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**Follow the Money –  
Competing Knowledge Regimes  
in an Overheated City**

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# Follow the money: Competing knowledge regimes in an overheated city

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*During fieldwork in Gladstone, an industrial town in Queensland, I was sometimes asked who paid for my research. Had I responded that it was funded by a mining company, or the powerful Ports Corporation, I would have lost credibility in the eyes of my local collaborators. Some of them even confessed that although they still trusted science, they no longer trusted scientists. Most of the local conflicts in Gladstone concern the relationship between residents and powerful economic agents.*

*In the era of 'fake news', 'alternative facts' and widespread revolt against the elites (including the intellectual elites), the Australian contexts illuminated here speak to wider issues including the validity of truth claims and the basic relationship between knowledge and power. My examples focus mainly on the destructive side effects of industrialisation, and this essay shows how people representing different knowledge regimes identify and interpret facts in various ways.*

*A broader explanatory framework may take into account the acceleration and intensification of global processes, which has led to 'overheating' across the world, in the sense that change now takes place faster and with more wide-ranging consequences than in the 19th and 20th centuries. Changes are often interpreted through decentralised electronic media, and as a result, it is increasingly difficult to navigate the jungle of information and to know whose knowledge to trust.*

\* \* \*

Suddenly, we seem to live in a time dominated by 'fake news', 'alternative facts', conspiracy theories, mistrust of scientific research, partial accounts parading as 'the real truth which has hitherto been concealed from us, the people', and revolts against allegedly smug academic elites and distant political elites. Currently, YouTube videos claiming research on climate change to be a scam get far more views than videos presenting the science of climate change. In this world, where the authority of science and empirical methods is being questioned and where even world leaders may brush aside uncomfortable facts as 'fake news', it is increasingly difficult to know whose knowledge to trust and how to act upon trusted knowledge in situations where something important is at stake.

The acceleration and intensification of global processes has led to 'overheating' across the world, in the sense that change now takes place faster and with more wide-ranging

consequences than before (Eriksen 2016a). Globalisation, in its twenty-first century manifestation, can be described as a complex and uneven development, marked by crises which are increasingly perceived as being global in character, but which remain local in their effects. Economic downturns, growing inequalities and alienation resulting from large-scale corporate capitalism, environmental destruction and climate change are all familiar sources of destabilisation in our day and age, with the nexus of knowledge and power – contested, changing, but often hegemonic – being a privileged site for the exploration of the crises of globalisation and the conditions for establishing alternatives. In order to study the particular sociocultural configurations that emerge in response to fast, typically exogenous change, my recent research in Gladstone, Queensland led me to study the relationship between knowledge and power in some detail. This topic, and contestations between different knowledge regimes, has become a far more important subject than initially anticipated, and it is one that is important to the residents of Gladstone. In my forthcoming monograph (Eriksen 2018, see also Eriksen and Schober 2017), I ask how different kinds of knowledge are being articulated with each other in situations of social or cultural transformation, to what extent and in what ways one form of knowledge becomes hegemonic and politically decisive, and what the conditions are for alternative modes of knowledge as the basis for outright resistance or alternative courses of action.

### **Knowledge in anthropology**

Whether it is planned or unplanned, rapid change has unintended side effects, is understood differently by people in different subject-positions, and tends to be contested by those who are immediately negatively affected by the changes. The ethnographic examples to which I will eventually turn are marked by great internal heterogeneity when it comes to making sense of change: stakeholders not only respond in different ways, but they frequently describe facts differently as well. In connection with infrastructural projects – from mining to industry, road construction to real estate development – investors, politicians, those in the media, NGOs and directly affected locals perceive these processes and their implications in various ways drawing on different sources of knowledge and representing different interests and agendas. Frequently, ‘expert knowledge’ is contrasted with ‘experience-based knowledge’, but different kinds of disembodied ‘expert knowledge’ may also clash, as when independent researchers reach results at odds with reports commissioned by industry or government. The contrast between embodied and cognitive knowledge has always been important in anthropological research on knowledge regimes and their relationship to social action.

An exceptionally rich and fertile field of research and theorising, the study of knowledge systems has for many years raised epistemological, methodological and indeed ontological questions within the anthropological discourse about cultural diversity. The great rationality debate following the philosopher Peter Winch's (1964) critique of Evans-Pritchard's analysis of Azande knowledge about witches, summed up in the latter's assumption that witches do not really exist (Evans-Pritchard 1983 [1937]), comes to mind here (a discussion which itself was an indirect descendant of the controversy concerning the Sapir-Whorf hypothesis on the linguistic construction of reality). Questions concerning translation, commensurability, hegemonic knowledge and ethnocentric bias were taken up and rephrased much more recently by Viveiros de Castro (2004) and his followers, who go

beyond theorising about knowledge and rationality by arguing that worlds inhabited by humans may in principle be radically different from each other 'all the way down'. However, in my ethnography from industrial Australia, the relevant aspects of knowledge systems and regimes can be studied, understood and compared by using the conventional methods of anthropological fieldwork, interpretation, translation and comparison. The multiple, often converging crises of globalisation, I argue, are best addressed by understanding how knowledge constructions relate to power and change and how knowledge regimes articulate with each other.

Regarding the contrast between cognitive and embodied knowledge, the Greek concept of *habitus* was most famously developed in contemporary social theory by Pierre Bourdieu (1977), who, in his theory of practice sought to come to terms with power as a multidimensional phenomenon expressed through symbolic and cultural struggles even if it was constituted in politics and the economy. *Habitus*, a term originating in Aristotle's philosophy, was the connecting point between individual persons and the larger system, a form of internalised knowledge situated in the body that signals the implicit and nonverbal rules of a particular configuration. A close relative of Connerton's (1989) concept of habit-memory, itself inspired by Maurice Halbwachs' (1950) Durkheimian sociology of social memory, *habitus* or tacit, embodied knowledge has represented a methodological challenge to anthropologists; it is understood by doing, not by talking (see e.g. Hastrup and Hervik 1994). I shall not explicitly address the issue of how knowledge becomes embodied, but will instead raise questions about the interconnection between different kinds of knowledge regimes (which usually express themselves in cognitive ways) and their respective relationship to power. In fact, Bourdieu's (1977) distinction between *doxa* and *opinion* might be more useful for the task at hand than his concept of *habitus*, *doxa* being the implicitly held beliefs that are usually not verbalised, but simply taken for granted. *Doxa* is thus unquestioned, while *opinion* is recognised as being open to disagreement and therefore points towards the possibility of collective action and change.

A final family of approaches that needs to be mentioned briefly is that associated with Edward Said's *Orientalism* (1978) and postcolonial theory, Michel Foucault's archaeology of knowledge (1970), James Scott's contrasting of abstract state knowledge and concrete local knowledge (1998) as well as Bruce Kapferer's studies of ideology and state power (2011, Hobart and Kapferer 2012). All these bids to connect ideology, knowledge and power are indebted to Antonio Gramsci's (1971) Marxist theory of hegemony, originally formulated when Gramsci was a prisoner under Mussolini's Fascist regime in the 1930s.

### **Contested knowledge**

The issues faced by local people trying to make sense of global worlds may be illuminated through the concept of *clashing scales*: local, context-specific forms of knowledge frequently contradict, or simply present a different version of reality, to the standardised, abstract forms of knowledge that may stem from the dominant global economic system and/or the state (Eriksen 2016a). Long's (1989) concept of 'the interface', introduced to account for the clashing worlds of native South Americans and development agencies, exemplifies a phenomenon of far more general significance than the single case he looked into: abstract expert knowledge usually overrules local, partially embodied knowledge. Clashing scales are also at the heart of many forms of anthropological engagement, from Scott's

(1999) study of state interventions to Lévi-Strauss' (1977) mournful lament of the loss of indigenous worlds to the benefit of a flattening modernity. Therefore, if we are to look at knowledge and power under conditions of overheating, it becomes a matter of paramount importance to understand how power is scaled, and how knowledge is both transmitted along those scales and becomes entangled in the kinds of conflicts that arise in multiscale settings.

While the present approach is informed by the schools and traditions outlined above, from the structural-functionalist to the postcolonial, it is distinctive in that it emphasises the problems associated with conflicting knowledges clashing in one and the same social field, frequently leading to open disagreement, distrust and challenges to various claims of legitimacy. When, for example, there is a perceptible gap between experience-based knowledge and expert knowledge, the decision-making process comes under scrutiny and may be questioned or deemed illegitimate by people affected. For example, in assessing the conditions for initiating an open-cut mine, be it in Australia or elsewhere, forms of knowledge may include that of economic profitability (the corporations, the national government), that of jobs (local politicians), that of ecological consequences (environmental NGOs), and a range of local knowledges which may emphasise, for example, changes in the quality of life, reduced access to water, increases in the cost of living, but also greater economic opportunity. There exist different, and often conflicting, interpretations (and, accordingly, proposed courses of action) of anything from economic crises, immigration, environmental issues and political reform to electricity generation, foreign investments and indigenous rights.

By calling attention to the relationship between knowledge and interests, local and translocal levels of decision-making, and local responses to rapid change, I invite you to explore with me the question why certain versions of the world become hegemonic, and what it is that triggers adherence to particular facts and interpretations – and, no less interesting, what makes people change their mind. The question 'Who to trust?' is fundamental, and is usually supplemented by the question 'Why should I trust them?'. This is not a foolish question animated by vitriol or by ignorance of scientific knowledge, and the answer gives a direction to possible courses of action.

## **Coal, gas and the Australian dream**

Mining is important to the Australian economy, and the sector represents about ten per cent of the GDP. Only 2.2% of the labour force is employed in mining, but it contributes indirectly to other sectors by generating a demand for services and auxiliary industries, and through taxes and royalties to the states and the federal government. About 80% of the electricity in the country is generated by coal.

Australian national identity is also considerably connected with mining. The successive Australian gold rushes from 1851 onwards brought waves of immigrants, mainly European, to the country and created fortunes locally. Rags-to-riches stories made their way into local folklore. The vast outback and desert areas, which make up much of the continent, tickle the collective imagination through their vast repositories of invisible wealth in the form of gold, uranium, oil, coal and other valuable minerals. Since 1960, manufacturing has declined in economic importance (from 30% of GDP to 12% in 2007), while the extent of

mining has grown steadily. In recent years, the extraction of unconventional fossil fuels (e.g. shale oil, coal seam gas) has added new sources of wealth to the existing resources.

Some of the richest coal fields in Australia are in Queensland, and much of the coal is shipped from the port of Gladstone, a small city of 40,000 inhabitants (around 60,000 if the commuting area is included), but which boasts one of the world's largest coal ports, second in Australia only to Newcastle, New South Wales. Until 1967, however, the town was mainly integrated economically with the surrounding countryside and had no fossil fuel-related industry. The cornerstone enterprise was Swift's Meatworks, which grew in importance and prosperity as a supplier of tinned meat to Allied forces during the Second World War. The meatworks were closed down in 1963, and in 1967 on the very same site, one of the world's largest alumina refineries was opened. The refinery would eventually get its electricity from the new coal-driven power station on the edge of town, opened in 1976, and the alumina would be turned into aluminium at the nearby Boyne Island Smelter starting in 1982. With the opening of the Moura railway line for transporting coal from the interior of Queensland in 1968, and the construction of a coal terminal at Barney Point, Gladstone had, in the space of a few years, become a fully-fledged industrial city.

Industrial and coal-related developments in the Gladstone region have continued at an uneven pace. A second alumina refinery has been opened in Yarwun, a very small town located west of Gladstone. Cement Australia (formerly Queensland Cement & Lime) operates a factory at Fisherman's Landing, just north of Gladstone, and a mine in Mount Larcom, to the north-west. There is also a quarry, a chemical factory and many auxiliary activities – scaffolding, mechanical workshops, transport companies and so on – adding to the industrial, and industrious, face presented by Gladstone to the visitor.

Since the early 2000s, industrial change has accelerated in Gladstone. During my fieldwork in 2013–14, three plants for the liquefaction and storage of coal seam gas were under construction on Curtis Island, located across a narrow strait from the city. Work on these plants began in 2011 and the first liquid gas produced there was shipped in 2014. Ground was cleared and pipelines stretching several hundred kilometres were laid to transport the gas from the interior of the state. Simultaneously, a new coal terminal was built at Wiggins Island just north of the city, increasing the port capacity considerably. To enable access for large ships, the western, shallower parts of Gladstone Harbour were dredged from 2011 to 2013, removing 36 million cubic metres of sediment in the process.

The ownership structure in large industrial operations in Gladstone is complex, and the LNG (Liquid Natural Gas) facilities are no exception. Although the Gladstone Ports Corporation is state-owned, the projects it oversees are owned by consortiums consisting of several companies with complex, transnational ownership structures. The three LNG plants were built by the American corporation Bechtel, but they are owned and operated by other companies. One is owned by Queensland Liquid Natural Gas (QCLNG), which in turn is owned by British Gas (BG); the second is jointly owned by the Australian energy company Santos and the Malaysian company PETRONAS; and the third project, Australia Pacific LNG, is operated jointly by the Australian company Origin, the American company ConocoPhillips and the Chinese company Sinopec. Many subcontractors have, moreover, been involved in various stages of the construction of pipelines and the plant itself, from large engineering companies to small, local actors like the transport company which moved trucks by boat from the mainland to the island and back. When something goes wrong, it is therefore not always easy to identify who or what to blame and what to do.

The main research question raised in my fieldwork concerned local responses to these changes and the unintentional side effects of rapid industrial growth more generally (see Eriksen 2018 for a fuller description and analysis). There are many different views, but on the whole, Gladstonites take a positive view of industrial development. However, there is also a broadly shared indignation over the large corporations' failure to engage in a direct and sustained way with the local community. Many also claim that Gladstone has received far too little in return for allowing large-scale industrial developments. One interviewee went so far as to describe the city as 'the sacrificial lamb of Queensland', noting 'if it is noisy and dirty, just put it here'. Many in Gladstone hold the view that they produce considerable wealth for south-eastern Queensland (the Brisbane and Gold Coast area) and get little in return. On the other hand, ambivalence towards the double bind between fossil fuel-powered growth and ecological sustainability was less widespread than anticipated. Instead, I found a great concern with health issues related to emissions, discharges and working conditions in the industry, as well as conflicts over the status of particular forms of knowledge.

### **Conflicting knowledge about Gladstone Harbour**

There is broad agreement that the removal of huge amounts of silt and mud from the sea-floor immediately west of Gladstone has had direct consequences for the fisheries. The harbour covers a large area between Facing Island to the east and the city, and stretches north-west towards the strait between Curtis Island and the mainland, appropriately called The Narrows. For many years, local fishermen benefited from large catches of fish and crab in the harbour area. Since the dredging began, nobody fishes in the harbour. Fish with lesions and swollen eyes were caught in the early days of dredging, and more than half of the area's mud crabs have been affected by shell disease.

A group of local fishermen decided to document the effects of the dredging on the fisheries and to demand compensation. They hired a marine biologist, named Matt Landos, to prepare a report, which was completed in October 2012 (Landos 2012). His report, based on samples of fish and crustaceans, but also water quality, seagrass and coral, concluded in no uncertain terms that the dredging had been ecologically disastrous and had inflicted severe damage on the fisheries.

However, several reports from the Queensland Government published during the same period concluded that dredging did not have the severe ecological consequences claimed by local fishermen and Dr Landos (Queensland Government 2012a, 2012b). The official view, shared by the Gladstone Port Corporation, was that the cause of the fish and crab diseases was the massive flooding which affected the state in 2010–2011, and which washed large quantities of sediments and chemicals from riverbeds and mineral-rich inland areas into the sea.

The debate between the fishermen's organization and Landos, on the one hand, and the political authorities and the Ports Corporation on the other hand, was reignited regularly. Landos pointed out that flooding had occurred all along the Queensland coast, whereas the diseased fish and crab were chiefly to be found in the Gladstone Harbour area. Spokespersons for the government countered this claim by arguing that local conditions differed from those elsewhere, in that the dam at Lake Awoonga, which supplies Gladstone with its fresh-water, had overflowed during the severe flooding of 2010–11, leading to large numbers of



fish (mostly barramundi) being washed over the rim, many of them killed or injured as a result. In addition, barramundi moved from freshwater to saltwater might be particularly vulnerable to disease.

This did not, however, explain the prevalence of mud crab disease in Gladstone Harbour. Landos' report indicates high levels of metals in the water and connects shell disease in mud crabs with this fact. Government reports nevertheless conclude that the water quality is acceptable. Yet, it was revealed by the *Gladstone Observer* (14 Dec 2013) that dredging had begun without the required prior environmental assessment, and that later such assessments had failed to comply with federal standards.

A scientist at the University of Central Queensland describes Landos' report as not based on 'very good science', and points out that by 2013, the seagrass seemed to have recovered. On the other hand, the biologist Jon Brodie at James Cook University, an expert on the ecology of the Great Barrier Reef, argues that flooding was far less damaging than dredging (Brodie 2013). Among other things, he points out that cloudy water makes feeding difficult for a number of species that depend on visual contact with their food. And although the quality of the water and the effects of dredging on fish health are disputed, simple observation suffices to confirm that the harbour water is indeed murky. Yet others say that the water has always been cloudy owing to the muddy seafloor.

There is no general agreement among experts about the effects of dredging on the fisheries. For the general public, it is impossible to evaluate the quality of the research undertaken. They are not biologists, but they are aware that there are vested interests on both sides, with the fishermen seeking compensation and the Ports Corporation and the Queensland Government trying to convince the public that every precaution has been made and no lasting damage inflicted.

Local people, who are not experts but live in Gladstone, base their judgements largely on experience, hearsay and personal observation. A skipper on a local boat, who has been plying the waters of Gladstone Harbour for many years, says that the area is now unattractive for fishing. He adds that it is well known that industrial waste was dumped more or less indiscriminately into the sea for many years in the past, and that the dredging was likely to have stirred up metals and chemicals from the seafloor. However, he also mentioned that he had spotted dolphins recently in the harbour basin, where they had been absent for a couple of years.

A local woman, an amateur artist and part-time teacher, who walks with her dogs in a park by the foreshore every morning says that she had spotted several large, dead fish that had been washed up on the beach recently. She had also seen dead turtles. Her conclusion was that 'there is something they are not telling us', 'they' referring to government and port authorities.

Finally, a local politician, a city councillor at the time of fieldwork, confesses that there is too much complexity for anyone to be able to see the full picture. The question concerns whose knowledge to trust, when there are opposing findings and conclusions.

## EEMAG and the East End Mine

Since 1995, an organization called the East End Mine Action Group (EEMAG) has been campaigning on behalf of farmers demanding redress and compensation from Cement Australia (formerly Queensland Cement & Lime). The bare bones of the story are as follows.

The cement factory at Fisherman's Landing, about ten kilometres north of Gladstone, is Australia's largest. Much of what it produces is exported. In addition to the factory, Cement Australia owns a limestone mine in the rural township of Mount Larcom, supplying the factory with raw materials. The open-cut mine has operated since the 1970s. Farmers living in the area were wary of later expansions of the mine, principally because they claimed that its water consumption was already too high and threatened to lower the water table, making agriculture and livestock raising – already precarious due to relatively low rainfall – very difficult. Moreover, they argued that the depletion of underground aquifers, due to overexploitation of groundwater, could make the soil subside into cavities in some locations.

Early in 1974, local farmers were surprised to discover that mining companies were, under Queensland law, allowed to drill boreholes on private land. This was when the first exploratory drilling took place. Later that year, the cement company purchased 2,200 hectares 'of the district's most productive land' in order to expand the mine (Lucke 2013, loc. 720). A protest group was formed immediately, but the Mount Larcom farmers were disappointed to learn that their acquaintances in Gladstone were strongly in favour of the mine expansion, as it would bring jobs and prosperity to the region. In its way, the mine was also sustainable, from a social and economic point of view. As a historian of Gladstone writes, in a book which celebrates the progress and development that industrialization finally brought to the city after a hundred years of thwarted hopes, the lime was transported to the factory in the form of slurry, 'through a twenty-four kilometre underground pipeline from East End to Fisherman's Landing, thus producing no environmental hazards' (McDonald 1988: 351). It was nevertheless pointed out time and again by the local farmers that the use of prodigious quantities of water at the mine did, in fact, produce some undesirable side effects.

Alec Lucke, who lived and worked on a farm in the area until his retirement in 2006, is one of the rural activists who have for decades been engaged in battle against Cement Australia and political decisions that, in his view, have been grossly misguided. In his detailed and meticulous self-published book *Road to Exploitation* (Lucke 2013), he describes meetings with politicians and bureaucrats, lawsuits against the company, independent studies documenting water depletion, and the expanding mine's slow encroachment on the community. Having moved to another state after selling the family farm at a low price ('after all, it was now virtually surrounded by the mine,' he explained to me), he continues to invoke hydrogeological studies and law in order to call the company to account. Throughout its existence, he admits, EEMAG has achieved little. Twenty-four landowners have received replacement water supplies from Cement Australia. Their greatest achievement, perhaps, consists of continuing to exist and continuing the struggle. He adds, not without pride, that the lawyers and scientists commissioned by the farmers' organization worked without pay half the time. To Lucke, this fact testifies to the existence of a community bent on representing the interests of 'the little man' facing powerful, transnational adversaries.

In the book, Lucke makes some observations of a more general kind. A man of little formal education, his long career as a rural activist has sharpened his analytical acumen and stimulated his thirst for knowledge. He argues that the specific, unique circumstances of Mount Larcom are relevant for people elsewhere who are affected by expanding mining, since the logic of corporations confronting locals is similar everywhere. He also writes, based on his own experiences, that:

[t]here is an enormous distinction between investments in yesterday's 'local scale' activity as opposed to today's mega scale open cut coal mines with railways and shipping and tomorrow's coal seam gas investments with their conversion plants, shipping, wellheads and pipelines spanning much of the state. (Lucke 2013: loc. 220)

This is a very perceptive observation. It was the expansion of the limestone quarry, not the mine itself, which killed the farming community at Mount Larcom. Although the expanding mine is the main cause, it is not the only one. The centralisation of certain services, notably the abattoir, led to the isolation of the area. Some local community remains, but those who now live in the area tend to work elsewhere.

At the same time, Cement Australia takes great pride in its environmentally sound practices and its deep community involvement, which includes sponsorships and support of a variety of voluntary activities around Gladstone, not least in sport. This kind of corporate social responsibility does not, of course, preclude the possibility, argued in great detail by EEMAG, that its activities made agriculture in the area ultimately impossible.

### **LNG on Curtis Island**

'You know, people may just shrug and express dismay when something happens to the environment, and they then move on without engaging themselves. But the fact is that five years ago, I was them.' This is the way a middle-aged environmental activist, who has lived in Gladstone her entire life, sums up what she describes as her 'awakening'. She readily admits that her engagement began with the 'Not In My Back Yard' (NIMBY) syndrome. A resident of Curtis Island, she was directly affected by the accelerated changes that took place in her immediate surroundings beginning in 2011, with the dredging of the harbour and the construction of the LNG plants on the island (see Eriksen 2016b for the full story). The construction led to increased traffic to and from the island, noise and an indisputable aesthetic deterioration of the area. Curtis Island is fair-sized (580 km<sup>2</sup>), and largely covered in forest and surround by crystal clear waters, it had a distinctly pristine identity before the LNG developments. Dredging and construction ruined the character of the island for her.

She points out that she could have left her engagement there – like, one might say, the fishermen of Gladstone – by focusing exclusively on the immediate effects of the changes on her own life. Instead, she joined a fledgling environmental organization based in the region, reading and learning about the threats to the Great Barrier Reef, the place of coal and gas in the Australian economy, ecological processes and the relationship of fossil fuel to global climate change. In this way, her initial NIMBY motivation was expanded to a world-view incorporating not only her own life-world, but also Queensland, Australia and ultimately the planet. Thus, she has lately become interested in the tar sand industry in Canada,



seeing similarities with Australian extractive industries. The LNG plants thereby were transformed from being a nuisance and an eyesore to a symptom of a world on a collision course with a liveable future.

Regarding criticism of the dredging of the harbour, large-scale perspectives are also invoked. Notably, the Save the Reef campaign, a coalition of environmentalists led by Greenpeace Australia, have used the example of Gladstone as a way to draw attention to the connection between Australian mining, the threats to the Great Barrier Reef and global climate change. In this way, they enter the same level of scale as the corporations and politicians they confront. The environmental activist on Curtis Island, and the local group of which she is a member, similarly connect their local concerns to a global analysis. However, clashing scales also create tensions between the globally-oriented Greenpeace organisation and local activists. One such incident occurred in December 2013, when a Greenpeace ship on a mission to investigate the state of the Great Barrier Reef failed to dock in Gladstone on its way north (see Eriksen 2018 for details).

Locally, it is nevertheless far easier to mobilize interest in the local effects of dredging and mining than to invoke the invisible spectre of global climate change. The extent of environmental activism in Gladstone is limited. During a nationwide campaign against fracking in November 2013, a participant in the online discussion commented on the absence of any activities in Gladstone by pointing out that the vast majority of the city's residents made their living, directly or indirectly, in the mining industry. However, further north in Queensland, where comparable developments are being planned, engagement is more palpable. In December 2013, the federal government approved plans to dredge a section of the coast off Abbot Point near the city of Bowen to enable a doubling of the coal port's capacity. This is an area more dependent on natural beauty for tourism to the Great Barrier Reef than Gladstone, and the immediate local reactions concerned fisheries and tourism, in other words, local economic and aesthetic interests. Like in Gladstone, people living in the area argued that their livelihoods were threatened, and that nobody had asked for their opinion before going ahead with the planned dredging.

For large-scale industrial developments to take place in Queensland (and elsewhere in Australia), an environmental impact assessment has to be produced beforehand. The draft reports are made available – online, in libraries and in government offices – for the general public to make comments and suggestions. Sometimes, they come in eight volumes including appendices. Meetings with stakeholder groups are also organized if the project is a major one. However, at one such hearing in Rockhampton in December 2013, a participant representing environmental interests exclaimed, slightly exasperated, that the Queensland Government was wasting their time – they would never follow any of the suggestions from the public anyway.

Concerning the development of LNG operations on Curtis Island, the residents of Gladstone tend to see it as the result of complicity between politicians and corporations. They were never asked, and the general view is that they reap few benefits, but are made to pay the cost in the form of environmental and aesthetic degradation. The construction workers lived in temporary accommodation on the island and rarely ventured into town; they were spoken of, slightly condescendingly, as 'fly-in fly-out workers' (FIFOs). Shopkeepers claim that they have had no increase in sales whatsoever following the flow of several thousand workers through the city. There is a widespread view that the industry does what it likes

with the complicity of council and state politicians, disregarding community values and local needs.

These brief examples indicate not only power discrepancies between local communities and corporations/state government, but also divergent scales of operation and engagement. Whereas large-scale operations tend to look for profitability for the corporation or cumulative effects on society as a whole (following the logic that ‘in order to make an omelette, you have to break some eggs’), locals are concerned with their tangible, small-scale situation. What is good for Queensland is not necessarily good for Gladstone, and what is good for Gladstone is not necessarily good for Mr and Mrs X, Y and Z, who are adversely affected by industrial change. These discrepancies between scales are growing perceptibly in Gladstone, and similar processes can be identified in European societies, and can be understood as partial explanations for the rise of anti-elite populisms there. Although critics of dredging and LNG often invoke large-scale effects of the fossil fuel industry, their primary source of engagement is that of the local, as is their primary source of knowledge. However, what of the local politicians – should they not see the welfare of the community as being paramount?

There are three partial answers to this question. First, regional councils are comparatively poor and powerless in Australia, since major decisions are taken at the level of the state government. Second, investments bring growth and royalties to the council coffers, which is a reason for local politicians to encourage developments such as the Curtis Island LNG plants. Third, it is possible that politicians enjoy, as one informant puts it, ‘basking in the glory of power and industrial development’; that prestige projects in their constituency add to their own status.

It should be noted that infrastructural developments are qualitatively different from changes at the level of culture and representations. Changing people's notions and vocabulary can be fairly easy; changing practices takes longer, but infrastructural developments are difficult to reverse. The moment the harbour has been dredged for the sake of access for large ships, or the CBD of Gladstone has been dissected by a new access road to the port, or the East End Mine is in place, reversing these changes is long-term and difficult. In this sense, Durkheim's suggestion that social facts should be treated as things – *comme des choses* – was misleading: In studies of social change, physical objects and infrastructure cannot be seen as structurally equivalent to social actions and representations, since they are stable in ways agency is not.

### **Conclusion: Follow the money, not the knowledge**

When epistemic faultlines appear in an otherwise consensus-oriented, industrial, forward-looking society, the relationship between knowledge and power is questioned, and trust suffers as a result. One ex-activist simply says, to one of my questions, that ‘the answer is simple, just follow the money’. Many have seen their trust in the democratic character of the political system dwindle, and following the dredging scandal (which affected many) and the mine controversy (which affects fewer), faith in scientific results has also been weakened. Although, as some might say, ‘I still trust science’, they may add that they no longer trust scientists until they know who pays for their research. All this certainly held true for the three cases I have briefly presented, where knowledge is seen as being connected to

sectional interests, be they political, economic or existential. And when the seeds of distrust are sown, they may proliferate quickly. For example, there is a widespread rumour that the routine blood testing of employees at some of the large factories, while it ostensibly concerns drugs and alcohol, is really about looking for evidence of toxins and symptoms of poisoning. Other things being equal, trustworthiness, in people and institutions, decreases with increased distance. The view shared by the environmental activists and others who feel overrun and treated disrespectfully, is that when large-scale projects clash with small-scale realities, being right is far less important than being large. Distance also precludes close engagement with life-worlds and the knowledge of everyday experience. The scaling up of the Australian resource economy, commented upon by many (e.g. Cleary 2012, Munro 2012), removes corporate accountability further and further away from stakeholders, creating a democratic deficit and a feeling of being neglected, ignored and overrun by the powers that be.

Yet this very distrust of established knowledge contains the seeds of possible citizen action and social change. Questioning authorities in this kind of setting can be empowering in that non-elite people propose different interpretations leading to different courses of action. The anti-elitism witnessed in politics around Europe and North America these days is born of a related impulse, namely the conviction that people are being lied to, and that the power elites conceal important facts from them. A difference with the controversies in Gladstone is that the outrage here is directed at big money and the complicity between government and corporations, while the new populisms in Europe are strangely quiet when it comes to economic, and especially financial, power.

In the Gladstone region, the city itself and its surrounding rural and semi-urban communities have been affected by growth and change in many ways. Occasionally, parents have to collect their children early from a primary school near Queensland Alumina Ltd. (QAL) because of white alumina dust blowing into the schoolyard. When you rise from an outdoor chair, you may notice that your trousers have been soiled by coal dust. These are everyday occurrences. The discovery of a colony of non-endemic fire ants, presumably from the USA, at an industrial site in late 2013, raised a few eyebrows, but nobody was deeply surprised. The population of Gladstone is accustomed to living with vulnerabilities resulting from industrial operations. When I took part in a Conservation Volunteers Australia project to clear an oceanic beach of rubbish, and we came across Chinese and Korean water bottles, a Japanese Pepsi can and an empty juice carton from Cyprus, nobody was surprised. On the horizon, we could see the contours of coal ships from many countries waiting for their turn to load at Tanna Coal Terminal.

The recent, accelerated change in Gladstone – dredging, LNG plants, new coal terminal, expanding limestone mine and so on – is a result of Australia's integration into a changing global economy, a key factor being the growing global demand for minerals. Scarcely anyone in Gladstone is against coal mining or industrialisation *per se*, perhaps because they are all entangled in the fossil fuel industry, but perhaps also because they see the difficulty of promoting a credible alternative. At the same time, many argue that local needs and community interests should be given first priority, and that this is not the case. The two fundamental contradictions resulting from accelerated growth in a neoliberal world economy are highly visible and lead to a series of tensions and conflicts locally: the double bind between growth and sustainability, and the disjuncture between small-scale community concerns and large-scale corporate interests. These are, at an abstract level, the major contradictions



of contemporary globalisation. As I have shown, they are enacted, with high stakes on several sides, through an apparent competition between knowledge regimes. Upon closer scrutiny, these knowledge regimes morph into an unequal power relationship where the credibility of facts and interpretations, at the end of the day, is irrelevant. Yet this very situation reveals a crisis of legitimacy, which may eventually foment collective actions and demands for change. Whether the outcome of the growing scalar gaps and the reduced legitimacy of formerly authoritative knowledge leads to xenophobic nationalism, militant environmentalism, social movements of the 'Occupy' type or something else, depends on the context and on the successful activation of interpretive hegemonies linking a particular knowledge regime to a course of action and a set of existential concerns that resonate broadly enough for political action to be noticed and to make a difference.

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