

Towards an Environmental History of Television

Water Pollution Issues on Finnish Broadcasting Prior to Earth Day 1970

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Introduction

It may be a bit of an exaggeration to claim that television is dead, although it is obvious that today television does not hold the same significance as it previously had.¹ During the 1970s and 1980s it still provided an important topic of casual conversation.² Whereas at that time it was safe to assume that everyone at work, school or university had watched the same television programmes, this assumption is no longer safe to make.³ English media researcher John Ellis has described this shift thusly: ‘The mode of address of programmes begins to change, becoming less universalistic and more specific. At the same time, the audience’s basic orientation towards television begins to change. Everyday conversation changes from “What did you think of the programme last night?” to an initial “Did you see the programme last night?” or even “I caught an interesting programme last night...”. This change is crucial. The first attitude is from the Cold War era, in which it was quite natural to assume that anyone would probably have seen the same programme as you. But in the era of globalization, no such assumption can be made.’⁴

It is not difficult to think of reasons why the glory days of television are over. In addition to the increased availability of television channels and programmes, the pervasiveness of the internet, personal computers, cellular phones and new forms of social media skyrocketed after the turn of the millennium in all wealthy post-industrial societies.

¹ We are grateful for the comments presented on September 12, 2014 at the Nature & Culture Seminar at the University of Kansas, USA. We also thank MA Nathan Adair for checking the language. Initial surveys of environmentally themed programs contained in the Finnish Public Broadcasting television archives were conducted as part of *The Sea and the Cities* project funded by the Nordic Council of Ministers in 1995-2000 and 2004 (<http://www.valt.helsinki.fi/projects/enviro>).

² For changes in national, regional and international media consumption (incl. newspapers, magazines, radio, television, cinema, outdoor, internet) see, annual surveys of, for example, McKinsey or ZenithOptimedia.

³ Jonathan Gray and Amanda Lotz, *Television studies* (Cambridge: Polity, 2011), 1–2; Jostein Gripsrud, “Television in the digital public sphere”, in Jostein Gripsrud, ed. *Relocating Television: Television in the digital context* (London, New York: Routledge, 2010), 12–16.

⁴ John Ellis, *Seeing Things: Television in the Age of Uncertainty* (London & New York: I.B.Tauris, 2000), 72.

New forms of social media included, for example, social networking sites (IRC galleries, Facebook, LinkedIn, MySpace and Twitter), social news sites (Digg, Newsvine, Sphinn), social sharing sites (Flickr, YouTube, Pinterest), social bookmarking sites (Delicious, Faves, BlogMarks), and social shopping sites (Kaboodle, KolMol, ThisNext), not to mention the websites of individuals, groups, associations, media outlets, public organizations and commercial enterprises. Unlike traditional media, which delivered content but did not allow viewers to participate in its creation or development, online media allows people to discuss and share content, participate in its creation and network. Social media gives people what TV never could – a chance to be engaged and engage others. Hence, it is no wonder that television tends to be forgotten amidst the various waves of new media development.

However, in this article we want to explore the glory days, or rather the early days, of television – a time when television network heads could expect that almost any programming would attract the undivided attention of its audience – and frame this exploration from an environmental perspective. These days, it is virtually impossible to imagine an environmental problem rising to social significance without extensive media coverage. Whether a topic is considered important and real is to a large extent determined by the media attention it receives; after all, it is the mass media only that may dramatize problems as visual and symbolic events for whole nations if not for the whole industrial world.⁵ In this framework media history is one of the most important chapters of modern human history. If we want to understand the historical expansion of environmental awareness among the general public after World War Two, then we must ultimately confront the question: who communicated what to whom and how?⁶

How we define the various meanings of television and what its place in theoretical discussions has been could be presented in a number of different ways.⁷ In the following we will briefly frame the theoretical discussions concerning television in terms of three subsequent waves. Discussion started in earnest in the early 1960s when Canadian philosopher and media theorist Marshall McLuhan argued that ‘The medium is the message’,

⁵ John A. Hannigan, *Environmental Sociology: A Social Constructionist Perspective* (London and New York: Routledge, 1995), 54–56.

⁶ Jonathan Rose (Drew University) introduction. Asa Briggs and Peter Burke, *A Social History of the Media: From Gutenberg to the Internet* (Cambridge: Polity, 2005).

⁷ For example, John Corner conceptualizes television as for of institution, image, talk, narrative, flow, production, reception, pleasure, knowledge and as a contemporary idea. John Corner, *Critical Ideas in Television Studies* (New York: Oxford University Press, 2000).

which signified that the manner in which information is communicated is as important as the information itself. According to his theory human history could be divided into four eras, that is, the acoustic age, the literary age, the print age and the electronic age. Each of these technological revolutions of communication had a particular impact on our body and senses (seeing, hearing, smelling, touching) and changed therefore people's orientation toward societies.⁸ The second wave of theoretical discussions was largely initiated in the 1970s by British cultural critic Raymond Williams who maintained that in order to theorize the role that television played in society we need to ground its technological and cultural forms in the society that produced it.⁹ Williams and his followers claimed that television had to operate in a relatively limited space contested by the expectations of viewing the transparent world, the changing regimes of a governing state, expectations of national unified culture as well as by the pressures of market forces.¹⁰ Due to the end of the Cold War and its exigencies, representants of the third wave preferred to focus on exploring the social construction of media discourses, intertextual issues and agency of viewers.¹¹ In brief, research has clearly shifted its emphasis from historical stages and structural issues towards more individual approach.

Existing studies on the development of environmental reporting have mainly relied on two theoretical frameworks. The first of these two frameworks is closely related to the structural issues approach while the second is based on the historical stages viewpoint. The first theoretical framework emphasizes the sudden and relatively recent change in environmental reporting. It maintains that the media played a central role in the 'environmental revolution' and quantitative agenda-setting research has indeed proven that environmentally-themed articles in newspapers spiked suddenly in Western industrialized

⁸ Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964), 9; see also Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto: University of Toronto Press, 1962).

⁹ Raymond Williams, *Television: Technology and Cultural Form* (London: Fontana, 1974). His key concepts were criticized and further elaborated by, for example, John Ellis, *Visible Fictions: Cinema, Television, Video* (London: Routledge, 1982), Richard Dienst, *Still Life in Real Time: Theory After Television* (Durham: Duke University Press, 1994) and John Fiske, *Television Culture* (London: Routledge, 2001).

¹⁰ Dienst, *Still Life in Real Time*, 11.

¹¹ See, for example, James Shanahan and Michael Morgan, *Television and Its Viewers: Cultivation Theory and Research* (Cambridge: Cambridge University Press, 1999); For contemporary theoretical thinking, see Marijke de Valck and Jan Teurlings, eds., *After the break: television theory today* (Amsterdam: Amsterdam University Press, 2013); For an overall framework of media studies, see Meenakshi Gigi Durham and Douglas M. Kellner eds., *Media and cultural studies: keywords* (Oxford: Blackwell Publishers, 2001).

nations in the late 1960s and early 1970s. In brief, this theory states that environmental reporting emerged in the industrialized democratic states as a part of the environmental movements of this time period.¹²

The second theoretical framework maintains that environmental reporting developed gradually and over a long time-period. Although the second approach acknowledges that a major expansion took place in environmental concepts and practices in the late 1960s and early 1970s, pioneering studies that have been conducted, primarily in the Nordic countries,¹³ have demonstrated that environmental reporting started to develop much earlier than has been previously recognized.¹⁴ According to these views, environmental reporting developed as a reaction to the industrial revolution.

In our view, this framework proposes the examination of long-term cycles of environmental media that have taken place in the industrialized world. The first cycle consists of bodily performance, in which one or more persons use their body or voice in public in various ways to address environmental issues. Performances and the like are still used widely in public appearances, demonstrations, theatre, and media. The second cycle comprises self-made or printed matter, such as the environmental banners, posters, information leaflets and books. The third cycle is that of newspapers, which have enjoyed a dominant political position in industrial societies. The fourth cycle emerged in the form of motion pictures and animation in movies, and subsequently in the establishment of large-scale film studios, nickelodeons and cinemas. The fifth cycle includes establishment of local and national radio

¹² See, for example, James S. Bowman and Kathryn Hanaford, "Mass Media and the Environment Since Earth Day," *Journalism Quarterly* 54 (Spring 1977): 160-165; Anthony Downs, "Up and down with ecology – the "issue attention cycle", *Public Interest* 28 (Summer 1972): 38–50; J. W. Parlour and S. Schatzow, "The mass media and public concern for environmental problems in Canada 1960–1972," *International Journal of Environmental Studies* 13 (February 1978): 9–17. See also, for example, Glenn D. Hook et al., *Environmental Pollution and the Media: Political Discourses of Risk and Responsibility in Australia, China and Japan* (London: Routledge, 2017).

¹³ Bendt Jensen, *Traek af miljødebatten i seks danske aviser fra 1870'erne til 1970'erne* (København: Rockwool Fondens Forskningsenhed, 1996); Rauno Lahtinen and Timo Vuorisalo "In Search for the Roots of Environmental Concern: Water Management and Animal Welfare Issues in the Finnish Local Press in 1890-1950," *Scandinavian Journal of History* 2 (2005): 177-197; Kristiina Korjonen-Kuusipuro, "Aallon harjalla: Pietarsaari vesiensuojelun edelläkävijänä," in *Harmaat aallot*, 125-141; Simo Laakkonen, *Vesiensuojelun synty. Helsingin ja sen merialueen ympäristöhistoriaa 1878-1928* [The origins of water protection. An environmental history of Helsinki and its sea area in 1878-1928] (Helsinki: Gaudeamus/Hanki ja Jää, 2001).

¹⁴ Also the works of Peter Brimblecombe, Bill Luckin, Martin Melosi, Edmund Russel and others emphasize that environmental concerns on pollution emerged early. For a wider discussion of the importance of WWII as a turning point see Simo Laakkonen, Richard Tucker, Timo Vuorisalo, "Conclusions: World War II and Its Shadows," in Simo Laakkonen, Richard Tucker, Timo Vuorisalo, eds., *The Long Shadows: Toward a Global Environmental History of the Second World War* (Corvallis: Oregon State University Press, 2017), 315-332.

broadcasting companies in the interwar years. The sixth cycle took place in the post-war decades, when television broadcasting expanded to the industrialized countries and thereafter across the globe. The seventh cycle consists of the internet-based new media. These forms of media have made up global networks of power, affected the use and abuse of natural resources, and controlled our hearts and minds until this day.

As we will examine the unique, historically-situated, role that television played in establishing the modern environmental reporting, we will specifically focus on the sixth cycle. When we take into consideration the fact that for over half a century, television has been the primary mass media format in Western democracies and also in left- and right-wing dictatorships, it is surprising to note that the environmental history of television remains almost-completely unsurveyed terrain. In 2005, thirty or so environmental historians presented varied and intriguing perspectives on the directions in which the field should expand in future – and yet none of them mentioned television.¹⁵ We are aware of only one study focusing on the historical development of environmental programmes on television: in her dissertation, Monica Djerf-Pierre examined the development of environmental news reporting on Swedish television from 1962 to the 1990s. Nevertheless, she trimmed the early years of television from the scope of her study and approached her theme primarily from an institutional and quantitative perspective.¹⁶

Our case study on the environmental history of Finnish television that we present here can be considered an entrée into the qualitative study of the environmental history of television. In addition, we approach the topic from a novel chronological perspective, beginning our exploration from the earliest stages of television broadcasting. In this article, we explore how environmental topics were introduced on television to the Finnish public prior to Earth Day or rather the European Nature Conservation Year, held for the first time in 1970, which could be considered the genesis for the important symbols of the development of modern environmental awareness.¹⁷

For this reason, we focus on the time period 1958–1969 in our research. We begin our examination of television programmes in 1958, when the state-owned public radio company

¹⁵ Adam Rome et al., "Anniversary Forum: What Next for Environmental History?," *Environmental History* 10 (January 2005): 30–109.

¹⁶ Monika Djerf-Pierre, *Gröna nyheter: miljöjournalistiken i televisionens nyhetsändningar 1961–1994* (Göteborg: Institutionen för journalistik och masskommunikation, Göteborgs universitet, 1996).

¹⁷ John McCormick, *Reclaiming Paradise: The Global Environmental Movement* (Bloomington: Indiana University Press, 1989), 67.

Oy Yleisradio Ab (the Finnish Broadcasting Company) began regular television broadcasts in Finland under the moniker Suomen Televisio (STV, Finnish Television). STV was not the only television station in Finland at the time, nor even the first, but we focus on its broadcasts and those of its successor, because the Finnish Broadcasting Company was by far the largest producer of programmes during the period of research and generally the most important media provider in Finland (Figure 1.).¹⁸ As in other Western European countries, the Finnish Broadcasting Company belonged to a centralized system that was under parliamentary oversight. It was a BBC-style public service, which is why its initial objective was to provide unbiased and neutral reporting.¹⁹

We focus here on water pollution and protection issues because this study is part of a long-term research programme studying the environmental history of the Baltic Sea.²⁰ We had originally planned a comparative study of environmental broadcasting in the Baltic Sea Region including western democracies (Finland and/or Sweden) and a Communist state (the Soviet Union, Estonian SSR), however, doing so proved impossible. Only a few programmes on environmental topics from Soviet times were found in the archives of Estonian television (ETV). The Swedish television (SVT) archives, on the other hand, censored its qualitative bodies of data by denying access to printed content reports. Hence, we paid a visit to the renowned BBC television archives in Reading, England as well. But the BBC's archival material from the early days was of poor quality and their content reports had not been digitized. The data contained in the archives managed by Finnish Public Broadcasting proved, thus, to be a superb source for our research.

The data sources used in this study consist of written content reports (WCR) collected from the database of the Finnish Broadcasting Company's television archives as well as digitized versions of original programme recordings (OPR). The written content reports are post-broadcast reports created for all television programmes broadcast by the Finnish Broadcasting Company. The contents of these reports vary, but the reports used as data in this

¹⁸ Raimo Salokangas, *Yleisradion historia 2.osa. 1949-1996. Aikansa oloinen* (Porvoo: WSOY, 1996), 115–119.

¹⁹ Pernaa, Ville: *Uutisista, hyvää iltaa. Ylen tv-uutiset ja yhteiskunta 1959–2009* (Hämeenlinna: Karttakeskus, 2009), 27–31; Jukka Kortti, *Näköradiosta digiboksiin. Suomalaisen television sosiokulttuurinen historia* (Helsinki: Gaudeamus, 2007).

²⁰ For previous studies of the project on the environmental history of pollution and protection of the Baltic Sea, see the special issues edited by Simo Laakkonen and Sari Laurila, "The history of urban water management in the Baltic Sea Region", *European Water Management* 4 (1999): 29-76 and "Man and the Baltic Sea," *Ambio: A Journal on the Human Environment*, 4-5 (2001): 263-326 and Simo Laakkonen et al., "Science and governance of the Baltic Sea," *AMBIO – A Journal on the Human Environment*, April, 2-3/2007, 123-286.

study always contain the following minimum information: programme name, full length, date of first broadcast, type of broadcast, duration, topic as well as some sort of description of the programme's contents. In practical terms, these descriptions of programme contents varied from a few sentences to detailed reports several pages in length. At times, the content reports also contained more detailed information, for instance, the inserts used in the programme or the length of the reportage, potential reruns, the names of journalists or units who were responsible for creating the programme.

The content reports were gathered from the television archives database by conducting searches of over a hundred terms related to water pollution and water protection. However, it should be noted that it helps to be thoroughly familiar with the topic before searching digital archives, because general research terms do not usually deliver. The more specific search terms we used were selected based on previous experience. The body of data was not limited according to programme type, and thus includes content reports on news programmes, in-depth reportages, current affairs shows, and documentaries. Programmes cards on 184 different programmes, inserts or reportages were included in the final body of data. Applying methods of qualitative content analysis, we will investigate which topics related to water pollution were covered on Finnish Public Broadcasting television programmes and at which point during the period of study, and when. The content reports offer a good overall quantitative and qualitative view of the programmes broadcast by Finnish Public Broadcasting during 1958–1969 that dealt with water pollution.

However, because one of our goals was to investigate the qualitative content and narrative approach of these programmes in greater detail, we ordered the digitization of selected original programme recordings. Digitizing all of the nearly two hundred programmes was unfeasible, because digitization is a fee-based service and not all of the original recordings or their audio tracks had survived to the present day. Nonetheless, we strove to select from the body of programmes a representative sample for digitization, in order to cover the entire period of study and the various themes being investigated as effectively as possible. We also aimed for comprehensiveness of programme genre. In the end, we selected a total of thirty-six programmes for digitization based on the content reports (Figure 2.).

From this body of digitalized data, we selected a few representative shows, which, through a more thorough examination, allow us to depict qualitative shifts in television journalism across themes during the period of study, in such aspects as the role of journalists, audio-visual characteristics, thematic compilation and editing. In this sense, we are not

treating the programmes as ‘peepholes’ into a past reality, but as re-presented versions of reality, in other words representations.²¹ Relying on frame analysis, we attempt to discern the conception of reality the Finnish Public Broadcasting television programmes then offered relating to the theme of water pollution. In this case, what is relevant is not the frames themselves but their content. As David Deacon et al. have noted, ‘it is the content of what is contained that is of paramount importance’.²² Consequently, our study on contemporary environmental history falls under the rubric of digital environmental humanities as well.²³

In our study we focus on four broad water pollution issues that proved most prominent in the data: nuclear testing and radioactive fallout, oil pollution, toxic substances and industrial emissions. In addition, we also reflect on why the theme of agricultural run-off was practically absent from television.

Nuclear Tests and Radioactive Fallout

Both television broadcasting and environmental problems expanded rapidly in all industrial nations during the Cold War.²⁴ The first theme to emerge in television programming at the very beginning of our period of study was nuclear testing and the consequent radioactive fallout.²⁵ The issue spawned uncertainty and questions in Finland, as one of the Soviet Union’s nuclear test sites was located on the island of Novaya Zemlya in the Arctic Ocean, about 1,240 miles from Finland’s capital. Due to this geographical proximity, fears of radioactive fallout traveling to Finland along air currents were real. The Finnish authorities

²¹ Jeffrey Richards, “Film and television: the moving image,” in Sarah Barber and Corinna M. Peniston-Bird, eds. *History beyond the text. A student’s guide to approaching alternative sources* (New York: Routledge, 2009), 73–74; Norman Fairclough, *Media discourse* (London: Edward Arnold, 1995), 136.

²² David Deacon, Michael Pickering, Peter Golding, and Graham Murdock, *Researching Communications. A Practical Guide to Methods in Media and Culture Analysis* (London: Hodder Education, 2007), 160.

²³ For more information on the environmental digital humanities see, for example, Finn Arne Jørgensen, “The Armchair Traveler’s Guide to Digital Environmental Humanities,” *Environmental Humanities*, 4:1, 2014, 95–112; John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (Chicago, IL: Chicago University Press, 2015); Charles Travis and Poul Holm, “The Digital Environmental Humanities—What Is It and Why Do We Need It? The NorFish Project and SmartCity Lifeworlds,” in Charles Travis, Alexander von Lünen, eds., *The Digital Arts and Humanities: Neogeography, Social Media and Big Data Integrations and Applications* (Springer: Switzerland, 2016), 187–204.

²⁴ For a wider perspective, see J. R. McNeill and Corinna R. Unger, eds., *Environmental Histories of the Cold War* (Cambridge: Cambridge University Press, 2010) and Simo Laakkonen, ed., “Militarized Landscapes: Environmental Histories of the Cold War,” special issue, *Cold War History* 16 (November 2016), 377–481.

²⁵ For a seminal study of the reactions following atmospheric atom bomb tests and consequent radioactive fallout, see Robert A. Jacobs, *The Dragon’s Tail: Americans Face the Atomic Age* (Amherst: University of Massachusetts Press, 2010). For the special context of reporting in Northern Europe see, Esko Salminen, *The Silenced Media: The Propaganda War between Russia and the West in Northern Europe*. Translated by Jyri Kokkonen (New York: St. Martin’s, 1999).

did not have atmospheric radioactivity monitoring systems at their disposal in the late 1950s–early 1960s, so contemporaneous measurements do not exist. It has later been estimated that, of the 91 atmospheric nuclear tests conducted on Novaya Zemlya in the years 1957–1962, in at least 14 cases direct radioactive fallout may have been carried to Finland.²⁶

In the late 1950s and early 1960s, Finnish television programming zeroed in on the nuclear ban negotiations held by the opposing parties involved in the Cold War in particular.²⁷ When combined with Finnish television’s journalistic ideals of neutral reporting, the aforementioned lack of measurement instruments led to circumstances in which the coverage of nuclear pollution focused on these international test ban conferences.²⁸ An exception was a May 1959 current affairs report on the island of Saltholm, located in the Baltic Sea between Denmark and Sweden, which local health authorities had sequestered after inhabitants had been subjected to radioactive irradiation that was presumed to have resulted from increased Soviet nuclear testing in the autumn of 1958.²⁹

The superpowers’ nuclear test ban negotiations fell apart in the autumn of 1961, and the Soviet Union subsequently accelerated its testing programme. The issue of radioactive threat became timely in Finland once more, especially since national radiation monitoring was still in its infancy and information on tests conducted by the Soviet Union came from second- and third-hand sources.³⁰ As was typical for the journalistic culture of the early 1960s, the authorities’ reaction to the threat of radioactive fallout was to present a reassuring face to the public. Television coverage included, for instance, radiation measurements taken

²⁶ Jussi Paatero and Juha Hatakka, “Ydinkokeiden vaikutukset ilmakehässä,” in Jussi Paatero and Irma Ylikangas, eds., *Ydinkokeista Fukushimaan – keinotekoinen radioaktiivisuus ympäristössä*, 23–25; For political issues concerning journalism, see Esko Salminen, “The struggle over freedom of speech in the North: the Finnish press gave obeisance to Moscow, but did not succumb to the Kremlin’s propaganda programme during the Cold War years 1968–1991,” *Scandinavian Journal of History*, 23 (1998): 239–251.

²⁷ For the background of the ban, see, for example, Robert A. Divine, *Blowing on the Wind: The Nuclear Test Ban Debate, 1954–1960* (New York: Oxford, 1978) and Glenn T. Seaborg, *Kennedy, Khrushchev and the Test Ban* (Berkeley, CA: University of California Press, 1981).

²⁸ *Kamerakerros 154*, 14 October 1958 (WCR); *Kamerakerros 164*, 31 October 1958 (WCR); *News and Valokeilassa*, 1 December 1961 (WCR); For Sweden, see Djerf-Pierre, *Gröna nyheter*, 123–126

²⁹ *Kamerakerros 268*, 8 May 1959 (WCR & OPR). The inhabitants of the island were dependent on rain water.

³⁰ Arno Aho, *Suomessa voitaisiin huoletta kulkea. Ydinaseiden ja ydinpolttoainekysymyksen seuranta Suomessa kylmän sodan aikana* (Helsinki: STUK-YTO-TR 201, 2004), 60. For a wider discussion, see Toshihiro Higuchi, “Atmospheric Nuclear Weapons Testing and the Debate on Risk Knowledge in Cold War America, 1945–1963,” in *Environmental Histories of the Cold War*, 301–322; Neil Oatsvall, “Weather, Otters, and Bombs: Policymaking, Environmental Science, and U.S. Nuclear Weapons Testing, 1945–1958,” in Edwin A. Martini, ed., *Proving Grounds: Weapons Testing, Militarized Landscapes, and the Environmental Impact of American Empire* (Seattle, WA: University of Washington Press, 2015), 43–74.

in Lapland, a region in northernmost Finland, as well as the ceremonial inauguration of one of Finland's first automatic radiation alarms in the country's third-largest city, Turku.³¹ The best example of this attitude is, however, a broadcast of the current affairs programme *Kamerakierros* on a test station measuring radioactivity in the upper layers of the atmosphere. This report was shown a week after the Soviet Union detonated the largest nuclear explosive in history, the 'Tsar Bomb', at Novaya Zemlya in October 1961. The programme assuaged fears of radioactive fallout by reporting that sharp fluctuations in radiation had recently been detected at the measurement station, but that the peaks had 'only lasted for a few hours and were harmless in intensity'.³²

The signing of the Partial Test Ban Treaty, which prohibited nuclear weapons tests or any other nuclear explosions in the atmosphere and outer space or under water, was one of the watershed events of 1963 according to Finnish television. It was clear from the text of the treaty that the goal was to protect both human lives and the environment from radioactive radiation.³³ As a result of the treaty, the Soviet Union stopped conducting atmospheric nuclear tests at Novaya Zemlya, the average levels of radioactivity in the atmosphere started to decrease, and with the exception of the turn of the year 1966–1967, when alarmingly high radioactivity levels were unexpectedly measured in Finland, the topic of radioactive fallout eventually disappeared from Finnish television.³⁴ In conclusion, despite threatening to induce the end of the world, the cultural half-life of radioactive fallout turned out to be surprisingly short in modern media.

Marine Oil Pollution: Active Reporting from the Beginning

Oil has never been plentiful in the northern Baltic, for which reason Finland has been utterly dependent on imported oil since the late nineteenth century. Indeed, Finland did not make the final shift to an oil-based economy until after World War II, when the national oil company (Oy Neste Ab) was established. The company's first oil refinery was completed in 1957, after which oil imports grew from approximately half a million tons per annum to almost 10

³¹ *TV-Uutiset ja Valokeilassa. Uutiset*, 23 October 1961 (OPR & WCR); *Kamerakierros* 835. *News*, 3 November 1961 (OPR & WCR).

³² *Kamerakierros* 838. *News*, 7 Nov. 1961 (WCR); Aho, *Jotta Suomessa voitaisiin huoletta kulkea*, 60.

³³ *Tapahtui vuonna 1963*, 31 December 1963 (WCR); See <http://www.state.gov/t/isn/4797.htm#treaty>. Cited August 5, 2012; McCormick, *Reclaiming Paradise*, 51–55.

³⁴ *Myöhäisuutiset*, 29 December 1966 (WCR); *Varhaisuutiset*, 5 January 1967 (WCR); *Varhaisuutiset*, 13 January 1967 (WCR).

million tons a year and transitioned over the following decade from lighter oil products to heavier oil products and eventually crude.³⁵

Transporting oil in the shallow, shoal-filled northern Baltic Sea was, however, a risky proposition. The continuously growing number of oil tankers entered the Baltic Sea through the straits of Denmark, where the shipping lane was only slightly over thirty feet deep. Once they made it into Finnish territories, the tankers were forced to navigate their way to shore through narrow, serpentine shipping lanes that wound their way through thousands of granite islands and shoals. When one takes into account the poor condition of ships and navigational technology following the war years, as well as the fact that the Baltic Sea is the only sea in the world that may completely freeze over at times, it is no wonder that tankers that sailed the Baltic were exceptionally susceptible to accidents. In addition to unintentional accidents, oil found its way into the sea through intentional discharge, as ships emptied their ballast tanks and bilge water or washed out their oil tanks.³⁶

Marine oil pollution already appeared on Finnish television for the first time in 1958, when an in-depth television news report investigated the shipwreck of the Norwegian tanker *M/T Siranda* off the coast of southwestern Finland, an incident that had resulted in the release of over 500 tons of crude oil into the sea of the vulnerable archipelago. The accident was televised, thanks to a camera crew that had succeeded in reaching the site of the *Siranda* rescue operation on another vessel.³⁷ The troubling news continued in 1960, with the reports of the shipwreck of the Finnish tanker *Wirma*. In 1961, there was a television report on the running aground of the Swedish tanker *M/S Coolaroo* in the waters off Helsinki (Figure 3.). News coverage included dramatic footage of the vessel, which had run aground and split in two in the heavy seas, as gloomy music played in the background and the narrator explained that almost 800 tons of oil had ended up ‘devoured by the sea’, sparking fears ‘that oil would once again pollute Helsinki’s shores’.³⁸

³⁵ Suomen virallinen tilasto 1:A, Ulkomaankauppa 1945-1970.

³⁶ Simo Laakkonen and Antti Lehmuskoski, ”Musta meri. Öljyonnettomuuksien ympäristöhistoriaa Suomessa vuoteen 1969” [The Black Sea. The environmental history of oil accidents and spills in Finland prior to 1969], *Historiallinen Aikakauskirja* 103 (2005): 382–390; Markku Kuisma, *Kylmä sota, kuuma öljy. Neste, Suomi ja kaksi Eurooppaa* (Porvoo: WSOY, 1997), 14–16, 251, 519, 565.

³⁷ *Kamerakierros 143*, 24 September 1958 (WCR & OPR). A few days before the *Siranda* ran aground, there was also a television report on a collision between two oil tankers on the Gulf of Oman. *Kamerakierros 141*, 20 September 1958 (WCR); Laakkonen and Lehmuskoski, *Musta meri*, 387.

³⁸ *Kamerakierros 399. News*, 20 January 1960 (WCR); *Uutiset ja Valokeilassa*, November 1961 (WCR); the quotation concerning the wreck of *Coolaroo* is taken from *Finlandia-katsaus 568*, November 1961 (OPR).

In 1963, television news crews accompanied a coast guard vessel to survey oil that had washed ashore in the S-W archipelago of Finland. In this case, the assumption was that the oil had been intentionally discharged and it was reported that the oil slick, which was over four-and-a-half inches thick in places, had polluted the shoreline for dozens of kilometres, killing ‘all life on the rocky shores and in the reed-beds’. In reality, the oil had ended up in the sea as a result of a leak sprung by the English vessel *M/T Hydatina* two weeks earlier, but the state oil company had kept the incident a secret, and it was not revealed to outsiders until after the springtime thaw of the sea ice, when the oil washed up on shore.³⁹

The environmental pollution resulting from intentional oil discharge was mentioned on television for the first time in 1959, when television news reported on a tanker that emptied its cargo into the sea off Denmark, resulting in an enormous oil spill that covered the waves and waterfowl that then had to be killed by local fishermen.⁴⁰ The same year, Finnish television broadcasted a Swedish Television segment on a Nordic Council discussion that sought methods of pressuring the socialist states in the Baltic region to join the OILPOL Convention, which had prohibited the intentional discharge of oil in the world’s seas since 1954.⁴¹

Reporting on oil accidents and discharge on television was difficult for a variety of reasons, even when they took place off the coasts of Finland. Intentional discharge was forbidden, which meant it took place out on the open sea under the cover of night. In addition, neither the oil companies nor the shipping companies informed the authorities, let alone the media, about oil spills that took place at sea; on the contrary, the companies actively strove to conceal such incidents, as in the case of the *M/T Hydatina*. It was also challenging to find high-quality news material and on-site footage, because television news lacked its own dedicated crews and in the early years there was a lack of lightweight portable cameras.

And yet oil pollution was covered on television from 1958 onwards. This might have been facilitated by the dramatic nature of the maritime oil spills and the visual power of shipwrecks, which suited both the medium of television and the news ideals of the late

³⁹ *Uutiset*, 7 May 1963 (OPR).

⁴⁰ *Kamerakierros 390. News*, 7 January 1959 (WCR).

⁴¹ STV, *Aktuellt. Pohjoismaiden neuvosto*, 10 November 1959 (WCR & OPR); For the early history of international marine oil pollution, see Anna-Katarina Wöbse, “Oil on Troubled Waters? Environmental diplomacy in the League of Nations,” *Diplomatic History* 32 (September 2008): 519–538.

1950s–early 1960s, which emphasized atmosphere and incident footage. The aim of state-owned television to remain neutral in societally controversial issues was evident in the way attention was focused primarily on spills and intentional discharge from foreign tankers, even though neither was unheard of from Finnish vessels.⁴² In essence, television concentrated primarily on the incidents themselves and their immediate causes and consequences.

Television's approach to dealing with issues of oil pollution changed in the late 1960s, as demonstrated in the coverage of the largest oil catastrophe of that time – the 1967 *Torrey Canyon* disaster in the English Channel – as well as three major oil spills that took place in Finnish waters in 1969. The first major difference had to do with the speed and breadth of reportage: news of spills now reached viewers when still fresh, sometimes on the same day and coverage continued longer than before.⁴³ This was the case in the *Torrey Canyon* incident, with the new Finnish Public Broadcasting correspondent in London, Pertti Salolainen, who later became a member of parliament, minister and the deputy prime minister, reporting to Finnish viewers on the accident almost every day for two weeks.⁴⁴ In the second place, a new, more effective approach to information gathering, which did not shirk social commentary, produced news material that challenged the oil company's official truth of 'minor and manageable' oil pollution. Despite the prevailing ideal of the late 1960s, in which news was 'fast, appealing, colourful and dramatic',⁴⁵ discussions of oil pollution during this period began to break free of the shackles of the news broadcast genre, and current affairs programmes started dealing with broader questions regarding the safety of oil transport and questions of social responsibility.⁴⁶ In sum, oil pollution was the first

⁴² Accidents that involved the Finnish tankers *M/T Panu* (1959), *M/T Wiking* (1965), *M/T Pensa* (1966) and *M/T Wipunen* were not reported on television at all. Cf. Laakkonen and Lehmuskoski, *Musta meri*, 390-392.

⁴³ Palva: *Myöhäis uutiset*, 1 May 1969 (OPR); *Varhaisuutiset*, 2 May 1969 (WCR); *Myöhäis uutiset*, 3 May 1969 (WCR); *Varhaisuutiset*, 5 May 1969 (OPR); *Myöhäis uutiset*, 5 May 1969 (KSO); *Yö uutiset*, 5 May 1969 (WCR). Eira: *Myöhäis uutiset*, 11 December 1969 (WCR); *Ajankohtainen kakkonen*, 12 December 1969 (WCR). Raphael: *Varhaisuutiset*, 16 December 1969 (WCR); *Myöhäis uutiset*, 16 December 1969 (WCR); *Yö uutiset*, 16 December 1969 (WCR) *Varhaisuutiset*, 17 December 1969 (WCR).

⁴⁴ *Myöhäis uutiset*, 19 March 1967; *Varhaisuutiset*, 20 March 1967; *Myöhäis uutiset*, 21 March 1967; *Varhaisuutiset*, 23 March 1967; *Myöhäis uutiset*, 24 March 1967; *Varhaisuutiset*, 25 March 1967; *Myöhäis uutiset*, 26 March 1967; *Myöhäis uutiset*, 27 March 1967; *Varhaisuutiset*, 28 March 1967; *Myöhäis uutiset*, 28 March 1967; *Varhaisuutiset*, 29 March 1967; *Myöhäis uutiset*, 30 March 1967; Pernaa, *Utisista, hyvää iltaa. Ylen tv-uutiset ja yhteiskunta 1959–2009*, 164; MP Pertti Salolainen, b. 1940 in Helsinki, interviewed 5 May 1998 in Helsinki by Simo Laakkonen 1998.

⁴⁵ Pernaa, *Utisista, hyvää iltaa. Ylen tv-uutiset ja yhteiskunta 1959–2009*, 90; Pertti Hemánus, *Reporadion nousu ja tuho* (Helsinki: Otava, 1972), 68.

⁴⁶ *Ajankuva*, 12 June 1969 (WCR); *Meriturvallisuus 1. Jos laineilla on öljyä*, 24 September 1969 (OPR).

environmental issue that was the subject of continuous reporting over the whole period under study.

Hazardous Substances: Silence on *Silent Spring*, Noisy Debates on Mercury

Modern environmental protection is often considered to have had its inception with the publication of *Silent Spring*, Rachel Carson's 1962 work warning of the dangers of insecticides, particularly DDT (dichlorodiphenyltrichloroethane). Her book was an enormous sales success, especially in the United States, where it played a significant role in the eventual restriction and total prohibition of the use of DDT and eleven other substances. Even though in numerous Western European countries the work rose to the top of sales lists and sparked lively conversation, reactions to it varied greatly and the related emergence of the international environmental movement conceals within it significant local and regional differences.⁴⁷

Silent Spring was soon published in Finland as a ten-part series on the main editorial page of the country's largest daily newspaper, *Helsingin Sanomat* and a Finnish version of the book appeared in 1963. And yet the work or the articles on it did not arouse much of a reaction on the pages of the major dailies.⁴⁸ The situation on television was much the same: searches of the Finnish Public Broadcasting's television archives database conducted with the search terms 'Rachel Carson' and 'Äänetön kevät' (*Silent Spring* in Finnish) did not yield a single result.

Generally speaking, the reception of Carson's translated work was lukewarm in Finland, because the whole issue of environmental poisoning was still only of minor significance in the early 1960s. For instance, the use of DDT in the recently war-torn and -impoverished country was only a fraction of that of the United States or even of Finland's neighbour Sweden, which escaped war.⁴⁹ On the other hand, an episode of the popularized television programme *Tiedettä jokamiehelle* (Science for Everybody) on the dangers of insecticides that was broadcast in the summer of 1965 clearly indicates that its creators were

⁴⁷ McCormick, *Reclaiming Paradise*, 55–56; J. Valerie and Craig K Harris, "Noisy Winter: The DDT Controversy in the Years before *Silent Spring*," *Rural Sociology* 63 (1998); Edmund Russell, *War and nature: Fighting humans and insects with chemicals, from World War I to Silent Spring* (Cambridge: Cambridge University Press, 2001); for the UK, see John Sheail, *Pesticides and nature conservation: The British experience 1950–1975*. (Oxford: Clarendon Press, 1985), 227–228.

⁴⁸ Sari Laurila, "Itämeren ympäristötutkimus Suomessa ennen 1960-lukua," in Simo Laakkonen, ed. Special Issue, "Kohti Itämeren ympäristöhistoriaa", *Historiallinen aikakauskirja* (2007): 9.

⁴⁹ Räsänen, *Converging Environmental Knowledge*, 164–165.

aware of Carson's work and the discussion it had stimulated, even though neither was mentioned by name during the show.⁵⁰

This programme is also a good example of the fact that television programming policies did not make an abrupt about-face in the mid-1960s. In the manner of shows from the era, the show was visually and expressively rather stiff and consisted primarily of long speeches that the experts read directly into the camera from paper; the reporter did not intervene with pointless interjections or additional questions. Expert statements that displayed a positive attitude towards the use of insecticides appeared at the beginning and end, in a sense granting the authorities' reassuring statements 'the upper hand'.⁵¹

However, the plight and mass deaths of birds, especially large birds of prey, had made appearances on Finnish television already before the aforementioned episode. The reproductive difficulties of American eagle species and the threat of their imminent extinction had been reported on television as early as 1961.⁵² The plight of the sea eagle, whose habitat was found in the Baltic Sea region, was covered on two programmes in 1964.⁵³ Based on the title of the first programme, *Hätähuuto viimeisten puolesta* (A Cry for Help for the Final Few), one can deduce that the sea eagle's circumstances were considered relatively dire. The tone of the second programme was even gloomier, as it reported that the sea eagle was already 'on the verge of extinction'.⁵⁴ These concerns most likely originated in Sweden, where the Swedish Society for Nature Conservation, the national conservation organization, had in late 1963 revealed alarming information on the sea eagle's plight and the impact of mercury on its reproductive capability.⁵⁵

Mercury was mentioned for the first time on Finnish television in the spring of 1964, after information on high mercury levels detected in Swedish chicken eggs had leaked into the press and that country's poison board had decided to prohibit the widespread use of aldrin

⁵⁰ This notion is based on the fact that the Finnish title of the programme (*Elämänmyrky* [Life poisons]) had been taken from the Finnish translation of the book *Silent Spring*, in which the term 'biocide' had been translated using this precise yet unusual Finnish term. Carson 1962, 13; Harri Siiskonen, "Silent Spring and the Nordic Agricultural Magazines," *Scandinavian Economic History Review* 50 (2002): 18–19.

⁵¹ *Tiedettä jokamiehelle: Elämänmyrkyt*, 10 June 1965 (OPR); See also Kortti, *Näköradiosta digiboksiin*, 118.

⁵² *Kamerakerros* 626, 3 January 1961 (WCR & OPR).

⁵³ *Hätähuuto viimeisten puolesta*, 29 May 1964 (WCR); *Varhaisuutiset*, 11 December 1964 (WCR).

⁵⁴ In addition to the sea eagle (*Haliaeetus albicilla*), at least the Eurasian eagle owl, peregrine falcon and golden eagle were reported as being of threatened status. *Hätähuuto viimeisten puolesta*, 29 May 1964 (WCR); *Morning news*, 11 December 1964 (WCR).

⁵⁵ Pekka Nuorteva, *Elohoepa Suomen luonnossa ja hallintokoneistossa* (Porvoo: Werner Söderström Osakeyhtiön laakapaino, 1976), 26.

and dieldrin.⁵⁶ The scandal faded rapidly, however, after studies found only minute amounts of mercury in Finnish chicken eggs.⁵⁷ The discussion of the poisoning of the environment took a new turn in the spring of 1967, when the weekly current-affairs programme *Keskiviikko* (Wednesday) revealed that mercury levels in Finnish fish exceeded the safety limit established by the World Health Organization (0.5 milligrams per kilo) many times over.⁵⁸ The highest levels were discovered in fish taken from waterways located near large paper factories since the wood processing industry used phenylmercury as a slime and mould repellent (Figure 4).⁵⁹ Additionally, the show revealed that according to the latest Swedish research results, less-dangerous inorganic mercury compounds such as phenylmercury converted into the most dangerous form of mercury, methylmercury, when introduced into waterways.⁶⁰ This information meant that Finns were no longer safe from the dangers of mercury, even though a representative from the wood-refining industry interviewed on the programme tried to convince audiences that the mercury used by the Finnish forest industry did not pose a health threat to Finns.⁶¹

The fact that the previously described revelations reached the consciousness of the public at large specifically through television is no coincidence. *Keskiviikko* was a programme that represented Finnish Public Broadcasting's new, more investigative and critical journalistic approach; its aim was to reveal injustices in Finnish society. The programme became known especially for its so-called 'revolver interviews', in which the interviewed experts no longer enjoyed the immunity they had in the past and were presented with difficult questions.⁶² In general, the original cautious approach started gradually to be replaced by a more investigative, radical and opinionated 'informative programming policy'.⁶³

⁵⁶ Djerf-Pierre, Gröna nyheter, 138–139.

⁵⁷ *Varhaisuutiset*, 25 March 1964 (WCR & OPR); *Uusi Suomi*, 25 March 1964.

⁵⁸ *Keskiviikko*, 5 April 1967 (OPR); Nuorteva, Elohopea Suomen luonnossa ja hallintokoneistossa, 54; Räsänen, *Converging Environmental Knowledge*, 40.

⁵⁹ Niklas Jensen-Eriksen, *Läpimurto. Metsäteollisuus kasvun, integraation ja kylmän sodan Euroopassa 1950–1973* (Helsinki Suomalaisen Kirjallisuuden Seura, 2007), 308; Pekka Nuorteva and Jouko Soveri, *Elohopeasade* (Helsinki: Kustannusosakeyhtiö Tammi, 1979), 111.

⁶⁰ Räsänen, *Converging Environmental Knowledge*, 166.

⁶¹ *Keskiviikko*, 5 April 1967 (OPR).

⁶² Pernaa, *Uutisista, hyvää iltaa*, 70.

⁶³ Salokangas, *Yleisradion historia 2.osa*, 249, 261–265; Eino S. Repo, Kari Ilmonen, N-B Storbom, Mauno Tamminen and Ville Zilliacus, *Yleisradion suunta. Yleisradiotoiminnan tehtävät ja tavoitteet* (Weilin+Göös: Helsinki, 1967), 12–13.

Further, by 1967, Finnish Public Broadcasting had developed into a sufficiently strong and independent institution that it was able to repel state attempts to silence it. Sales of fish in the country had collapsed as a result of the revelations made on the programme and the Minister of Agriculture, who was concerned about the livelihood of fishermen, asked the director of Finnish Public Broadcasting to stop covering the mercury issue on television. The director rejected this suggestion, stating that public safety weighed more on balance than sales of fish.⁶⁴ Consequently, an intense debate on mercury levels in fish, the health effects on the populace, appropriate safety limits and damage to the fishing industry continued on television.

Concern about the health effects of eating fish increased more than ever when the details of the Minamata mercury catastrophe in Japan began to come to light in 1968. The Finnish Broadcasting Company sent a reporter to Sweden in fall 1968 to interview Jun Ui, a Japanese chemist, who had been involved in investigations into the Minamata and Niigata mercury poisoning catastrophes. He was in Stockholm that year because he explored industrial pollution cases in Europe as a researcher for the World Health Organization (WHO).⁶⁵ In an interview broadcast on Finnish television news, Ui characterized the Finnish mercury-poisoning situation as ‘rather serious’.⁶⁶ A few days later, another show was broadcast on Finnish television that showed Japanese footage of the Minamata disease: emotionally charged images of the catastrophe’s child victims, who suffered from convulsions and deformities.⁶⁷ Thus, television demonstrated its international visual power.

After the heated debates of 1968⁶⁸, coverage of the mercury theme on television decreased, presumably because the Central Association of Finnish Woodworking Industries, which represented the country’s overwhelmingly largest branch of industry and mercury

⁶⁴ Eino S. Repo, *Pihlajanmarjat. Muistelua vuosilta 1939–1969* (Helsinki: Weilin+Göös, 1975), 218.

⁶⁵ “Obituary: Jun Ui,” *Kyodo News*, Nov 12, 2006.

<http://www.japantimes.co.jp/news/2006/11/12/national/obituary-jun-ui/#.WUv9LSuQz-Y>; Dr. Jun Ui, Biography, http://www.rera.org/eg_organization_Jun-Ui.html In 1970 the Finnish Association for Nature Conservation granted him a prize for warning of the dangers of environmental pollution posed by mercury.

⁶⁶ *Varhaisuutiset*, 18 October 1968 (WCR); Nuorteva, Elohopea Suomen luonnossa ja hallintokoneistossa, 202–205.

⁶⁷ *Me kysymme*, 21 October 1968 (WCR)

⁶⁸ *Myöhäisuutiset*, 28 April 1968 (WCR); *Varhaisuutiset*, 4 April 1968 (WCR); *Silmätikku*, 7 May 1968 (WCR); *Nous hauki puuhun laulamaan*, 3 September 1968 (WCR); *Sju dagar*, 5 October 1968 (WCR); *Myöhäisuutiset*, 8 December 1968 (WCR).

polluter, announced under pressure from the Minister of Agriculture that it would stop using mercury in all of its member factories.⁶⁹

The notion of an environmental awakening sparked by Carson's work has also been widely adopted in Finland, which speaks to the predominance of American research in environmental history and, correspondingly, a lack of local empirical research in the field.⁷⁰ Our results corroborate previously presented views according to which Carson or her works did not have a significant direct impact on the Finnish environmental debate. Instead, the influences on the Finnish debate came from the country's western neighbour, Sweden. Therefore, the debate on television did not focus on the United States, DDT, agriculture or rural nature primarily but rather on Finland, forest industry, mercury and local water pollution, which were more pressing problems in the land of a thousand lakes.

Industrial Polluters: From Silence to Selective Criticism

Of the Western European nations, Finland was in relative terms the most forested. It comes as no surprise, then, that the largest percentage of Finnish exports by a large margin were products of the mechanical and chemical forest industry. The chemical forest industry was also by far the largest polluter of Finnish waters and air. As the production of the chemical forest industry rose to pre-World War II levels in the late 1950s, the impact was evident for all to see and smell. Criticism of the water pollution caused by the forest industry remained insignificant, however, especially in those mill towns where wood companies wielded a strong grip on local newspapers and politics.⁷¹

The state-owned Finnish Broadcasting Company did not, in principle, face the same restrictions as the local press. Yet the forest industry's position of power in the national economy and Finnish Television's attempt to remain outside societal controversy led to circumstances in which discussions of industrial discharge or environmental pollution remained almost uncovered on television far into the 1960s.⁷² In practice, the question of

⁶⁹ Jensen-Eriksen, *Läpimurto*, 308; Nuorteva and Soveri, *Elohopeasade*, 111.

⁷⁰ Tuomas Räsänen, "Converging Environmental Knowledge: Re-evaluating the Birth of Modern Environmentalism in Finland," *Environment and History* 18 (2012): 160–161.

⁷¹ Sami Louekari, "'Meidän saamaton Ateenamme.' Ympäristöasenteet Jyväskylässä" in *Harmaat aallot*, 194; Rauno Lahtinen, *Ympäristökeskustelua kaupungissa. Kaupunkiympäristö ja ympäristöasenteet Turussa 1890–1950* (Turku: Turun yliopisto, 2005), 68–69; Mia Pitkänen, "Ympäristökysymysten julkisuus teollisuuspaikkakunnalla. Warkauden Lehti paikallisten ympäristökysymysten ja elämäntapojen ympäristösuhteen ilmentäjänä ja määrittäjänä 1970-luvulta nykypäivään," *Alue ja Ympäristö* 27 (1998): 65–78.

⁷² *Kun järvemme likaantuvat*, 14 May 1963; *Suojele vesiä. Kulttuuri, ihminen ja vesistöt*, 28 April 1964

industrial responsibility was avoided by arguing that hunting down the guilty parties was pointless, because in the end ‘we all polluted water’.⁷³

Yet a few minor departures from this official programming policy appeared in the early 1960s. Of these departures, the most noticeable was a documentary ‘Why Wastewater?’, broadcast in autumn 1964, which took a head-on approach to dealing with water pollution in Finland. Referring to wood refining, the programme noted that the industry creates ‘nine-tenths’ of our wastewater. In order to illustrate the magnitude of effluent, the discharge of the wood-refining industry was compared to the daily wastewater load of 20 million people at a time when the population of the country was approximately four and a half million. As a solution to this problem, the programme proposed the construction of wastewater treatment systems at all wood refineries. This was not, however, considered very realistic, because ‘[Finnish] industry in general approaches issues of wastewater with the disdain of the ignorant’, for which reason ‘Finland is gradually turning from the land of a thousand lakes to the land of a thousand polluted lakes’.⁷⁴

Another aspect that made the show unusual was its richness and imaginativeness of expression, which combined pictures, editing, speech, music and above all, contrasts between all of these in order to underscore its message. An example of this is a vignette at the end of the show in which a young couple in love rows across a polluted bay wearing gas masks as the wistful song ‘My Beautiful Homeland’ plays in the background: ‘My beautiful homeland is beyond compare, like a pearl it shines clear and pure...’.

The documentary also demonstrated that while the programming policy of Finnish Television did not support the investigation or presentation of difficult societal issues, this was not necessarily the same thing as active repression. However, it did mean that the personal traits of individual journalists played a notable role in breaking down the lack of institutional support and journalistic barriers. One example is narrator-writer-director Reino Paasilinna (b. 1939) of the aforementioned documentary. Labelling an individual as truly exceptional is not much of a stretch when it comes to Paasilinna, as this self-taught television reporter with no formal education hailing from the wilds of Lapland became, specifically as a result of the social critiques of his documentary programmes, one of the nation’s most divisive public figures of the late 1960s (Figure 5). Paasilinna left television in the 1970s,

⁷³ *News*, 14 May 1963.

⁷⁴ *Miksi likavesiä?*, 1 October 1964 (OPR).

joined the Social Democratic Party of Finland, embarked on a diplomatic career, became a member of parliament, then a member of the European Parliament and then eventually returned to Finnish Public Broadcasting in the 1990s as the company's director. Yet, in the early 1960s, Paasilinna was nothing more than an unknown⁷⁵ young journalist directing his first work for television who applied uncompromising journalistic ideals when choosing to cover the issue of water pollution: 'My philosophy at the time was that Finnish Broadcasting Company needed to deal with subjects that were at least of the scale of Finnish Broadcasting Company, that little subjects weren't enough for us'.⁷⁶

After the programme, the forest industry strove to hinder Paasilinna's work in a variety of ways. Nevertheless, the debate over industrial water pollution developed into a more systematic presence on television in the late 1960s. Interestingly enough, attention was not directed that much at the overwhelmingly largest water polluters, but at various individual state-owned industrial institutions and egregious one-off cases. Particularly prominent were the state-owned factories located in the riverine areas of Finland's western coast.⁷⁷ Most coverage was directed at the factory run by a state-owned fertilizer manufacturer (Typpi Oy) after it started to discharge large amounts of pure ammoniac into a nearby river in the summer 1969. The discharge killed basically all fish downstream and tainted marine fish as far as 60 kilometres off the coast. The company initially tried to hide the discharge and its representative denied on camera that the company was releasing ammoniac into the water.⁷⁸ However, the company subsequently shifted tactics after test results confirmed that the ammoniac could not have originated anywhere else, arguing that the connection between the discharge and the fish die-offs was unproven.⁷⁹ Despite their attempts to silence coverage, the topic rose to and remained on television by and large thanks to the persistent work of a single regional Finnish Broadcasting Company reporter, Pauli Huotari (Figure 6).⁸⁰ As a result of his work, the debate on discharge and damage to the

⁷⁵ Reino Paasilinna, b. 1939 in Petsamo, interviewed 1 March 2012 in Helsinki by Otto Tähtkää.

⁷⁶ Paasilinna, Interview, 1 March 2012.

⁷⁷ *Från dag till dag*, 24 August 1966 (WCR); *Myöhäisuutiset*, 8 October 1966 (WCR); *Ajankuva*, 22 November 1968 (WCR); *Myöhäisuutiset*, 12 August 1969 (WCR); *Me kysymme*, 23 October 1969 (WCR).

⁷⁸ *Me kysymme*, 18 October 1969 (OPR).

⁷⁹ Pauli Huotari, *Typpi Oy – Meidän tehdas* (Helsinki: Otava, 1970), 24–26.

⁸⁰ *Saastuva Perämeri*, 14 October 1969 (WCR); *Ajankuva*, 18 October 1969 (OPR); *Myöhäisuutiset*, 23 October 1969 (OPR). According to Antti Liukkonen, who analyzed the reporting of local newspapers of the Typpi Oy case in 1969–70, bourgeois newspapers criticized the responsible state company notably more than leftwing newspapers. Antti Liukkonen, *Aatteesta arvoihin. Yleispuoluekehitys ja ympäristöpolitiikan jakautuminen*

fishing industry expanded to include the pollution of the entire Bay of Bothnia, the northernmost bay of the Baltic Sea.⁸¹

Why did the public debate that arose around industrial discharge in the late 1960s focus on single state-owned factories instead of the obvious scapegoat, the privately-owned forest industry?⁸² There are no doubt many possible explanations, however, the forest industry's importance in Finnish society is of course the most probable reason. And yet this explanation does not seem watertight, because after the mid-1960s, societal criticism on television appeared to have been directed particularly at the Finnish financial elite and, for instance, the large size of the state-owned oil company did not afford it any protection from public criticism.

We would like to note two factors that might explain why the forest industry was spared televised societal criticism. Firstly, it appears as if the state companies that had grown more common after World War II were expected to demonstrate a 'stricter moral code' than private industrial institutions that, in the pursuit of maximum profits, invested minimally in environmental protection. Secondly, the attitudes of the private-sector wood refining industry towards the press and environmental protection diverged significantly from those of state-owned companies. Unlike the large national companies, in their televised appearances the representatives of the privately-owned wood-refining industry continuously stressed the importance of environmental protection and the industry's desire to do its share – even if in reality it did nothing.⁸³

The flexibility of the private forest industry and its self-regulating media strategy was predicated on a consciously selected policy adopted during the pollution-related conflicts of the late 1930s; the industry harnessed this approach in an attempt to shape the national development of water protection policies and minimize financial losses to itself.⁸⁴ In this manner, the media-strategic choices of both individual journalists and huge, societally significant actors wielded remarkable influence through television.

oikeisto-vasemmisto-akselilla. Valtio-oppi, yhteiskuntatieteellinen tiedekunta, Jyväskylän yliopisto, 2010, 110. Unpublished Master Theses.

⁸¹ *Saastuva Perämeri*, 14 October 1969 (WCR); *Ajankuva*, 18 October 1969 (OPR); *Late-night news*, 23 October 1969 (OPR).

⁸² The Social Democratic Party had announced in 1969 its first environmental program where it blamed above all capitalism, large companies and the chemical forest industry for polluting watercourses. SDP:n luonnon- ja ympäristöhoito-ohjelma, 1121. Saastumisen syyt (<http://www.fsd.uta.fi/pohtiva/ohjelmalistat/SDP/438>).

⁸³ *Vesittykö vesiensuojelu?*, 29 March 1967 (OPR).

⁸⁴ Jensen-Eriksen, *Läpimurto*, 302.

Agricultural Pollution – The Missing Topic

In terms of Finland's waters and those of the entire Baltic Sea region, the most intractable problem at the moment is eutrophication, of which the greatest single cause lies in the phosphorus and nitrogen that enter waterways in the form of agricultural run-off, which is the outcome of lengthy historical development. Finland's agriculture began to become increasingly reliant on chemical fertilizers immediately after World War II.⁸⁵ As a result of this increasing reliance on chemicals, larger and larger amounts of nutrients began to wash into the waterways, causing a eutrophic effect. Despite the fact that this development was recognized by authorities and experts by the late 1950s⁸⁶, agricultural run-off was not dealt with in any way on television during the entire research period, which in retrospect appears surprising. Why did the agricultural discharge of nutrients into waterways receive no television coverage?

One possible explanation may have to do with the lack of food and material scarcity that existed in Europe and the world more broadly after World War II, as well as prevailing attitudes that lasted into the early 1960s. According to this way of thinking, fresh water bodies were like fields, which meant that their productivity, in practice their fish stocks, could be increased by adding nutrients to them. In the spirit of this 'exploitative paradigm', the release of nutrients into waters was not seen as problematic; just the opposite, it was seen as a preferred state of affairs.⁸⁷ The ten-minute programme shown in 1959, *Tiesittekö tämän fosforista?* (Did you Know This about Phosphorus?) is a perfect example of this attitude. In this so-called educational film, which was produced by the state-owned fertilizer company, farmers were encouraged to spread phosphorus-based fertilizers generously 'on all plants in all areas', in addition to which the film also suggested adding fertilizer directly into the water to increase fish stocks: 'So, go ahead, toss heaps of phosphorus into the water, and before you know it, our lakes will be splashing with fish tails'!⁸⁸ (Figure 8.)

⁸⁵ Jari Niemelä, *Talonpoika toimessaan. Suomen maatalouden historia* (Helsinki: Suomalaisen Kirjallisuuden Seura, 2008), 212.

⁸⁶ Vesistönsuojelukomitean mietintö, Komiteamietintö no. 13, 1958 (Helsinki: Valtioneuvoston kirjapaino, 1958), 65. Pollution problems were also reported by newspapers.

⁸⁷ Simo Laakkonen and Antti Parpola, "Rehevöitymiskäsitysten historiaa," in Saara Bäck et al., eds., *Itämeren tulevaisuus* (Tampere: Gaudeamus, 2010), 88–91. See also Tuomas Räsänen, "Alarmism and denialism in environmental science: the case of the nutrient pollution in the Baltic Sea in the 1960s and 1970s," *Scandinavian Journal of History*, 43 (2018), 646–665.

⁸⁸ *Tiesittekö tämän fosforista?*, 29 December 1959. The company that produced the film was Valtion rikkihappo- ja superfosfaattitehtaat Oy, that is, a government owned fertilizer company.

This unsophisticated attitude of exploitation gradually began to give way as the 1960s progressed and the eutrophication of water bodies began to be seen as a wider problem.⁸⁹ Industry and human habitation continued to remain large polluters, but in 1967, agriculture's share of overall water pollution was increasing rapidly.⁹⁰ Despite this, the topic still was not covered on television. This might well have to do with the societal status of agriculture in the 1960s. Small-farm-dominated agriculture, which struggled to guarantee its farmers even a modest living, did not offer the societal critics who appeared on television the same sort of enticing target as industry and its captains who were rolling in significant profits. Just the opposite: Finnish agriculture acted as an antithesis of sorts to the growing forest industry and the national oil company, which were enjoying a golden age at the time.⁹¹ Reino Paasilinna expressed this viewpoint thusly: '[Agriculture] was a more delicate subject in that there are just these average, basically poor farmers and they are practitioners of a vulnerable livelihood in a country that isn't really suited to earning a living from agriculture (--) so it was sort of a softer problem'.⁹²

Despite the rapid socio-economic structural changes of the 1960s, Finland was generally speaking still a heavily agricultural society, where the problems facing the farming population found plenty of sympathy and understanding.⁹³ This attitude was augmented by the fact that both the country's president and his cabinet regularly hailed from a powerful party that represented rural interests. Perhaps agriculture was also protected by perceptions of tradition and a life in tune with nature, which remained strong long after its automation and chemicalization. In part because of these factors, television could also focus more easily on the rapidly growing industrial-urban environment of Finland, where the damage caused by factories, cities and the consumption habits of an urbanizing population were still much more visible problems than the nutrient discharge caused by dwindling rural areas and growing agricultural production.⁹⁴ When it came to struggling agriculture, then, for a long time

⁸⁹ Kemia tukee maataloutta, 1 March 1965 (OPR). Laakkonen and Parpola, *Itämeren tulevaisuus*, 90–91.

⁹⁰ Niemelä, *Talonpoika toimessaan*, 221; Pirkko Leino-Kaukiainen, "Vesistöistä viemäreiksi: vesiensuojelu Suomessa 1945-1970", in *Harmaat aallot*, 66.

⁹¹ See e.g. Jensen-Eriksen, *Läpimurto*, 343; Kuisma, *Kylmä sota, kuuma öljy*, 361; Yrjö Haila, Timo Ryyänen, and Matti Saraste, *Ei vettä rantaa rakkaampaa* (Helsinki: Weilin+Göös, 1971), 105.

⁹² Paasilinna, Interview, March 1, 2012.

⁹³ Lyytimäki, *The environment in the headlines*, 201; Pertti Haapala, "Väki vähenee - maatalousyhteiskunnan hidas häviö [People vanish – the slow fading of agricultural society]," *Suomen maatalouden historia*, III (Helsinki: Suomalaisen Kirjallisuuden Seura, 2004), 235.

⁹⁴ Lyytimäki, *The environment in the headlines*, 200; *Miksi likavesiä?*, 1 October 1964.

television reflected the country's political power structures and social structures and the population's cultural heritage.

Conclusions: From Television towards an Environmental History of the Media?

In the sole previous systematic study of environmental reporting in television of which we are aware, television programmes were studied mainly from an institutional and quantitative point of view and its period of study did not begin until 1962. We believe that qualitative environmental historical research on television is also necessary, since we argue that the spectacular growth of environmental consciousness among the great public that has occurred in Western industrialized countries cannot be properly understood without examining the activities of television.

Our research indicates that coverage of water pollution began considerably earlier than the late 1960s–early 1970s as most media researchers have proposed.⁹⁵ We have shown that the Finnish Broadcasting Company started to broadcast programmes concerning water pollution from its very first year of regular transmission, 1958. It must also be noted that if the rise in the number of programs dealing with water pollution over that same period is compared to the quantitative growth in annual television broadcasting as a whole, from 400 hours to almost 3000 hours, the number of environmentally themed programmes was significant, even in the early days of television and their relative number grew only slightly over the decade.⁹⁶

From the late 1950s on, television programmes regularly addressed a variety of topics related to water pollution. The main concerns presented on Finnish television were water pollution caused by oil accidents and spills, radioactive fallout, toxic substances and, to a lesser extent, industrial discharge. The first programme addressing oil pollution off the Finnish coast was shown almost a decade prior to the *Torrey Canyon* accident. When it came to nuclear issues, Finnish television was most concerned with the atomic tests conducted in nearby Soviet regions and the subsequent fallout in Finland. In terms of toxic chemicals, the main problem was mercury ingested by fish in Finnish lakes and seas, while the impact of DDT on birds in the countryside remained a marginal issue. The primary polluter of Finnish

⁹⁵ See, Parlour and Schutzow, *The mass media and public concern for environmental problems in Canada*, 12.

⁹⁶ Finnish Broadcasting Company annual reports 1958–1970.

watercourses by far was the national forest industry, but television placed more blame on state companies than private companies, which had developed more effective media strategies. Experts had identified agriculture as a polluter by the late 1950s, but this was not presented on television, seemingly due to the socio-economic difficulties faced by small farms and the political power of rural producers. In sum, the programme policy of the television faced obvious obstacles in society in the case of small farmers and private industry.

In conclusion, water pollution issues were covered on television because they were already clearly considered to be a severe national problem in Finland by the late 1950s. The main external influence came from neighbouring Sweden, which acted as a sort of a ‘filter’ for ideas entering the Finnish public debate from the outside. The direct impact of other countries was relatively small, if not downright marginal. In the post-war decades, water pollution was, as in a number of other industrial countries, the primary environmental problem in Finland. It is therefore likely that national broadcasting companies in most other industrial countries addressed water pollution problems as well. This indicates the integrated impact television and water pollution had on the emergence of environmental awareness in the industrial world as far back as the 1950s. Our concern for the Planet Earth has long, strong aquatic roots.

Why was television, from its earliest days, such a useful tool for communicating about issues of water pollution? In order to understand this issue, it is necessary to address some structural changes that television introduced to the media landscape in Finland and elsewhere. In 1945, there were probably fewer than 10,000 sets in the United States. This figure soared to about 6 million in 1950, and to almost 60 million by 1960, that is, one set in almost nine out of ten households.⁹⁷ In 1960, North America had 60 percent of the world total of television sets, Europe (including the USSR) had 31 percent, and the rest of the world nine per cent. By 1970 television reached 70 percent of the Soviet population. That year most households in the industrialized world possessed a television set.⁹⁸

Another important reason for television’s impact was that it represented a brand-new world, above all in Europe, where post-war reconstruction had barely come to an end in the

⁹⁷ "Television," *The World Book Encyclopedia* (Chicago: World Book Inc., 2003), 119; Winthrop Jordan, *The Americans* (Boston: McDougal Littell, 1996), 798.

⁹⁸ Unesco statistical reports and studies. *Statistics on radio and television, 1950-1960* (Paris: Unesco, 1963), 23; Artemy M. Kalinovsky and Craig Daigle, *The Routledge Handbook of the Cold War* (London, New York: Routledge, 2014), 359.

mid-1950s. Television introduced a new, dynamic generation of people, technology, ideas and styles. Television recruited young, bold and beautiful individuals who were affected by the politically enlightened ideas of post-war Europe. During the Cold War, the most popular programmes were current affairs programmes and news broadcasts,⁹⁹ which were the venue for most environmentally themed programming. Despite an initial clumsiness, the new audio-visual technology grew to become particularly effective at transmitting ideas, opinions, emotions, and atmospheres wielding a notable impact on the hearts and minds of growing national audiences that represented all ages, political ideologies and social classes. (Figure 7).

However, while demand for television programmes increased constantly, supply remained extremely limited. Consequently, the first decades of television have been defined as an era of scarcity. Finland had only two television channels until the 1990s, circumstances echoed in the other Nordic countries. British television had long three channels, that is, BBC One and Two and commercial channel ITV (Independent Television). And although it is difficult to imagine now, even in the United States, the majority of viewers had access to only three alternatives (ABC, CBS and NBC) from the early 1950s to the early 1980s. From the 1950s onwards, in Europe, the United States and much of the rest of the industrialized world, entire nations closely followed a handful of channels and programmes, which addressed environmental issues from the very beginning. In brief, the post-war decades were the golden age of an exceptionally focused and politically enlightened television of the sort that did not exist before or after. We argue that, during this time period, television became not only a political agenda setter but a framer of Western environmental culture as a whole. Our global concern for the Earth has not only long and strong aquatic but analogue roots as well.

Yet everything that is solid eventually melts away. After its glory days, television started to lose its importance. Naturally, the rise and fall of all-reaching television broadcasts was neither the first nor the last cycle in the development of media. Many other cycles have emerged through new technology, young people, fresh styles and subversive ideas – only to be later marginalized by new generations of the same agents. As mentioned in the introduction, there are at least seven long-term cycles or waves of media that have taken place in the world (bodily performance, printed matter, newspapers, motion pictures, radio,

⁹⁹ Risto Sinkko, “Television katsominen 1960–1979,” in Risto Sinkko ed., *Televisio ja suomalainen* (Espoo: Weilin + Göös, 1981); See also John Ellis, *Seeing Things: Television in the Age of Uncertainty* (London: I. B. Tauris, 2000).

television, internet). According to Daniel Czitrom, each medium of communication is a product of opposing impulses, holding progressive, Utopian visions of unity and connection in creative tension with dystopian visions of domination and exploitation.¹⁰⁰ Consequently, each medium cycle provides varying possibilities for studies depending on what a research concept entails in a given case. In sum, we suggest that the local, national, and global development of media and its different arenas, actors, and arguments should be critically explored in future.

In sum, the time is finally ripe for environmental history of media. Until recently the sources of media history studies have been exceptionally difficult to come by, exceedingly costly to copy and notoriously laborious to work with. But fortunately, major governmental broadcast companies have finally opened their vaults, and an increasing volume of archival material and copies of television and radio programmes and movies are being digitized and made accessible. Also an increasing number of important newspapers and periodicals are now available to scholars on-line. In some pioneering countries, for example Australia and Estonia, national archival services enable the conducting of simultaneous searches of different media and other historical sources. After the establishment of archives for written material, the introduction of a perpetually growing pool of easy-to-use digitized on-line information comprises the second archival revolution.

Our case study on the early days of television is an attempt to see some of the possibilities that the integration of media history, environmental history and digital environmental humanities may provide. We are not suggesting the abandonment of the virtues of old-school historical methodology. Rather, we propose combining the best of the old-school approaches and the potential of the new school to look for a wider array of source materials, alternative methods for searching for and processing information, and new channels for publishing and popularizing results. Our common environment and ongoing digital media revolution are too valuable to be left to the responsibility of vloggers, or tweeters – we need environmental historians in the director's chair as well.

¹⁰⁰ Daniel J. Czitrom, *Media and the American Mind: From Morse to McLuhan* (Chapel Hill: University of North Carolina Press, 1982), 187-196.