STS Perspectives on Big Problems

(HPSC0011)

Course Syllabus

2022-23 session (T1) | STS Staff, Course Coordinator Dr. Noémi Tousignant| n.tousignant@ucl.ac.uk

Course Information

This module introduces students to the uses of STS in solving big problems in the contemporary world. Each year staff from across the spectrum of STS disciplines – History, Philosophy, Sociology and Politics of Science – come together to teach students how different perspectives can shed light on issues ranging from climate change to nuclear war, private healthcare to plastic pollution. Students will develop research and writing skills, and assessment will consist of a formative essay plan and a final essay.

This year's topic is **Misinformation**

Basic course information

Course website:	https://moodle.ucl.ac.uk/course/view.php?id=28014&section=0
Moodle Web site:	https://moodle.ucl.ac.uk/course/view.php?id=28014&section=0
Assessment:	Formative essay plan and final essay (summative)
Timetable:	Fridays, 11.00-13.00, room 642 – IOE 20 Bedford Way
Prerequisites:	None
Required texts:	Readings listed below
Course tutor:	STS Staff, course coordinator Dr. Noemi Tousignant
Contact:	n.tousignant@ucl.ac.uk
Web:	https://www.ucl.ac.uk/sts/people/dr-noemi-tousignant
Office location:	22 Gordon Square, room 2.1
Office hours:	Fridays 1.15-2.15 pm face-to-face, or online by appointment.

How is the course organised?

This module is delivered through weekly, two-hour face-to-face sessions. Guest lecturers from the STS staff will combine lecturing with seminar-style discussions and activities.

Come to class prepared! Locate, read, and take notes on the essential readings listed and linked below. These are also posted on the module's Moodle page. On Moodle, you will find further information and instructions – such as watching a short video, searching for examples, or reflecting on a set of questions – to help you get ready for class. Check Moodle at least weekly for updates.

Additional readings or materials might also be recommended. These are not required. Use these to deepen your understanding of a case, issue, approach, or concept covered in the session. They will be particularly useful for planning and writing your essay. Use the library search engine, UCL Explore, to find these and further resources.

Overview of sessions

Module session	Date	UCL Week	Topics	Lecturer
1	7/10	6	**Introduction:** *Why is misinformation a 'Big Problem' and how do we approach it with STS?*	Dr. Simon Lock Pr. Brian Balmer Pr. Emma Tobin
2	14/10	7	**Conspiracy theories** *What distinguishes a theory from a conspiracy? How do power, images and emotions shape how conspiracies are circulated and discredited?*	Pr. Charlotte Sleigh Dr. Stephen Hughes
3	21/10	8	**The ethics and epistemology of misinformation** *What, if anything, is wrong about misinformation? What is 'good' information, from an ethical and epistemological perspective?*	Pr. Phyllis Illari Dr. Erman Sozudogru
4	28/10	9	**Travel and trust in the history of science** *How, in the past, were 'traveller's tales' judged to be true or false? What techniques were developed to secure reliable knowledge from afar?*	Pr. Simon Werrett
5	4/11	10	**Communicating (mis)information** *How do narrative styles, persuasion and accuracy in science communication shape what counts as real and fake news?* **Essay Workshop** *How do I plan, prepare, and write a good essay? How can I use STS approaches and concepts in my essay?*	Dr. Jean-Baptiste Gouyon Dr. Noemi Tousignant Pr. Joe Cain
	11/11	11	READING WEEK	
6	18/11	12	**Misinformation may be bad for your health** *Should misinformation be defined as such based on its negative health or environmental outcomes? How should publics be protected from hazardous misinformation?*	Dr. Cristiano Turbil Dr. Noemi Tousignant
7	25/11	13	**Global information (in)justice** *How does the global digital misinformation landscape distribute political destabilization? What underlying structural issues exacerbate the harmful effects of misinformation?*	Dr. Michel Wahome Dr. Saheli Datta Burton
8	2/12	14	**Is technology the problem, can technology be the solution?** *Can social media fix misinformation if it is part of the problem? What else is needed to make digital tools work in mitigating extremism?*	Dr. Cian O'Donovan Dr. Jack Stilgoe
9	9/12	15	**Resisting misinformation: a primary source workshop** *How have information and its audiences been (mis)represented? How can we critically analyse these (mis)representations? How, by fighting back against misinformation, have publics challenged powerful institutions?*	Dr. Jenny Bulstrode Pr. Jon Agar
10	16/12	16	**Review session**	Dr. Noemi Tousignant

			What have you learned about misinformation and what have you learned about STS? How can you use these skills and knowledge to analyse how today's 'Big Problems' are defined and addressed?	

Assessments

Summary

	Description	Deadline	Word limit	Weight
CW	Formative essay plan	30 November 2023, 5pm (UK time)	1,000	0%
CW	Essay	11 January 2023, 5pm (UK time)	2,500	100%

Please Note: All deadlines for submission are at 05:00 PM (London Time)

Assignments

The first assignment for this module is an **essay plan.** This is a formative assessment, which means that the grade you are given does **not** count towards your final grade. Take this assignment seriously, as: 1) It is designed to take you through essential steps to prepare your final essay (100% of your grade for this module); 2) It is an opportunity to obtain feedback to guide you in writing your final essay. The essay plan should be **1000 words** long and is due on **30 November 2023**. Check the Moodle page for detailed instructions on how to complete and submit your essay plan.

The second and final assignment is a **2500-word essay** and is due on **11 January 2023**. It is worth 100% of your final grade. In the assignment brief (posted on Moodle) you will be provided with a choice of topics, and detailed guidance on what you must and can include in your essay. The course plan also includes an essay workshop (on 4 November).

Consult the STS Student Handbook for further information: particularly the sections on assessment, extenuating circumstances and reasonable adjustment (for procedures on

requesting extensions), academic integrity (what constitutes plagiarism and how to avoid it), and the appendix on undergraduate criteria for assessment.

While these general criteria apply, this module uses a more detailed marking grid as assessment criteria for the 2,500-word essay. This grid is included as an appendix to this syllabus and on Moodle.

You should also read the [UCL Library Guide on References, citations and avoiding plagiarism](#).

Aims & objectives

Aims:

To demonstrate and explore the ways that STS provides perspective that contribute to the understanding of major problems facing humanity

Objectives:

- The possession of empirical and theoretical knowledge of big problems from interdisciplinary STS perspectives, and the written communication skills to account for such knowledge

- The skills to analyse such knowledge in order to propose persuasive cases for potential contributions to solutions to such problems

- A deeper grasp of the varied character of STS and its interdisciplinary relevance to a wider world

Description and aims of the 2022-2023 theme:

This year's module theme is **Misinformation**. We aim for you to learn, from an STS perspective, about a range of types and cases of misinformation, from fake news and state propaganda to conspiracy theories and traveller's tales. We will explore and discuss the causes and consequences of misinformation, particularly as they involve science and technology. We will, for example, consider how the line between information and *mis*information has been and continues to be (re)drawn, controlled, and put into practice. We will further consider how this distinction is shaped by and affects, for example, social trust, political power, moral values, or the persuasiveness of communication.

Yet our core aim in this module is for you to learn more about what the interdisciplinary field of STS *is* and what it can *do*. Together, we will consider what STS can offer for understanding and solving a complex, urgent, and far-reaching societal problem such as misinformation. We will thus explore the kinds of questions that STS can ask: How have problems such as misinformation been defined as solvable by science and technology? How do the power and values attributed to science and technology – which vary in time, space, and along social-political lines – shape how the challenges and consequences of misinformation are understood and addressed? How do uses of science and technology reflect, reinforce, or challenge socio-political orders and hierarchies and systems of values?

Teaching team

To provide an overview of different approaches in STS, the module is taught by guest lecturers from across the Department of STS.

You should contact the course coordinator, Dr. Noemi Tousignant (n.tousignant@ucl.ac.uk) for any general information including about assignments. Please contact guest lecturers for specific question about the content of their session. Note that the Moodle page also includes a Q&A forum for each weekly session where you can post your questions about the weekly topic and materials.

You can find out more about guest lecturers, including their contact information, on the STS webpage: https://www.ucl.ac.uk/sts/people/sts-academic-staff.

Description of sessions

1. Introduction to the Module – *7 October*

What makes misinformation a Big Problem? How can we approach misinformation with STS?

This introductory session will involve class discussion about misinformation and science. We will not assume any prior knowledge and the aim is to get you talking and thinking about misinformation in relation to science and technology, and to introduce you to ways in which history, philosophy and sociology of science might be used to conceptualise and challenge misinformation.

In the first part of the session, **Dr. Simon Lock** will present the concept of 'wicked problems', and will discuss how STS offers various disciplinary lenses for approaching and interrogating such problems, notably misinformation.

In the second part, **Pr. Brian Balmer and Pr. Emma Tobin** will lead a seminar discussion around examples of fake news to spark a general discussion about philosophy, history and sociology of science takes on misinformation and truth.

Essential reading:

Cottrell, Stella (2019). ***The Study Skills Handbook***. London: Macmillan Education, Limited.
Chapter 8: 'Working with Others: Collaborative Study'.
** **pay particular attention to pp.171-73 and pp.177-79,** which are about the purpose of seminars at university, with some excellent advice on how to get the most out of them.

Additional materials:

Riesch, Hauke (2021). *Apocalyptic Narratives: Science, Risk and Prophecy*. London: Routledge.
Chapter 2: 'Making Sense of How We Make Sense of the World' (find this on UCL Explore)

Forum for philosophy, "Misinformation," discussion chaired by Jonathan Birch, with Lisa Bortolotti, Quassim Cassam and Cailin O'Connor:
https://www.lse.ac.uk/philosophy/blog/2021/02/04/misinformation/

2. Science and conspiracy – *14 October*

What distinguishes a theory from a conspiracy? How do power, images and emotions shape how conspiracies are circulated and discredited?

This session, led jointly by **Pr. Charlotte Sleigh** and **Dr. Stephen Hughes**, will explore what conspiracy theories and their diffusion can tell us about the politics, communication, and visual-affective dimensions of science and technology. By looking at the case study of controversies around water fluoridation the 1960s UK, we will consider historical questions such as the emergence of scepticism as a scientific perspective and how social pathways for making and disseminating (mis)information changed with the advent of the Internet. We will also learn how to analyse images, and to critically reflect on the role that power, images and emotions play both in the dissemination of conspiracy theories and in how the public makes meaning of science and technology.

Essential reading**:**

Sleigh, Charlotte, 'Fluoridation of drinking water in the UK, c.1962-67 A case study in scientific misinformation before social media', *Royal Society* (2022)

Question to think about: who participated in the debate, and how did they decide what was the right perspective? (There are many angles to the second question!)

Additional readings:

Grusauskaite, Kamille, John Harambam and Stef Aupers. 'Picturing Opaque Power: How Conspiracy Theorists Construct Oppositional Videos on YouTube', *Social Media + Society* (2022).

Martin, Brian. 'Analyzing the Fluoridation Controversy: Resources and Structures', *Social Studies of Science* 18.2 (1988): 331–363

Martin, Brian. 'The Sociology of the Fluoridation Controversy: A Reexamination', *The Sociological Quarterly* 30.1 (1989): 59–76

Freeze, R. Allan, and Jay H. Lehr, *The Fluoride Wars: How a Modest Public Health Measure Became America's Longest-Running Political Melodrama* (Hoboken, New Jersey: Wiley, 2009)

3. The ethics and epistemology of misinformation – *21 October*

What, if anything, is wrong about misinforming? What is 'good' information, from an ethical and epistemological perspective?

In the first part of the session, **Dr. Erman Sozudogru** discusses the challenges that uncertainty, as it plays out in science and public discourse, poses to trust and politics. Question to consider before the session: What separates belief from knowledge? How do we distinguish 'good' information from misinformation? What should inform our judgements when making decisions?

In part II, **Pr. Phyllis Illari** considers what our ethical responsibilities around misinformation might be. Think about what your *own* responsibilities might be before the session. We will consider the difference between thinking in terms of individual rights and responsibilities, to thinking in terms of what one should ethically do to *care* for a community. This is the feminist ethics of care.

Case study: European debates about the safety of the AstraZeneca vaccine and how this fostered misinformation.

Essential reading:

Sozudogru, Erman (Forthcoming). 'Active definition of uncertainty', in S. Ehsani et al. (eds.), T*he Future Circle of Healthcare, Future of Business and Finance*: Springer Netherlands. *This text will be posted on the Moodle page.*

Taylor, Linnet (2020). 'The price of certainty: How the politics of pandemic data demand an ethics of care', *Big Data & Society*, 2020, July–December: 1–7.

Additional reading:

Gilligan, Carol (2003 [1977]). 'Concepts of Self and Morality,'*In a Different Voice: Psychological Theory and Women's Development*, Cambridge MA: Harvard University Press.

4. 'Here be Dragons': Travel and trust in the history of science – *28 October*

How, in the past, were 'traveller's tales' judged to be true or false? What techniques were developed to secure reliable knowledge from afar?

This session is led by **Pr. Simon Werrett**: Before "fake news" there were "traveller's tales", the stories of sailors and explorers of distant lands and monstrous creatures that claimed to be true yet were likely exaggerated or made up. Science has long had to rely on traveller's tales, the reports of persons charged with going to far-off places to study their natural environments. But how to trust such persons? This lecture surveys the panoply of techniques developed in the sciences to secure reliable knowledge from distant places. It shows how these techniques have done much to shape the modern, global world and to shape what counts as (mis)information.

Essential reading:

Harris, Steven J. (2011) 'Long-distance corporations, sciences, and the geography of knowledge,' in Sandra G. Harding (ed.), *The Postcolonial Science and Technology Studies Reader* . Durham: Duke University Press.

Additional readings:

David Livingstone, *Putting Science in its Place: Geographies of Scientific Knowledge* (Chicago, 2003), chapter 4. *Physical book available in the UCL Science Library.*

Charles W. J. Withers, "Travel and Trust in the Eighteenth Century," in John Renwick, ed. *L'Invitation au Voyage: Studies in Honour of Peter France* (Oxford: Voltaire Foundation, 2000), 47-54. *Physical book available in the UCL Main Library.*

Paula Findlen, 'Inventing Nature: Commerce, Art, and Science in the Early Cabinet of Curiosities' in Pamela Smith and Paula Findlen, eds. *Merchants & Marvels: commerce, science and art in early modern Europe* (2002), 297-323. *Physical book available in the UCL Archaeology Library*.

5. I: Profitable ignorance. II: Essay Workshop – *4 November*

Part I: Does the production of ignorance count as misinformation? Part II: How can I research, plan, and write a good STS essay?

In the first part of this session, Dr. **Noémi Tousignant** will present case studies concerning the health hazards of exposure to PCBs, focusing on how industry and regulatory actors shaped what knowledge of risk was *not* produced, circulated, and acted upon. We will explore and discuss questions such as: What strategies have been used to limit the power of scientific knowledge to protect health and environments? Can missing, partial, withheld, or uncertain knowledge – 'produced ignorance' – count as examples of 'misinformation'? Who is most affected by 'produced ignorance'? Does 'produced ignorance' arise only from bad or corrupted science, or is it a more general feature of research and regulation? In the second part of the session, **Noémi** will lead a workshop on the assessments for this module and, more generally, on writing STS essays.

Essential reading:

"The crisis of PCBs" (read the 4-line description and have a look at the digitized version of the original meeting notes): https://www.toxicdocs.org/d/X7JKvq01ExZb77QZ857rM8y7d

Griffith-Spears, Ellen (2014). *Baptized in PCBs: Race, Pollution and Justice in an All-American Town* The University of North Carolina Press: Chapel Hill. Read: 'Introduction' pp1-17, and pp129-133 of Chapter 4: 'The Nature of the Poison' (only 4p required here, but if you have time do read on). *You can read this online: please refer to page numbers in the book itself, NOT the different numbers given on the linked table of contents on the left-hand side. You can also download a pdf copy by clicking on the print icon (top right) and selecting 'save as pdf' from the dropdown 'destination' menu.*

Additional readings:

Hoover, Elizabeth (2020). 'Whose citizenship in "citizen science"?: Tribal identity, civic dislocation, and environmental health research', In: Thom Davies and Alice Mah, eds. *Toxic truths: environmental justice and citizen science in a post-truth age* (pp. 242-266). Manchester University Press.

Markowitz, Gerald, & David Rosner (2018). 'Monsanto, PCBs, and the creation of a "world-wide ecological problem', *Journal of Public Health Policy*, *39*(4), 463-540. Especially the sub-section '"Sell the hell out of them as long as we can": 1969.'

6. Communicating (mis)information – *18 November*

How do narrative styles, persuasion, emotional appeal, and accuracy in the communication of science shape what counts as public information, fake news, or propaganda? Should misinformation be defined on the basis of potential negative outcomes, and can it sometimes be useful?

In the first part of the session, Dr. **Cristiano Turbil**, will discuss "Smallpox, vaccine and medical (mis)information." In today's class, we will look at the debates surrounding the introduction of compulsory vaccination in Victorian Britain. We will review and discuss several primary sources to explore the social, cultural, medical and political significance of a very controversial public health campaign which generated significant public unrest. Specifically, we will discuss how public concerns about vaccines were exacerbated by, often, fraudulent information and the use of emotionally charged language and analogies in periodical articles, cartoons and caricatures.

In advance of the class, please read the the article by Nadja Durbach (see essential reading below).

The second part of the session is led by Dr. **Jean-Baptiste Gouyon**: Misinformation and Fake news are seen as a problem because some groups consider them as news and information, whereas other

don't, and because they circulate along networks not dissimilar to those of information and news (sometimes these networks overlap). There is a fear that the distinction between truth and falsity, facts and fiction might evaporate. In this session we try and adopt an agnostic perspective on misinformation and fake news and reflect on their social function. We ask: 'what makes them news for some people?'; 'what makes them information?'; 'what do people do with misinformation?'. In asking these questions we reflect on the notion of accuracy and its value as a rhetorical resource in public discourse. We also look at the role of narratives and stories, and how they relate to the notion of trust. Finally, we point back to a discussion of the deficit model of public understanding of science, as a problematic, top-down approach to science communication, and we ask what could be learned from discussions of misunderstanding of science when it comes to reflecting on misinformation. In other words, how can we look positively at misinformation?

Essential readings:

Durbach, Nadja, (2000). "'They might as well brand us': Working-class resistance to compulsory vaccination in Victorian England," *Social History of Medicine,* 13, 45-62.

Fischer, Frank (2019) Knowledge politics and post-truth in climate denial: on the social construction of alternative facts, *Critical Policy Studies*, 13:2, 133-152.

Hansen, Anders (2016) The changing uses of accuracy in science communication, *Public Understanding of Science*, 25(7), pp. 760–774.

Additional readings:

Fisher, R. (2022) The translator versus the critic: A flawed dichotomy in the age of misinformation, *Public Understanding of Science*, 31(3), pp. 273–281. https://doi.org/10.1177/09636625221087316

Harambam, J. (2021) Against modernist illusions: why we need more democratic and constructivist alternatives to debunking conspiracy theories, *Journal for Cultural Research*, 25:1, 104-122, https://doi.org/10.1080/14797585.2021.1886424

Harambam, J., Grusauskaite, K., & de Wildt, L. (2022). Poly-truth, or the limits of pluralism: Popular debates on conspiracy theories in a post-truth era. *Public Understanding of Science*, 31(6), 784–798. https://doi.org/10.1177/09636625221092145

Jasanoff, S. & Simmet, H. R. (2017). No funeral bells: Public reason in a 'post-truth'age. *Social Studies of Science*, 47(5), 751-770. https://doi.org/10.1177/0306312717731936

7. Global information (in)justice – *25 November*

How does the global digital misinformation landscape distribute political destabilization? What underlying structural issues exacerbate the harmful effects of misinformation?

In this session we will analyse the business of targeted misinformation that aims to destabilise political systems and their polities, and the solutions societies are considering to mitigate against it. The Cambridge Analytica and Facebook scandal serves as the primary case study.

In the first part of the session, **Dr. Michel Wahome** will discuss whether/how the digital misinformation landscape differs from other ways in which destabilising misinformation spreads in society—community networks, gossip, preachers, traditional media, etc.—and what this means for legislation in different contexts.

In part two, **Dr. Saheli Datta Burton** will discuss the underlying structural issues that exacerbate and facilitate targeted misinformation. For instance: How do emerging extractive practices by large information/data sources/facilitators (e.g., Facebook Basic) to limit information/content increasingly resemble the oppressive structural barriers of old?

Essential Readings:

Cunliffe-Jones, Peter, Assane Diagne, Alan Finlay et al. (2021) *Misinformation Policy In Sub-Saharan Africa: From Laws and Regulations to Media Literacy*. London: University of Westminster Press. Read: 'Chapter 4: Identifying what misinformation causes actual or potential harm,'pp.126-134.

Kwet, Michael (2019). Digital colonialism: US empire and the new imperialism in the Global South. *Race & Class* 60(4), pp3-26.

Watch: Mark Zuckerberg launching Facebook Basics in Zambia (2 mins)
https://www.youtube.com/watch?v=LIvYUft2wJM

Additional readings:

Laterza, Victor (2021). '(Re)Creating "Society in Silico": Surveillance Capitalism, Simulations and Subjectivity in the Cambridge Analytica Data Scandal', *Partecipazione e Conflitto,* vol. 14, no. 2, pp. 954-974.

Walker, S. et al. (2019), 'The disinformation landscape and the lockdown of social platforms', *Information, Communication & Society*, 22:11, pp.1531-1543

Nothias, T. (2020). 'Access granted: Facebook's free basics in Africa', *Media, Culture & Society*, 42(3), 329-348.

Shahin, S. (2019). 'Facing up to Facebook: how digital activism, independent regulation, and mass media foiled a neoliberal threat to net neutrality', *Information, Communication & Society*, 22(1), 1-17.

Bhagwat, A. (2020). The law of Facebook. *UC Davis L. Rev.*, 54, 2353.

8. Is technology the problem, can technology be the solution?
– 2 December

Can social media fix misinformation if it is part of the problem? What else is needed to make digital tools work in mitigating extremism?

In the first part of the session, **Dr. Cian O'Donovan** presents a case study from his research on dis/misinformation in the context of far-right extremism, and on how civil society organisations are organising in response. He will lead a discussion on the concept of infrastructure, and on what kinds of digital and social infrastructures are needed for action. How can thinking about human capabilities help us challenge misinformation and big tech more broadly?

In part two, **Dr. Jack Stilgoe** discusses the automation of misinformation and of anti-misinformation tools. Can social media provide a solution if they are part of the problem? More generally, can technologies fix social problems? Jack will look at a case study in which the British Medical Journal got caught up in Facebook's covid 'fact-checking' apparatus.

Essential reading:

O'Donovan, Cian (2022). 'Collective capabilities for resisting far-right extremism online and in the real world,' *Journal of Peer Production*.

Coombes, Rebecca and Madlen Davies (2022). 'Facebook versus the BMJ: when fact checking goes wrong' *BMJ* 2022;376:o95. *Very short!*

Morozov, Evgeny (2020). 'The tech 'solutions' for coronavirus take the surveillance state to the next level,' *The Guardian*, 15 April.

Additional reading:

Solnit, Rebecca, 'Hope is an embrace of the unknown,' rebeccasolnit.net.

9. Resisting misinformation: a primary source workshop – *9 December*

How have information and its audiences been (mis)represented? How can we critically analyse these (mis)representations? How, by fighting back against misinformation, have publics challenged powerful institutions?

This session, led by **Dr. Jenny Bulstrode**, with **Pr. Jon Agar**, will build on the previous sessions by introducing primary source examples of representation, misrepresentation and combatting misinformation. Exploring the preparation materials and working through questions together, students will be supported to revisit and extend the application of concepts they have learned in the module so far, while being introduced to working with sources. A crucial aspect of this is introducing the importance of critical contextualisation in the interpretation and analysis of information. In this way students are supported to extend the application of concepts learned through set case studies and critically evaluate the representation of information for themselves. There will be two activities: each will involve engaging with short read/listen material concerning themes of representation, combatting misinformation, nuclear colonialism, environmental racism, and coerced-sterilization.

Essential reading and preparation:

Please go to the Moodle page for details on the workshop activities, case studies and sources, and for instructions on how to prepare.

WARN Newsletter n.d. 13-16. Reprinted in *Hearing Before the United States Commission on Civil Rights – National Indian Civil Rights Issues: Hearing Held in Washington, D.C. March 19-20,* 1979: **Read**: "Who We Are,"p.14; "Resources of Red Nations,"pp.21-22, "The Theft of Life," pp.23-26.

Listen: radio interview with Dr Connie Pinkerton-Uri: https://archive.org/details/pacifica_radio_archives-BC1963 (31minutes 58 seconds)

Archives of the Liberation News Service issue 673, 25 January 1975*,* **Read:** 'Survey Reveals Many Doctors "Actively Push" Sterilizations: "Many of the Women Didn't Really Understand What Was Going On"' pp.11-12.

Hsuan Hsu (2014). Nuclear Colonialism and Mapping, in 'Representing environmental risk in the landscapes of US militarization.' Environment & Society Portal, *Virtual Exhibitions* no. 1. Rachel Carson Center for Environment and Society. Especially

Additional materials:

Carlson, L. A. (1983). 'Federal Policy and Indian Land: Economic Interests and the Sale of Indian Allotments, 1900-1934', *Agricultural History*, 57(1), 33–45.

Erickson, J. D. & Chapman, D. (1993). 'Sovereignty for Sale: Nuclear Waste in Indian Country.' *Akwe:kon Journal*, 10, 3-10.

Kluchin, Rebecca M. "Locating the Voices of the Sterilized." *The Public historian* 29.3 (2007): 131–144.

10.   Review session – *16 December*

What have you learned about misinformation and what have you learned about STS? How can you use these skills and knowledge to analyse how today's 'Big Problems' are defined and addressed?

This session, led by **Dr. Noemi Tousignant**, will consist of discussion and activities designed to *consolidate* what you have learned in this module; find *connections* across sessions and the topics, concepts and approaches they introduced; and put what you have learned into *practice*. You can also ask questions about the final essay.

There is <u>no essential reading</u> for this session. Instead, you are encouraged to look back over module materials (including lecture slides) and the notes your will have taken throughout the term.

Appendix: Marking Criteria for HPSC0011 – Assignment 2

Criteria	85-100% FIRST	70-79% FIRST	60-69% U. SECOND	50-59% L. SECOND	40-49% THIRD	20-39% FAIL	0-19% FAIL
Targeting the question / issue	Very Precise; targeting could only be improved slightly	Precise; targeting of a high standard throughout	Close; lacks effective targeting in some places	Adequate; notable lapses in targeting:	Imprecise; numerous failures to target question	Inadequate; continuous failures to target question	Poor; largely fails to target question
Quality of argument	Highly Skilled; quality of argument could only be improved slightly	Skilled; quality of argument of a high standard throughout	Largely Appropriate; quality of argument generally good	Adequate; notable lapses in quality of argument	Limited; numerous shortcoming in quality of argument	Inadequate; continuous shortcomings in quality of argument	Poor; largely fails to development effective argument
Essay structure	Highly Skilled; structure could only be improved slightly	Skilled; structure of a high standard throughout	Largely Appropriate; structure generally good	Adequate; notable lapses in structure	Limited; numerous shortcomings in structure	Inadequate; continuous shortcomings in structure	Poor; largely fails to development effective structure
Conceptual awareness	Highly Skilled; conceptual awareness could only be improved slightly	Skilled; conceptual awareness of a high standard throughout	Largely Appropriate; some gaps in conceptual awareness	Adequate; notable gaps in conceptual awareness	Limited; numerous and notable gaps and errors of conceptual interpretation	Inadequate; limited conceptual awareness with continuous failures of interpretation	Poor; largely fails to demonstrate any conceptual awareness
Use of material from academic literature	Highly Skilled; discriminating and original use of relevant literature	Skilled; extensive use of relevant literature	Largely Appropriate; extensive, but not especially skilled, use of relevant literature	Adequate; adequate, but uncritical use of largely-relevant literature	Limited; use of largely-relevant literature with evidence of significant gaps	Inadequate; superficial use of largely-relevant literature with evidence of significance gaps	Poor; superficial use of largely-irrelevant literature
Use of lecture/tutorial material	Highly Discriminating; limited, critical and appropriate	Discriminating; limited and appropriate	Largely Appropriate; selective and appropriate use of lecture material	Adequate; significant & undiscriminating use of lecture material	Inappropriate; some inaccurate use of lecture material	Inadequate; little evident knowledge of lecture content	Poor; largely fails to demonstrate use of lecture material
Critical evaluation of evidence	Highly Skilled; evaluation of evidence could only be improved slightly	Skilled; evaluation of evidence of a high standard throughout	Largely Appropriate; evaluation of evidence generally good	Adequate; notable lapses in evaluation of evidence	Limited; numerous shortcoming in evaluation of evidence	Inadequate; continuous shortcomings in evaluation of evidence	Poor; largely fails to evaluate evidence
Accuracy of factual content	Highly Skilled; could only be improved slightly	Skilled; of a high standard throughout	Largely Appropriate; some factual errors	Adequate; some notable errors	Limited; some major errors	Inadequate; many major errors	Poor; many fundamental errors
Use of examples	Highly Skilled; highly appropriate and detailed	Skilled; appropriate and detailed	Largely Appropriate; appropriate but lacking in aspects of detail	Adequate; examples of varying appropriateness and more limited detail	Limited; limited number of appropriate examples lacking in detail	Inadequate; some examples, not appropriate, lacking in detail	Poor; very few appropriate examples with little detail provided
Literacy and appropriateness of writing style	Highly Skilled; writing could only be improved slightly	Skilled; writing of high standard throughout	Largely Appropriate; writing may have lapses in style	Adequate; notable lapses in writing style	Limited; numerous lapses in writing style	Inadequate; extensive evidence of low quality writing	Poor; largely inappropriate writing style
Correctness of in-text citation and reference list construction	Highly Skilled; contains only a few insignificant errors	Skilled; accurate and consistent referencing	Largely Appropriate; largely accurate and consistent referencing, but with minor to moderate errors	Adequate; competent referencing but some moderate inconsistencies and/or errors	Limited; inconsistent referencing or numerous major errors	Inadequate; inconsistent referencing and numerous major errors	Poor; highly inconsistent and error-strewn referencing
Overall presentation	Highly Skilled; publishable with some minor modifications	Skilled; clear, appropriate presentation; very few inadequacies	Largely Appropriate; good standard of presentation but with some inadequacies	Adequate; Competent but with notable presentational inadequacies	Limited; many presentational inadequacies	Inadequate; numerous presentational inadequacies	Poor; untidy or disorganized presentation