Encroaching Irish bogland frontiers: science, policy and aspirations from the 1770s to the 1840s

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Introduction

I begin this chapter with quotes by Arthur Young (1741–1820), an English social and political observer and writer, who spent years in Ireland in the 1770s and published a detailed account of his observations and a survey, extensively cited later in the nineteenth century, based on the knowledge he gathered on that journey. When he covered the topography of the island, he marvelled how ‘the bogs, of which foreigners have heard so much, are very extensive in Ireland’. As a man who had devoted his life to the improvement of agriculture and the social conditions of the rural poor, he maintained that ‘the means of improving them [bogs] is the most important consideration at present’. Young envisioned how a country so widely covered with ‘wastelands’ could possess a lush, cultivated countryside and wealthier population and serve as the granary of the industrialising England.¹

Arthur Young’s writing in a sense bespeaks the quite common notions and, moreover, visions of the future of late eighteenth- and early nineteenth-century Western and Northern European elite and scholars related to boggy, fenny and marshy areas. First of all, there were vast tracts of bogs or mires still in an almost wholly natural condition in the frontiers near or beyond the settled and almost wholly artificial areas of the then European economic or political powers – not only in Ireland but also in East Friesland, Livonia, Moscow and Nizhny Novgorod Oblasts, Norrland, Ostrobothnia and Sápmi (Finnish, Norwegian and Swedish Lapland) among others.² When we think about the most famous frontiers in the nineteenth century we usually name American prairies, the
backwoods of colonial Africa and Southeast Asia, Siberian woodlands or the polar regions. These frontiers and the ambitions to map and tap them attained far more publicity in late eighteenth- and early nineteenth-century European media and popular culture than peatlands, which, nevertheless, also became the objects of economic, political and scientific meaning-making, which unavoidably began to shape the society–nature nexus in these particular areas. Bogs, fens, marshes and mires, as such, were conceived as wastelands and barriers to progress or civilisation. Increasingly commercial and technology- and science-oriented perspectives on peatlands and wetlands gathered momentum, aiming at transforming these areas into territories that were seen as being made valuable by local people or by massive intervention of state or enterprises. Consequently, quite distant and distinct environments were bound together when it comes to the appraisal of nature.

This chapter seeks to explain these meaning-making, valuation and commercialisation processes concerning bogs in Ireland from the 1770s to the 1840s. The Industrial Revolution, a crucial landmark considering the development of a new mindset regarding the set of assumptions about and notions of frontiers or wastelands, originated in Ireland in the 1770s. It was during that decade that Arthur Young also published his survey of Ireland, which, compared with earlier writings on the matter, was unique in its thoroughness and, should I say, certain imperial ethos. At the beginning of the nineteenth century the amount of publications and reports focusing on how to tame bogs increased and the first commission was charged with finding ways to improve these wastelands. The temporal end of this study, in turn, is in the 1840s before the Great Famine, which started the reassessment of past policies and priorities. Besides, late nineteenth-century plans for improving Irish bogs largely rested upon the plans and aspirations outlined already between the 1770s and 1840s.

In his pioneering work The Making of the English Landscape, William George Hoskins stated that his focus was on the ways in which humans, for instance, ‘have reclaimed marshland, fen, and moor’, ‘created fields out of a wilderness’ and ‘made canals’. My focus is rather on the question of why humans aimed at reclaiming peatlands, in this case particularly bogs, in Ireland. Therefore I do not trace how the plans and ideas expressed in the sources finally materialised, or how many acres, when and where were converted into arable and forest land or industrial-scale peat extraction sites, and how this all altered the natural flora and fauna in the drained or fragmented bog areas. This kind of study has been done excellently by Oliver Rackham on Britain’s ‘ordinary landscape’ and how it has been made ‘both by the natural world and by human activities,
interacting with each other over many centuries’. In this chapter I am, though, more interested in the notions, values and future visions to be traced in the texts, and, in addition, what they tell us about the changing human–peatland relationship. I do not, however, consider bogland frontiers merely as a social construction, but equally as part of a tangible material world. Having read the sources used in this study, one can nearly sense the many-metres-thick peat layer, as well as muddy and watery soil awaiting ‘industrious drainers’ and ‘spirited improvers’ in the vast bogs of Ireland. Human–peatland relationship(s) should indeed be contemplated as an ambiguous and intricate process of interrelatedness within which both parties are active actors. To put it simply, humans also become the objects of their own agency and, therefore, the outcome of the action is difficult to predict, unlike the outcome of rule-based causal processes. Coincidence and even chaos play bigger roles than when examining natural or cultural processes as such, separated from each other.

As primary sources, I use parliamentary Committee Reports related to draining and cultivating Irish bogs and improving the inland navigation, as well as publications of, for example, Arthur Young, Thomas Newenham, Richard Griffith, James Dawson, Joseph Hume, Robert Monteath and Sir Robert Kane on the reclamation of Irish bogs for the benefit of agriculture, canal transport, silviculture and the prosperity of the country. Especially the assumptions and plans made by Arthur Young and Sir Robert Kane were etched in the general debates over the drainage issue and their conclusions became widely cited later in the nineteenth century. In addition to these works, the four detailed and practical reports from the Committee Respecting the Draining of Bogs in Ireland between 1810 and 1814 set the priorities for the ideal geographical locations of the intended drainage, as well as how the drained soil could be best utilised, and provided decision makers and landowners with the then most accurate scientific knowledge on these areas; in total, the commissioners surveyed 731,976 English acres of various bogs. Altogether, it is important to contemplate whether the sources describe best practice rather than the state of affairs. In many cases they do cover the already materialised ‘improvements of wastelands’ up to a point, but mostly they envisage the future of agriculture and inland navigation in Ireland and Great Britain as well and how the goals could be achieved by means of the drainage.

Theoretically the issues covered in this chapter are intertwined with discussions on frontiers, environmental knowledge and enviro-technical imaginaries. Michael Redclift has outlined that ‘frontiers can be seen as both material realities and as social constructions, whose
ideological utility often develops slowly, without clear lines of demarcation’. This is an apt remark when studying various historical peatland frontiers. Redclift considers migration and settlement, the management of resources and the effects of globalisation as the main processes that determine the development of the frontier. In my case, those who were devoted to the drainage issue tried to fight emigration and find ways to settle the then uninhabited or sparsely populated wastelands. Their main aim was to find better ways to manage previously useless or valueless resources and convert them into valuable property. In a sense, the environment was seen as an input into a technological and commercial system.

The effects of (proto-)globalisation can be found in this case too, at least up to a point, since the Irish economy became ‘inextricably bound to the rest of Britain’ in the nineteenth century, as Michael Turner puts it, and the British economy, in turn, can be contended to have become bound with its colonies and those European areas that were important to the empire’s security of grain supply and raw materials. That question could also be turned into one that deals with the effects of British imperialism dominated by London. In this case, those who had adopted a British identity with its ambitions, or, paraphrasing Mary Louise Pratt, ‘imperial eyes’, in a sense tried to execute the British civilising mission to ensure the material progress of Ireland. The civilising mission also related to nature, aiming at making it blooming and wealth-producing.

Bogland frontiers can be analysed in terms of knowledge and technological systems and how they impact the altered ecologies. I seek to disentangle how accumulating knowledge on peat soil, as well as new drainage, canal transport and peat extraction and processing technologies, inspired those who devoted themselves to the civilisation of nature to reappraise peripheral areas and to promote the conversion of these areas into territories that are seen as being made valuable. As the main processes that determined the development of these frontiers I consider settlement, the management of resources and the effects of the centralised laissez-faire trading system dominated by London. The whole complex question can be placed in category (5) presented in the opening chapter by Jon Agar. Later, in the twentieth century, it might be described under (3) and (7), but that is another story.

British scientists and politicians who envisaged how boglands could be transformed into valuable property took part in the building and dissemination of socio-technical imaginaries. In Jasanoffian terms, these imaginaries become enmeshed in performing diverse visions of collective good, at expanding scales of governance from communities.
to nation states.\textsuperscript{10} In my case, socio-technical imaginaries articulated visions of social futures and of risk and benefit for society. It is therefore essential to consider how these imaginaries have provided underlying rationale for visions concerning drainage. Furthermore, projects that transformed the environment can be seen as the reflections of socio-technical imaginaries and changing aesthetical, economic and societal values to nature. Plans and visions – even as ideas and beliefs – meant the increasing rationalisation and commercialisation of peatlands.

When late eighteenth- and early nineteenth-century scholars and engineers talked about bogs they used a different set of definitions from the ones of today. In Ireland, peat was nearly always termed turf. Knowledge about the peat soil and the hydrology of bogs accumulated gradually and became tested in practical efforts to reclaim former peatlands. Irish bogs were divided into flat red bogs and mountain bogs, depending on their location and the composition of the peat soil. Mountain bogs – mountain blanket bogs in the current term – occur on relatively flat terrain in the mountain ranges above 200m altitude and are characterised by heavy rainfall and low evaporation, and red bogs – or raised bogs – occur throughout the midlands of Ireland and got their name because the dry peat looks brownish-red in colour. Overall, bogs have played a fundamental role in Irish culture. In some regions their reclamation for fuel peat was an important part of the local economy. However, the perceptions and the use of bogs were subject to considerable changes in the modern period.

\textbf{Bogland frontiers framed and labelled}

The drainage issue had been more or less on the agenda in Ireland already from the beginning of the eighteenth century. William King, Fellow of the Dublin Society, published in 1685 an article in which he labelled Irish bogs as ‘a great destruction to Cattle’, ‘a great hindrance in passing from place to place’ and ‘a shelter and refuge to Tories and Thieves’, and ruminated ‘how they [bogs] may be remedyed, or made useful’, for example, as meadows. Moreover, the Crown could consolidate its control over the remote areas and, at the same time, promote cattle farming.\textsuperscript{11} King’s arguments, however, can be viewed more as a backing to the police practices under the rubric of regimentation rather than as a particularly serious plan to steer the minds of the landowners on attacking the drainage issue. His treatise simply lacks detailed and practical survey and technical advice for entering into the work.
Some freeholders tried to advance the reclamation of Irish bogs in the eighteenth century, and the Dublin Society tried to further drainage works in principle at least. Henry Brooke, one of these drainers, even wrote a guidebook entitled *A Brief Essay on the Nature of Bogs, and the Method of Reclaiming Them* based on his experiences in 1772 and gave quite detailed descriptions of how a bog can be converted into arable land. Brooke was a writer and pamphleteer born in Rantavan, County Cavan, Ireland in 1703, who ran a farm at Rantavan in the 1770s, where he drained a lake and got a bog instead. Brooke was personally interested in transport and the commercial revolution of the eighteenth century. His book, however, was targeted at those landowners living in a similar environment and having an interest in practical instructions related to the drainage. Thus, it is hard to find an imperial ethos in Brooke’s plan, aiming at a comprehensive civilising mission when it comes to nature and Irish ‘wastelands’ as a whole. That was an angle, or even a mindset, which became apparent in Arthur Young’s thorough survey *Arthur Young’s Tour in Ireland, 1776–1779*.

Young was already an established agricultural and political writer when he published the survey on Ireland. He carried out many experiments on his own farms and reported on the practices of other farmers after touring the major agricultural districts of several countries in order to do a personal survey. Young also gathered information by corresponding with the leading agriculturalists of his age, both at home and abroad, including John Sinclair, the Chairman of the Board of Agriculture, and George Washington in America. Young always urged the traveller to depart from the main roads in order to survey agriculture that was less influenced by access to trade with urban or industrial areas. That working method led to him travelling the vast Irish bogland areas as well, which impressed him in many ways.

‘Although the proportion of waste territory is not, I apprehend, so great in Ireland as it is in England, certainly owing to the rights of commonage in the latter country, which fortunately have no existence in Ireland’, Young began the description of boglands, ‘yet are the tracts of desert mountains and bogs very considerable’. By framing and labelling certain areas as ‘waste territories’ Young in a sense ignored all the land use conventions and techniques the locals had practised in these areas. He does not cover whether, for example, bogs were seen as waste territories by the rural poor. In fact, that seemed to have been quite an inessential question for the men who devoted themselves to the civilising mission.

At the turn of the nineteenth century, dichotomous ideas of wasteland as ruined or defiled nature became fully codified in Western
philosophy and literature. In that context, wasteland refers to land that is as yet unmodified by civilisation. As Vittoria Di Palma puts it, ‘the wasteland is defined not by what it is or what it has, but by what it lacks’. In the eyes of drainers and improvers, bogs certainly lacked something, for example, permanent settlement, good road and canal connections, prosperous holdings, green cultivated land and even picturesque scenery. It remains, however, unclear whether the rural poor themselves shared that picture. Their voice is totally missing from the sources. Historically the human–bog relationship in Ireland and in almost every so-called peatland frontier area in Western and Northern Europe, however, had been quite mobile, a strategy for adapting to the environment and also resourcefully utilising the best offerings of nature rather than transforming it.

In Ireland, the main function of bogs had been to provide fuel for the bulk of the rural population. Turf production by using such approved low-tech tools as sleáns (two-sided spades), wooden wheelbarrows, etc. was an important part of the work year: between cutting, drying, harvesting and drawing home the turf, a labourer’s annual supply required up to one month’s work. Like the potato, the bulk of the turf harvest was not marketed. Economic historian Cormac Ó Gráda even argues that ‘abundant fuel was one of the factors which made life for the poor in Ireland bearable’. Boglands had been turf-cutting frontiers without any wide-ranging improvement aims for the freeholders and many landlords as well, whereas in Young’s visions these areas rather represented agricultural, navigation and settlement frontiers with more thorough ambitions.

Young concluded that the main reasons for the lion’s share of the Irish bogs still being unreclaimed were the custom of leaseholders and, equally, the poor grip on reality of the majority of the landlords. He described how ‘the minutes of the journey show that a few gentlemen have executed very meritorious works even in these [bogs]; but as they, unfortunately for the public, do not live upon any of the very extensive bogs, the inhabitants near the latter deny the application of their remarks’. Boglands had largely remained untamed and uncultivated. ‘Trifling as they have been on the Irish mountains yet are the bogs still more neglected,’ Young notes. Having then given a detailed account of the costs expected from the drainage, which he considered to be ‘very moderate’, Young encourages both parties to diligently attack the drainage issue. ‘Whatever the means used’, he persuaded, ‘certain it is that no meadows are equal to those gained by improving a bog.’

It is possible to find all the frontiers considered in my study already in Young’s pioneering survey. Boglands were agricultural frontiers as they were places waiting to be converted into pasture and,
consequently, opening settlement frontiers that could become more permanently and firmly inhabited. For Young, boglands represented not so much a terra nullius but rather areas at the edge of cultivation or beyond it. It would be possible to, paraphrasing legal terms, dismiss a case, but wouldn’t that be inefficient and a pure waste of resources given that the estimated costs were moderate and the anticipated benefits manifold? In a similar vein, Young criticised the state of affairs when it comes to inland navigation, which was quite inextricably linked to the drainage issue. ‘But of all public works, none have been so much favoured as inland navigations,’ Young lashes out at the decision makers, ‘but under the administration of this [Navigation] Board, which consists of many of the most considerable persons in the kingdom, very great attempts have been made, but I am sorry to observe, very little completed.’

Navigation frontier as the opportunity for profit or efficiency from a new technology emerged once again in a proposition that came from inside the Dublin Society. The writer using his author abbreviation W.V. proposed in 1801 ‘that a company be formed, consisting of subscribers … to be incorporated by act of parliament, and called the Waste Land Company of Ireland’. That company would ‘have power to purchase from tenants, in fee simple, red or black bogs … lying together; or strands, or marshes, usually covered with the tides’ and ‘also to cut canals to neighbouring towns, for the purpose of supplying them with turf and water’. The author was quite pessimistic about finding enough capital from private persons to embark on extensive drainage works. He justified his proposition by arguing that

it is conceived the reason, why the bogs of Ireland have not been improved by individuals is, because they have neither property nor power, property to undertake a heavy work, or power to cut drains through neighbouring lands, or to get manure elsewhere than on the ground, and therefore that great bogs can never be improved but by a company, under the powers of an act of parliament.

Having once completed the drainage, ‘such a company could carry on their works as well as any canal company’. The agricultural frontier aspect is also covered in the proposition. W.V. mentions that ‘bogs, in the course of their improvement, are well-suited to the growth of hemp and rape’.

Young’s and W.V.’s plans, even as ideas, meant the increasing commercialisation, commodification and rationalisation of boglands. Within that context, frontiers are conceived, as Gordon M. Winder and Andreas
Dix formulate it, ‘in terms of modernising commercial projects backed by cultural imaginaries and scientific, technical and political calculation that are set to work in environments’. With the process of modernisation, boglands as objects became increasingly socio-natural and thus connected to the desires, aspirations and demands of the British civilising mission.

**Bogland frontiers surveyed and assessed**

In addition to the works of Arthur Young and other late eighteenth- and early nineteenth-century improvers, the Dublin Society and the Irish Parliament also tried to prop up the drainage issue. The Irish Parliament, for example, passed an Act in 1731 to ‘encourage the improvement of barren and wasteland, and bogs’. The charter of the Dublin Society from 1750, in turn, recites ‘that several of the nobility and gentry of Ireland, having observed vast tracts of land and bog in Ireland uncultivated, and a general want of skill and industry in the inhabitants to improve them, had formed themselves into a voluntary society for promoting husbandry and other useful arts’, including ‘draining bogs’. There were, however, many drainers and improvers who were not satisfied with how things had progressed in practice in the late eighteenth century and at the beginning of the nineteenth century. The government was expected to step forward to advance the issue more sensibly.

The appointment of a special committee with special power to manage the task, including expensive and extensive surveys, was pushed by, for example, Sir Arthur Wellesley, who was Chief Secretary of Ireland in 1807 and 1808, and Thomas Newenham, an Irish political writer and former MP. They both had the political assets to win support from London. Wellesley wrote a memorandum to the Home Secretary, Lord Liverpool, on the drainage of the bogs of Ireland and proposed ‘the appointment of a Commission with power to survey the different bogs and ascertain their extent, the practicability of draining them and the expense of that operation’. Newenham’s *A View of the Natural, Political, and Commercial Circumstances of Ireland* published in 1809 followed the optimistic perceptions of Arthur Young and positioned the Irish drainage issue as significant to the success of Great Britain as well. Newenham also saw the costs following from the drainage as very moderate. ‘Such an expenditure’, Newenham judged, ‘would unquestionably enable Ireland to supply, most amply, the growing wants of England, after satisfying those of her own rapidly increasing population.’ He estimated that
if one-eighth part of this [bogs of Ireland], consisting such land as, by situation, nature of soil, and abundance of natural manures, appeared most favourable circumstanced for cultivation, were reclaimed, 3,600,000 average barrels of the different sorts of grain, even with the present defective mode of husbandry, might be annually obtained.

Ireland could be easily transformed from ‘waste territories’ to the granary of industrialising England, whose dependency on the grain imports was substantial.23

Finally, Parliament appointed the Committee Respecting the Draining of Bogs in Ireland in 1809. Already active proponents of the drainage issue, for example, Charles Vallancey, Richard Griffith, John Leslie Foster and John Staunton Rochford, were nominated to the secretary of the commissioners to be appointed to that task. Vallancey, the acting chairman of the committee, was an English-born military surveyor who was sent to Ireland in the late 1760s, and Richard Griffith was Chairman of the Board of Works, an Irish geologist and mining engineer. Rochford served on the Dublin Society’s chemistry committee, and Foster was an Irish barrister and nephew of John Foster, the Chancellor of the Exchequer of Ireland. The task of surveying Irish bogs by counties, to be carried out by the assigned engineers, was directed by the Board of Works of Ireland.24 Ultimately, the appointment of the parliamentary committee can be seen as a result of a decades-long deliberation and civilising mission in terms of the ‘wastelands’ of Great Britain. Besides, the time was favourable for the initiative, since Britain was at war and stronger self-sufficiency was desired.

The committee authored four detailed reports on the bogs of Ireland between 1810 and 1814 and provided the House of Commons with an impressive amount of agricultural, soil chemical and topographical knowledge and, in addition, plans on how, where and at what cost to commence the drainage. The reports also contained pioneering research into peat deposits. No other such surveys were conducted in Ireland in the nineteenth century with respect to the thoroughness, geographical coverage and the amount of work.

The commission concluded that the drainage would benefit Ireland and also England in many ways and estimated that all flat red bogs ‘might be converted to the general purposes of agriculture’.25 As for mountain bogs, the commission was rather optimistic and judged ‘that not only they, but a considerable portion of the mountain soil, may be improved at a small expense, so far as to afford excellent pasture and meadow’.26
Not only was the state of agriculture expected to be improved, but inland navigation would also be advanced. ‘Whenever the bogs shall have been perfectly drained’, Richard Griffith calculated, ‘it will doubtless be a matter well worthy of the consideration of the proprietors to obtain navigable communications with the main land, for the purpose of procuring gravel, lime, etc., and for the more easy and cheap conveyance to market of the produce of the bogs.’

Lime and fine gravel were blended with peat soil to reduce its acidity. On the whole, the commission was convinced that the increasing land value would cover the expenses of the improvements that had been made to it.

The committee’s contribution to the mapping of Irish bogland frontiers bound these environments with complicated trading networks in a more illustrative and reasonable way. The agricultural or navigation frontier was not just an Irish frontier but a British frontier as well. Farm products played a crucial role in stoking the Industrial Revolution. In the future visions of the commission, Ireland would bear an apparent resemblance to the then much more cultivated and manicured environments in Western Europe. The cultivated and canalised low-lying lands of Ireland would see a constant flow of materials and products from inland to the seaports and to England, and vice versa. Even the most ‘desolated’ and ‘abandoned’ mountain districts would be used as pasture. Trading networks and their associated practices and interdependencies allowed boglands to be viewed through ever more calculative and speculative eyes. That desired march of progress demonstrated how new technology became embedded in the future visions. The age of canals and steam would be realised in the back garden of industrialising England and an infinitely greater bulk of goods could be carried in much greater security on barges than in wagons and at a very much smaller expenditure of horse power and labour. Paradoxically, rather low technology, for example, spades, mills and weirs, and lots of strong men and women were still needed to drain the water from boggy areas. Actually, that was the way peatlands were prepared for improvements until the late nineteenth century when machines and dynamite were tested in the drainage.

Consequently, boglands would become almost wholly artificial environments. In fact, there would hardly be intact bogs in Ireland any more except for the roughest and most desolate ones, should the plans of the drainers and improvers be fulfilled – only meadows, fields, turf extraction sites, canals and afforested mountains instead. Consequently, peatland ecologies would begin to tilt towards monoculture: natural, rare and diverse bog flora, including Sphagnum mosses, bog cotton,
heathers, black bog rushes, bog myrtle, royal fern and sundew, would be replaced by plant species that humans valued most both economically and often aesthetically. Despite the ambitiousness and far-reachingness of the plans, the commission did not see any hazards for the locals arising from the drainage except the increasing flood risk. That, however, could be obviated by deepening the beds, and removing channel obstructions in these small rivers, sufficiently to render them capable of effecting the quick discharge of the waters, without flooding the country, as otherwise the injury that might be produced by the floods in the low lands would counterbalance the advantage of drainage in the bogs.\textsuperscript{29}

Environmental learning, in this case, became a process characterised by interest in practical details, utilitarian values and the ambition to develop suitable technologies and engineering to drain the water from bogs.

**Bogland frontiers revisited and reopened**

The reports of the committee were ultimately not published and made open to the public. Quite soon, they were buried among the endless archive of the British parliamentary papers after the drainage issue took a backseat in the government’s political agenda. Richard Griffith made an attempt to raise the issue by publishing a book in 1819 in which he largely reiterated his arguments already floated years ago in the reports. The book was dedicated to Robert Peel, former Chief Secretary for Ireland and a rising star in the Conservative party, who Griffith thought had power to promote the issue in Parliament. Griffith was, however, politically experienced enough to tie the issue to a more burning question, namely the poor law question. ‘Let the legislature open to the people new sources of profitable labour, by the extension of inland navigation and by reclaiming the bogs,’ Griffith writes; ‘by doing this, they would afford present employment to the poor, and gradually throw three million acres into the land market; which would reduce the extravagant rate of rents; and thus meet the existing evil in a double form’. Griffith stressed that ‘Ireland must now be considered as an integral part of the Empire’. The measures that to him appeared of the most immediate importance for the improvement of Ireland were ‘the further extension of her Inland navigation; the draining of her Bogs, and the adoption of a liberal system of Religious and Moral
A new angle was opened in the drainage issue and socio-technical imaginations of boglands.

Robert Fraser, an Irish statistician and surveyor, wrote in *Sketches and Essays on the Present State of Ireland* in 1822 for the acting Committee of the Society how

it is of importance to remark, that the reclaiming of these bogs is an undertaking of great national importance; inasmuch as the whole of the two millions of acres, are capable of being converted into the production of grain, and that at the same time the improvement of these bogs, would be a great source of employment, to the redundant population of this country, their full cultivation, would ensure to England, supplies of grain, at moderate prices, which might render it wholly independent of foreign countries, for the food of its manufacturing population.

Fraser wondered that ‘no legislative measure has been adopted, in order to facilitate the reclaiming of those extensive tracts’. Tackling the poor question in Ireland by means of promoting drainage was also addressed by a few British politicians in the 1830s. Joseph Hume, a radical MP, for example, tried to expedite the solving of the issue by publishing a scheme for ‘improving bogs and other wastelands in Ireland’, based on the arguments already brought forward by Arthur Young, the committee and Richard Griffith.

Whether eventually applied to the poor question, agricultural improvement or inland navigation, Irish bogland frontiers became viewed ever more dominantly within the imperial context in the 1820s and 1830s. James Dawson, an entrepreneur who experimented with steam power on the Grand Canal in the early 1810s and later on also entered the mining business, argued in letters that originally appeared in *Carrick’s Morning Post* in 1818 and 1819 how drainage and canalisation was the best way to ‘promote the civilisation and improvement of the interior of Ireland, to supply the increasing agricultural wants of Great Britain, and provide employment for our superabundant population’. Naturally that would also rejuvenate the business of canal companies, as well as mining enterprises reliant on good canal networks. Robert Monteath, a forester and silvicultural writer, in turn, promised in his book in 1829 that if

[my] plan of improving the wastelands of Ireland, taken in connexion with my other plans of improvement on bare, rocky soils, are
Monteath dedicated his book to the Duke of Northumberland, Lord Lieutenant of Ireland. For Monteath, mountain bogs represented silvicultural frontiers with splendid prospects. In this case too, frontiers connoted a perspective viewed from a centre and involved imperial power relations.

The projection of values, plans and aspirations on to the bogland frontiers remained quite unchanged until the 1840s. The perspective was dominated by a concoction of agricultural, inland navigation and settlement prospects. With the exception of Robert Monteath’s work, silvicultural interests were covered only sparingly. This goes for perceiving bogs as fuel frontiers as well. Late eighteenth- and early nineteenth-century drainers and improvers almost downplayed the significance of bogs as a source of fuel. For them, cutting and drying turf by hand for heating purposes may have seemed archaic and ineffectual.

Boglands as fuel frontiers became framed later in the early 1840s by Sir Robert Kane, an Irish chemist, who focused on frontiers that extended vertically downward in terms of resources for extractive activities. Before that, bogland frontiers epitomised horizontally extensive frontiers for agricultural and transportation activities. Kane had seen how ‘the employment of turf as a source of heat in industry is extending’ and judged that ‘there is in our bogs amassed a quantity of turf, which, if the peculiar characters of that fuel be suitably attended to, may become of eminent importance to the country’. Whereas the locals cut turf by hand and ‘spoiled [it] by its mode of preparation’, Kane envisioned fully mechanised turf extraction. ‘It is only by operating on a great scale, and with powerful machinery, in fact,’ he writes, ‘only by manufacturing compressed peat largely for sale that the operation can be made to practically succeed.’ And that was supposed to be just the beginning of the scientific and technological processing of peat. ‘Not merely may we utilise turf in its natural condition, or compressed, or impregnated with pitchy matter,’ Kane analysed, ‘but we may carbonise it as we do wood, and prepare turf charcoal’ for many industrial purposes, including railway and steam boat engines, ironworks, textile factories and breweries.

What makes Kane’s book of special interest is its divergent national overtone. Unlike Griffith or Fraser, Kane does not stress the benefits of the exploitation of peatlands for Britain but brings out how the gain resulting
from new technology and activities would especially profit Ireland. He does not see, in the terms of Kenneth Pomeranz, Irish boglands as ‘ghost acres’ for England’s Industrial Revolution but as valuable resources for Ireland’s underdeveloped industry and also for national self-sufficiency.

Altogether, Kane’s vision was a high-tech response to the exploitation of bogs. It involved a series of then modern technologies, including, for example, hydraulic press and high pressure engines, and a series of industrial practices. To Kane’s mind, the exploitation of bogs should be based on scientific-economic knowledge and calculation. Boglands were to service manifold aims and the transition to mass production of both soft and hard commodities. These aims benefited the empire and his homeland, Ireland, as well. The concept of bogland frontiers became broadened by new knowledge and technologies that repeatedly pushed the frontier into various layers of strata. Most importantly, making intact bogs valuable was no longer only to be achieved by converting them into arable land or engineered canal networks.

Later advocates of the drainage and reclamation of bogs often invoked late eighteenth-century and early nineteenth-century drainers and improvers to back up their arguments. Calculations and priorities changed, but the total aim remained the same in the late nineteenth century and early twentieth century: to transform boglands into places that are being seen to be made more valuable. Various visions put into practice had begun to alter the ecologies of untapped boglands over a wide area already in the nineteenth century, although the peak in drainage and the use of peat as a fuel occurred later in the next century.

**Summary**

Historically, the exploitation of peatlands has been sold to investors, policy makers, citizens and local people as the continuation of technologically driven futures with a particular notion of progress. Focusing on late eighteenth- and early nineteenth-century Irish drainage, reclamation and inland navigation plans and visions, this chapter looks at the imaginaries of technological progress and commodification of nature and how they take the form of material-discursive projects of making the future. Such visions of social futures were developed by English and Irish scientists and politicians who aimed at turning vast Irish boglands into valuable property by civilising nature.

The period under scrutiny was in many ways a tipping point in values, notions and ambitions and meant increasing calculation,
Common to these writings was the future vision they expressed for Ireland and the whole British Empire and how that vision was fundamentally based on strong faith in the advancement of science and technology to tame and refine ‘wastelands’, as bogs were labelled and assessed. Irish boglands became viewed through imperial eyes and tied to the British civilising mission. The aim of so-called drainers and improvers was to win support for their plans not just from Irish landowners and the economic elite but from the cabinet and Parliament.

Arthur Young’s thorough survey *Arthur Young’s Tour in Ireland, 1776–1779* emerged as a signpost of the new wave of scientific-technological improvers aiming at transforming boglands into territories that were seen as being made more valuable. Young’s survey was rather optimistic with respect to the appraised potential of Irish bogs for pasture and tillage and the general development of the island through the improvement of wastelands. Thomas Newenham, an Irish political writer and former MP, followed the perceptions of Arthur Young and positioned the Irish drainage issue as significant to the success of Great Britain as well.

The optimistic spirit of Young and Newenham and other improvers of the time was shared by the Dublin Society and its members, envisioning an upturn in the economic and political conditions of their homeland now as an irremovable part of the empire. The appointment of a parliamentary committee in 1809 to enquire into the nature and extent of the several bogs in Ireland, and the practicability of draining and cultivating them, represented the apogee for improvers in terms of political publicity. The committee authored four detailed reports on the bogs of Ireland between 1810 and 1814 and provided the House of Commons with considerable agricultural, soil chemical and topographical knowledge and, in addition, plans on how and at what cost the drainage could be commenced. The committee’s contribution to the appraisal of Irish bogland frontiers bound these environments with complicated trading networks in a more reasonable way. The agricultural or navigation frontier was not just an Irish frontier but a British frontier as well. Improvers envisaged how the cultivated and canalised low-lying lands of Ireland would see a constant flow of materials and products from inland to the seaports and to England, and vice versa. That desired march of progress demonstrated how technology, particularly steam power and barges capable of moving heavy produce, became embedded in the future visions.

The reports of the committee were ultimately not published and made open to the public. Richard Griffith, being disappointed in the
outcomes as a member of the committee, tried to raise the issue by publishing a book in 1819, in which he largely reiterated the arguments already floated years ago in the reports. Griffith was, however, politically experienced enough to tie the issue to a more burning question, namely the poor law question. Griffith and Robert Fraser, an Irish statistician and surveyor who published a book on the matter in 1822, saw the drainage issue as crucial in tackling the rural poor question by providing land for settlement and extra income for rural people living in poverty.

The projection of values, plans and aspirations on to the bogland frontiers remained quite unchanged until the 1840s. The perspective was dominated by a concoction of agricultural, inland navigation and settlement prospects. Sir Robert Kane, an Irish chemist, opened a new perspective by focusing on frontiers that extended vertically downward in terms of resources of extractive activities. Kane envisioned how turf, having been cut by hand by locals for centuries, could become a vital fuel for the industrialisation of Ireland. Kane’s vision was a high-tech response to the exploitation of bogs: he introduced fully mechanised turf extraction and utilisation practices and called for mass production of peat products from turf charcoal to turf coke. Making intact bogs valuable was no longer only to be achieved by converting them into arable land or engineered canal networks.

Altogether, the arguments developed by English and Irish scientists and politicians between 1770s and 1840s meant active rethinking of bogs and expectations related to them and laid the foundations for material environmental transformations. To refer to Jon Agar’s types of technology/environment interaction (see Chapter 1), Irish boglands were perceived and also mastered as wastelands in need of commercial exploitation. That articulation conflated imaginaries of technological and social progress, capital accumulation and profits and benefit.

Notes


William King, ‘Of the Bogs and Loughs of Ireland by Mr William King, Fellow of the Dublin Society, as it was presented to that Society’, *Philosophical Transactions* 15 (1685): 948–60.


Young, *Arthur Young's Tour in Ireland*, 95.


Young, *Arthur Young's Tour in Ireland*, 100–3.


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*The Fourth Report*, 16.


Joseph Hume, *Brief Notices Respecting the Origin and Purpose of Some of the Departments of the Royal Dublin Society, Referring also to a Scheme for Improving Bogs and Other Waste Lands in Ireland* (Pamphlets, Hume Tracts, 1831).
33 James Dawson, *Canal Extensions in Ireland, Recommended to the Imperial Legislature, as the Best Means of Promoting the Agriculture–Draining the Bogs–and Employing the Poor* (Dublin: Carrick, 1819), Letters 1 and 3.


35 Robert Kane, *The Industrial Resources of Ireland* (Dublin: Carrick, 1844), 30, 37–38, 40.