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CHAPTER 5

Poisonous Prosperity: the Tilting Historiography of Gas Extraction

Peter van Dam and Jouke Turpijn

A "treasure" and "the foundation of Dutch post-war welfare" – since the 1960s, politicians, journalists, and historians have predominantly presented the finding and exploitation of the Groningen gas field as an unexpected windfall for the Netherlands (Hakkenes). Indeed, the discovery of the enormous gas deposit in the Northeastern part of the Netherlands caused a "revolution": private households were rapidly equipped for cooking and heating with the newfound natural gas, power plants switched to the new resource, and companies welcomed a new, cheap source of energy. The national government, which shared its revenues with the oil companies Shell and ESSO, used the enormous earnings to accelerate the closing of the increasingly unprofitable Dutch coal mines, compensate for setbacks in times of economic crisis, and fund welfare state provisions. For a long time, the main doubt about gas extraction was its future: What would happen once the gas field was depleted? (Commissie Ontwikkeling Nederlandse Canon).

After the parliamentary inquiry into the history of gas extraction that took place in 2022 and 2023, that perspective is no longer tenable – if it ever was. The publication of the report *Groningers boven gas* ("Groningers over gas") marks the advent of a more critical view of the history of gas extraction. "Sixty years of gas extraction have benefited Dutch society in many ways (…). However, the extraction has shown ever larger downsides. Many people living above the gas field on a daily basis experience the harmful consequences of what are by now 1,615 earthquakes caused by gas extraction," the final report by the parliamentary inquiry stated (*Groningers boven gas – vol 1*: 7).

Accounts of the history of gas extraction in Groningen have emphasized the resulting gains, but in the light of the effects of gas extraction on Groningen and the earth's climate, the costs of gas extraction need to be assessed too. This chapter analyzes the emergence of a predominantly positive narrative, the challenges presented to this narrative from an ecological and social perspective, and the extent to which more critical views have been able to displace the dominant narrative. The narrative of progress and prosperity was predicated

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on a view of history that foregrounds economic and technological dimensions. As the inhabitants of Groningen have managed to draw attention to the negative social impact of extraction, the optimistic narrative has gradually been supplemented by a more critical perspective that acknowledges the harm that was caused to the local population. We argue that this critical view has to be expanded. Regarding the history of gas extraction in Groningen as part of the history of the Anthropocene, we position this history at the heart of postwar global development in order to enable a better understanding of how its social and environmental costs came to be accepted. This dialogue between Groningen's local history and a global history of the Anthropocene produces a new narrative of the history of post-war Dutch prosperity that acknowledges the detrimental effects of gas extraction in Groningen and its relation to human-induced climate change.

1 Progress Becomes History

Until recently, gas extraction has been equated with progress and prosperity in historical accounts of the Netherlands. Technology and governance have dominated this history. This is true even if we look beyond histories commissioned directly by those involved. The authoritative *Techniek in Nederland in de twintigste eeuw* ("Technology in the Netherlands in the 20th century") amply recounts the exploration of the gas field, the secrecy with which the oil companies and the Dutch government treated this discovery, their negotiations over its exploitation, and the eventual set-up of their collaboration. The quick installation and conversion of the technological infrastructure for gas distribution was labeled "a revolution" (Schot et al. 202–219). A grid of pipelines was swiftly built across the Netherlands, households were equipped to use the Groningen natural gas for cooking, central heating became common in Dutch houses, and factories, workshops, and horticulture switched *en masse* to the new source of energy. Within a decade, the exploitation of the Groningen gas field transformed the Netherlands, from everyday comforts to the international standing of the Dutch economy. Potential drawbacks of the comprehensive introduction of cheap fossil fuel energy were hardly discussed. Compared to coal and oil, natural gas was seen as a "clean" source of energy. This was an additional reason for companies to use it.

The positive view of the history of gas extraction was cemented by its integration in narratives of postwar Dutch wealth. From the 1950s onwards, a period of unprecedented prosperity began, in which, thanks to the construction of a social safety net, most inhabitants of the Netherlands benefited.

Social security, rising wages, new technologies, and global trade led to "golden years" especially in the long 1960s, that many people in the Netherlands today remember with undisguised nostalgia (Van Bergen).

That prosperity was inextricably linked to Groningen gas. In the widely read handbook *Land van kleine gebaren* ("Land of small gestures") about the Netherlands since 1780, Herman de Liagre Böhl, for example, refers explicitly to the "miracle" of Dutch postwar prosperity growth:

> In this, the country was helped by the discovery of natural gas near Slochteren in 1959. The Netherlands turned out to have a huge amount of this cheap fuel. For a modern, energy-hungry society, that find was invaluable. By 1973, natural gas production had risen from virtually zero to over 70 billion cubic meters, much of which was destined for export. Our international trading position benefited enormously from this. The income also made it possible to raise social benefits to a high level and to adjust the structure of the labor market relatively painlessly. (De Liagre Böhl 310)

The importance of natural gas revenues for public finances has been highlighted by the Dutch Court of Audit (*Algemene Rekenkamer*). These earnings include the income from the gas from Groningen, from other gas and oil fields, dividends from EBN and GasTerra, and corporate income tax revenues from companies involved in extracting, transporting and selling natural gas. From 1965 through 2018, the Dutch state earned a total of 416.8 billion euros from this (converted to 2018 price levels). From the time natural gas was found in Slochteren until the early 1980s, this yield became increasingly important. Around 1985, it amounted to almost 20% of government revenues. After that, the share declined, but around 2010 it was still around 10% (Algemene Rekenkamer).

For Dutch business, natural gas also constituted a huge windfall. In a short time, an energy-intensive economy emerged. Historians Jan Pieter Smits and Ben Gales conclude that the large amount of cheap energy gave Dutch companies an advantage over many foreign competitors, contributing to "very high economic growth" (Schot et al. 89). Cheap energy would remain beneficial and was initially used to mitigate other economic problems during the 1970s and 1980s. As Dutch industry's exports, just as many other industrial economies, began to decline, the government used gas export revenues to keep the value of the Dutch guilder equal to that of the German mark.

Ordinary Dutch citizens benefited from the natural gas revenues. Backed by the revenues, the government was able to pay for, in the words of historian James Kennedy, "the increasingly generous social security system" built

up until the 1970s (347). The daily lives of many Dutch people became more comfortable thanks to natural gas. From the late 1960s, most people cooked with natural gas. Amenities such as central heating and hot water also operated mostly on gas. In addition, much of the electricity used was generated with it (Van Overbeeke). Technological progress, economic growth, and the use of fossil fuels were thus self-evidently connected in accounts of post-war history. Potential risks were discounted because of their presumably local and negligible nature. Drawbacks could be controlled and thus did not necessitate a fundamental reconsideration.

2 A Sense of Uneasiness

Entangling the histories of gas extraction and progress, historians have until recently trivialized the damage gas extraction caused to humans and the environment. This is not to say that criticism has been completely absent in public debate and historical accounts. Concerns about the impact of extraction on the local environment and potential effects of subsidence were raised right from the outset of gas extraction. However, the main concerns articulated related to the economic and technological impact, upholding a frame of reference that depreciated social and environmental concerns.

The main critical questions raised about the impact of gas extraction in historical evaluations were related to the purported "Dutch Disease" in the 1970s and 1980s (see the introduction to this volume). During the 1970s, oil and gas prices rose due to strained international relations, culminating in the notorious oil crises of 1973 and 1979. The revenues the Dutch state received from gas extraction thus increased considerably. Nevertheless, financial analysts worried that the Dutch economy would suffer from a comparative disadvantage because of the rising cost of Dutch currency, goods, and production. The price of Dutch currency followed the rise of the international gas price: the Dutch guilder became very expensive for investors outside the Netherlands. The Dutch Disease revolved around three interrelated issues: how the revenues from gas extraction should be spent; to what extent these revenues had a negative impact on the position of the Netherlands in international markets; and whether dependency on cheap gas rendered Dutch businesses vulnerable to shifts in the energy market and disincentivized exploring possibilities to become more energy-efficient (Luiten van Zanden 25; Correljé; Etkind 275).

Tiny cracks in the conviction that extraction from the Groningen gas field was a beneficial undertaking could also be found in works that presented the environmental and social impact of gas extraction as an economic and

technological challenge. Such accounts at once signaled and suppressed these cracks. For example, in the aforementioned *Techniek in Nederland in de twintigste eeuw*, Gales and Smits pointed towards the (future) costs of gas extraction. Their concerns continued the debate over the dependency on gas as a cheap source of energy. Stressing that access to inexpensive energy had resulted in economic growth and a significant increase in material standards of living in the Netherlands, the authors cautioned that the Dutch economy had become notably "energy-intensive" (Schot et al. 105).

Smits and Gales also raised the issue of the environmental impact of the economic expansion facilitated by gas extraction, noting that the needs of consumption and new industries put pressure on the environment and the quality of living. They further feared that the way in which Dutch economy drew on "ecological capital" could hamper future economic growth and innovations. People living in the 1960s and 1970s had benefited from the vast economic progress and had passed the environmental costs inflicted by this growth on to future generations. "The exact extent of the costs required to undo the environmental damage are as of yet unknown," Smits and Gales concluded. "There seems little doubt that the costs will severely pressure the economy and require much technological ingenuity" (Schot et al. 111).

Despite a growing body of critical scholarship about progress and ideas about "development," historians did not extend these concerns to what was unfolding in Groningen as a result of gas extraction (Duyvendak). In part, this resulted from the assumption that Dutch politics had moved beyond planning and a belief in progress since the 1970s (de Liagre Böhl 321; De Haan). The development of technology was discussed as distinct from such political and moral views.

In the early twenty-first century, environmental activists in particular made themselves heard in the public debate. Eventually, their interventions left their mark on the way the history of the gas field was narrated. Discussions around the so-called "Canon of Dutch history" can serve as an example. In 2006, a list of 50 elementary "windows" on Dutch history was published by a government-installed commission. In a search for a binding national identity, every Dutch citizen was supposed to know these 50 windows, although an attempt to make the resulting "Canon" obligatory in school curricula failed. The windows included an entry called "The Gas Bubble" (*de gasbel*), which presented the Groningen gas as an elementary part of Dutch post-war history. It had been "a blessing for the Dutch economy," its authors opined (Commissie Ontwikkeling Nederlandse Canon).

This positive view aligned with earlier histories, but the authors did acknowledge two challenges related to this "blessing." First, they pointed to the fact

that the supply of natural gas was by default limited and that finding a suitable substitute in the future would be difficult. Second, they noted that environmentalists had voiced concerns about accessing new gas fields in order to extend the value of the Groningen gas field. Some of these potential additional fields were located in the protected natural area of the Wadden Sea. This area stretches from the Dutch northwest up until the western coast of Denmark. It comprises tidal flats and wetlands that are marked by a remarkable biodiversity. Environmental activists had campaigned against intrusions that would negatively impact this area. These activists had also pointed at other negative effects of gas use for the environment, like the threat of earthquakes and the emission of carbon dioxide, but these were not included in the Canon. "Their concerns," the authors noted, "are not directed against the use of natural gas – it is a clean fuel after all – but against the disturbance, the negative impact on the visual amenity and above all the land subsidence in the most important Dutch natural area" (Commissie Ontwikkeling Nederlandse Canon).

The attention to the drawbacks of gas extraction was by no means comprehensive or self-evident. In 2009, the Dutch Petroleum Company (*Nederlandse Aardolie Maatschappij*, NAM) celebrated its 50th anniversary. 50 years earlier, the Groningen gas field had been discovered and NAM, the company assigned to carry out the extraction, celebrated this "landmark" with a commemoration, public festivities, and a book publication. Historians Joep Schenk and Petra Timmer wrote 224 pages on the history of the gas field. Only 2.5 of these pages described the earthquakes with the diminutive *aardschokken*, which literally means "earth jolts." Their most important conclusion was that "there is no reason for concern" because the earthquakes were less strong than natural earthquakes elsewhere. NAM was convinced that "transparency forms the best remedy against wrong journalism and suspicions [...] The company's point of view is clear and firmly founded: gas extraction does not damage or hardly damages buildings" (Schenk 98–99).

The reactions to this blatant attempt to maintain a license to operate showed clear signs of the gradual shift in the perception of the history of gas extraction. In a review of the publication, historian Geert Verbong concluded that the authors "reassurance that everything will stay as it is" was evidently short-sighted, as the exhaustion of the Groningen gas field was drawing closer (150–151). Its operators had already started to develop Groningen into an international "roundabout" for gas distribution. In the roundabout, gas comes and goes from and into several directions: it can be exported as long as there is plenty, but it can also be imported when the situation changes. Another reviewer, Ben Gales, stated that the book was "naïve" in ignoring conflicts that had been raised by contemporaries as well as historians (114).

3 The Bubble Bursts

A more fundamental shift in the evaluation of the history of gas extraction in Groningen was instigated outside the realm of historiography. Interventions by activists, scientific experts, and politicians exposed the negative impact of gas extraction. Shifting their views, different groups have followed divergent timelines and perspectives.

Scientific experts quickly acknowledged the risk of subsidence resulting from gas extraction but continued to assert that these risks could be managed or compensated. After a first earthquake in 1986 in the vicinity of Assen, some observers suggested that it had been caused by gas extraction. Yet research continued to be directed mainly towards improving methods of extraction rather than towards gaining a better understanding of potential risks. As the number of earthquakes increased during the 1990s, so too did the number of critical questions. Slowly but surely, a new scientific consensus was established: gas extraction in Groningen could cause earthquakes.

This insight, however, did not change the overwhelmingly positive evaluation of drilling for gas as an economically beneficial enterprise without any serious social or environmental drawbacks. The prevalent research on the earthquakes in the Groningen area suggested that the force of the shocks would remain relatively mild. The resulting damage would be similarly insignificant. Neither the gas field operator nor the public institutions involved deemed it necessary to explore this subject more extensively. Accordingly, in 2009, historian Joep Schenk, in his authorized history of the Groningen gas field, noted that "based on the current information, NAM expects to continue to extract natural gas from the Groningen gas field for another fifty years" (199). The economic benefits of gas extraction continued to outweigh the doubts about the social and environmental consequences of continued exploitation of the gas field. Reassuring scientific studies and the comfortable physical distance of the majority of the Dutch public to the affected area abetted this attitude.

On 16 August 2012, however, an earthquake near the hamlet of Huizinge dented the sense of reassurance. At a force of 3.6 (Richter scale), it exceeded the current calculations about the potential severity of extraction-induced earthquakes. This shock provided an opening for questioning the scientific and political consensus. Later that same year, seismologist Annemarie Muntendam-Bos presented new calculations, causing a stir among scientists. Muntendam-Bos was employed by the State Supervision of Mines (*Staatstoezicht op de Mijnen*), the organization responsible for monitoring the social and environmental risks of mining and drilling activities. Her new research showed

that earthquakes would become more severe and occur more regularly if gas extraction continued on a similar scale (Van den Berg).

Backed by these new scientific insights and the regular occurrence of earthquakes, inhabitants of Groningen and the organizations they set up, like the Groninger Bodem Beweging, pressured the government to fundamentally reconsider its position on gas extraction in the area (see the chapters by Ineke Noordhoff and Dirk Jan Wolffram). Eventually, the activism and the new scientific insights prompted a reaction from national politicians, both in parliament and in ministries. A series of research reports commissioned by the Dutch Ministry of Economic Affairs after the Huizinge earthquake affirmed the warnings about the dangerous consequences of gas extraction. Nonetheless, the Minister of Economic Affairs, Henk Kamp, led the charge to postpone a decision on scaling down the volume of extraction in 2013, opting to stress scientific uncertainties rather than mitigating risks for the people living in the affected areas.

Kamp's successor Eric Wiebes eventually decided to cease the extraction of gas from the Groningen field in 2018. Despite the initial reluctance to reconsider gas extraction because of the financial consequences, the risk of liability and the sheer potential costs compelled a recalibration. Even if Wiebes had opted to change nothing, the exhaustion of the gas field was no longer a distant thought. By that time, the field was expected to be depleted in about fifteen years.

As the quantity of remaining gas in the field decreased, the cost of extraction itself rose. Adding to these costs were the expected costs of compensation and securing houses if extraction would continue. Against that background, discontinuation had become the most sensible option. "Safety has prevailed over euros," Wiebes concluded triumphantly, looking back on the decision made in 2018 (Middel). The fact that this victory took so long and was hard-fought, however, muted any sense of triumph.

4 Tilting Histories

The shift in perception of gas extraction necessitates a major recalibration of its history. Signs of such a revaluation can be discerned in popular accounts that recently appeared, but in many instances, they continue to be informed by the former success story. Strategic consultant Sven Ringelberg (2021) regards the problems that have arisen around natural gas as an occasion for mounting an energy transition towards sustainable sources of energy. He argues for a similarly ambitious and comprehensive transition towards new sources of energy as had been orchestrated by the national government after

the discovery of the Groningen gas field in 1959. Journalist Emiel Hakkenes (2020) continued to label the gas field a "treasure" that turned the Netherlands into a prosperous country. He primarily takes issue with the fact that the people in Groningen did not share in the wealth that had been accrued:

> For seventy years the wealth came from under their houses, churches and farms. What they got in return, was a shaking soil, that caused cracks in their houses and their hearts. In every way, this met the definition of suffering – the suffering of inequality, injustice and indifference. (Hakkenes 338)

A much more critical perspective is explored by journalists Margriet Brandsma, Heleen Ekker, and Reinalda Start (2016). In *De Gaskolonie* ("The Gas Colony"), they map the untransparent collaboration between the fossil fuel industry and the government, and argue that this was characteristic of the Groningen venture right from the start. They also question the short-term focus that dominated decision-making and highlight the importance of a reckoning with this history to inform the necessary transition to sustainable sources of energy. Geoscientist and journalist Sam Gerrits (2021) focuses on the dubious role the fossil fuel companies played in this history. The profound impact of gas extraction on the environment in the northeastern part of the Netherlands comes fully into focus in a book by Ineke Noordhoff (2022). She highlights the agency of the Groningers, describing the ways in which people in Groningen have tried to fight back against the negligence of the officials and companies involved.

These journalists thus highlight the crucial importance of political and economic power in shaping the politics of energy, and highlight the extent to which political and economic interests have marginalized the attention to social and environmental harm. Such critical accounts are now finding their way into the work of historians. A new commission was appointed to reappraise the Canon of Dutch history in 2019. This commission revised the entry on the gas field in the new Canon published in 2020. The history of the gas field is now presented as part of a broader energy history labeled "Coal and gas." The updated entry highlights how the phasing out of coal mining was connected to the introduction of the cheaper, cleaner, and more easily movable natural gas. Its authors point out the parallel problems that ensued from both forms of extraction: "pollution, earthquakes but rising temperatures through CO_2-emissions too" (Commissie Herijking Canon van Nederland 145). In the new entry, criticism of gas extraction is no longer connected to environmental pressure groups fighting to protect areas like the Wadden Sea but also to the people who were most affected by the earthquakes in Groningen:

> In the last couple of years, the earthquakes increased in strength and they seriously damaged houses and other buildings. This creates unrest among the inhabitants of Groningen who have organized several protests. The government wants to shut the gas tap down completely in 2022. (Commissie Herijking Canon van Nederland 145)

The emerging critical view of gas extraction was especially notable around the celebrations for NAM's 75th anniversary in 2022, which were more modest than they had been in earlier instances. A company-sponsored documentary – *NAM: 75 jaar bron van energie* ("NAM: source of energy for 75 years") – covered the earthquakes in the Groningen area quite extensively, reserving about a third of its duration for the issue. At the end of the film, "strategic energy expert" Lucia van Geuns concludes: "The first 65 years the NAM has produced a lot of prosperity and the last ten years much distress. So actually a laugh and a tear for the inhabitants, the NAM and the state." CEO Johan Atema professes that "we as a company have come out of this stronger and have learned many lessons." This illustrates how the history of gas extraction had finally tilted.

5 Reframing Postwar Prosperity

The narrative of postwar Dutch prosperity built on the "miracle" of gas revenues has become untenable in the light of the human suffering and environmental damage it caused. Our preceding analysis has highlighted the intimate relation between the history of gas extraction and the narrative of postwar progress in the Netherlands. As a new history of gas extraction in Groningen is emerging, this new perspective also prompts a broader recalibration of postwar historiography. How can we reframe the history of postwar prosperity?

The damages caused by gas extraction, the ballooning costs of compensation and protection of the inhabitants of the region, and the finite nature of the gas resources all render gas extraction in Groningen unviable. Since 2018, the political evaluation has been focused on the effects of gas extraction on people living in the Groningen area. The comprehensive historical approach adopted by the parliamentary inquiry, which resulted in a five-volume analysis, astutely pointed out how the structure of governance caused a persistent ignoring of the dire situation of those affected in Groningen. Yet it stopped short of questioning the dominant historical narrative of progress through gas extraction and ignored the way in which fossil fuel dependence contributed to climate change and even now impedes a transition to sustainable energy sources.

The parliamentary inquiry and recent popular publications predominantly revolved around the negative social impact. It is indeed important to bring into focus the harrowing dealings with the people of Groningen, to finally hear them and listen to them, and to do what is possible to prevent more suffering. Their perspective deserves a place in future historiography, as the updated Canon of the Netherlands from 2020 has already tentatively acknowledged. The failure of subsequent government officials to protect the inhabitants of the Groningen area has also rightly drawn attention. However, the ecological consequences of the extraction and boosted consumption of gas have moved into the background in public debate. Though understandable, this risks ignoring the elephant in the room. Gas extraction is part of a broader history of increased dependence on fossil fuels. The updated entry on the history of coal and gas from the Canon hints at an acknowledgment of this history as it points out how mining, drilling, and using coal and gas have contributed to global warming (Commissie Herijking Canon van Nederland 144–145).

Human-induced climate change has become a defining issue of our times. The acclaimed postwar prosperity came at an as-of-yet unfathomable environmental cost that includes a high concentration of CO_2 in the atmosphere, a wave of extinct animal and plant species, and a huge amount of plastic waste. These consequences of the massive use of fossil fuels will appear as a distinct layer in the earth thousands of years from now – an insight Dipesh Chakrabarty has labeled a "knowing beyond our comprehension" (221).

Chakrabarty and others have taken to the notion of the Anthropocene to come to terms with the realization of the immense influence of humans on the condition of the planet. Humans have collectively become a "geological actor," transforming the world on an unprecedented scale through their activities. This insight compels us to rethink not just how we name our current era, but also how we write our histories. The way humans have become a geological factor calls for a view of history that regards the history of the human species collectively and integrates the history of human-induced climate change in the scales of geological history (Chakrabarty). Yet historical accounts on this scale cannot provide us with accounts of what drove the increasing use of fossil fuels, who contested these developments, which inequalities were created, and which power relations were at play (Bonneuil and Fressoz; Westermann and Höhler).

To create such accounts, we need new down-to-earth analyses that delve into the intricacies of histories such as that of gas extraction in Groningen. This history, then, is not just a local phenomenon but rather presents a building block for a history of the Anthropocene. It positions gas extraction at the heart of postwar global developments in order to explain how it came to be

accepted despite the obvious social and environmental costs. The way gas extraction and the accompanying emphasis on technological and economic progress have long dominated public and historical accounts can be understood as part of the "Great Acceleration" in postwar history. Under this banner, J. R. McNeill and Peter Engelke have elaborated how, after the end of World War II, human impact on the environment and climate escalated in only a short period of time. Using new machinery and relatively cheap oil and gas as energy sources, people were able to intervene in their natural environment on an unprecedented scale. Intensified agriculture and large-scale forest clearing were the most visible consequences, but the everyday use of all kinds of plastic objects was another direct result. Especially in the rich countries of the Global North, people quickly got used to a lifestyle that required a previously unprecedented amount of energy. Moreover, because the world's population was growing rapidly, the adverse effects took on unprecedented proportions (Steffen et al.).

The way in which the history of gas extraction in Groningen has been narrated, from the initial optimism up until its recent tilting, enables a better understanding of how the costs of this Great Acceleration have not been accounted for. Often, they were simply ignored or deemed irrelevant. More fundamentally, however, they have been understood as the inevitable price that had to be paid for postwar prosperity. If we combine the reckoning with the history of gas extraction that has recently taken place in the Netherlands with an understanding of how the increasing dependence on fossil fuels has come to threaten the living conditions on the planet, this lack of accounting is no longer tenable.

A first exploration of how the narratives of the Great Acceleration and gas extraction could be combined has been provided by the authors of *Well-being, Sustainability and Social Development: The Netherlands 1850–2050*. This study reinterprets the history of the Netherlands from the vantage point of "well-being" (Lintsen et al.). Instead of placing an emphasis on economic prosperity, the authors measure the quality of life of the Dutch population since 1850 using a broad set of indicators, including health, education and leisure, biodiversity, and the functioning of political institutions. Moreover, they analyze the extent to which quality of life was also guaranteed for people in other parts of the world and for future generations.

Compared to earlier historiography, *Well-being, Sustainability and Social Development* presents a welcome step in the direction of a reconfiguration of the parameters by which prosperity can be measured. In this account, the period around 1960 becomes a turning point as well as an exemplary moment. By that time, the average Dutch citizen had enough to eat and access to

education, healthcare, and acceptable housing. Hygiene had improved and less than 1% of the population still lived in extreme poverty. "It was only quite recently – some 50 or 60 years ago – that well-being and sustainability were still reasonably balanced: the classical issue of poverty had been solved while claims on natural capital remained reasonably modest," the authors conclude (Lintsen et al. 502).

But that balance was built on sand, the authors continue. Pollution was a growing problem. Resource consumption was increasing so rapidly that it would soon be unsustainable – fossil fuel consumption, for example, grew by an average of 7% per year between 1960 and 1975. The Great Acceleration that McNeill and Engelke pointed to was already running at full speed and, due to the Groningen gas, was stepping up a gear in the Netherlands. In addition, rich countries had unilaterally shaped world trade to their advantage, a situation that more and more countries in the Global South were opposing during this period, with little success (Kunkel; Van Dam). Little reason, then, to yearn back to the 1960s.

For the Netherlands, gas extraction fundamentally shaped a society dependent on fossil fuels while normalizing the dismissal of social and environmental costs. Historians long portrayed gas extraction as a wellspring of prosperity, stifling critical discussion of these costs. The parliamentary inquiry has conclusively demonstrated that prosperity was neither equally distributed nor democratically negotiated. Not everyone benefited, and many had no voice in determining acceptable risks. Prosperity did not simply emerge from fortuitous discovery and competent management. Rather, the pursuit of economic expansion and technological development systematically undermined planetary well-being. Acknowledging the substantial social and environmental damage that resulted forces us to abandon the narrative of post-war welfare as a success story. Prosperity extracted a severe toll from present and future generations. Instead of celebrating "golden years," we must reconceptualize the post-war era as a period of poisonous prosperity – one whose true costs are only now becoming fully apparent.

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