

Through a different lens: the Irish landscape as seen by mining promoters, 1835–80

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One of the less well known aspects of the nineteenth-century Irish economy was mining, principally of copper but lead, gold and other minerals as well. In the mid 1820s, there was a 'boom' in Irish mining with the establishment of four firms, in addition to the privately owned Berehaven mines, that played the important role of calling attention to the potential of Irish copper mines. Of the four – the Hibernian Mining Company, the Mining Company of Ireland, the Royal Hibernian Mining Company, and the Imperial Mining Company – only the Mining Company of Ireland lasted beyond 1842 as an active mining company. Its copper mines in County Waterford at Knockmahon were very successful, as were its other ventures.¹ While small, usually unsuccessful mining ventures were almost ubiquitous, there were four areas where mines, especially copper mines, enjoyed some success. The most varied area was Co. Tipperary where small copper, lead, iron, and coal mines operated intermittently over the course of the century. At Knockmahon in Co. Waterford, the Vale of Avoca in Co. Wicklow and on the Beara Peninsula in Co. Cork large copper mines operated successfully until late in the century.

Travellers' descriptions of the nineteenth-century Irish landscape generally focus on the physical beauty of the landscape and the desperate poverty of Irish peasants they found in that landscape.² One group who travelled about Ireland looking at its landscape, however, focused on geology and Ireland's potential for mining development. Many, if not most, travellers saw an idealized Ireland, shaped to a considerable extent by their preconceptions of Ireland. Frequently these preconceptions were romantic – an idealization or abstraction of the realities of Ireland. Interestingly, the group one would expect to be more objective and less prone to miss the reality of what they saw because of their economic motivation – mining promoters and developers – were not, in the end, much different from the casual traveller in their ability

¹ Des Cowman, 'The mining boom of 1824–25: Part 1', *Journal of the Mining Heritage Trust of Ireland* 1 (2001), 49–54; 2 (2002), 29–33. ² See John P. Harrington, *The English traveller in Ireland* (Dublin, 1991) for a discussion of this vast literature. In addition to the works cited below, examples include, Sir John Carr, *The stranger in Ireland* (Philadelphia, 1806); Emmet J. Larkin (ed.), *Alexis de Tocqueville's Journey in Ireland: July–August 1835* (Dublin, 1990); John Barrow, *A tour round Ireland* (London, 1836); J. Stirling Coyne, *The scenery and antiquities of Ireland* (London, 1842); W.M. Thackeray, *The Irish sketchbook 1842* (Gloucester, 1990, reprint); Asenath Nicholson, *Ireland's welcome to the stranger* (New York, 1847); and S. Reynold Hole and John Leech, *A little tour in Ireland* (London, 1806).

to move beyond preconception and idealization. Many in this group were Cornish miners; others were geologists, sometimes amateur. They published their descriptions in contemporary geological society journals, the press, and after 1835 when it began publication, *the Mining Journal*. Their perspective was very different from other travellers and has not been much studied. It did, however, reflect a significant level of activity for much of the nineteenth century. Before discussing these mine promoters' perceptions of the Irish landscape, it is useful to discuss several travellers or commentators on Ireland who described mine sites in Ireland as part of a more traditional traveller's account or description of Ireland.

TRAVELLERS' AND GENERAL OBSERVERS OF THE IRISH LANDSCAPE

One of the more prominent early nineteenth-century travellers who commented extensively on Ireland was Lady Chatterton [Henrietta Georgiana Marcia Lascelles]. In *Rambles in the South of Ireland* (1839), she describes her trip through the Beara Peninsula, including a visit to the Allihies mines, the largest and most successful copper mines in Ireland, in a manner typical of such accounts:

From their station [Hungry Hill] the Kerry Mountains are seen to great advantage. The Hungry Hill adventurers descended to a projecting rock which they described to me as a very picturesque position, overhanging a hollow in the mountain in whose wild bosom lay a black and gloomy lake, said, nevertheless, with another near it, to abound with peculiarly bright trout.³

The next day she describes the ascent to Allihies, the site of the Puxley family's copper mines, the most productive in Ireland in the nineteenth century:

The view as we ascended was very fine, including the bay and the headlands, and much of the mountain scenery was now familiar to the gentlemen from their visit yesterday to Hungry Hill.

After we passed the highest point of the ascent, we had a magnificent view over that part of the Atlantic of which the mountaineers were deprived yesterday by the fog. Dursey Island and Blackball Point, which has a tower upon it, form one side and Sheep's-head the other, of the entrance to Bantry Bay. The Skilligs . . . made their appearance in the extreme distance. They are two remarkable rocks, which seem to be nearly similar in shape, and stand about ten or twelve miles out to sea. Before us were the Hogs, two rocky islands apparently lying just south of the Kenmare river; beyond was

3 Lady Chatterton, *Rambles in the South of Ireland*, 2 vols, 2nd edition (London: Saunders and Otley, 1839), i, 72.



1 'View of the mines at Allihies, County Cork', from Lady Chatterton, *Rambles in the South of Ireland* (1839).

Darrynane Bay, with its lofty mountains. Then, nearer, Cooleagh Bay, which is the summer harbour of the mines.⁴

As in most of the narratives, Chatterton comments on the dire poverty of the Irish peasants she encounters and the filthiness of their homes and persons, comparing them unfavourably to the English, in this case Cornish miners: 'On our return, we visited some of the cottages, and with all my partiality for the Irish peasants, I could not but see the striking superiority in point of cleanliness of the cottages belonging to the English [Cornish] miners.'⁵ She also notes, 'the English [Cornish] and the Irish, notwithstanding a difference in religion, agree perfectly well together. It is said that for ten years there has not been a quarrel among the workmen, owing to a rule, which is strictly enforced, that whoever quarrels is immediately dismissed.'⁶

Lady Chatterton's observation of harmonious relations between the Cornish and the Irish in Allihies may well have been what she saw. However, the small number of Cornish who had come over when the mines were first opened lived in stone cottages built for them by the Puxleys quite near the mines, quite apart from their Irish co-workers. They worshipped in a stone Methodist chapel, also built for them by the Puxleys. The Irish miners provided their own housing and walked some considerable distance from their homes to the mines – and no Catholic chapel was provided for them.⁷ In Hancock, Michigan some years later Irish (largely from

4 *Ibid.*, i, 74–5. 5 *Ibid.*, i, 79. 6 *Ibid.*, i, 76. 7 See, R.A. Williams, *The Berehaven Copper Mines*, Northern Mine Research Society, British Mining No. 42, 1991; C. O'Mahony, 'Copper mining at Allihies, Co. Cork,' *Journal of the Cork Historical and Archaeological Society*



2 'View of Castletown Berehaven' from Lady Chatterton, *Rambles in the South of Ireland* (1839).

Allihies) and Cornish miners worked for the same company, but never together and regularly engaged in massive brawls on the main street. They can hardly be said to have gotten along.⁸ In any event, Lady Chatterton sets forth the themes common to much of the travel writing about Irish mining districts – the physical beauty of the setting, the charm of the people, despite their dire poverty and squalid living conditions – and also displays the detachment from reality that is also common in such narratives.

In 1824, about fifteen years before Lady Chatterton's tour T. Crofton Croker published *Researches in the South of Ireland, etc.* Croker is not primarily concerned with scenery or mineralogy, offering instead very general and wide-ranging observations. However, in chapter seventeen he addresses 'Mines and Minerals' and begins with a disclaimer: 'Although it does not come within the design of this work to treat on the geology of the south of Ireland, yet I feel satisfied that a brief account of its mines and minerals will not be misplaced, and may tend to direct some attention to an important though neglected pursuit'.⁹

92 (1987), 71–84; Des Cowman, 'Life and labour in three Irish mining communities circa 1840', *Saothar*, 9 (1983), 10–19 for descriptions of the Allihies Mines and living conditions there. ⁸ William H. Mulligan, Jr., 'Irish immigrants in Michigan's copper country: assimilation on a northern frontier,' *New Hibernia Review*, 5:4 (2001), 109–22. ⁹ T. Crofton Croker, *Researches in the south of Ireland, etc.* (London, 1824), p. 310.

Croker is among the earliest writers to describe of the state of mining in Ireland, writing only twenty years after Colonel Hall reopened an ancient mine on Ross Island and essentially began the nineteenth-century Irish mining boom. His chapter includes nearly all of the sites that were to become important in Irish mining during the century. His description of the mines at Allihies is typical, interestingly, of later efforts to promote Irish mining, combining promotion with description:

Besides paying the proprietors very handsomely, the blessing which this mine has been to the surrounding country can only be appreciated by those who have witnessed such a scene. The place where, but a few years since, the barren and rocky mountains could scarcely sustain the lives of a few half-starved sheep, is now the scene of busy and useful employment, dispensing competence and comfort to hundreds. The principal works are carried on about a mile and a half from the water, and the ground rises to a considerable elevation. The vein crosses the regular strata of the country, which is a hard rock of greywacke, at a small angle, taking a direction about two points to the south of east and the same to the north of west. The matrix of the vein is a white opaque quartz, in part of its course of the amazing width of sixty feet (which has been proved by cutting through it), but the ore has seldom exceeded three feet in breadth.¹⁰

While discussing the iron mines at Silver Mines in Co. Tipperary, Croker attributes the mine's problems to mismanagement and waxes enthusiastic about the potential economic benefits for Ireland. Both these ideas, the tremendous economic benefit Ireland could gain from its mineral resources and the need for proper (generally meaning Cornish or English) management remain important themes in the discussion and promotion of Irish mining for the rest of the century, as does Croker's positive view of English activities in Ireland:

but mismanagement seems to be the order of the day in Ireland . . . Many places may be mentioned where mineral treasures expose themselves to the view of the passing traveller; but a repetition of circumstances that admit little or no variation occasion a tiresome monotony, and enough has probably been said to show what an extensive field of speculation and research the south of Ireland presents: indeed, as useful employment is acknowledged to be the grand desideratum in that unhappy country, and as England has proved herself so nobly solicitous in every effort to raise the indolent and misguided Irish peasantry from their present state of wretchedness and discontent, what better opportunity could be wished for them than this subject presents? – Companies of wealthy individuals might be formed at this side of the water; and if qualified persons were engaged to superintend the works, such associ-

ations would not only be attended with every probability of profit to those concerned, but they would at once administer extensive employment, and no doubt, greatly tend to tranquilize the peasantry.¹¹

In 1883, nearly sixty years after Croker, Samuel Hall, the son of one of the first Irish mining promoters Colonel Robert Hall, described the state of Irish mining as the industry wound down with mines closing across the country:

The failure of schemes for working mines in Ireland to repay their projectors has generally been traceable to one of two causes – bad management or insufficient capital, and sometimes the two combined ... but in copper, lead, sulphur, and marble, various districts are rich, and greater rewards than have already been obtained probably await those who shall in the future bring capital, skill and energy to the working of these deposits.¹²

Mining, particularly of copper, came to be a major focus for efforts to develop alternatives, or supplements, to agriculture as the principal foundation of the Irish economy through the 1860s. Hall's various efforts had had mixed success. In several instances, especially the Berehaven mines at Allihies in Co. Cork, the Knockmahon mines in Co. Waterford, and the Avoca (sometimes spelled Ovaca) mines in Co. Wicklow, success was substantial enough to suggest to proponents of mining development that with sufficient capital and 'proper,' that is, English, management many more successful Irish mining ventures were possible. The successful mining operations in these three areas became models for what proponents of Irish copper mining, especially the trade paper *The Mining Journal* saw as possible with sufficient capital and efficient management. The reality of the repeated failure of mining ventures in Ireland was invariably attributed to poor management, not the changing world market or overly optimistic projections.¹³

MINING AND INDUSTRIAL JOURNALISTS

Between Croker and the younger Hall there was a great deal written describing the mineral resources of Ireland with the intention of promoting mining generally as well as individual mining ventures. These efforts range from the very general and relatively objective discussion of Ireland's mining districts in Robert Kane's *The Industrial Resources of Ireland* to newspaper articles on various mining ventures and proposed

11 *Ibid.*, pp 317–18. 12 S.C. Hall, *Retrospect of a long life from 1815 to 1883*, 2 vols (London, 1883), ii, 344. Hall had written a more traditional travel account with his wife some years earlier: Mr and Mrs S.C. Hall, *Ireland: its scenery, character, &c.*, 3 vols (Hall, 1841). 13 D. Cowman and T.A. Reilly, *The abandoned mines of west Carbery: promoters, adventurers and miners* (Dublin, 1988). There is a great deal about the failure of the Audley Mines, which led to prolonged litigation, in the *Mining Journal*.



3 Gold mining, County Wexford from Lady Chatterton,
Rambles in the South of Ireland (1839).

ventures and several industrial journals. These include two short-lived publications, the *Irish Railway Gazette* and the *Irish Industrial Magazine*, and the more successful *Mining Journal*, *Railway and Commercial Gazette* (hereafter, simply the *Mining Journal*), which is still published today.

Sir Robert Kane's *The Industrial Resources of Ireland*, first published in Dublin in 1844 with a second edition appearing in 1845, is in many ways the key work for nineteenth-century Irish economic development efforts. Kane extensively and exhaustively catalogued and discussed various mining and manufacturing operations in Ireland. He also called attention to a wide range of underdeveloped economic resources in Ireland, such as waterpower sites and mineral deposits that were suitable for development.¹⁴ Kane's work was regularly cited in newspaper and magazine articles and other essays on Irish economic potential during the second half of the nineteenth century. It attracted a great deal of favourable notice among those interested in Irish economic development, but the level of investment activity and economic diversification Kane and other advocates of mining in Ireland hoped for never developed. The trade papers present a combination of reporting and opinion that are not always clearly distinguished. The *Mining Journal* had regular correspon-

14 Robert Kane, M.D., *The industrial resources of Ireland* (1845 second edition.)

dents who provided a great deal of information, some of which conflicted with the editor's position on some ventures. Many pieces were not signed, or were signed with a penname.¹⁵ There are also advertisements which explicitly promote various ventures and letters to the editor, which seem to be the best source for identifying problems within the industry.¹⁶

Another aspect of nineteenth-century journalism that must be taken into account is the practice of reprinting articles from publications obtained on exchange. Finding several articles on a particular mine at a particular time, or on the opportunities being promoted in a particular district is almost always due to reprinting, not reporting by different people that might offer different perspectives. Still, after all the caveats are noted and taken into account, the *Mining Journal*, the publication I will focus on here, does appear to be a useful window into the world of Irish mining in the nineteenth century. Focusing on the *Mining Journal*, a specialized industrial publication has many advantages over relying on general London, Dublin, Cork, Waterford or regional Irish newspapers in terms of yield, to borrow a mining term. Before looking at the *Mining Journal* it is useful to look at two, short-lived Irish magazines that also promoted and commented on Irish economic development.

The *Irish Industrial Magazine* which was published in Dublin was an attempt to produce an Irish publication focused on the economic development of the country. Established in 1866, the *Irish Industrial Magazine* avoided reprinting items and published some very trenchant and insightful original articles. In its first issue E.H. Wadge, a Fellow of the Geological Society, published the first of several articles entitled 'On Mining and Quarrying in Ireland'. The first had the subtitle, 'as source of industrial and profitable employment'.¹⁷ Wadge touches on some familiar themes as well as presenting some new perspectives:

The vast improvement in the localities amongst which mining industries are pursued far more than counterbalance the trifling loss of the surface land destroyed by their operations; . . . It should be remembered, also, that mines are generally found in wild, barren, mountainous districts, the reclamation of which would of itself be a positive national advantage. How full is Ireland of such situations and of such premises!¹⁸

He then proceeds to the great nineteenth-century cliché on Irish mining, that the development of mines would solve the problem of poverty in Ireland and once the problem of poverty was solved political agitation would stop and English rule would be accepted:

¹⁵ It has not been possible to determine how anonymous, within the industry, such contributions would be. The little evidence that does exist strongly suggests not very.

¹⁶ The *Mining Journal* published many such prospectuses as display ads throughout the century. The letters to the editor were generally on pages two or four and in smaller type. The letters are often in the form of a pointed question. ¹⁷ *Irish Industrial Magazine*, January 1866, pp 24–9. ¹⁸ *Ibid.*, p. 25.

'What to do for Ireland?' has long been the question of questions to successive governments, and a difficulty to the most sagacious of statesmen. What we should advise would be – cultivate and foster her mining industries; for she does indeed possess vast mineral riches, as witness her mines of sulphur, copper, and lead, in Wicklow and in Monaghan; her splendid mines at Berehaven; her mines comprising the property of the Mining Company of Ireland, and many other companies.¹⁹

Wadge does point out that Irish copper ores, on average, brought twice the price of British ores at the Swansea sales, the major market for copper ore. He fails to point out, or perhaps notice, that Irish ores brought far less than Australian and Chilean ores in the same market.²⁰ He describes mines, slate and marble quarries, and coal mines in some detail. He even offers the standard critique of apathy toward the development of Irish mineral resources by investment in mines. Wadge then offers a very spirited, and unusual, defence of the Irish labourer and his suitability for mine work and compares his position with that of the Cornish miner:

The aptitude of the Irish labourers for pursuits such as quarrying and mining is well known and admitted, both *at home* and *from home*. [emphasis original] When properly instructed, they make workmen in all respects equal, in many superior, to the average of the men among whom they are employed, especially for the harder and more dangerous portions . . . The most cursory ramble through a mining district or village will convince the most sceptical of the manifold advantages which the employment offers.²¹

The longest-term promoter of Irish mining was the *Mining Journal*, a weekly trade paper based in London. On 29 August 1835 Henry English launched the *Mining Journal and Commercial Gazette* to serve the British mining industry. Its scope was broad, incorporating coverage of railroad and canal development and all types of mining and quarrying in the British Isles. It also covered mining where British capital was invested and other mining areas, such as the Lake Superior region of the United States, where British investment was minimal. Between 1835 and 1880, when Irish copper mining was most extensive and most active, the *Mining Journal* focused more on copper mining than on any of the other economic activities it covered. Within a few months the *Mining Journal* had its attention drawn to Irish mining:

We have to thank 'Adventurer' for his communication. The mines of Ireland are deserving the attention of the capitalist. The mineral resources of that country are as yet unproved, and the application of capital would, we doubt

19 Ibid. 20 The results of the bi-weekly Swansea ticketings appeared in various British and Irish newspapers and after 1835 regularly in the *Mining Journal* and after 1848 in a series of reports by Robert Hunt. 21 *Irish Industrial Magazine*, January 1866, p. 28.

not, be as productive of advantage to the adventurer, as we are assured it would to those employed in developing its riches. Why do not Irish landlords and Irish patriots put themselves forward? They would get support, but while they are supine, how can it be expected that the English capitalist should be moving?²²

In 1845 the West Carbery and County of Cork Mining Company published a prospectus, hoping to attract £200,000 by selling 10,000 shares at £20 each. It listed the advantages the site offered: proximity to the sea, water power, and cheap labour. These characteristics appear in other prospectuses in different combinations over the next few decades.²³

A few months later an article by 'A Practical Miner' was reprinted from the *Cork Southern Reporter* on 'Mining in the County of Cork'. The points in the prospectus are made and expanded upon:

the natural advantages and facilities for working mines in the west of the county are superior to any in the world. Here we have safe and commodious harbours, at convenient distances, all around the coast; and from the position of the mineral districts, the important item of land carriage is saved – here we have numbers of streams and rivers, that might be applied to mechanical purposes, to an unlimited extent – and here we have the valuable lodes staring us in the face in broad day-light, as if in mockery of the apathetic capitalist.²⁴

In the end the venture was a failure – an almost complete failure, as were nearly all ventures in this area of Ireland developed after the 1830s. Despite the 'promising' geology, none of these ventures lasted very long – although a number were revived from time to time with glowing prospectuses in the *Mining Journal* – or made any significant return on the investment made.²⁵

Sea access and potential for development of water power appear frequently in the prospectuses for new mining ventures and in the articles discussing them in the *Mining Journal*. Another theme is similarity in geological formation or location to one of the more successful mining ventures, especially the Berehaven Mines at Allihies. Frequently, these similarities become the principal justification for investment. After a romantic description of the geology of the Kenmare area, one promoter makes the case for investment based on proximity to the Berehaven Mines:

The Kenmare Bay, from its entrance from the Atlantic to the town of Kenmare, is about 30 miles long; at the south side are the Berehaven Mines, and on the north side, near West Cove, the Hartopp Mines. The formation at

²² *Mining Journal*, 12 December 1835, p. 132. ²³ *Ibid.*, 11 October 1845, p. 529. ²⁴ *Ibid.*, 8 November 1845, p. 628. ²⁵ Cowman and Reilly, *The abandoned mines of West Carbery*, passim.

either side of the entrance to the bay is of a similar character – viz. compact clay-slate, and large quartz veins running obliquely to the strata. And if the same *cause* produces the same *effect*, judging from surface indications, there is no assignable reason why good mines may not be found in the West Cove Mountains as in those at the opposite side of the bay.²⁶

Sometimes what starts out as flowery description turns technical, as with this opening paragraph for an article titled ‘Ireland – Its Geology and Mining’:

Assuredly a brighter era has dawned upon Ireland. The genial sun of a manifestly providential visitation is now fairly above her horizon; its revivifying rays have already called into life and activity the latent forces of civilization, which have for untold ages lain dormant within her prolific womb; they are rapidly dispersing the hitherto stagnant mists, and removing those foul blotches – moral, social, political – which during the protracted period of a chastening ordeal, affixed themselves like vampires upon her, to the great exhaustion of the life blood of her national existence, and to the sad disfigurement of those physical features, which nature herself, has rendered so eminently attractive.

We find a considerable development of the lower Silurian rocks in Waterford, bordered on the north and west by the old red sandstone, and to the south by the trap-rocks already referred to; in this district many valuable copper and some lead mines have been discovered.

The lower Devonian, or old red sandstone formation, constitutes an extensive and very picturesque tract in this part of the whole of the county of Cork ... In fact [copper mines] stud this part of the country even down to the extremity of that old red sandstone peninsula which stretches farthest out into the vast Atlantic; for here, on the shores of Crookhaven Harbour, a place greatly resorted to by shipping, are situated the famous purple copper ore and silver lead mines of that name.²⁷

Examples of this approach to the landscape and mineral resources of Ireland can be multiplied. The West of Ireland Mining Company (Limited) which sought to develop ‘one of the richest and most varied mineral deposits in the British Islands’ mentioned in its 1857 prospectus that:

the whole is intersected with rivers and streams, so that the water power is inexhaustible, while the sea frontage affords every opportunity for shipment, either by the formation of quays to suit circumstance, or by means of existing and well-known ports of Killeries [*sic*] and Westport.²⁸

²⁶ *Mining Journal*, 29 January 1853, p. 68. ²⁷ *Ibid.*, 17 September 1863, p. 580. ²⁸ *Ibid.*, 16 May 1857, p. 350.

Descriptions of the Irish landscape presented by those promoting mining ventures have some things in common with travellers' accounts, primarily a focus on the poverty of the people. Mining promoters or observers, almost always hold up mining as the solution to this poverty. There are a number of things that are specific to mining promoters – Ireland's coasts are seen as advantageous for providing low cost transportation for mines located nearby. Picturesque rivers and streams are sources of water power. Colourful rock formations and strata in cliffs are not merely scenic, but evidence of mineral wealth waiting development:

The mines of Ireland have of late assumed so important a position in the ticketing papers, of the sale of ores, at Swansea that it is with pleasure we advert to the circumstances, as it must be gratifying to all, whether embarked in mining adventures or otherwise, to learn that the mineral products of the sister isle are daily developing their riches affording employment to thousands, who otherwise must, in all notability, be in a state of starvation, and giving to trade in the vicinity of the mines that impetus which Ireland much requires. It is pleasing to find English enterprise and Irish industry this combined, yielding as they do, in most cases where prudent management is pursued, returns amply remunerative to the capitalist, and of an advantage to the peasant.²⁹

The 'problem' of Ireland for the *Mining Journal* it becomes clear was the country's endemic extreme poverty and political restlessness and agitation against English rule. Industry and especially mining was seen as solutions that would provide employment for the peasants and develop a cash economy. Ireland, and the Irish, would quickly become more like the English and harmony would soon prevail.

So committed was the *Mining Journal* to its optimistic vision of an Ireland led to industry and modernity by mining that it was especially reticent about discussing negative aspects of the Irish mining industry throughout the 1860s and on numerous occasions accepted and believed overly optimistic assessments of the future of individual mines. When mining ventures that had drawn extravagant editorial praise when first proposed and offered to investors ended up in the wonderfully named 'Winding Up Court' or the principals were indicted for fraud, there was seldom editorial comment or notice taken in a formal article. One usually has to read the very fine print on page two for letters from subscribers who were shareholders in the failed ventures or the occasional column of the paper's always unnamed 'Dublin Correspondent' to find any hard questions being posed or negative information reported about failed ventures or proposals to reopen abandoned workings. The *Mining Journal*, however, remained optimistic in the face of mounting evidence that copper mining in Ireland was not going to be a profitable industry on an extensive scale. In fact, the paper seems not to have been able to see the negative prognosis for

British Isles copper mining generally. Copper mining would not be the solution to the 'problem' of Ireland; rather it became just another factor that produced emigrants – not only from Ireland, but from Cornwall as well.³⁰

Changes in the world market that began in the 1830s and accelerated dramatically during the 1840s changed the situation for Irish mining ventures. The much larger and better established Cornish copper mines also suffered. Miners from both Cornwall and Ireland were beginning to emigrate in significant numbers by the 1840s because of the contraction of the industry and declining incomes for Irish and Cornish mines.³¹ In Ireland this situation was made worse by the large number of relatively new ventures that brought people into mining, or, as appears more to be the case, led them to relocate to the newest venture that promised work. While reporting all of these developments, the *Mining Journal* consistently underestimated their significance. Initial reports on the tremendous copper finds in the Keweenaw Peninsula in Michigan, for example, were initially dismissed as so spectacular as to be impossible. When the reports were confirmed by experienced Cornish mining captains, the Michigan mines were still dismissed as serious competition because any resource that rich could not last long.

While Cornish miners soon became ubiquitous and visible in hard rock mining districts around the world, Irish miners were less visible and more likely to go to the United States or Australia. After 1845 production in the Lake Superior district increased making the prospects for Irish (and Cornish) copper mining ventures even less promising.

It is clear that the *Mining Journal's* view of the condition, and potential, of mining in Ireland was seriously flawed. While this is especially obvious during the Famine when the population was debilitated by hunger and disease, it was also true during the following decades. Its desire to promote industrial development, especially mining, in Ireland led its editor to underestimate the problems facing any effort to develop mining ventures, particularly during the Famine, and to continue to promote mining as a solution to the problems of poverty and political unrest in Ireland after the Famine.

The paper heralded what would become its standard call on 12 September 1846 under the heading 'Distress in the County Cork Mining Districts':

Our chief object in our present notice of the condition of the poor in the districts referred to is to urge the propriety of different companies working mines and quarries therein to as extensive an employment of the poor in the respective vicinities, as the nature of their operations may allow. By their so

³⁰ William H. Mulligan, Jr., 'From the Beara to the Keweenaw', *Journal of the Mining Heritage Trust of Ireland*, 1 (2001), 19–24. ³¹ Ronald Rees, *King Copper: South Wales and the copper trade, 1584–1895* (Cardiff, 2000) offers a sound, brief discussion of the changing world production of copper ore. For the United States see Charles K. Hyde, *Copper for America: the United States Copper industry from colonial times to the 1990s* (Tucson, 1998) and Mulligan, 'From the Beara to the Keweenaw' and 'Irish Immigrants in Michigan's Copper Country'.

doing, it may be very fairly assumed, that so far from suffering a loss, or even a reduction of their profits, in all remunerative mines they will increase those profits – because it is a well-ascertained fact, that there is nothing like a sufficient application of labour and capital to the development of the wealth of even the most productive mines in the mineral districts of the county of Cork.³²

Such appeals for investment in Irish mines were a regular feature during the course of the Famine; occasionally with the variation that government aid money would be better spent expanding mining in Ireland to provide employment, and would thus be a long-term solution to both the current crisis and the long-term economic problems of Ireland. A correspondent from West Carbery, a mining district in Co. Cork, where many copper mining ventures had failed, who signed himself 'A Miner', highlighted one major problem with the approach suggested. While calling for assisted emigration to the mines in Australia, 'A Miner' described:

our starving fellow-creatures, hundreds and thousands of whom are dying daily in this country from *starvation?* – men, who a few days ago were in full vigour, health and strength, are now reduced to mere skeletons; and such is the misery and extreme destitution to which they are reduced, that when employment on the public work is afforded them, they are unable to perform it – and numbers who stagger out in the morning to the roads and other works now being carried on, drop dead from exhaustion.³³

The debilitated condition of the Irish working class was a serious impediment to solving Ireland's problems, at least in the short run, with industrial occupations like mining that required physical energy and some skill. The public works jobs provided by the Russell government were beyond the physical capacity of the population.

What is remarkable is that these images of the economic potential of Ireland's mineral resources, and the optimism attached to them, did not change during the entire period Irish mining was an active industry despite the failure of large numbers of mining ventures. The same things were being said as the industry was declining as were being said when it might have had a future. Actually, nearly everything quoted comes from the period of marked decline in production. Optimism reigned supreme. Perhaps it was a denial of the harsh realities that would destroy the great hope – that mining would provide a solution to the poverty of Ireland. Experience does not seem to have had any impact on how promoters saw the potential for mining. Take for example the Allihies mines in Co. Cork and the Knockmahon mines in Co. Waterford. Both are located on, or very near, the coast. Neither, however, gained much economic advantage from that. There is no good anchorage at the Knockmahon mines and lightering ore to ships was both expensive and

dangerous. Allihies ores initially were processed near the beach at Ballydongan but access for ships was so dangerous there that the mine owner was forced to buy his own ships – and even he soon accepted the necessity of bearing the cost of shipping the ore six miles overland to Castletown Berehaven for shipment to Swansea. Neither area ever received rail service during their mining days, or afterwards. Experience proved the value of coastal location given the specifics of each site a myth, but it appears time and again in descriptions of Irish mining ventures as an advantage. It is even more puzzling that there were no efforts to develop railroads to move ore economically to better harbours. Plans for Irish mining development seem to have operated in an idealized world, not the real world.

The landscapes mining promoters saw, whether honestly or dishonestly, were much more landscapes of hope than landscapes of reality. This is not uncommon when people are confronted with an unfamiliar landscape. John Logan Allen has written extensively about how the American explorers Lewis and Clark took many months as they moved west into increasingly unknown areas to begin to see what was actually in front of them and not what they had expected to find.³⁴ The optimistic promotion of Irish copper mines continued nearly until the time the industry died. The peak years for production for Irish copper mines were from roughly 1835 to 1847. The lowest level during that period was in 1841 when 14,321 tons of copper was produced. From 1847 until 1882 when the Swansea ticketing sales ended that level was exceeded once and approached twice. Irish copper production did not exceed 8800 tons after 1870. It was an industry in decline because it could not compete with Chilean and Australian copper or compensate for the complete loss to the British copper industry of the American market after the development of the Lake Superior copper mines after 1845.

In my research on Irish copper mining and, peripherally, on nineteenth-century Irish mining and economic development generally, the most striking thing is the wishful thinking; that mining could be a solution to the problems of Ireland by providing employment to the native population, therefore it must be possible. In the real economic world after 1845 when large copper fields in the United States, Chile, and Australia began to be developed there was no future for the copper mines in Ireland or the more established and better funded mines in Cornwall. Those who saw mineral wealth in Ireland's landscape never saw the realities of that landscape in the larger perspective of the copper market of the nineteenth century. They never abandoned their landscapes of hope for the landscapes of reality.

³⁴ John Logan Allen, *Passage through the garden: Lewis and Clark and the image of the American Northwest* (Urbana, 1975), passim. The sub-field of historical geography known as geosophy deals with these dissonances between expectation and reality.