

Abstract Future or Polluted Presence? Environment, Welfare, and Planning in Denmark

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When welfare planning in Denmark and Scandinavia emerged in the early postwar years, it was directed towards the handling of a society in growth. An expanding economy, rising energy use and infrastructures of mobility and communication were in focus for the modernising effort.¹ This growth became the base for what is called the Danish universal welfare model, or what Gösta Esping-Andersen calls the social democratic model (though criticised for rather being social liberal, see introduction p. 9), with social security, health, and education services, etc. financed by taxes and equally distributed to citizens.² Industrial production and modernised agriculture production led to a deterioration of the environment, and in the late 1950s a public awareness of local pollution.³ Paradoxically, this growth and the critique of it grew simultaneously, showcasing that the welfare society now had become so comprehensive (and successful) that it could take a new, large field into the scope of its services, the environment.

¹ Arne Gårdmand, *Byplanlægningens Historie 1938–1993* (København: Arkitektens Forlag, 1993); Thomas Hall, and Louise Fox, *Planning and Urban Growth in the Nordic Countries* (London: Taylor & Francis, ‘Studies in History, Planning and the Environment’, 1991). Since writing, a new and relevant english title has appeared, Ellen Braae, *Urban Planning in the Nordic World*, Aarhus University Press.

² Gösta Esping-Andersen, *The Three Worlds of Welfare Capitalism* (Cambridge: Polity, 1989).

³ Andrew Jamison, *The Making of the New Environmental Consciousness: A Comparative Study of the Environmental Movements in Sweden, Denmark and the Netherlands, The Making of the New Environmental Consciousness: A Comparative Study of the Environmental Movements in Sweden, Denmark and the Netherlands* (Edinburgh: Edinburgh University Press, ‘Environment, Politics and Society Series’, 1990), 67, 71; Jens Engberg, *Det Heles Vel. Forureningsbekæmpelsen i Danmark fra Loven om Sundhedsvedtægter i 1850'erne til Miljøloven 1974* (Copenhagen: Københavns Kommune Miljøkontrollen, 1999), 355; *Miljø- og Energiministeriet 1971–96: Undfangelse, Udvikling og Udblik*, Miljø & Energi (Copenhagen: Miljø-Og Energiministeriet, 1996), 29.

Historian Paul Warde and others have argued that the environment⁴ emerged as a ‘potential area of government policy’ in the early 1960s for it to become part of standard national politics by the end of that decade across Western countries.⁵ This resembles the picture in Denmark: since the 1880s there had been distinct legislations on hygiene, poison, streams and sea, but in 1963 efforts to gather legislation were suggested for the first time. A decade later, a Ministry of Environment was established and soon after The Environmental Protection Act was passed. Polemically, one could ask: If a cluster of laws and administration had been there for a century, why was it then necessary to establish a unitary ministry, legislation, and knowledge production around environment in the early 1970s?

Research shows a more comprehensive, modern idea of environment emerging in the postwar era, problematising human-nature relations in a new way.⁶ In this article, we will investigate the process in a Danish context, addressing how this idea became a political problem for the Danish welfare state. We will thus ask: how was the environment problematised in parliament in the middle of the 1960s and through which ‘enviroming practices’ was it shaped in this early stage? Closing the article, we will shortly indicate the legislative preparations of administering the environment as an object for welfare and planning politics pointing to further research potential.

Much attention has been, and is, given to postwar welfare and environmental history in the Nordic countries. At least three clusters of research are present in this intersection. One dealing with resources, welfare landscapes,

⁴ This exact word was not always used to describe the idea at this time. Paul Warde, Libby Robin, and Sverker Sörlin, *The Environment: A History of the Idea* (Baltimore: Johns Hopkins University Press, 2018), exemplifies this by speculating that Rachel Carson’s world-famous influential book *Silent Spring* (1962) for this reason did not contain ‘the environment’ in the title, 7.

⁵ Warde, Robin, and Sörlin, *The Environment: A History of the Idea*, 18.

⁶ Warde, Robin, and Sörlin, *The Environment: A History of the Idea*; Holger Nehring, ‘Genealogies of the Ecological Moment: Planning, Complexity and the Emergence of ‘the Environment’ as Politics in West Germany, 1949–1982’, in *Nature’s End* (London: Palgrave Macmillan, 2009), 115–138; Peter Coates, Paul Warde, and David Moon, *Local Places, Global Processes: Histories of Environmental Change in Britain and Beyond* (Oxford: Oxbow Books, 2016).

and technology.⁷ Other studies converge around Nordic models, discourses and institutions.⁸ A third cluster, closest to this study, focuses on environment, politics and knowledge.⁹ The actual becoming of the environment as a notion is less examined although it is a topic of investigation within environmental history.¹⁰ We argue that a focus on the early environmental concern is critical because the environment since the late 1960s has been an inevitable element in welfare and planning politics and still is today. Thus, we see our limited study as an occasion to point out a fruitful area of research, namely the intersecting historiographies of environmental and welfare history, to which we hope this study contributes.

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- ⁷ Examples are Mikkel Høghøj, 'Between the City and the Sea: The Welfare Landscape of Køge Bay Seaside Park and the Urbanization of Nature in Post-War Denmark', *Geografiska Annaler. Series B, Human Geography* 104/3 (2022), 209–226; Johan Pries, and Mattias Qviström, 'The Patchwork Planning of a Welfare Landscape: Reappraising the Role of Leisure Planning in the Swedish Welfare State', *Planning Perspectives* 36/5 (September 2021), 923–948; Mogens Rüdiger, and Ning de Coninck Schmidt, 'The Breakthrough of the 21 Degrees Culture in Denmark. Undoing and Doing Gender in Danish Home Making after 1945', *Journal of Energy History* 2021/6; Bo Poulsen, and Mogens Rüdiger, 'The 1950s Syndrome and Danish Energy Consumption and Production' (Abingdon: Routledge, 2020), 39–51.
- ⁸ Bo Fritzboøger, *Sustainable Development of Denmark in the World, 1970–2020: A Critical Introduction* (Cham: Palgrave Macmillan, 'Sustainable Development Goals Series', 2022); Haldor Byrkjeflot, Klaus Petersen, *et al.*, *The Making and Circulation of Nordic Models, Ideas and Images*, ed. Klaus Petersen (London: Routledge, 2021); Nina Toudal Jessen, 'At the Intersection of Expertise and Landscaping: How Technical Advisors Created New Nature', in Mikkel Thelle and Mikkel Høghøj, eds, *Environment, Agency, and Technology in Urban Life since c.1750: Technonatures in the Global North* (Cham: Springer International Publishing, 2024), 195–216.
- ⁹ Niklas Olsen, 'Klimapolitikens Idéhistorie i Danmark 1980–2022', *Historisk Tidsskrift*, 2022; Johan Östling, Niklas Olsen, and David Larsson Heidenblad, eds, *Histories of Knowledge in Postwar Scandinavia: Actors, Arenas, and Aspirations* (London: Routledge, 2022); David Larsson Heidenblad, *The Environmental Turn in Postwar Sweden* (Lund: Lund University Press, 2021).
- ¹⁰ Warde, Robin, and Sörlin, *The Environment: A History of the Idea*; J. R. (John Robert) McNeill, *Something New under the Sun: An Environmental History of the Twentieth-Century World* (London: Penguin Books, 2001); Jamison, *The Making of the New Environmental Consciousness...*

In order to focus our grip on the problematising process in parliament, we turn to the concept of ‘environment’ and ‘environing’.¹¹ The former is here understood as a conceptual and powerful revolution of the last half of the twentieth century in the Western world indicative of problematic human-nature relations – particularly negative impacts of human activities on the earth.¹² This makes it a ‘crisis concept’.¹³ Four distinct but overlapping dimensions shaped (and are still shaping) the idea of the environment: (1) Future: The possibility of predicting future scenarios in terms of the planet’s degradation but also providing solutions. (2) Expertise: Ecologists were important in the early development of the idea, but new expertise and other scientific disciplines stretched and shaped the ideas, for instance by bringing numbers, models, and data sets into the work. (3) Trust in numbers: Numbers acquired authority as indicators of change caused by humans. (4) Scale and scalability: Very local or even microscopic phenomena were linked to the planetary scale.¹⁴

Likewise, ‘environing’ focuses on the social and historical processes of the idea of the environment. It is ‘a process of making’,¹⁵ and thus a concept of agency and governance.¹⁶ ‘Environing technologies’ describe ‘practices whereby humans make environments’.¹⁷ Particularly three types of environing technologies: ‘Shaping’, such as using and restructuring material environments, and ‘sensing’, respectively ‘writing’, as practices related to documenting and registering material and information often

¹¹ Suggested by the historians Sverker Sörlin, Paul Warde, Libby Robin and Nina Wormbs.

¹² Sverker Sörlin, ‘The Environment’, in Noel Castree, Mike Hulme, and James D. Proctor, *Companion to Environmental Studies* (Oxford: Routledge, 2018), 27, 29, doi:10.4324/9781315640051; Sverker Sörlin, and Nina Wormbs, ‘Environing Technologies: A Theory of Making Environment’, *History and Technology* 34/2 (2018), 103; Warde, Robin, and Sörlin, *The Environment: A History of the Idea*, 24.

¹³ *Ibid.*, 23; Sörlin, ‘The Environment’, 29.

¹⁴ Warde, Robin, and Sörlin, *The Environment: A History of the Idea*, 14–18.

¹⁵ Sörlin and Wormbs, ‘Environing Technologies: A Theory of Making Environment’, 105.

¹⁶ *Ibid.*, 104, 115–116.

¹⁷ *Ibid.*, 106.

using instruments.¹⁸ We find it compelling to focus the analysis rather on the environment as a process than an object because it shifts the attention from identifying types of environmental problems to the practices of becoming of political problems.

As source material, we use Danish parliamentary debates on environmental issues from 1964 to 1970, thus outlining different positions and opinions, as well as several diverse secondary sources and literature referred to in the parliamentary debates.¹⁹ Primarily, the analysis is a close reading of two parliamentary debates in 1964 we identified as the most thorough, early debates about the environment. The first one is a proposal by Socialist People's Party to investigate the effects of pesticides and hormone chemicals.²⁰ The second is another and more extensive proposal from the same party suggesting a commission on poison and pollution.²¹

Is there an Environmental Problem in Denmark?

The Socialist People's Party was founded in 1959 as a new party on the left by a break with the communists. When Morten Lange, co-founder and biologist, motivated the party's first proposal in parliament in January 1964, he stressed a relation to the American biologist, Rachel Carson's book *Silent Spring*, and especially the countrywide discussions the book had created

¹⁸ Ibid., 107.

¹⁹ We have investigated parliamentary debates of environmental issues from the first suggestion about gathering environmental legislation in one legislation in 1963 to 1971 when this junction was initiated. All titles on proposals and quotes from the parliamentary debates are our translations.

²⁰ 'Proposal for parliamentary resolution on an investigation of harmful effects of powder and spray poisons and technically used hormone preparations' proposed November 1963, first reading 15 January, 1964. The result was a committee, advising politicians to be attentive in general of the issue, but no further action was taken.

²¹ 'Proposal for parliamentary resolution on appointing a committee investigating certain risks of poison and pollution' proposed December 1964, first reading 15 December, 1964. The result was a committee and yet another expanded commission proposal debated about a year later resulting in advice for politicians not to establish a commission but an expert group.

in Denmark.²² Here Lange noted a tendency by some experts to ‘reassure’ the public that the book was exaggerating.²³ One such expert was medical professor Poul Bonnevie who in a critical review of Carson defended Danish agriculture for its ‘rational [...] ecological considerations’ in using pesticides.²⁴ Lange disagreed with Bonnevie’s framing of ‘ecology’ as a way of exploiting and not protecting ‘natural balance’, and thus introduced ecology as central in the debate on poisons.²⁵ In general, Carson’s book was influential in the parliamentary debate, mentioned by most of the MPs. The minister of interior, Lars P. Jensen, for example, concluded the debate saying that reading it sent a ‘cold shiver down my spine’.²⁶

Lange argued that the new, synthetic pesticides, aggregating in animal and human organisms, stimulating resilient species, and causing ‘long-term change in the flora and fauna of the soil’, should be investigated.²⁷ The problem, though, was not clear to all the other MPs. Social democrat Christian Thomsen said Danish climate and regulation was radically different from the US, finding Carson’s approach not objective enough, not least because pesticides helped alleviate food problems in a time of a rising global population.²⁸ Others argued that Danish and international

²² Rachel Carson, *Silent Spring* (London: Hamish Hamilton, 1962); *Ead., Det tavse Forår* (Copenhagen: Gyldendal, 1963). The Danish translation was published in November 1963. Carson’s book on the threat of pesticide use in American agriculture was an immediate bestseller in the United States remaining on *New York Times*’ list for 31 weeks. It did not only reach a broad audience in the US but globally and was translated into a dozen languages. Libby Robin, Sverker Sörlin and Paul Warde, *The Future of Nature: Documents of Global Change* (New Haven: Yale University Press, 2013), 201. Examples on the debate in Danish newspapers: ‘Pesticides are suitable for human extinction’, *Information* 18 November, 1963; ‘Professor doubts pesticides’ usefulness’, *Berlingske Aftenavis* 19 November, 1963; ‘Humans poison Nature as well as ourselves’, *Demokraten Aarhus* 10 March, 1963; ‘Is the insect war going too far?’, *Herning Folkeblad* 28 February, 1964 (all our transl.).

²³ First reading, 15 January, 1964, column 1957.

²⁴ *Ibid.*, column 1958. Bonnevie’s review was in Danish medical journal *Ugeskrift for Læger*.

²⁵ *Ibid.*, column 1958. Mentioned in Leif Blædel, ‘Chairman of the Poison Committee at war with Rachel Carson’, *Information* 15 January, 1963, 6.

²⁶ First reading, 15 January, 1964, column 1981.

²⁷ Proposal 21 November, 1963, column 1281.

²⁸ First reading, 15 January, 1964, column 1962, 1964.

institutions were already investigating poisoning.²⁹ As a rebuttal of the problem altogether, Søren Jensen (Denmark's Liberal Party) opposed the idea that 'unsprayed' areas like roadside ditches and railroad hillsides were useful, since in his opinion they were spreading weed and insects to the fields.³⁰ Overall, thus, it was debatable how comprehensive the possible problem was, and if there was one at all.

For Lange, obviously, the issue was ecological. Animals and plants were interdependent, and it was worrying how pesticides became entangled in local ecologies, for example, concerning the life of bacteria in the forest floor.³¹ Pesticides, and especially hormone chemicals, would affect the food chains by eradicating certain species, or making them resilient as for example flies. Flies were food for birds, and as Skræppenborg-Nielsen (Socialist People's Party) noted, swallows were declining in Denmark, due to 'our poisoned flies'.³² This had some resonance with Social democrat Thomsen who worried about the 'one-sided culture'. He recalled the history of the US Midwest, 'in a state of nature for centuries', being vulnerable for pests brought over from Europe. The defence was use of heavy pesticide spraying, causing 'incredible harm' to birds, fish, etc.³³ The concern for species' survival was joined by farmer and politician Jacob Kirkegaard (Social Liberal Party), voicing how especially the Danish honeybees were at risk. Without these indispensable insects to pollinate plants, agriculture and gardening would be 'helpless' and consequences for the balance in nature's 'grand household' would be impossible to measure.³⁴ The use of chemicals, thus, was frequently mentioned as disturbing the 'state of Nature', the 'natural household' or 'equilibrium'.³⁵

This notion of balance seems a response to the perspective that Lange brought up, referring to Carson as a representative of ecological knowledge, corresponding with Warde *et al.*'s point about expertise as crucial in shaping the idea about the environment. The debate was also ripe with calls for

²⁹ Ibid., column 1966, 1968.

³⁰ Ibid., column 1965.

³¹ Ibid., column 1959.

³² Ibid., column 1978.

³³ Ibid., column 1961.

³⁴ Ibid., column 1970.

³⁵ Ibid., column 1961, 1970, 1972, 1974.

science, experts, and experiences, as in the frequent mention of the European Council, even though, as Thomsen noted, not enough knowledge was present even there to lay a solid line in handling pesticides.³⁶ Knud Thomsen (Conservative People's Party) pointed to the rationale of looking to the US for relevant knowledge, since Danish expertise could not be expected to cover all specialist issues. Also, the issue of detergents causing mountains of foam in lakes and streams, was raised as a problem of lacking knowledge.³⁷ But not only scientific or technical expert knowledge was at stake. For example, noted Lange, was the butterfly population in Denmark declining. This observation made him ask, 'what else could have happened that we don't know about?'.³⁸ Thus, Lange made a 'call for suspicion': an appeal to everyone for sharing their 'impression, have heard something, have seen something', to take action. Using Sörlin and Wormbs, we can see how mobilisation of sensing and documenting practices is proposed as a solution.³⁹ The debate on knowledge and expertise not only highlights an awareness of lacking insight, but also implicitly deals with the kind of knowledge needed when encountering a new problem, where the participants combine their own experiences with the accessible, fragmented knowledge. For example, when Lange also had observations on apple trees sprayed too often in his neighbourhood into the debate or Knud Thomsen mentioning private oil tanks as threatening.⁴⁰

Pesticide effect was not least an important question of a problematic or uncertain future, corresponding with Warde et al.'s ideas about the environment as a crisis and future-oriented concept.⁴¹ Lange addressed new reports on disease patterns from smoking as well as a recent scandal on Thalidomid, a nausea-relieving drug for pregnant women causing birth defects in the early 1960s. In this time of chemical engineering, Lange implicated, new

³⁶ First reading, 15 January, 1964, column 1965.

³⁷ *Ibid.*, column 1957. It was a public issue, raised for instance in the newspaper *Information* 5 May, 1964.

³⁸ *Ibid.*, column 1959.

³⁹ *Ibid.*, column 1960; Sörlin, Sverker, and Nina Wormbs. 'Environing Technologies: A Theory of Making Environment', *History and Technology* 34/2 (2018), 103.

⁴⁰ First reading, 15 January, 1964, column 1959, 1969.

⁴¹ Warde, Robin, and Sörlin, *The Environment: A History of an Idea*.

substances could aggregate invisibly in bodies or ecologies, until their consequences suddenly perhaps would be all too visible. An implication supported by his co-party member Skræppenborg-Nielsen with detailed descriptions of DDTs ability to aggregate and harm both its host body but also next generations, like the Thalodomid-cases. Another strong reference was the new and ongoing debate on nuclear waste.⁴² This issue of ‘residue’ was a broad concern, also internationally, where commissions dealing with this were set up, for example, in WHO and the UN organisation for agriculture and foodstuffs, FAO.⁴³

Thus, time and toxicity were related through residue but also prevention. Instead of fruitless discussions, as Søren Jensen (Denmark’s Liberal Party) appealed, prevention was needed when talking about pesticide control procedures, drawing broad support from all MPs in the debate.⁴⁴ The only problem was how to act. Like the figures of residue and prevention, the whole debate was future-oriented, as when Skræppenborg-Nielsen called for abolishing pesticides to the degree that they ‘threaten our [future] population’s health’.⁴⁵ Very specific issues such as private oil tanks and car exhaustion? were shortly mentioned and commented as other future threats – indicating how this new ‘ecological’ gaze might change the potential of mundane components of everyday life. This goes to show how it set off other worries – worries that would come to full expression in the next debate.

Establishing an Environmental Problem – Possibly Numerous

In December 1964, less than a year after the first debate, Lange and his same three colleagues suggested another and more extensive proposal in parliament: A commission investigating risks of poisoning and pollution. Evidently, the idea about the environment expanded and transformed even though the time frame was as limited as 11 months.

⁴² Ibid., column 1956, 1961.

⁴³ Ibid., column 1968.

⁴⁴ Ibid., column 1966.

⁴⁵ First reading, 15 January, 1964, column 1979.

Thus, groundwater, drinking water, seawater, surface water was mentioned several times throughout the debate.⁴⁶ So was air pollution in terms of dust and ash plagues, smoke from cars and smokestacks, and atmospheric concerns.⁴⁷ Oil refineries, buried oil and septic tanks, sulphone from detergents, energy problems, noise pollution, radiation risks too.⁴⁸ Often the issues were accompanied by sensory experiences of them contributing to the envioning practice.⁴⁹ MPs saw with their own eyes – or at least reported – that open-air bathing had become limited, fish, birds and shellfish died, and layers of dust was so thick that one could write on windows and windowsills in several cities.⁵⁰ Another way of highlighting the topic as important was the reminder from the Conservative Knud Bro of the 40,000 signatures that had been handed over to parliament as part of the newspaper *Information*'s campaign 'Stop the filth'.⁵¹

Lange considered examples on pollution and poison as 'damaging interventions in the balance of our nature'.⁵² He saw a connection between poison and pollution and not a long list of similar but separated problems: 'Starting with pesticides, it does not take long before one gets hands on the pollution of streams and in the issue of groundwater [...] There are so many of these things that have a beastly ability to interrelate'.⁵³ Contrary to the first parliamentary debate, Lange was rather alone promoting an idea about coherence and ecology. Only one other member, the conservative Bro, problematised humans' 'changing ecologies in nature' when it came to pesticides.⁵⁴

Like the first parliamentary debate, knowledge and expertise were considered holding the keys to future solutions. Lange argued that among the

⁴⁶ First reading 15 December, 1964, column 1732, 1735, 1739, 1747, 1748, 1749, 1750, 1752, 1754.

⁴⁷ *Ibid.*, column 1733, 1734, 1738, 1740, 1742, 1743.

⁴⁸ *Ibid.*, 1964, column 1733, 1734, 1739, 1740, 1743, 1748, 1753.

⁴⁹ Sörlin and Wormbs, 'Environing Technologies: A Theory of Making Environment'.

⁵⁰ First reading 15 December, 1964, column 1742, 1748, 1750.

⁵¹ *Ibid.*, column 1747. From 27 April to 12 June, 1964 the campaign had been carried out, meaning the paper every day contained issues on (mainly water) pollution. The campaign ended in a petition demanding politicians to take action.

⁵² Proposal for parliamentary resolution 1 December 1964, column 1161.

⁵³ First reading 15 December, 1964, column 1735–1736.

⁵⁴ First reading 15 December, 1964, column 1745.

relevant agencies there was ‘a will to control but not the scientific foundation’.⁵⁵ He quoted the professor Dalgaard-Mikkelsen for saying that the ‘biological research comes staggering up the innovative chemical industry’⁵⁶ on the occasion of a new Danish book, *Human and Nature*, that Dalgaard-Mikkelsen had contributed to.⁵⁷ According to Lange this book was ‘excellent’. In a ‘neat, extraordinarily factual, “un-fanatic” way [it] takes these problems up for consideration’.⁵⁸ Considering the polarised debate caused by *Silent Spring* the year before, assumably Lange wanted to stress the thorough scientific genre of *Human and Nature* as well as its specific focus on Danish conditions. The book was written by different Danish scientists on pollution in air, water, soil, plants, games, food inspection, radioactive pollution and the use of hormones and antibiotics in animal production. In his eyes, this was a reliable book communicating useful ecological knowledge.

Other conceived reliable expertise was brought into the debate. As poison and pollution was discussed almost as a broad umbrella term, a diverse set of knowledge positions and actors were drawn on by the other MPs, showcasing Sörlin and Wormbs’ point about writing and documenting as an enviroing practice.⁵⁹ For instance the Academy of Technological Sciences was highlighted for investigating air pollution and smoke as results from England had indicated the dangers could be significant⁶⁰, The Engineer Association had a few years earlier worked on noise limits⁶¹, State institutions such as the Poison Committee, the National Food Safety Agency and laboratories on pesticides, toxicology, pharmacology, pests, and local pollution were mentioned frequently.⁶² Generally, inside and outside Denmark, residuals of pesticides and hormones were investigated, but a stronger international or Nordic collaboration was promoted by MPs.⁶³ Some knowledge positions

⁵⁵ Ibid., column 1736.

⁵⁶ Ibid., column 1737.

⁵⁷ Christiansen, K. Hjort, *Mennesket og Naturen* (Landbo-Forum, 1964). It was published by the organisation Landbo-Forum that provided educational work citizens in the countryside.

⁵⁸ Ibid., column 1737.

⁵⁹ Sörlin and Wormbs, ‘Enviroing Technologies...’, 107–108.

⁶⁰ First reading 15 December, 1964, column 1733, 1743.

⁶¹ Ibid., column 1740.

⁶² Ibid., column 1736, 1738, 1741, 1744, 1747, 1750.

⁶³ Ibid., column 1741, 1744, 1746, 1747, 1751.

more than others brought in a ‘trust in numbers’ in the debate – another important aspect in shaping the environment according to Warde *et al.*⁶⁴ Measurements and numbers were particularly used in relation to the discussions on air pollution, water reserves, and determinations on acceptable limits for residuals and bathing water.⁶⁵

Lange perceived science as an expertise providing solutions to remedy mistakes in the past and present for a better future, also coherent with Warde *et al.* He was deeply worried about the future. Motivating the proposal for a commission, he stated that ‘[r]ecent time has shown a great deal of examples on extensive and dangerous damages, at the same time as the general uncertainty about the long-term effects is increasing’.⁶⁶ Action was needed ‘so that we can look into a future where we will not see our own mistakes being turned towards us as a truly critical danger’.⁶⁷ Bro’s (Conservatives) ideas about the environment followed the same temporal logics asking ‘[w]hat will happen with the poison we fill up the soil with? How will they be transformed, and how will they work in the far future?’⁶⁸ He even stated: ‘Next to the issue of keeping peace, this is the most crucial issue for people’s future’.⁶⁹

Besides Bro and Lange, no one else in the debate articulated future scenarios. The future was shoved into the background, and instead the polluted present was more dominant. Warde *et al.* describes the environment as ‘an idea that burst into life in a futurological soup’,⁷⁰ but in our case this seems to be more predominant in the first debate about ecology and an uncertain and abstract future than in the discussions about present pollution.

Evidently from above, the commission proposal addressing poison *and* pollution resonated with the MPs that participated in the debate – and more than the proposal of the first debate. The list of environmental problems was long and stretched from microscopic to global scales, which is another

⁶⁴ Warde, Robin, and Sörlin, *The Environment: A History of the Idea*, 16.

⁶⁵ First reading 15 December, 1964, column 1738, 1739, 1744, 1748.

⁶⁶ Proposal for parliamentary resolution 1 December 1964, column 1161.

⁶⁷ First reading 15 December, 1964, column 1737.

⁶⁸ *Ibid.*, column 1744.

⁶⁹ *Ibid.*, column 1742.

⁷⁰ Warde, Robin, and Sörlin, *The Environment: A History of the Idea*, 15.

element in shaping the idea about the environment.⁷¹ From the discussion of resistant rats and cockroaches,⁷² to local issues such as the eroded fishing boats in Esbjerg,⁷³ to issues about water pollution of specific national importance as Denmark depended on ‘exactly its’ water for fishery, agriculture and industry⁷⁴, to international collaboration for instance in WHO on an international code for food additives.⁷⁵

On top of this, the problems at stake were also explicitly acknowledged as ‘severe’⁷⁶, ‘extensive’⁷⁷ and ‘great’.⁷⁸ Two MPs from two different agricultural parties (Danish Liberal Party and Danish Social Liberal Party), though, encouraged defusing specifically the debate about the use of additives and pesticides. But as one of them continued: We ‘must acknowledge that serious problems have been pointed out, problems reaching so far that none of us for the time being is capable of overlooking them’.⁷⁹ No one toned any problems of pollution down, and seemingly everyone could see their own environmental agendas under the broad umbrella term of poison and pollution. The environment as a problem was establishing, and a part of this process was a gemmation where the idea grew and budded.

Handling the Problem: Environment in Planning

As the Nordic societies embraced welfare debates and policies more systematically during the 1960s, planning became a centre of gravity for turning this into reality. As politics and planning was coupled closely, that is, by Swedish Gunnar Myrdal, also planners and politicians went into a kind of alliance, in Denmark expressed in the notion of ‘social engineers’. This signified the new generation of politicians and officials, educated in political science

⁷¹ Warde, Robin, and Sörlin, 17.

⁷² First reading 15 December, 1964, column 1738.

⁷³ *Ibid.*, column 1747; Proposal for parliamentary resolution December 1, 1964, column 1160.

⁷⁴ *Ibid.*, column 1749.

⁷⁵ *Ibid.*, column 1751.

⁷⁶ *Ibid.*, column 1734, 1742.

⁷⁷ *Ibid.*, column 1742, 1743.

⁷⁸ *Ibid.*, column 1742, 1749.

⁷⁹ First reading 15 December, 1964, column 1742.

and building society from economic theory, in the Danish case inspired by Keynesian ideas of public investment. Prime Minister (1962–1968; 1971–1972) Jens Otto Kragh was instrumental in this process, and it was during his two governments that planning became driving in welfare politics.⁸⁰ It is in this process, we argue, that the problem of environment became entwined with the planning system that emerged, as we shall show below. Thus, this chapter also points to the larger discussion of how to understand and define welfare as related to planning. With the findings below, we suggest that this entails a broader set of relations than just market versus state, as Esping-Andersens initial model claims (see introduction p. 9).

Looking more broadly at what followed the two parliamentary debates in 1964, we get indications of the problems' fate. In 1965–1966, Lange's group of MPs reissued the proposal for a commission, causing a short discussion, still with a wide consensus on pollution as a pressing problem.⁸¹ In November 1968, debating a new natural protection law, Social Democrat Jens Kampmann brought up two central points: first, to centralise natural conservation in a central agency for 'Nature protection' and second, that a policy on this field should also deal with pollution.⁸² The debate ended with the minister for Culture (Kristen Helveg Petersen, The Danish Social Liberal Party) promising to act on this. Delivering on that promise, in 1969 Prime Minister Hilmar Baunsgaard (The Danish Social Liberal Party) announced a temporary 'Pollution council'. It should map existing research, assess possible actions, and document pollution.⁸³ This goes to show pollution had been established as a problem to be politically administered.

In 1969, Kampmann led a proposal for pollution politics, including a research institute and stricter pollution rules.⁸⁴ Here, he suggested 'the pollu-

⁸⁰ Niels Finn Christiansen, *The Nordic Model of Welfare: a Historical Reappraisal* (Copenhagen: Museum Tusulanum Press, 2006).

⁸¹ Proposal for a commission on certain poisoning and pollution threats, first reading, 12 January, 1966, column 2534.

⁸² Proposal for a law on nature conservation, first reading, 29 November, 1968, column 2034.

⁸³ Engberg, *Det Heles Vel*, 385.

⁸⁴ Proposal for a parliamentary resolution on pollution control, 31st October.

ter pays'-principle, on the rise in other countries as well.⁸⁵ The parliamentary debate was long, but strikingly on the administrative side discussing financing, institutions, measurements. In 1971, the first Danish Ministry of Pollution Control was established, the title indicating again how pollution had become *the* pressing issue. Two years later, though, it was reinvented as the Ministry of Environment.

In 1974, the legal platform for the ministry's work, the Environment Act, was passed in parliament, critical for administering the problem.⁸⁶ Central were the ministry's Environment Agency, already in place from 1972, and the Plan Agency of 1975. This was a sign that central parts of welfare planning such as urban zones, regional planning, roads, etc., were closely connected to environment. The Plan Agency was developed within the Social Democratic Party as part of the 'frame governance' principle, that is, where population and building zones were determined by State policy, to be 'filled out' by municipalities. Thus, the agency's lifespan (ending in 1992) tightly connected the new welfare paradigm with the planning tool that was instrumental to realise it, embedded into the administration of the environment.

If we try to see environmental footprints on welfare planning in a broader perspective, the period in question is marked by an interesting paradox: on one hand, the political landscape was highly disruptive, with several elections in the first half of the century, among them a 'landslide election' in 1973 reorganising the parliament to the loss of traditional parties such as the Social Democrats and the Conservative Party. Also, the first oil crisis and the narrow 'yes' to the EU (Then EC) caused major debates and political change. On the other hand, as Arne Gaardmand notes, there was a remarkable ability for political action, through planning.⁸⁷ Throughout the

⁸⁵ Ibid., column 827: the principle was discussed in economic policy from the 1920s, in 1968 being raised in the European Council, later in OECD and from 1975 part of European Waste Declaration, see Muhammad Munir. 'History and Development of the Polluter Pays Principle', *SSRN Electronic Journal*, January 2013.

⁸⁶ Jamison, *The Making of the New Environmental Consciousness*; Engberg, *Det Heles Vel*.

⁸⁷ Arne Gaardmand, *Dansk Byplanlægning 1938–1992* (1993) (Copenhagen: Arkitektens, 2016), 190.

decade, a transforming process of planning was rolled out, issued from the Ministry of Environment, making Denmark a thoroughly planned country.⁸⁸

We suggest it was precisely because the process was embedded in this new, prioritised ministry that it actually became realised (and roughly on time), but from early on, it was defined by an attention to natural consequences of the growing, urbanised population, and broader, the welfare state. At the end of the 1970s, a new, a modernised planning system had emerged to regulate housing, land use, infrastructure, industry, agriculture, and also core environmental issues.

A few preceding processes should be mentioned here to understand the way in which this ‘mainstream’ planning system was formed and integrated environmental elements. Water, as some of the earliest issues, had been regulated by law since medieval times, but a modern Stream Act from the 1940s, and later ‘main stream’ planning for, that is, groundwater would build on this. Also, nature conservation, as noted above, had been a strong debate from the 1910s, and legislation on this was moved to the Ministry of Environment, thus highlighting recreation and cultural landscapes, for example, in the later planning intentions.

However, there was still innovations in the new planning system. It came in three stages, roughly speaking, initiated by the Zoning Act of 1968. The country was divided into urban and agricultural areas, with strict differences of taxing, building and infrastructure rules, only leaving summer house areas as an alternative category. Not explicitly targeting environment, the zones became a central point in later environmental debates. On top of this came the second phase, the Regional Planning Act of 1973–1974, producing highly influential, regional plans in the following years. This act is directly integrated with the Environmental Act, (as was the laws on water and nature protection), making regional planning the first thoroughly environmental regulation tool. Areas of interest for raw material extraction were laid out; there were guidelines for noise and recipient quality.⁸⁹ As a start to a policy for groundwater protection, areas of interest for water extraction were laid

⁸⁸ Ellen Braae, *Urban Planning in the Nordic World* (Aarhus: Aarhus University Press/The University of Wisconsin Press 2022), 18.

⁸⁹ *Miljøhensyn ved planlægning* Guide nr 2, May 1974, Environmental Agency.

out in some counties.⁹⁰ The third stage was the Municipal Planning Act of 1975, in effect 1977, taking the decentralised planning system to the last scale. In the municipality, radically reformed and expanded in 1970 (see above), decisions were to be made, based on the framework of the national act. Here, environmental issues as well as economic, educational, etc. had to be prioritised in a process involving public opinion.

Concluding Remarks

As the substantial debates in parliament about the environment were activated by the Socialist People's Party and the Social Democrats a few years later initiated political legislation on the area, one could conclude that bringing the environment into welfare politics was a left-wing project. However, this is not our conclusion. Neither in the parliament nor in civil society were issues about the environment a particular left-wing issue at this time.⁹¹ In both debates we saw that Lange's environmental concerns resonated with politicians across the political spectrum. Besides, when The Environmental Protection Act (a Social Democratic proposal) was passed in 1973, it only came through because of the support from the Conservatives. For different reasons several other parties did not support it – Socialist People's Party due to the concession to the industrial sector that on the other hand made the Conservative support the law.⁹²

Instead, our analysis shows a movement from a complex ecological worry about poisons and an uncertain and abstract perhaps even distant future to a more sensed notion of present pollution. A 'struggle over time' was going on. A pressing *present* (of the pollution) came to dominate the more abstract and unmanageable *future* (of the poisoning). We also see another important

⁹⁰ Vilhelm Michelsen, Karsten Bay Kristensen, Ib Ferndinadsen, *et al.*, *Regionplanlægning – bidrag til regionplanlægningens historie* (Copenhagen: Dansk Byplanlaboratorium, 'Byplanhistoriske Noter', 2004), 26.

⁹¹ Pollution gathered different local actors in the 1950s–1960s rather than organisations or grassroots. The conservative Conservation Society (Danmarks Naturfredningsforening) had existed for half a century, but it was not until the late 1960s and 1970s more left-oriented grassroots organisations began their activism when the environmental movement NOAH was founded in 1969 and the anti-nuclear movement OOA in 1974.

⁹² Engberg, 435.

movement –from problematisation over definition to administration. In the first debate, the criteria and parameters of the actual problem were discussed. In the second debate on the other hand, all agreed on a problem and a pressure for action but discussing the magnitude and components. Finally, the debates of the third section dealt with the specific challenges of the solutions, in short with the administration of the problem.

We have conceptualised this as envioning practices playing out over the four dimensions explained in the theoretical section. Although scale and scalability is present (the environment in both debates is perceived as a global problem not limited to national boundaries), the two most predominant and legible dimensions are future and expertise. Expertise was articulated in the first debate by connecting fragmented scientific input with individual experiences from the MPs. In the second debate, large fields of expertise emerged both within and outside the political-administrative system, where MPs rather had to navigate these fields.

Entangled in these practices we found sensing and writing as prominent and taking on several forms, as we show. We note how across the debates, writing is a prominent political tool (reports, petitions) for envioning. In the first debate, sensing was combining bodily experiences (seeing weeds on railroad hills) with complex measurements (of sulphonic acid), but as uncertain signs to be interpreted – remember Lange’s call for suspicion – while in the second, we have the paradoxical situation that a wide range of specialised sensing was developing, while the issue as such – pollution – became pressing *because* it could be sensed immediately by everyone (as dust in windowsills, etc.). The practice of forming is indirectly present, as the debates responds to the undesirable consequences (poisoning and pollution) of forming environment.

In this article, we have looked at the ways in which the idea of environment affected welfare politics and administration. We suggest that welfare planning, also understood as a spatial and material practice, for environment was highly present and grew to be an important sector of welfare politics, thus questioning Esping-Andersens focus on market-state-relations as sole parameter of definition. Further research could follow this thread ahead in time to see how new major environmental agendas such as climate change from the 1980s and onwards changed this. But the inverse strategy from ours could also be valuable, that is, to see how administration, planning

and institutions have influenced the idea of the environment, its' use and transformation over time.



Fig. 14. Spraying the crop. The use of pesticides caused the first foundational debate about environment in Danish parliament in 1964. Photo: E. & L. Hounsgaard. © Rønde Foto