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Hoskins, Gareth

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People like us: historical geographies of industrial-environmental crisis at Malakoff Diggins State Historic Park

Gareth Hoskins

Department of Geography and Earth Sciences, Aberystwyth University, SY23 3ND, UK

Abstract

This paper contributes to a growing body of literature on the historical geographies of extraction. It develops a critique of industrial heritage through an account of North Bloomfield, California, a settlement within the boundaries of Malakoff Diggins State Historic Park, and home to what was, in the years leading up to 1884, the largest and richest hydraulic gold mine in the world. I use archived fragments from two people who lived and worked in North Bloomfield to undercut the grand narratives of environmental conquest that still tend to undergird industrial heritage rubrics. The places given over to commemorate key moments in the development of our industrial society provide crucial orientation for contemporary environmental decision making. I demonstrate how a more intimate and nuanced approach to the industrial past through ancillary stories that foreground everyday encounters with nature can be used to challenge the soothing plotlines of technological genius, dignified suffering, social progress and enlightened restraint that so often frame public histories of extraction.

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Keywords: Environmental crisis; Industrial heritage; Hydraulic mining; Storytelling

The power of these fables to move us derives from the magnitude of the protean conflict figured by the machine's increasing domination of the visible world. This recurrent metaphor of contradiction makes vivid, as no other figure does, the bearing of public events on private lives.¹

To stand on the overlook next to campsite twenty-seven at Malakoff Diggins State Historic Park is to encounter a kind of industrial Grand Canyon; a place that exposes the subsoil as much as it does the representational deficiencies of 'natural' and 'cultural' as distinct categories of landscape (Fig. 1). And that is part of its problem. The 3000-acre parkland of second growth ponderosa pine, incense cedar and black and live oak is situated within a Montane Hardwood-Conifer wildlife habitat, and contains the tumble-down town of North Bloomfield, as well as a vast open pit that stretches for a mile along the San Juan Ridge of California's northern Sierra Nevada. The pit is a remnant of hydraulic gold mining, a capital-intensive industrial enterprisesequent to the placer claims that prompted the 1848 Gold Rush. Such was the impact and scale of hydraulic mining in the 1860s and 1870s that it attracted journalists, photographers and geomorphologists from all over the world desperate to witness, and then write about, the awesome and gloriously destructive power of modern engineering. The side effects of hydraulic mining—the constant flooding of farmland, real estate, river and rail networks—prompted a battle now famous in the canons of environmental legislative history between the miners and those with commercial interests downstream; a battle that led to hydraulic mining's partial ban in 1884 and the development of the juridical doctrine of anticipatory nuisance.² Today, as industrial heritage under the stewardship of the California Department of Parks and Recreation, Malakoff Diggins now serves as an ambivalent reminder both of humanity's destructive capacity and its restraint. This oppositional significance means that the state park falls through the gaps in those commonly available interpretive platforms rangers are able to draw upon, and it can compete neither with examples of 'pristine' nature nor the more intact working examples of industrial heritage attractions nearby. The park therefore occupies a kind of interpretive purgatory where miners who shaped the landscape are figures of

¹ L. Marx, Machine in the Garden: Technology and the Pastoral Ideal in America, London, 1964, 364.
² G.P. Smith, Re-validating the doctrine of anticipatory nuisance, Vermont Law Review 29 (2004) 687–732.
This paper explores how we encounter the environment in places where industrial development is formally located and interpreted as heritage – how the environment features as an agent of change, and as a topic of conversation. I explore the problems with conventional commemorative renditions of industry-led environmental transformation and demonstrate how things might work differently. The paper works through four sections. I proceed initially by consolidating a critique of the grand narratives of progress that so often frame places associated with past industrial development, before outlining attempts within human geography research to unsettle and disenchant those grand narratives through creative affective storytelling. Sections two and three examine how progress is played out in the variegated mythologies of Malakoff Diggins to reinforce established social hierarchies. Sections four and five then offer an archive-based alternative using biographical fragments of two people on the periphery of hydraulic mining history, as it is conventionally understood. Their intimate and everyday encounters with nature – illustrated through the correspondence between dam keeper Julius Anderson, and his mining company superintendent in the first example, and the unpublished bird-related compositions of North Bloomfield resident Mary Kallenberger in the second example – help to enrich our understanding of this industrial past by exposing us to nuance and ambiguity. Such details of lives lived but largely overlooked can be interpreted as heritage equivalents (pressure, pounds, load, distance, expense, profit) and their numerical equivalents (pressure, pounds, load, distance, expense, profit) that tend to be foregrounded. Indeed, scholarly accounts of extraction are not immune to this heroic framing.4

The grand industrial trajectory as charted in Mumford’s classic Technics and Civilization and repeated in historical scholarship, literature, museums and, not least, heritage interpretation has been subject to critique in recent years on the grounds that it serves to naturalize capitalist development as a universally experienced and inevitable social advance.7 In her book The Lowell Experiment, for instance, anthropologist Cathy Stanton writes about how the former textile town in Massachusetts was transformed into a monument to the Industrial Revolution. She cautions that ‘far from contributing to any collective questioning of post-industrial realities, even the most radical historical interpretations at the park serve[d] to support the underlying logic of economic restructuring in subtle but powerful ways’.8

So even while apparently corrective programmes of industrial history feature content on the exploitation of labour or the contradiction: irresponsible perpetrators of ecocide for some, and, for others, noble pioneers taming wild nature with their technological ingenuity and hard work.

Fig. 1. View of Malakoff Diggins from the overlook of chute hill campground at Malakoff Diggins State Historic Park, Nevada County California, taken by the author.
environment, they still remain enchanted with the epic conquest of nature storyline and still affirm the legitimizing trajectory of progress.\(^9\) Rarely is room left to dwell on those more marginal characters who hold an oblique and ambiguous relationship to the historic place or event commemorated. Such characters matter because they can undermine overly determined lessons from history. As Lorimer recognizes, they provide a ‘creative biographical dimension’ in our often impersonal environmental histories and give ‘thicker’ accounts of more localized personal experience. ‘Particularity and mundanity are’, he notes, ‘the qualities that matter most’.\(^10\) But the political economy of resurrection at industrial heritage sites tends to work against such thickenings. Individuals most often brought back to life for interpretive purposes tend to be either achievement-orientated, as in those deemed to have played a key role in socio-technical development, or archetype-oriented, for instance, people who seem to embody broader national character traits.

Dicks’s research on Rhonda Heritage Park, a mining museum in South Wales, however, shows how ordinary biographies and ‘the vernacular voice’ have come to be regularly employed in industrial heritage to invite identification and provide a way for the visitor to ‘fantasize the self as other’.\(^11\) For Dicks this allows communities all too often marginalized by official forms of top-down heritage the opportunity for validation and self-definition, but the practice could also be understood as having a more sinister normative function. The details that resonate most in these vernacular examples are those that lengthen our sense of perspective and intensify our contemporary ‘distance’ from the past. And this works to enroll us into a narrative of continuing progress. It obscures the fact that mining continues apace, sometimes elsewhere, sometimes in close proximity to the very museum that commemorates its passing. It also obscures the fact that our own relative economic prosperity (as museum-goers and heritage patrons) is dependent on mining and the costs of that mining being passed on to those least able to afford it. Other kinds of histories and other modes of biographical affiliation can nuance our understanding of the industrial past and open it up to more direct and productive critique.

There is now a tranche of work in environmental historical geography and historical geographies of natural resource extraction that disrupts and displaces those legitimating narratives of industrialization with experimental forms of storytelling and alternative narrative modes of address. Within human geography specifically, Edensor examines industrial ruins for their disrupting qualities of excess; DeSilvey’s auto-ethnographic field notes highlight the affective circuitries of copper places in Butte Montana; Stewart’s composition of worlds in the coal mining camps of West Virginia tries ‘to loosen the formal narrative bonds of a hyperactive story stored by the banks of moralism’; Krupar’s ‘counter-ethno-fables’ challenge the conversion of a toxic arsenal in Denver into the Rocky Mountain Wildlife Refuge; and Hill narrates a walk through the Forest of Dean in a ‘non conventional academic style’ to tap into the non-representational qualities of that place’s mining history.\(^12\)

Like these affective historical geographies of industry and extraction, this paper shares a commitment to the political possibilities of storytelling and an awareness of the limits imposed by institutional epistemics.\(^13\) It draws on unpublished archived fragments relating to two individuals who happened to be involved in the most significant moment in the environmental history of California.\(^14\) The documentary remains of Mary Kallenberger and Julius Anderson reside in the Malakoff Diggins State Historic Park Collection which is now housed in the California Department of Parks and Recreation Repository, a one hundred and sixty thousand square feet facility at the former McClellan Air Force Base northeast of Sacramento.

These biographies are woven together loosely in this paper as a gesture towards the social nuances within historical mining settlements usually presented as populated with larger than life victims and villains. They also help stretch out localized portraits of environmental transformation by a perpetrator — be it capital, labour or modern technology — into a more prosaic web of networks, relations, tensions, contradictions and proclivities. As recent research in human geography has so effectively demonstrated, the quotidian detail captured in archive material can prime imaginative engagement and help put forward alternative social memories that challenge current ways of thinking.\(^15\) I employ biographical fragments in a similar way to disrupt, distract and introduce ambiguity within overly straightforward accounts of environmental misadventure at Malakoff Diggins. As Mills points out, ‘there is an explicit politics in recovering and restoring fragments’, ‘embracing the fragmentary and disordered nature of archives can explain the incomplete nature of our lives, states, institutions, and everyday geographies’.\(^16\) I use biographical fragments with this and two other more specific strategic intentions in mind. The first, as glimpsed through memos on weather conditions sent down the mountain by dam worker Anderson, helps craft a more intimate profile of emplaced labour between individuals and the nature they are required to engage with. The second, illustrated through collected writings and tuition-related correspondence linked to Kallenberger, allows us to more effectively track the mutually generative role of nature and creativity in individual acts of self-making. Before that, however, it is necessary to explain precisely how Malakoff Diggins emerged as a place of historical

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9 Of course there are many industrial heritage practitioners, park interpreters and preservationists who do not sign up to this narrative but instead work against an institutional inclination to use the past to validate conditions in the present. See for example, D. Hardesty, Issues of preserving toxic wastes as heritage sites, The Public Historian 23 (2001) 19–28; P.C. Pezzullo, Toxic Tourism: Rhetorics of Pollution, Travel, and Environmental Justice, Alabama, 2007; R. Missach, Bravo 20: The Bombing of the American West: Creating the North American Landscape, Baltimore, 1990.

10 H. Lorimer, Telling small stories: spaces of knowledge and the practice of geography, Transactions of the Institute of British Geographers 28 (2003) 200.

11 B. Dicks, Culture on Display: The Production of Contemporary Visibility, Maidenhead, 2004, 127.

12 T. Edensor, The ghosts of industrial ruins: ordering and disordering memory in excessive space, Environment and Planning D 23 (2005) 829; T. Edensor, Waste matter: the debris of industrial ruins and the disordering of the material world, Journal of Material Culture 10 (2005) 311–332; C. DeSilvey, Copper places: affective circuitries, in: O. Jones, L. Garde-Hansen (Eds), Geography and Memory: Explorations in Identity, Place and Becoming, Basingstoke, 2012, 45; K. Stewart, Atmospheric attenuations, Environment and Planning D: Society and Space 29 (2011) 445; S.R. Krupar, Where eagles dare: an ethno-fable with personal landfill (1), Environment and Planning D: Society and Space 25 (2007) 194; S.R. Krupar, Transnatural ethics: revisiting the nuclear cleanup of Rocky Flats, CO, through the queer ecology of Nuclia Waste, Planning D: Society and Space 7 (2013) 303–327; L. Hill, Archaeologies and geographies of the post-industrial past: landscape, memory and the spectral, Cultural Geographies 20 (2013) 379–396.

13 T.W. Luke, Museum pieces: the politics of aesthetics and knowledge at the museum, Third Annual Arlington Humanities Colloquium, University of Texas—Arlington (1997) 12.

14 See also Lorimer, Telling small stories (note 10).

15 R.L. Kelley, Gold vs. Grain: The Hydraulic Mining Controversy in California’s Sacramento Valley, Cleveland, 1959; M. Ziebarth, California’s first environmental battle, California History 3 (1984) 274–279; D. Worster, Hydraulic society in California: an ecological interpretation, Agricultural History 56 (1982) 503–515; R.F. Dasmann, Environmental changes before and after the Gold Rush, California History 77 (1998) 105–122.

16 D. Delyser, Collecting, kitsch and the intimate geographies of social memory: a story of archival autoethnography, Transactions of the Institute of British Geographers 40 (2014) 1–14; T. Cresswell, Value, gleaning and the archive at Maxwell Street, Chicago, Transactions of the Institute of British Geographers 37 (2011) 164–176.

17 S. Mills, Cultural—historical geographies of the archive: fragments, objects and ghosts, Geography Compass 1 (2007) 529–543.
interest and how the mining operations that went on there became associated with a cast of charismatic historical residents.

**Mythologising Malakoff**

A 1967 historical study of North Bloomfield opens by establishing the utility of an anti-narrative approach (Fig. 2):

This report is prepared for administrative purposes in connection with the interpretive program of the Division of Beaches and Parks of the State of California. Literary qualities have deliberately been sacrificed to include detailed, and occasionally repetitious, technical descriptions of mining installations and improvements. Such action is justified because this is a resource document to be used by many people for a variety of purposes, and an elusive fact or figure may be found here that will prove to be time-saving and particularly valuable to one of many readers.17

Such an appeal to dispassionate factual recording runs counter to a more popular framing of Malakoff Diggins as the quasi-mythical setting for a battle between nature and humanity which was consolidated during the formation of the park in the 1960s but emerged initially as an investment strategy in tandem with the pit’s original excavation. The North Bloomfield Gravel Mining Company was established in 1866 by a syndicate of thirty investors from San Francisco led by railroad baron Lester Robinson and William Ralston, founder of the Bank of California. The company commissioned photographic technician Carleton E. Watkins to document their operation in 1871 and generate interest further afield.18 His visit to Malakoff Diggins on November 7th of that year is reported by J.W. Johnson for the Mining and Scientific Press.19

We had the pleasure a few days since, of examining some twenty photographic views recently taken of the North Bloomfield Gravel Mines. The pictures, which were taken by C.E. Watkins, of this city, are really masterpieces of the photographic art, and present the most perfect and lifelike representation of hydraulic mining which we have ever seen depicted on paper [Fig. 3].20

Alongside this visual framing came literary renderings of the site as obscure and radically other. L.P. Borkett in his 1881 book Our Western Empire wrote: ‘It is impossible to conceive of anything more desolate, more literally barbarizing than a region which has been subjected to this hydraulic mining treatment’.21 Visiting journalists and reporters described scenes that resembled ‘a battlefield of antediluvian giants and monsters’ where ‘Nature reminds one of a princess fallen into the hands of robbers who cut off her fingers for the jewels she wears’, and Western chronicler Samuel Bowles referred in 1869 to hydraulic mining as ‘the very Devil’s Chaos indeed’.22 Such prose makes plain the heavily gendered way in which mining is so regularly scripted.23 The descriptions also illustrate Nye’s notion of the ‘technological sublime’, described as a set of ‘emotional configurations that both emerge from and help to validate new social and technological conditions’.24 Similar sentiments carry through in scientific accounts of the diggins which reveal the all too often overlooked emotive dimension in the production of geomorphological knowledge flagged recently by Dixon, Hawkins and Straughan in their work on the place of art in scientific landform study.25 For example, Eduard Reyer, professor of geology at the University of Vienna, penned an apocalyptic description for the journal Deutsche Rundschau Berling. His account of this descent into Malakoff’s ‘wild barren amphitheatre so vast that it could contain a whole settlement and so deep that a high church steeple could hardly reach to the ledge’ included a description of thick black steel pipes carrying water jets that ‘gushed, swelled, and seethed as it burrowed into the ground’.26

This framing continues at the diggins today. Embossed on a bronze plaque overlooking the site is the composition Thunder in the Waters composed by Alvin Trivelpiece, founding father of the state park. The first of five stanzas reads:

They ripped and tore the gravel banks asunder with powerful streams that rumbled like thunder.

A hundred hills were levelled by the blows to smash millenniums of deep repose.27

**North Bloomfield residents**

North Bloomfield developed as a commercial hub serving the now long dismantled towns of Lake City, Shands, Moore’s Flat and French Corral. Postal service records and fire insurance maps show the town in the 1880s with a population of over twelve hundred and a collection of more than one hundred buildings including five hotels, eight saloons, two livery stables, two dry goods stores, two

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17 W. Turrentine Jackson, The North Bloomfield mining district: report on the Malakoff Mine, the North Bloomfield Mining District, and the Town of North Bloomfield, Division of Beaches and Parks, Department of Parks and Recreation State of California Sacramento, 1967, 1.

18 Watkins is now widely recognised for his dramatic mammoth plates and stereo-views of the Yosemite Valley and the industrialising far west. See C.E. Watkins, W.J. Naef and C. Hult-Lewis, Carleton Watkins: The Complete Mammoth Photographs, Los Angeles, 2011; C. Hult-Lewis, The mining photographs of Carleton Watkins, 1858–1891, and the origins of corporate photography, PhD dissertation, Graduate School of Arts and Sciences, Boston University, 2011; K.G. Morrissey, Rich crevices of inquiry: mining and environmental history, in: D.C. Sackman (Ed), A Companion to American Environmental History, Oxford, 2010, 394–409.

19 The vernacular spelling of diggins became the standard form of reference with the area’s classification as Malakoff Diggins State Historic Park in 1965 in conformity with the public resources code 5001.5(e). Diggings was used specifically in the labeling of Watkins’s photography and this spelling has been carried through in some historical accounts; see P. Greenland, Hydraulic Mining in California, Spokane, 2001. G-dropping in the present participle is commonly associated with a generic rural or country form of expression particularly aligned to the vocabulary of the old West as in huntin, fishin, shootin and so on.

20 J.W. Johnson, The Early Pacific Coast Photographs of Carleton E. Watkins, 1871–1876, Hearst mining collection of views, Berkeley, 1905.

21 Cited in R. Rohe, Man and the land: mining’s impact in the far West, Arizona and the West 28 (1986) 315.

22 A. Kolodny, The Land Before Her: Fantasy and Experience of the American Frontiers, 1639–1869, Chapel Hill, 1984, 5; R. Dawson and G. Brechin, Farewell, Promised Land: Waking from the California Dream, Berkeley, 1999, 37; S. Bowles, The Switzerland of America: A Summer Vacation in the Parks and Mountains of Colorado, Springfield, Massachusetts, 1869, 53.

23 C. Merchant, Mining the earth’s womb, in: R.C Scharff, V.Dusek (Eds), Philosophy of Technology—The Technological Condition: An Anthology, London, 2003, 417–428.

24 D. Nye, American Technological Sublime, Cambridge, MA, 1994, xvii. For an account of the emergence of the industrial aesthetic as sublime see N. Stormer, Addressing the sublime: space, mass representation, and the unrepresentable, Critical Studies in Media Communication 21 (2004) 212–240, and also Klinger’s discussion of Coalbrookdale in F.D. Klingender, Art and the Industrial Revolution, London, 1947.

25 D. Dixon, H. Hawkins and E.R. Straughan, Wonder-full geomorphology: sublime aesthetics and the place of art, Progress in Physical Geography 37 (2013) 227–247.

26 E. Reyer, Californische Skizzen: 1, Die hydraulischen Goldwaschen, Deutsche Rundschau Berling XLIX (1996) 371–397. It was translated and printed as E. Reyer and S.K. Padover, Documents: placer mining in California, Pacific Historical Review 4 (1935) 398. See also R. Rohe, Man as geomorphic agent: hydraulic mining in the American West, Pacific Historian 27 (1983) 5–16.

27 A full version of the poem is available at http://malakoffdigginsstatepark.org.
breweries, a grocery, lunch house, barbershop, blacksmith, butcher, dairy, bakery, three boot makers, three fraternal organizations, two churches, a school, a post office and a daily stage coach service.

The landmark legal decision Woodruff vs. North Bloomfield Gravel Mining Company in 1884 prohibited the dumping of waste making mining in the area unprofitable, and by 1893 the boom had already given way to a morose nostalgia as this account by Samuel Butler, a local newspaper reporter, makes plain:

October 8, 1893. We proceeded to the town of North Bloomfield arriving about 6 pm. To say that we were gratified by the appearance of things would be prevarication of the vilest kind. There was a dull monotony everywhere prevalent which was painful to behold. Bloomfield today is only a mere skeleton of what it was during the prosperous era of hydraulic mining. The lethargy and inactivity is not due to the indifference or disregard of the citizens for the welfare of that once lively burg, but to the suppression of hydraulic mining. Bloomfield depends on this particular industry for its support and its commercial and financial prosperity.... During the evening we visited some of the prominent business places and pleasure resorts, and everywhere we were confronted with groups of men, a majority of them being pioneers, who had passed from young buoyant manhood to the age of maturity in the mountains, and in a deeply pathetic

Fig. 2. Regional Map centered on the San Juan Ridge adapted by Antony Smith cartographer DGES, Aberystwyth University.

Fig. 3. Malakoff Diggins, Hearst Collection of Mining Views by Carleton E. Watkins, The Bancroft Library, University of California, Berkeley, BANC PIC 1905.17172—flALB.
manner they were relating the reminiscences of the early days.28

The town's decline continued through to its transformation into heritage as part of a 1960s wave of state park expansion prompted by an emerging leisure class, greater automobile accessibility, and the growing visual appeal of those high cliffs and spires created during the days of hydraulic mining. Falling within the boundaries of Malakoff Diggins State Historic Park, North Bloomfield has been dismantled and restored in line with the classic imagined geography of the gold country ghost town that generates its appeal through absence.29 It is an absence all the more compelling because the presence it depends upon seems just out of reach. The town's historic walking tour pamphlet suggests, for example, that ‘[i]f you listen carefully you might hear piano music and laughter, the excited shouts of children on their way home from school, horses nickering, and the roar of giant water cannons and shouting miners echo across the gold-laden canyon walls.’30 The town's general store, masonic hall, drug store, barber shop and saloon have been restored and furnished to convey an inhabited town with notions of heady pioneer heritage in by the imaginations of visitors and staff alike and imbued with research on the ghost town of Bodie, spectres. Ghosts of previous residents where, as DeLyser notes in Recreation, Sacramento, 1979, 49.

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Two hundred miles north of Bodie, North Bloomfield's spectres have come to include the drunken Irish prospector responsible for the town's original name, Humbug City; the brothel keeper Madame August who in 1855 opened the Hotel de France that was burnt down in 1876 by a man smoking in bed; an elderly lady renowned for collecting rent with a shotgun; and a miser — the apparently penniless odd job man, Charles Marr — who, after his death, was found to have squirrelled away thousands of dollars worth of gold packed in three yeast powder cans hidden in the chicken house.

The enhanced visibility of these comfortably larger than life residents in North Bloomfield works to eclipse the history of the area's non-white population. The park lies within the territory of hill Nisenan tribes who have occupied this section of the Sierra seasonally since 1000 AD. Many died in the malaria epidemic of 1833 and many more were killed when the miners arrived.33 While the state park acknowledges a human presence before the gold rush in its archaeological research, resource management plans, and through the exhibition of artefacts at its museum, those notched projectile points and bedrock mortars give the impression of a long lost and now silent pre-historic people rather than a population contemporaneous with the region's industrial transformation. Indeed, it is a population that continues to cause problems for lawmakers today with their contested status as the 'official' indigenous peoples of Nevada County.34

Similarly, the historical presence of Chinese people in North Bloomfield has been diminished during the preservation era. The material evidence of their presence is regarded by California State Parks as ‘of critical historical significance, in spite of its unimposing appearance... [and] critical to our understanding and appreciation of California’s complex multi ethnic social and economic heritage.’35 However, the modest remains of Chinese-built cellars, outhouse pits, vegetable gardens, a subterranean store, and a few pre-1900 Chinese porcelain-ware scatters, do not draw the same levels of attention as the large cast-iron water cannon (or ‘monitors’) displayed in the middle of town and fired off down Main Street once a year with great ceremony.36

Just as physical obduracy and contingency of cultural preference shape the inventory of artefacts at an historic site, these same two dictates are also true of the archive. DeSilvey explains that archiving, for example, often involves a process of 'semiotic thinning' where contents are disciplined in ways that facilitate subsequent scholarly research and, in the process, can become 'static and stale'.37 Archives, like artefacts, nevertheless open up a number of possibilities for alternative and disruptive rearrangement.38 They can be read in ways different to those envisaged. Their partial, illusive and sometimes contradictory character rejects comprehensive sense-making and works to hold off demands for immediate intelligibility. I use elements of the archive in the next two sections of this paper to supplement more familiar templates of California mining history and, more generally, to undercut the heroic/tragic grand narratives of environmental conquest that still tend to undergird industrial heritage rubrics. The individuals recovered from the archive stand out from the numerical data contained within the ledgers, invoices, receipts, shipping statements, and post office records that make up much of the rest of the collection. Stories seem to gather around people and, although partial and hesitant, these two people came through with enough persistence to enable an emotional connection. This emotional connection is wholly different from the kinds of affective affiliations generated by role-adoption and self-as-historical-other.

28 Turrentine Jackson, The North Bloomfield mining district (note 17), 121.
29 D. DeLyser, Authenticity on the ground: engaging the past in a California ghost town, Annals of the Association of American Geographers 89 (1999) 602–632; D. DeLyser, When less is more: absence and landscape in a California ghost town, in: P.C. Adams, S. Hoelscher, K. Till (Eds), Textures of Place: Exploring Humanist Geographies, Minneapolis, 2003, 24–40.
30 North Bloomfield Historic Walking Tour. California State Parks, 2011.
31 M.A. Helmich and P.G. Spear, A Gold Rush Merchant's Manual: Or How to Appear as a Mid 19th-Century Store in a 21st-Century World.31 But lack of obvious residential life cultivates a sense of the ‘ever so recently vacated’. For much of the year, like Conan Doyle's Mari Celeste, North Bloomfield is populated with spectres. Ghosts of previous residents where, as DeLyser notes in research on the ghost town of Bodie, ‘empty spaces are readily filled in by the imaginations of visitors and staff alike and imbued with notions of heady pioneer heritage.’32
32 D. DeLyser, When less is more (note 29), 24.
33 S. Lindstrom, A Historic Sites Archaeological Survey of the Main Hydraulic Pit Basin Malakoff Diggins State Historic Park North Bloomfield, Nevada County California, California Department of Parks and Recreation, Resource Protection Division, Sacramento, 1990; see also http://www.nevadacountyarchives.org.
34 B. Porter, D.L. Felton and P.E. Nesbitt, Malakoff Diggins State Historic Park Resource Management Plan California Department of Parks and Recreation, Sacramento, 1979; H. Meals, Cultural Resource Inventory and Site Evaluations for the South Yuba Trail, Nevada County, California, Nevada City Ranger District, Tahoe National Forest, Sacramento, 1994; D. L. Felton, Survey of Cultural Resources at Malakoff Diggins State Historic Park, The Resources Agency, Department of Parks and Recreation, Sacramento, 1979; J. Gracey, North Bloomfield Cultural Landscapes Report, Terra Cognita Design and Consulting, Petaluma, 2010; D. Baumgart, Tribe stripped of historical recognition in unusual move, Indian Country Today 23rd March 2011, available at http://indiancountrytodaymedianetwork.com/2011/03/23/tribe-stripped-historical-recognition-unusual-move-24126, last accessed 5th June 2014.
35 State of California, Department of Parks and Recreation, Survey of Cultural Resources at Malakoff Diggins State Historic Park, Manuscript on file at Department of Parks and Recreation, Sacramento, 1979, 49.
36 Lindstrom, A Historic Sites Archaeological Survey (note 33), 45.
37 C. DeSilvey, Art and archive: memory-work on a Montana homestead, Journal of Historical Geography 33 (2007) 880.
38 C. DeSilvey, Salvage memory: constellating material histories on a hardscrabble homestead, Cultural Geographies 14 (2007) 401–424.
fantasies of wild west mining camp re-enactments. But it is a connection that might help cultivate wider interest in and concern for those ordinary social lives on the margins of grand industrial-environmental histories.

Julius Anderson

One individual with no presence in the park’s interpretation but residing in its collection of historical business correspondence is Julius Anderson, keeper of the Bowman Dam. Bowman Dam was built in 1872 across Big Canyon Creek at a 5600 feet elevation in the High Sierra. The reservoir it created stored water that Anderson would discharge to hydraulic miners through the Bloomfield ditch—a network of trenches, flumes and chutes—that snaked down the mountains for around fifty-three miles. Today Bowman Reservoir is in Tahoe National Forest and is operated by the Nevada Irrigation District for purposes of recreation, water management and weather observation. Data feeds from there to the California Snow Survey and is used to predict seasonal water availability statewide. On their website the Nevada Irrigation District writes that they have been keeping weather records for Bowman Reservoir since 1929. Anderson was busy doing this way back in the 1890s including meteorological observations within messages sent down to North Bloomfield Mining and Gravel Company superintendent L.L. Meyers. In the process he provides a unique, albeit brief, consecutive record of climate history for the area as well as some engaging evidence about the way weatherworlds become locally known, experienced and documented.39

These are the messages he sent down the mountain through the month of January 1898:

Jan 2nd 1898
Dear Sir:—Everything is alright up here. Weather could not be nicer. Warm day no snow at all around the house and only about six inches in the woods. The barometer has never stood so high since I have been here. It has been 24.85 for several days but is going down a little now. There is 67 and a half foot of water in the reservoir and I am running twenty-eight hundred in the ditch. I went out fishing the other day but did not get a nibble nor did I see any. I enclose monthly report and time for severance.
Yours respectfully A.J. Anderson.

Jan 11th 1898
Dear Sir:—Everything is running nicely up here. The weather being very cold. It was 9 degrees this morning, the coldest morning we have had this winter. There is about 18 inches of snow in the timber. There is sixty five feet of water in the reservoir and I am running 2800 inches in the ditch—all she will carry at the lower end of my
beat.40 The reservoir is frozen over except in the center.
Yours respectfully A.J. Anderson.

Jan 19th 1898
Dear Sir:—Everything is running smoothly up here. The weather being cold and equally not much snow or any rain. There is sixty-two feet of water in the reservoir. I am running twenty-eight hundred in the ditch. As soon as the weather improves I would like a couple of men to help me with the braces on the high flume that fell down just before Mr Bates left here. The ice has knocked several of these down. They are all covered with ice. If it gets a little warmer the ice will let go and they will be quickly fixed. There is about two feet of snow at the measuring staff. The reservoir is frozen all around. Am going to try fishing pretty soon.
Yours respectfully A.J. Anderson.

Jan 26th 1898
Dear Sir:—Everything is alright up here. Weather is very cold blowing hard from north east. There is about one foot of snow on the ground along the ditch. There is 59 ft of water in the reservoir. I am running 28 inches in the ditch. The reservoir begins to look low showing a good many islands. I am in hopes of warmer weather and some rain pretty soon.
Yours respectfully A.J. Anderson.41

Hemmed in by snow—so high some years that it was said you could walk straight out of a second storey window—and seven miles from the nearest human settlement in Graniteville, the sense of Anderson’s isolation is enhanced by the way the archive captures only one side of the conversation. In the archive Anderson never gets a reply. A sense of isolation can also be inferred from the muted tone Anderson adopts when relating details to his boss. There is a cursory businesslike prose that runs counter to the flamboyant Spencerian script of his pen and counter to our expectations that historical correspondence be always filled with psychologically sensitive disclosure.

The picture of the dam keeper’s residence found in Carlton E. Watkins’ New Series of Plates draws us further to Anderson’s lonely role on the margins of a history that has largely forgotten him. In that context it is all too easy to imagine the unidentified figure standing in the distance on the dam wall is Anderson himself (Fig. 4).

With its inevitable focus on the material resource, historic preservation centres public attention on fixed and discrete artefacts and places. This promotes a sense of things in isolation and limits appreciation of process. By contrast, Anderson’s correspondence, in particular the ancillary information that surrounds his factual conveyance of data on precipitation and water levels, helps us conceive of hydraulic mining as an extensive and complex network of relations requiring a constant burden to maintain. His messages connect the diggings to an industrializing capitalist economy implicating people, things, objects, protocols, attitudes and sensibilities. They connect Anderson to a broader history of water supply and early irrigation in California. They also, crucially, convey an experiential and embodied suite of environmental encounters that get missed by the interpretive commentary within the town driven as it is by heroic imagery of men guiding water cannon and accounts of engineering achievement evidenced through numerical data on gravel displaced and gold recovered. Anderson’s oblique references to the fish, the fire and the ice amongst other things illustrate the necessary intimacies involved in the enterprise of hydraulic mining. He had to have this intimate relationship with nature in order to help others destroy it elsewhere.

Unlike mining company bosses, civil engineers, and a number of hydrauliking ‘pipers’, Anderson’s name has not entered the formal historical record. He remains anonymous in archivists’ summaries of the mining company files. But the letters elaborate a biography. They develop a narrative arc due to their chronological arrangement in the folder. Week after week, letter after letter, the story continues for eighteen months and abruptly concludes. Anderson notes in August 1898 that he was kicked by a horse and missed his

39 L. Veale, G. Endfield and S. Naylor, Knowing weather in place: the Helm Wind of Cross Fell, Journal of Historical Geography 45 (2014) 25–37.
40 A miner’s inch is the standard measure of volume of water that passes through a one-inch hole over a period of 24 hours. One miner’s inch equates to around sixteen thousand gallons a day. A ‘beat’ refers to the section of ditch Anderson was responsible for. The next section of several miles was someone else’s beat.
41 North Bloomfield Gravel Mining Company, 1870–1901 and undated, Folders 5–18 of Box 1, Series 1, Malakoff Diggins State Historic Park Collection, California State Parks, Sacramento, California. Changes in numerical expression retained.
trip over the ditch to Graniteville for supplies. He records that much of that same summer was spent fighting forest fires, trying to keep flames away from flumes. We know that in the following February he was having money problems and had received some sort of sanction from his boss because one weekly letter from that month starts with the words: ‘I am sorry to have annoyed you this way but I could not help it for if I pay old bills I cannot pay my present expenses’. His last letter in the archive, on June 19th 1899, begins as did every other with his favoured refrain ‘Everything is alright up here at Bowman Dam’. It finishes with a report on some repair work to the flumes and, perhaps more worryingly, the brief notification of a leakage of two hundred inches in the main dam wall.

Mary Kallenberger

Unlike Anderson, the next character from the archives does have an explicit presence in the state park. She assumes the interpretive role of a genteel feminine resident. Unlike those rarely mentioned female sexworkers who populated the town’s brothels and saloons she has a name and an era-specific furnished residence, the Skidmore House, to go with it. Mary Kallenberger was one of five children born to Rush and Elizabeth Skidmore, prominent citizens of North Bloomfield. Rush came from New York in the 1850s, set up a bakery, and in 1862 married and assembled the family residence – a kit house – into a central lot right in the middle of the then bustling town. Mary grew up in what would have been comfortable surroundings. Her father secured income buying and selling mining claims. He owned a saloon in the town and worked both as a public notary and an agent for Eureka and California Stage Lines. In 1884 Mary married William Kallenberger, eldest son of George, the town’s barber, who lived across the street, and Mary and Bill took up residence at the back of the barbershop before occupying the Skidmore house in 1911 when Rush passed away. Mary and Bill had a son Wendell who eventually passed the house over to the state park (Fig. 5).

The challenges of bringing up a family in a remote frontier mining town have been covered extensively in academic and popular literature. Such accounts established an archetype personified as the polite and petticoated Victorian gentlewoman. We know that in the following February, Mary began as did every other with his favoured refrain ‘Everything is alright up here at Bowman Dam’. It finishes with a report on some repair work to the flumes and, perhaps more worryingly, the brief notification of a leakage of two hundred inches in the main dam wall. The woman we encounter through the furnishings of the Skidmore house, and in the six cubic feet of materials that make up ‘Series 5, Mary Kallenberger materials 1860–1959 and undated’, conforms to this archetype to a certain extent. We hear Kallenberger playing piano forte and Pentecostal hymns through the sheet music deposited; and notice her interest in art and creative writing from a collection of periodicals that includes titles such as Practical Illustrating, Art Amateur, Art Interchanger, Art Student, and later, Writer’s Digest, Writer, Writers Guide and Writer’s Talent Scout. But the archive contains material that does more than reinforce expectations. Items of correspondence relating to Mary’s artistic training in harmony and composition, for example, and in drawing...
and illustration, shows her involvement in a tentative process of learning and self-making that meant withstanding harsh critique. The Instruction Department of the School of Arts and Crafts – an international correspondence company based out of Scranton, Pennsylvania – wrote to her in November 1913:

Dear Miss Kallenberger,

Your work on ‘surface texture’ has been received and we note that the drawings of the different objects is fairly good although in drawing the red vase you have made the neck a little too thick for the size of the body and the modelings around the base are not very carefully outlined. ... Your rendering of the rusted lock is very dull and muddy and it appears as if you had used crimson and blue in the body of this lock instead of using ‘burnt sienna’ and blue as instructed in the text.44

In some ways, papers in the Kallenberger archive align with domestic objects arranged throughout the Skidmore house to reinforce expectations of a middle-class gentility working to distance itself from the wilds of the Sierra mining town.45 Directions to contemporary park visitors in a scavenger hunt that includes the Skidmore property note, for instance, that ‘Small animals were sometimes able to sneak through little openings to find warmth and food inside a house’ and asks, ‘What would you use to control these unwanted visitors and where is it found?’46 But the archive also, and inevitably, provides a much more nuanced and intimate sense of those ordinary everyday encounters with nature that are open, ambiguous, sentimental and occasionally affectionate.

Collected in the file ‘Birds, undated’ are nine avian-themed stories typed onto now faded paper with subsequent pencil and then ink amendments. These relate Mary’s encounters with birds and their encounters with each other. The longest and most involved story is called ‘The Downey Woodpecker’.

In an old Pear tree that stood in the front yard close to the house, two little Downey woodpeckers decided to build their nest. They selected a partly dead limb and every morning at peep o’ day or around four o’clock when all the birds began to a-waken we could [hear] them busily knocking. Tap/tap/tap/ their sharp little bills striking rapidly making each stroke count – the bark and tiny particles of wood flying in all directions. Soon they had a hole excavated large enough for a comfortable little nest which Mistress Downey soon occupied.

The Downey is the smallest of the woodpecker family measuring just six inches long and lays 4 to 6 eggs. Now the tree that I mentioned where the nest was built stood close to the porch and every day as I stepped out I made it my duty to look at the little hole in that dry limb close to the main trunk of the tree and see how things were progressing. Some days I’d see Mrs Downey come out stretch her limbs and wings and fly away just for a little exercise, and a little worm or two to eat. Perhaps some of you have seen an old hen setting and how she comes off her nest with quite a clutter, stretches her limbs, flaps her wings, finds food and drink then back again to the nest, repeating daily until the eggs are hatched. So did Downey do the same but when she came off her nest she did it quietly, as all birds do for the reason of hiding their nests.

One day I saw little Downey fly away and then I stepped back into the house. I was startled shortly afterwards by a cry of distress from her so I went out again to see what was wrong.

44 International Correspondence School, Rendering in Watercolour, 1904 Box 28, Folder 7, Malakoff Diggins State Historic Park Collection. California State Parks, Sacramento. See also Music Instruction Correspondence, Box 28, Folder 7, Malakoff Diggins State Historic Park Collection, California State Parks, Sacramento.

45 For discussion on how the Victorian parlour played a key role in the making of the modern bourgeois subject see T. Logan, The Victorian Parlour: A Cultural Study, Cambridge, 2001; K. Hetherington, Capitalism’s Eye: Cultural Spaces of the Commodity, New York, 2007.

46 Malakoff Diggins State Historic Park Environmental Living Program, California State Parks, Sacramento, 2012, 106.
and saw she was all of a flutter with wing outstretched and in
great distress. She was trying to reach her nest and now and
then giving out a pitiful cry.

I saw at a glance what was wrong. Three large woodpeckers
were trying to rob her of her nest or rather the contents. One
was plastered against the bark close to the nest looking like a
huge bat. The other two were near flying around and driving
her back as Downey tried to reach her nest.

These woodpeckers are very large — twice as large as
Downey — head, back, and outer wings jet black, belly light.
When clinging to the trunk of a tree you can see no white — it
is a mass of black. They have a peculiar cry which sounds like
they call out Jacob/Jacob/Jacob/. It is a very harsh sound. They
are known as nest robbers of other species of woodpeckers,
so I knew what they were after.

I picked up a few small rocks and drove them away watching
to see that they did not return until Downey had entered her
nest. Next day back they came reinforced by an addition of
two more — five in all.

Two sat on a telephone pole outside close to the fence while
the other three hovered around the nest as they did the day
before. Again that cry of distress. I stepped out but the cry did
not bring me alone for every bird in that orchard heard it and
flew into the trees that surrounded that particular pear tree.
Every one of them kept their distance, I noticed not one
ventured forward — they knew better.

Chick-a-dee, linnet, robin, wren, English sparrow and other
birds were the audience. All kept very quiet but finally the
pugnacious little sparrow thought he’d say something so he
flew a little closer but no sooner had he made the move then
one of the black woodpeckers turned on him and he soon
retreated. Seemed like they all came to see what it was all
about and how it would end.

I interfered then by driving them off but did not succeed. I
knew something stronger than rocks had to be used to
accomplish results so I borrowed my neighbour’s little 22
rifle — not to kill but frighten them.

I shot three times into the air which surely proved effective.
The bird audience left quickly and the three woodpeckers
joined the two on the telephone pole and after a seemingly
consultation they decided to move on.

For two or three days peace reigned in the front garden
and Downey and her mate were happy. I thought that there
would be no more disturbances but I found I was mistaken.

About the third or fourth day I had occasion to leave the
house and on returning I found during my absence these
thieves had come back, and undisturbed had succeeded in
gaining entrance to the nest.

The little mother and father were carrying on frantically but
they were powerless — the size and number were against
them. One of the large birds was at the nest with his long bill
inserted into the hole of the limb where the two little
Downeys had worked faithfully morning after morning to
make that hole large enough for a little home nest. I watched
to see what the thief was doing. He would draw out his bill
covered with something, gulp down whatever it was, and
insert it again. Just what the nest contained — eggs or young
— we never knew as we made no examination but these birds
are known to eat both.

I felt so badly over it I left the house again and stayed away all
afternoon to escape hearing that little mother’s cry. I could
offer no help — it was just a tragedy in the bird kingdom.47

This and a host of other unpublished stories about quails, thrush,
robins and cat-birds constitute a local environmental historical
guide to birdlife in the western United States. They reveal
moments of everyday encounter between human and non-human
animals in a remote Sierra mining town that are often ignored in
grand and epic tales about taming the west where nature is
something to be subjugated or kept apart. Like Lorimer’s re-
constructions of the entwined biographies of humans and reindeer
through stories of companionship and the intimacies ‘in conduct
and encounter’, Kallenberger’s stories work to challenge convent-
tional historical accounts of mining and its associated emphasis on
the separation of individuals from the natures with which they
interact.48 They offer a glimpse of the emotional sensibilities of
everyday ornithological interest, its associated anthropomorphemic
projections, the vagaries of aggression and vulnerability, and the
species-specific preferences that percolate through our sentiments
of care and conservation. While the Malakoff Diggins State Historic
Park bird pamphlet provides an inventory of a hundred or so resi-
dent birds organized into their Latinate groupings from the family
phalacrocoracidae (cormorants), past many others, through to the
family fringillidae (finches), Kallenberger’s bird stories communi-
cate a much more lively profile of different kinds of families residing
in cohabitation. Understood in the context of other materials from
the Kallenberger collection — the correspondence school textbooks,
instruction papers, articles on sewing and composition books — it is
clear that these stories are driven by something more than a ped-
agogic imperative.49 They might also be thought of as an expressive,
creative, even therapeutic enterprise of self-making, a way of
dealing with broader social anxieties, a way of getting by. The
crafting of a voice and the scripting of commentary positions an
author at the centre of things. Kallenberger’s centre shares its
setting with a place that more regularly serves to commemorate
environmental conquest and subsequent restraint. It provides a rare
picture of the subjective historical experience of everyday natures at
Malakoff Diggins and one that is not pre-occupied with mining
camp legends or relative state-wide significance.

Conclusion

I have presented these fragments from the archive in a way that
keeps their compositional quality intact rather than pick them
apart phrase by phrase for purposes of critical analysis. I share this
formula with a number of scholars using storytelling as a mode of
academic research. Stories enable a layered approach to the study

47 Birds undated, Manuscripts, Box 28, Folder 9, Malakoff Diggins State Historic Park Collection, California State Parks, Sacramento, California.
48 H. Lorimer, Herding memories of humans and animals, Environment and Planning D: Society and Space 24 (2006) 515.
49 A fully itemized list of all the Mary Kallenberger Materials covering the period between 1860 and 1959 can be found in the Online Archive of California Collection Guide available at http://www.oac.cdlib.org/findand/ark:/13030/item94m3q6j, last accessed 16th April, 2014.
of place making.50 They have transformative potential for social change.51 They possess ‘a performative power to relate more than the teller intends’ and they ‘create new spaces for thinking about and imagining what might be going on’.52

Thought about in this way the archive material relating to Malakoff Diggins opens up new aspects of industrial and extractive histories for public scrutiny. In the nineteenth century, North Bloomfield became a site of national environmental crisis and has since come to feature prominently in the canons of environmental history as an exemplar of rapacious despoliation and subsequent wise-minded juridical restraint.53 Such notoriety is due in no small part to the way the events and landscapes associated with hydraulic mining correspond to aesthetic conventions of the ‘conquest of nature’ grand narrative. But this narrative and the straightforward moral resolution it provides disconnects Malakoff Diggins and other key places selected to mark the history of industrial development from contemporary environmental discussion. Such places operate to honour achievement. They deliver clear affirmative messages that legitimate the present as environmentally enlightened and post-industrial rather than working to facilitate dialogue and critique around the persistent toxic legacies of past hydraulic mining and its contemporary equivalents. As participants on the periphery, Kallenberger and Anderson provide insight into the everyday subjective experience of industrial-environmental histories and help us to rethink these histories outside the linear sequence of progressive events imposed by a heritage agenda.

Today Malakoff Diggins State Historic Park draws in visitors on account of the site’s photographic appeal as both obscure industrial sublime and as tranquil Sierra wilderness, but the majority of visitors are attracted by the old timey feel of the town’s restored period buildings: the general store, livery, saloon, barbershop and drugstore, and its cast of larger than life archetypal characters who occasionally appear in historic dress to re-enact bread making or a shoot out. Installing the biographical fragments of Anderson and Kallenberger and other individuals from the archive more fully within the park’s interpretive provision (whether in supplements to tour scripts, as additions in its suite of published material, or through park-supported archive study groups) would help to create productive ambiguities that could divert us from established patterns of meaning and ultimately deliver a more critical living history of industrial development. Anderson and Kallenberger and their stories could be part of an active narrative intervention that would challenge conventional industrial heritage in a number of ways.

First, they both subvert industrial heritage’s technocentric pre-occupation with ‘big stuff’ and the revelry prompted by its destructive capacity, emphasizing instead the more humble, quotidian companionships between humans and non-human natures which share the same space. Anderson’s dealings with ice, fire and fishing point to the ordinary labours required to maintain delivery of water down the mountain and the regular burden of providing reassurance to the company superintendent that ‘everything is all right’. Kallenberger’s efforts to creatively represent nature through still life drawing and stories about being in the company of birds illustrate a level of intimacy and affection that rarely makes it through to formal historical accounts of industrial extraction.

Second, these archival remains allow us to conceive of the industrial past as something existing beyond the boundaries within which it is physically preserved. Quite apart from familiar depictions of rugged individuals controlling singular items of technology, Anderson’s correspondence allows us to appreciate hydraulic mining as a dispersed and fragile assemblage of far flung outposts like dam stations connected through the vulnerable infrastructures of ditches, flumes and pipes that required constant and often mundane forms of monitoring and maintenance. Kallenberger’s accounts extend that mining assemblage to the domestic space of front yards and nesting birds. Seen together their biographical fragments link combinations of material flows, geological forces and business protocols to the lived experiences of countless people and other animals.

Third, and most significantly, these archival materials can provoke active engagement with contemporary social and environmental politics. As peripheral portraits of past industrial extraction they differ markedly from the much more familiar characters of industrial heritage: the remote Victorian engineer, or the gangs of nameless workers whose dignity in service appears heightened by anonymity. Getting to know Kallenberger and Anderson as everyday people like us is less about plugging the gaps of existing accounts and more about creating moments of disruption and departure. They force an acknowledgment that the standard heroic-tragic binary of mining and other industrial heritage endeavours eschew a much more intricate, intimate and ambiguous set of relations with nature that took place then as much as they do now. This helps to enrich our understanding of moments of crisis in the industrial-environmental past and expand our potential to appreciate (and so respond to) crises in an industrial-environmental future.

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