, C. "Moving the Needle on Health Disinformation", Think Global Health, August 1, 2022.

Wardle, C. "Getting Ahead of Misinformation", Democracy: A Journal of Ideas. January 2023.

Wardle, C. "Misunderstanding Misinformation". Issues in Science and Technology. May 2023.

INVITED PRESENTATIONS

National

Wardle C. Expert Witness. Knight Commission on Trust, Media and Democracy. New York, November 2017.

Wardle C. Enlisting the Public to Build a Healthier Web Information. The Web Conference, San Francisco, May 2019.

Wardle C. Strategies for Tackling Health Misinformation Online. National Academies of Sciences, Engineering, and Medicine. Washington, DC. February 2020

Wardle C. Communicating science during the coronavirus pandemic, Government-University-Industry Research Roundtable of the National Academies of Sciences, Engineering, and Medicine. (Washington, DC, via zoom). May 2020.

Wardle C. How journalists should approach covering vaccines. Aspen Institute. (Washington, DC, via zoom). January 2021

Wardle C. Understanding Vaccine Misinformation. National Forum on COVID-19 Vaccine Agenda (Atlanta via zoom)). March 2021.

Wardle C. Infodemic: How to Fight Disinformation—and Not Make Things Worse, Consortium for Universities for Global Health. Annual Conference. Virtual. March 2021.

Wardle, C. Rockefeller Foundation's #RFBreakthrough Livestream event with the US Surgeon General on health misinformation. (fully virtual). Feb 14, 2022.

Wardle, C. The Battle Against Fake News in Brazil's 2022 Elections. Hosted by Harvard University's David Rockefeller Center for Latin American Studies (DRCLAS) (Boston via zoom). April 13, 2022.

Wardle, C. Understanding and Responding to Information Disorder. Federal Government's Information Integrity R&D Interagency Working Group. (Washington, DC via zoom). May 27, 2022.
Wardle, C. Using Inoculation to Increase Skills in Identifying Misinformation: SMS Training Course Case Study, International Conference on Emerging Infectious Diseases. (Atlanta via zoom) August 9, 2022.

Wardle, C. Lessons from Monitoring Misinformation Across Global Elections. Defining the Solution Spectrum to Polarization (Ford Foundation). (New York via zoom). Sept 6, 2022.

Wardle, C. Some Honest Truths: Reflecting on the Fight Against Misinformation. Brown University's Data Science Initiative's Data Matters Seminar Series. (Providence, RI). Sept 14, 2022.

Wardle, C. Tackling disinformation: combating the lies that go viral. WEF (New York via zoom). Sept 30, 2022.

Wardle, C. The importance of inoculation in media literacy interventions. MedianGeist. (Kyiv, via zoom). October 27, 2022.

Wardle, C. Some Honest Truths: The Challenges and Opportunities of Mitigating Misinformation. University of Pittsburgh's Year of Data and Society Keynote. (Pittsburgh, via zoom). October 27, 2022.

Wardle, C. Using Inoculation to Increase Skills in Identifying Misinformation: MMS Training Course Case Study. Evidence in Governance and Politics (EGAP) annual conference. (Ithaca, New York), October 29, 2022.

Wardle, C. The Importance of Investigating Health Misinformation Narratives: ICFJ's Dismantling Disinformation. (Austin, via zoom), November 18, 2022.

Wardle, C. Lessons from the First Infodemic. Knight Foundation's Informed Conference. (Miami, Florida). November 29, 2022.

Wardle, C. Frameworks and Considerations for Defining Mis- and Disinformation. National Academy of Science and Medicine's Understanding and Addressing Misinformation About Science, Committee Meeting #1. (Washington DC, via zoom), December 14, 2022.

Wardle, C. Examining Information Disorder. Opening Conversation of Connexions Conference (Austin, TX). April 11, 2023.

Wardle, C. Do your own research (#DYOR): Understanding the causes and potential responses to misinformation through participatory networks, Wayne Danielson Award Acceptance Keynotes. (Austin, TX). April 11, 2023.

Wardle, C. Confronting Misinformation in Our Circle of Influence. American College Health Association. (via Zoom). April 18, 2023

Wardle, C. Effective Strategies for Tackling Misinformation: Prebunking, Debunking and Inoculation. HHS Health Literacy Working Group. (via Zoom), April 25, 2023.

Wardle, C. Countering Disinformation related to the War in Ukraine. Politico Europe Tech Summit, (Brussels, via Zoom) April 27, 2023

Wardle, C. Strategies and tools to counter gender-based disinformation. SLTC Research University, (Sri Lanka, via Zoom), April 29, 2023

Wardle, C. Freedom of Expression in an Age of Disinformation. Keynote at Cornell University's symposium on the same subject. December 7, 2023

Wardle, C. #DYOR (Do Your Own Research): Understanding and Navigating the Contemporary Information Ecosystem. Public Lecture at Johnson and Wales University. February 20, 2024.

Wardle, C. #DYOR (Do Your Own Research): Understanding Participatory Disinformation and the Contemporary Information Ecosystem. March 25, 2024

International

Wardle C. Journalism in an Age of Information Disorder. Future of Journalism Conference. Cardiff University. September 2017.

Wardle C. Lessons from Tackling Misinformation in the French Election. Festival 3i. Rio de Janeiro, November 2017.

Wardle C. Collaborative Journalism as a Strategy for Counting Misinformation. World Association of News Publishers (WAN-IFRA). Argentina, November 2017.

Wardle, C. Evidence given to the UK Parliamentary Select Committee on Fake News, Washington DC. February 2018.

Wardle C. Expert Witness, Singapore Select Committee on Deliberate Falsehoods, March 2018

Wardle C. Expert Witness, Canadian Parliament Select Committee on Disinformation, May 2018

Wardle C. Covering Election Disinformation: Lessons of the upcoming Brazilian Election. Abrajji Annual Conference. Sao Paulo. June 2018.

Wardle C. Tackling Misinformation. Trusted Media Summit. Google. London, UK. December 2018.

Wardle C. Navigating the News, ABC News, Hobart Tasmania, Australia. September 2019

Wardle C. Future Trends in Information Online. APAC Trusted Media Summit. Google. Singapore. December 2019.

Wardle C. Evidence to the UK Parliament, Digital Culture media and Sport Selection Commission on Covid-19 Misinformation. Virtual. April 2020.

Wardle C. Conspiracies, Rumors and Falsehoods: The truth about why the Infodemic is so dangerous and what we can do about it. first WHO infodemiology conference. Virtual Event. June 2020.

Wardle C. Science Communication and Dealing with Uncertainty in the Era of COVID-19. Annual Ingram Lecture. University of British Columbia. Virtual Event. September 2020.

Wardle C. Vaccination Misinformation Control and Prevention. Infodemiology in Practice. Unicef. Virtual Event. November 2020.

Wardle C. Online Misinformation and Effective Policy Responses. Brazil's Superior Election Court (TSE), II International Seminar on Disinformation and Elections. Virtual Event. October 2021.

Wardle C. Expert witness, Irish Future of Media Commission, Virtual Event. February 2021.

Wardle C. Emotion and misinformation in times of public health crisis, Trust and Truth Online conference, Virtual Event. February 2021

Wardle C. The view from the frontline fighting disinformation. BBC Trusted News Conference. Virtual March 2021.

Wardle C. Whistleblowers in an age of information disorder. Whistling the Fake Roundtable. London via zoom. Jan 2022.

Wardle, C. Big Tech's Part in the Fight. BBC 's Trust in Media summit. (London via zoom). March 29, 2022.

Wardle C. Role of Platforms in Tackling Disinformation in Ukraine. BBC Trusted News Conference.

(London via zoom) March 30, 2022.

Wardle, C. New Media Technologies and Social Impact: Misinformation, Hate Speech and Incivility. GCCRC International Conference in (Seoul Korea via zoom). May 20, 2022.

Wardle, C. Revisiting Information Disorder. FaktaBaari Forum (Helsinki, via zoom). May 24, 2022.

Wardle, C. 10 Recommendations Around Effectively Tackling Disinformation. European External Action Service's Special Event on EDMO's Taskforce on Disinformation and the War in Ukraine. ; (Brussels, via Zoom). July 6, 2022.

Wardle, C. Communicating health in the new media landscape. Keynote for the Annual Conference of the Australian Academy for Health and Medical Sciences. (Melbourne via zoom). October 13, 2022.

Wardle, C. Lessons from the Ukraine War. European Commission's Meeting on the Taskforce of the Code of Practice for Disinformation. (Brussels via Zoom). October 19, 2022.

Wardle, C. The importance of inoculation in media literacy interventions. MedianGeist. (Kyiv, via zoom). October 27, 2022.

Wardle, C. The Rise of Information Disorder: Trends, Lessons and the Questions that Remain. Albanian Institute for the Study of Media.. (Tirana, Albania via zoom), November 22, 2022.

Wardle, C. Lessons from Disinformation and the Ukraine War. Internet Governance Forum 2022. (Addis Ababa Ethiopia, via zoom), November 29, 2022.

Wardle C. ICRC. Effective Communication in a Networked Information Ecosystem. Annual ICRC Communications Conference. (Amman Jordan). June 23, 2023.

Wardle C. AI, health literacy, patient education and misinformation. Penn Medicine.

UNIVERSITY TEACHING AND MENTORING ROLES

2004-2008	Course Leader for: Media Events, Cardiff University Social Issues in Primetime TV, Cardiff University Research methods, Cardiff University Introduction to Academic Research. Cardiff University
Fall 2020	Course Leader Journalism in an Age of Information Disorder, University of Pennsylvania

Fall 2021 Course Leader Journalism in an Age of Information Disorder, University of Pennsylvania

Spring 2022 Course Leader New Media and Society, Cornell University

Fall 2023 Course Leader for Communication Module for Senior Seminar in Public Health

Spring 2024 Effective Communication in a Networked Information Ecosystem