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Postcolonial Times: Lock the Gate or Pull Down the Fences?

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Abstract

The development of a rural coal seam gas industry in regional Australia, together with its key technology, fracking, has been met by a very active, lively and vocal social protest movement. This 2013 Tricontinental Lecture in Postcolonial Studies reflects on this protest movement from two perspectives. First, it examines what a postcolonial studies perspective may bring to further understanding the relationships and dynamics between the industry and the protest movement. Secondly, it considers what postcolonial scholars themselves may be able to bring to critiques of social issues such as this environmental contention. The example described in this lecture also reminds us that postcolonial studies concerns more than the three continents of the Tricontinent, Latin America, Africa and Asia, and that it is centrally concerned with access to environmental resources.

Building on the history of the 1966 Tricontinental Conference in Havana, and the growth of postcolonial political philosophy and studies that focus on power, equity and access in postcolonial societies, this essay considers the power differentials between industry and government on the one hand, and the protest movement on the other. By examining the role of language and its control, a key social process in the wielding of power, it is shown that the coal seam gas development debate is couched in terms of industrial or governmental language, and not in the language of the community. This has three important consequences. First, opponents are forced to express concerns about technical matters or scientific matters, thus legitimising the proposed activity. Secondly, opponents are not authorised, within the formal sphere, to express their own feelings through their language of social anxiety, of love of the country, of being in the community, of history. Thirdly, both sides find themselves in a typical cross-cultural dilemma: either speak an inadequate form of language that the other party understands but that does not actually express what you mean, or speak your own language and risk the other party not understanding what you mean.

From a postcolonial studies perspective, this example reminds students of two key processes. First, students need to master the intellectual skills of the humanities in order to provide critical analysis of social situations. Secondly, students need to know that, as western scholars, they are as much part of any postcolonial problem as those in power, and therefore need to develop good reflective skills and to learn to think 'otherwise'.

This invited monograph is the text of the lecture, supplemented with further comments and illustrations, delivered to second year Humanities students at the University of Barcelona, Catalonia, on Monday 8th April 2013.

Key words: Tricontinental Conference, Australia, coal seam gas, fracking, community protest, language, power, postcolonial studies, postcolonial scholarship

Introduction to the Tricontinental Lecture in Postcolonial Studies lecture series

An initiative of the teachers of Postcolonial Studies in the English Department at Barcelona University, The University of Barcelona Tricontinental Lectures Series was created in 2011 to incorporate interventions by speakers of diverse academic and cultural backgrounds in the Postcolonial Studies courses offered at the Department of English and German Studies. The first Tricontinental Lecture was read by Sudanese-British writer, Jamal Mahjoub, in 2011, in an auspicious event co-organized with Casa Africa.

The series title responds to the conviction that the interdisciplinary field of Postcolonial Studies has a social and political responsibility. It pays homage to the 20th century anti-colonial struggle. It was inspired by Robert Young's precise reclamation of the key tenets of postcolonialism.

In many ways, tricontinental is a more appropriate term to use than postcolonial. ... As terms, both "tricontinental" and "third world" retain their power because they suggest an alternative culture, an alternative 'epistemology' ... Postcolonialism begins from its own knowledges, many of them more recently elaborated during the course of the anti-colonial movements, and starts from the premise that those in the west, both within and outside the academy, should take such other knowledges, other perspectives, as seriously as those of the west. Postcolonialism, or tricontinentalism, is a general name for these insurgent knowledges that come from the subaltern, the dispossessed, and seek to change the terms and values under which we all live.

Isabel Alonso, University of Barcelona, April 2013

Introduction

Postcolonial studies focus on the social struggles of people seeking to take control of their lives. In this lecture, I will explore an example of just one such struggle – the struggle by Australian rural communities to stop the development of the coal seam gas industry in rural areas. The struggle for communities to access environmental resources has long been part of social struggle (Hutton & Connors, 1999; Doyle, 2000). The anti coal seam gas campaigns in New South Wales and Queensland over the last few years continue that tradition. From a postcolonial studies point of view, there is much to learn about the processes of social protest from this example. In exploring this example of a social protest movement, I will do two things:

- I will provide a brief critique of the anti coal seam gas campaign, and its inherent paradox. I will briefly introduce the coal seam gas industry in Australia, and the opposition that has arisen against it. I will then present some ideas about what have, in my view, been the underlying driving values of the opposition.
- I will offer some advice to you as postcolonial students and scholars regarding your contribution to the critical debate surrounding such socio-environment matters.

In drafting this lecture, I explored further themes relating to the postcolonial perspective on social relations. These were not delivered in the lecture, but provide background and context to the body of the lecture. I include these as notes within the text at points of relevance. They should be read as part of my contribution to students' understanding of the complexity, reach and global relevance of postcolonial studies.

In delivering this lecture, I was particularly conscious of three important themes. First, Tricontinental issues are not limited to Latin America, Africa and Asia, but apply globally. Secondly, postcolonial concern about the environment has become as strong a concern as that about social conditions. And thirdly, the institution – the university – in which we are considering such thoughts is very much part of the dominant system, and so we need to tread carefully.

At the core of this lecture lies a paradox. The title – *Lock the Gate or Pull Down the Fences?* – refers to an interesting phenomenon often seen in postcolonial struggles. This is the adoption, by protestors, of actions and values similar to those they wish to overthrow. In simple terms, the forces of authority often seek to exclude the public from its activities. In that way, authorities maintain control. Protest movements seek to overturn this exclusion. Regardless of the type of protest – national independence, environmental protection, minority group empowerment, etc. – exclusion often becomes the very tool used by the protest movement. The title of this lecture, therefore, refers to this tension. In particular, it references to the very successful campaign slogan of 'Lock the Gate', used by anti coal seam gas campaigners in Australia to counter what they see as the industry's tendency to put fences – real, imagined and virtual – around its activities (Figure 1).



Figure 1. Both industry and protest movements can – and do – adopt policies and practices of exclusion. On the left are typical signs limiting access to a restricted area being used for an industrial or resource extraction purpose, and on the right is the Lock the Gate triangle, symbol of community protest against coal seam gas exploration and mining in Australia (Sources: CSG Free Northern Rivers, 2013; Keep the Scenic Rim Scenic, n.d.)

The Tricontinental Conference and postcolonial studies

Let us step back a little for a moment.

2013 marks the 58th anniversary of the Bandung Conference, a gathering of political activists from 29 then-newly-independent African and Asian countries. The conference was to redefine the geography of global politics. Thinking of themselves as a ‘third world’, separate from the first or western, and the second or soviet worlds, delegates sought to identify a new political order in which the newly-independent countries would thrive under neither colonial nor soviet rule and conditions. The focus of this movement gradually shifted to the problems of such new countries, the “poverty, famine, unrest: ‘the Gap’”, as Robert Young (2003:17) describes it. Postcolonial scholars consider the Bandung Conference to be the beginning of their discipline, and of the political philosophy now bearing the name ‘Postcolonialism’. The conference marked the acknowledgement of the effects of colonial rule, empire and non-indigenous dominance on disempowering and defining the majority of the world’s people.

By 1966, this movement had spread. Leaders and activists meeting in Havana represented three continents, Latin America, Africa and Asia – hence the ‘Tricontinental Conference’. This conference, rather than promoting a singular political or theoretical position on third world liberation, worked towards the empowerment of the dispossessed and the marginalised, the reduction of power differentials, and the establishment of systems of government and governance that allowed access, equality and equity (Figure 2).



Figure 2. After a long armed struggle against Indonesian government forces and the considerable power of the Indonesian government, the community of East Timor (Timor L'Este) gained political independence in 2002. The real struggle of gaining a true global economic, social and cultural independence is now underway. In these photographs, community members are engaged in training and development projects to identify innovative and sustainable agriculture for remote villages. (Photograph: David Lloyd).

The 2013 Tricontinental Lecture: *Postcolonial Times: Lock the Gate or Pull Down the Fences?*

The 2013 Tricontinental Lecture Series takes its name from that seminal 1966 event. However, while some of the original Tricontinental issues have been resolved, others – many more – remain. New ones have become prominent. Postcolonial debate and discussion remain necessary. Regardless of global progress, it is without doubt that power differentials continue to impede the lives of many. The many now reside both in the third world and amongst the politically and economically marginalised of the west. The title of this lecture – *Postcolonial Times: Lock the Gate or Pull Down the Fences?* – seeks to capture a key process globally, the locking in and the locking out of communities, regardless of location.

A postcolonial view of the world sees those in power holding, building and securing their power by disempowering others. The 'others' are usually a majority, the community, the poor, the marginalised. They are locked out of the power structures, locked out of their rights to self-determination, and locked out of their own culture. Furthermore, the locking out reinforces the position of both the powerful and the powerless (Figure 3). Boundaries, walls and fences, are important. Robert Young (2003:66) puts it this way:

Most nations rely on cohesive borders. If borders are open, permeable, then the nation's peoples cannot be controlled. They may leave, others may enter illicitly: migrants, immigrants, undesirables. The modern state functions by means of a contradiction: a combination of strict border controls together with tolerance, even quiet encouragement, of illegal immigration – by workers who then have no rights.

So, make a boundary, build a wall. We are always surrounded by walls. ... Some of us are walled in. Walls around the cantonment, the prison compounds. 'Gated living' in the US, or South Africa: barricades. ... Some of us are walled out ... walls that stretch through the countryside or zigzag across the city, built as border fences to keep people and things out. The limits of liberalism. To defend the state.



Figure 3. “... walls that stretch through the countryside or zigzag across the city, built as border fences to keep people and things out. The limits of liberalism. To defend the state.” Top: The Great Wall of China, the archetypal exclusionary wall, designed to keep people in and out over great distances. The Great Wall of China is a powerful expression of imperial power, not only in including and excluding people, but also in terms of the central control over both the many hundreds of thousands of people required to build it and defend it, and the resources required to build it and maintain it in use over centuries. Bottom: The remains of the Berlin Wall, another archetypal exclusionary wall, built to keep the West out of the Soviet East Europe, and to create a controlled enclosure of an undesirable people. As a powerful political statement, this wall served to keep both people and ideologies apart. While it has now been dismantled, and a unified Germany now seeks a new identity, similar walls, such as that enclosing the Palestinians in Israel-occupied Palestine, serving similar functions as statements of empower and the enforcement of that power on minority groups, continue to be built. (Photographs: Bill Boyd)

Yet, when we examine the opposition to colonial conditions, we find a paradox. Processes of exclusion and power may also be adopted.

A common theme in postcolonial studies is a critique of the adoption, as a rallying call for opposition, of traditional habits: conservative cultural nationalism, cultural tradition, and the traditions of power and conventional socio-cultural roles. Colonial powers across the world during the mid 20th C were relieved of their control over countries in Latin America, Africa and Asia as a result of the power of such conservative nationalism. It seems that a call to tradition was necessary. However, what that call risks is replacing one restrictive power with another.

The postcolonial agenda seeks something more independent, something more transformative, than a simple transfer of power from one elite to another. It seeks the development of empowered *people*, of a society in which egalitarianism is enacted, and communities in which all members have access to the resources they need to live comfortably and safely. Robert Young (2003:113) again helps us:

Postcolonialism as a political philosophy means first and foremost the right to autonomous self-government of those who still find themselves in a situation of being controlled politically and administratively by a foreign power. *With sovereignty achieved, postcolonialism seeks to change the basis of the state itself*, actively transforming the restrictive, centralizing hegemony of the cultural nationalism that *may have been required for the struggle against colonialism*. [Emphases added.]

So, let us return to the title of the lecture – *Postcolonial Times: Lock the Gate or Pull Down the Fences?* The ‘Lock the Gate’ slogan is a specifically Australian slogan, created and adopted by Australian anti-mining campaigners. In order to remove constraints that rural and regional Australian communities consider are being imposed upon them by government and mining industries, including the coal mining industry and the coal seam gas industry, the community created a campaign – ‘Lock the Gate’. The intent is to empower landowners and tenants to refuse entry to mining companies seeking to access their land for exploration and coal or gas extraction. That campaign champions exclusion and constraint. Hence the paradox: locking the gate to remove other barriers.

‘Tricontinental’ or ‘Hexacontinental’?

With this background to postcolonial studies and its fundamental link the Tricontinental Conference with its revolutionary Latin American, African and Asian foundation, you may well ask, “Why are we talking about Australia?”

To answer this question, let us consider the first of the three themes I introduced earlier: Tricontinental issues are not limited to Latin America, Africa and Asia, but apply globally. Should we be talking about ‘Tricontinental’ or ‘Hexacontinental’? You will notice that the case study I explore in this lecture comes not from Latin America, Africa or Asia, but from Australia.

As an Australian, I am conscious that the ‘Tricontinental’ label is inadequate in expressing the true scale of the challenge to postcolonial studies. Australia is an example *par excellence* of a colonised country. It is a country in which the original

people and their culture, the Aboriginal people of the hundreds of kinship and language groups of the mainland of Australia, and the Torres Strait Islanders of the northernmost parts of the mainland and the islands to the north of the mainland, have been dispossessed of their land, their language, their kinship structures, their culture (Figure 4). They now live in a perpetual state of enforced assimilation, expected to conform to a Eurocentric, largely Anglo-centric, form of social and cultural organisation. Ironically, they are also expected now to be increasingly 'indigenous', to reassert their own culture ... so long as that indigeniety does not seriously challenge the Eurocentric ways of being Australian. Australia is the fourth continent. Our neighbouring region, Oceania, is characterised by different and diverse, but equally disempowering colonial histories: we must thus add a fifth continent, Oceania.

Furthermore, I have lived for half my life in Scotland; I am a Scot. This part of me shares a form of history with many European minorities, including the Catalan, Basque and Galician people here in Spain (Figure 5). It is a history of dominance of a larger, neighbouring power, in my case, England. There is a long history of dominance: the periodic outlawing of indigenous Gaelic language, dress and kinship structures, the diminishing of another indigenous language, Scots, in the schools and official circles, the continuing social construction of the Scots as Other in Britain. Minority groups, be they ethnic, cultural, or economic, within the west, represent the sixth continent. Of course, I could go on.



Figure 4. Australian Aboriginal people have been dispossessed of their culture, their languages, kinship structures and links with land. Australian Aboriginal culture places reflect essential social and cultural relationships with land. Only relatively recently have Aboriginal people been, in general, allowed to resume some control of their important places. They are usually, however, still required to manage these places using non-Aboriginal social and environmental management processes and structures. These information boards describe some aspects of the important ceremonial and ritual place of Toooloom Falls, known at Bandahngan, in northern New South Wales, where the Githabul tribe is seeking to resume, from the government agencies managing it at present, its responsibilities for this important cultural place. (Photograph: Bill Boyd)



Figure 5. Catalunya: expressions of desired autonomy. In seeking autonomy from a dominant power, people will develop and celebrate the signs and actions of a separate culture and politics. The public expression of identity, the re-assertion of language, culture and history, and the creation of a contemporary culture. This figure illustrates a few examples from Catalunya; they include the public flying of flags, often a previously outlawed activity, the establishment of cultural institutes and the re-establishment of language and literature, and celebration of music. (Photographs: Bill Boyd)

The principal point here, however, is that the Tricontinental Conference and its successors, postcolonial philosophy, politics and studies, have often focused on conventional third world nations: issues of power and dispossession, minorities as Other, and marginalisation. Postcolonial studies, however, have a wider relevance throughout the world, whether you are working in Africa or your own city. There are dispossessed, threatened and marginalised people within everyone's own community, regardless of whether our country is considered to be a Third World country or not. The Third World is everywhere.

Coal seam gas exploration and mining in Australia

Let us return now to coal seam gas and the social response to it. Coal seam gas is a source of energy that has been mined for nearly 30 years in Australia. The principle is relatively straightforward. Hydrocarbon gasses are locked up in microscopic pores in certain rocks. Conventional extraction cannot release these gasses. However, the technique of hydraulic cracking – known as 'fracking' – allows these inaccessible gasses to be removed.

The technology uses wells drilled into the gas-bearing layers. This may not be enough to release the pressure on the rocks, and thus release the gas, as in conventional gas extraction. If this is the case, a mix of water, sand and chemicals is inserted to fracture the rocks and mobilise the gasses. This is known as 'fracking' (from fracturing + cracking). Fracking has been used for over 60 years across the world, and for the last decade and a half in Australia. The gasses are removed in water. Extraction of the

gasses results in saline and toxic wastewater, which is then processed at the surface to yield clean water.

The scale of the industry is important to understand. Wells need to be localised, so a deposit of gas will need many, often hundreds, of individual wells. It has been estimated that in the state of Queensland alone, for example, there could be as many as 40,000 wells by 2030.

I do not wish to debate the pros and cons of the industry here. There is much technical literature – both scientific and industrial – that describes the industrial processes. For a good source of information, the Australian Broadcasting Corporation web site provides a sound and broad synthetic review of the coal seam gas industry and technology (ABC, 2013). (The ABC is the government-run public broadcasting body in Australia, generally regarded as a good and reliable media source.) However, I do note that the technology is established and continues to be developed. It has been used in gas extraction across the world. Interestingly, when the industry was first expanded in Australia, it was welcomed by most as being the new green and clean energy. However, in recent years, this view has changed considerably. What is important, now, is that public scrutiny of the industry has increased significantly. Many concerns have now been raised, both by the public and by the scientific community, including:

- Effects of the fracking chemicals on ground water
- Effects of the fracking chemicals on river water
- Effects of the saline wastewater
- Ecological effects in mining areas
- Human and animal health issues
- Social issues of the impact of an industry on rural communities
- Economic issues affecting agricultural producers
- Amenity and quality of life issues
- Short-term and long-term impacts of the industry
- Geological stability of the wells and the rocks

Naturally, while there is a strong public outcry about these matters, there is not complete agreement on all of them. Reports and publications reflect both the differing understanding of the effects of coal seam gas exploration and extraction, and the political context of the authors and agencies publishing the reports (e.g. Lloyd-Smith & Senjen, 2011; Clark *et al.*, 2011; Rural Affairs and Transport References Committee, 2011; APPEA 2011; Williams *et al.* 2012: Figure 6). The industry and parts of the government have argued against many of the claims of negative impacts. Parts of the industry have been proactive in seeking to manage the impacts. The mining companies themselves are taking different approaches. Some are very public about their activities and, I believe, genuinely try to engage the public. Others appear to be working more secretly. All the companies need to work within planning regulations.

More recently, the government appears to be listening to the public. It is putting legislative and planning controls in place, and enforcing controls on mining company activities. Some government, notably at the local government level, is taking a strong stand against coal seam gas.

The scientific debate is growing, with scientific articles now being published in the international reviewed scientific literature (e.g. Tait *et al.*, 2013; Figure 6). Previously, supporters of the industry, in particular, sought to discredit scientists making comment on the issues, on the basis that there had not been any credible scientific research conducted. This is now changing.

The emergence of the community-based protest movement

From a social science point of view, the spectacular growth of large, vocal and very active community-based protest groups is most interesting. These are truly grass-roots groups, and have grown from within the various communities affected by the industry.

An example is a group known as the ‘Western Downs Alliance’ (Lloyd *et al.*, 2013). It started in 2009 as a small group of farmers who were offered payment for gas wells to be drilled on their land. Following an internet search, they found alarming information about coal seam gas mining in the USA. They started a media campaign, which brought the issue to the wider Australian public. They have since toured the regions, talking about the industry, what its plans were for their land, and (in their own words) exposing plans for coal seam gas mining development elsewhere.

This group is typical of the emerging coal seam gas protest groups. They are local, and they focus on local issues. They represent farmers, rural residents, and Indigenous groups. They are all concerned about the negative impacts on social and environmental quality of life in the country. One local group member, for example, has commented (these quotes are from Lloyd *et al.*, 2013):

You can't eat gas, it's that simple. They want to put the pipeline right through our most productive country ... This is all about water: our head waters are just up the road here ..., and we depend upon these aquifers for the farms and for the towns.

These groups have been very successful at mobilising local concern. However, not all local people agreed. In some communities, the potential economic and employment benefits of the industry have been seen to be positive. Some communities have become quite divided. One protester has acknowledged this thus:

This issue is going to divide communities a lot more yet, as one neighbour can let them on and then you have a gas well on your boundary. In the early stages there was no education, people did not know what they were letting themselves in for. When you go out and educate yourself it is quite terrifying.

Nevertheless, a popular campaign has been very successfully mounted (Figures 7).

- Protest marches have attracted thousands of participants. A march in the regional town of Murwillumbah, in northeast New South Wales, in May 2011 attracted some 2,500 people, building on a smaller protest of around 400 people the year before.
- Protestors have attended company shareholder and public meetings.

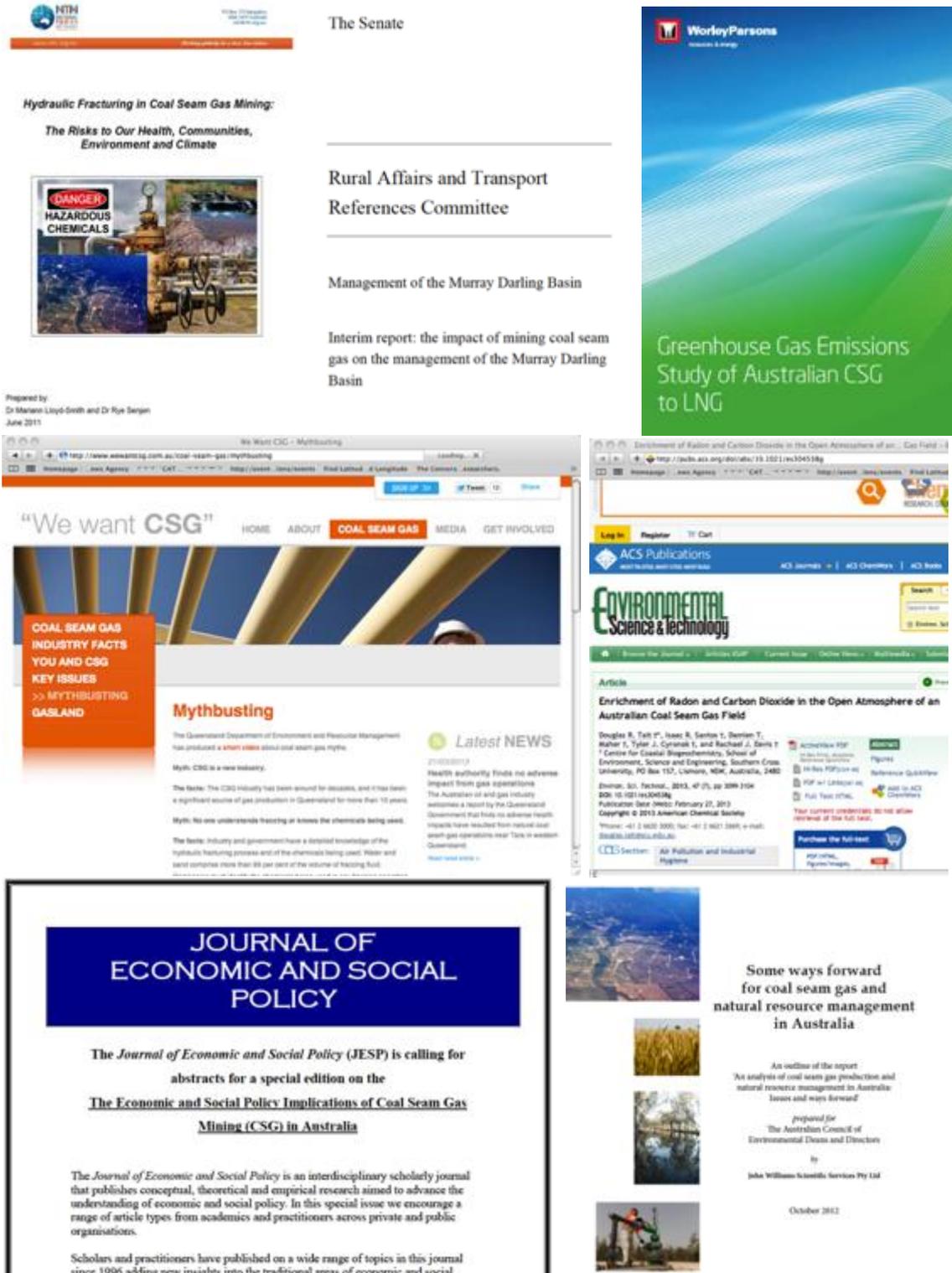


Figure 6. In every debate there will be a diversity of opinions and views, reflecting the authors' beliefs, political position or view, official or professional obligations, etc. The response to the increasing public visibility of the coal seam gas industry in Australia has been diverse, changing through time. Here are examples of the many publications now available (Sources: from top left to bottom right: Lloyd-Smith & Senjen, 2011; Rural Affairs and Transport References Committee, 2011; Clark et al., 2011; APPEA 2011; Tait et al., 2013; email call for a special issue of the Journal of Economic and Social Policy; Williams et al. 2012)

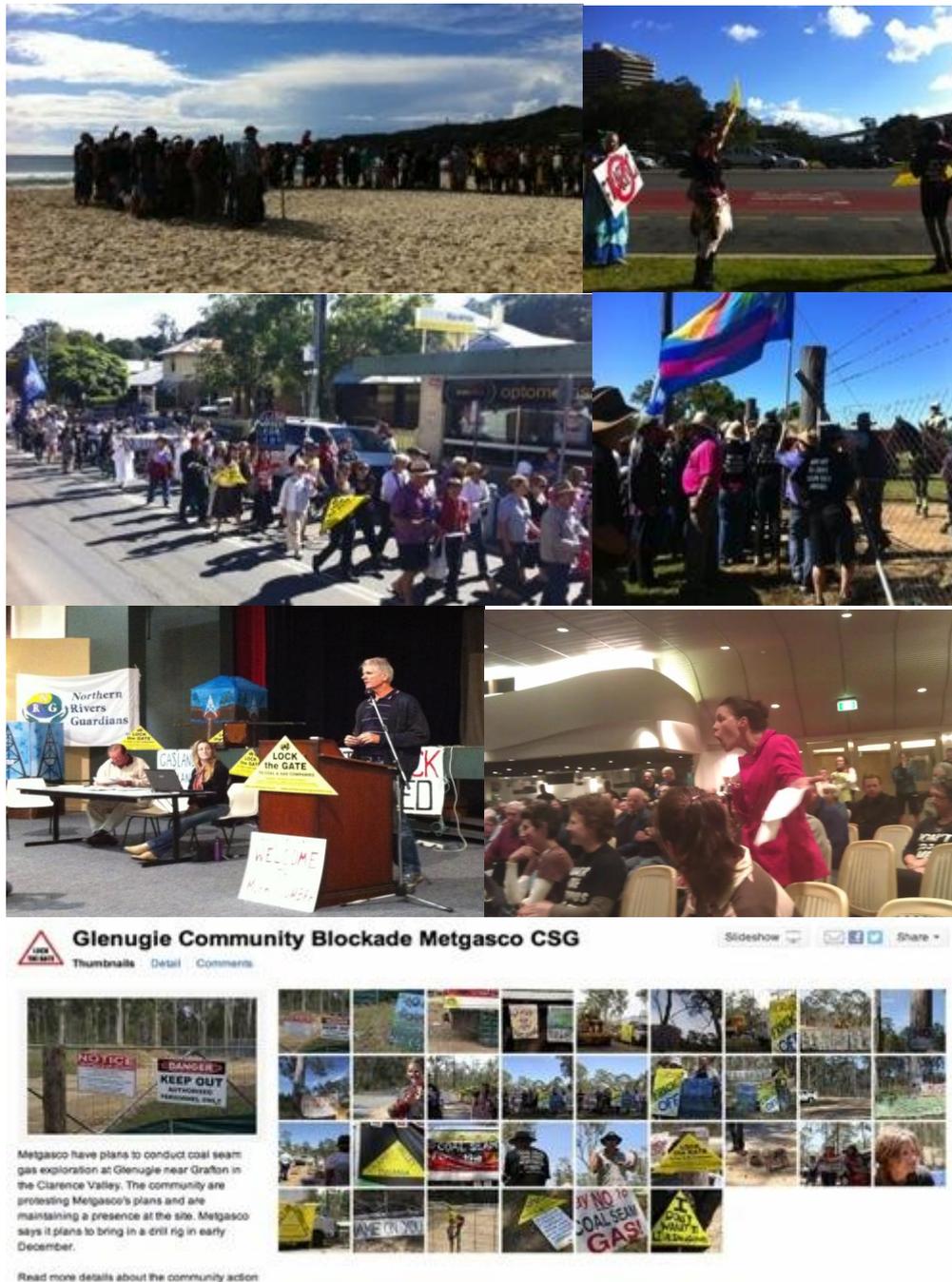


Figure 7. *The coal seam gas social protest movement in action: protest marches and gatherings in New South Wales at Byron Bay (top left) and Murwillumbah (middle, left), and in Queensland at Broadbeach (top right) and Chinchilla (middle right). The lower middle images are from public meetings: the Lock the Gate annual general meeting (left) and a public meeting with one of the companies in the town of Casino (right). The lower image is typical of the web presence of the protest movement; the web provided a powerful medium for dissemination of information and communication between groups and individuals. Note the visually prominent yellow 'Lock the Gate' triangles, an image that has become synonymous with the protest campaign and movement. (Photographs: Hanabeth Luke; Lloyd et al., 2013; CSG Free Northern Rivers, 2013a)*

- Widespread petitions have attracted thousands of signatures, and protest group surveys have engaged over a thousand people in one area.
- A large community stage show, *Coal Seam Gas – The Musical*, has entertained thousands of people, and allowed a lively expression of the range of community concerns (Documentary Australia Foundation, 2013) (Figure 8).
- An important part of the success of the campaign was the adoption of the 'Lock the Gate' slogan. This drew on a broader anti-mining campaign, which sought to have landowners lock their gates to mining exploration and extraction.

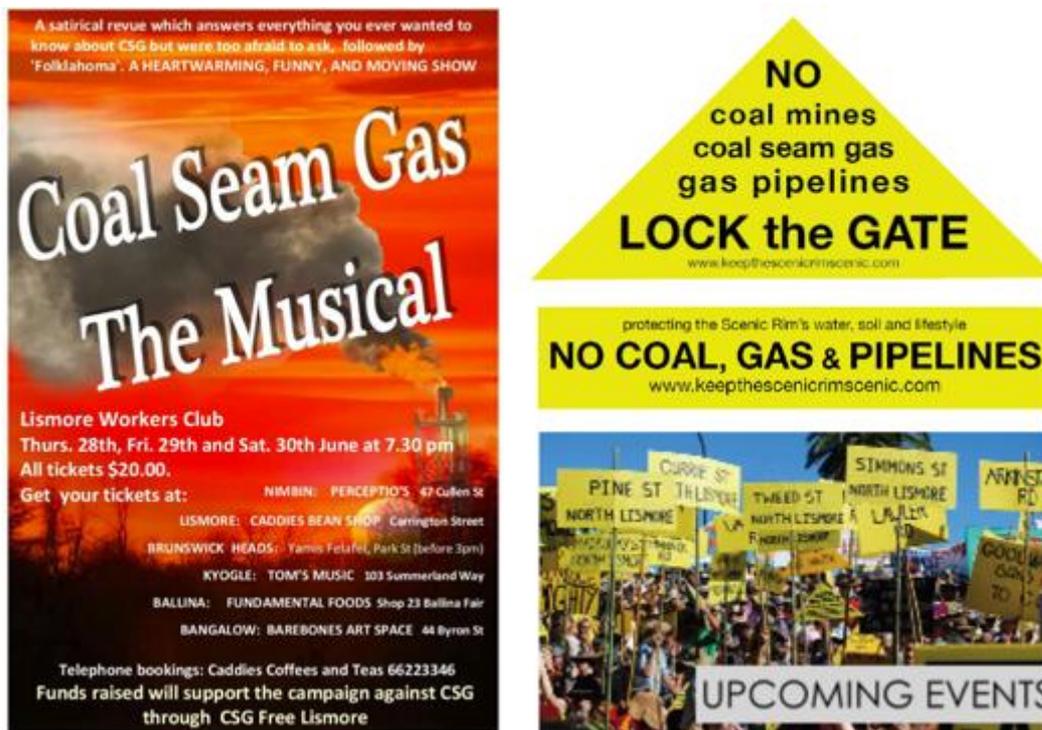


Figure 8. Elements of the anti coal seam gas protest campaign. On the left is an advertisement for the Coal Seam Gas – The Musical show, a community created and performed musical show, used to present the protest movement's views to the public. It also served as a rallying event, fund-raiser, powerful group building activity, and a movement-affirming activity. On the right, the Lock the Gate triangle and other related material. The adoption of the colour and lettering provides a powerful visual image for protest events, as illustrated in the protest group web site image at the bottom. (Sources: Northern Rivers Guardians, 2013; Lock the Gate Alliance, n.d.)

The campaign used a very simple and unambiguous slogan, 'Lock the Gate'. It also used what I consider to be a very effective graphic, the yellow triangle. This is a very successful and powerful piece of advertising and sloganeering. It has, I believe, helped to mobilise large sections of the community against the coal seam gas industry. If a landowner agrees with the campaign, he or she ties a triangle to the gate of their

property. If every owner on a road has a Lock the Gate triangle on show, the entire road can be declared a coal seam gas free zone.

A number of local government councils have strongly supported this campaign. One, in particular, chose to include a question on coal seam gas in its local elections last year. In response to the question "Do you support coal seam gas exploration and production in the Lismore City Council area?" over 85% of voters voted 'No'.

The de-colonisation of environmental resources

Before we continue examining the Australian coal seam gas protest issue, let us turn to the second of the three important themes introduced earlier: postcolonial concern about the environment has become as strong as any concern about social conditions. If postcolonial studies are about social issues, what is the relevance of environmental concerns?

Postcolonialism is a political philosophy underlying the right to sovereignty and the transformation of restrictive, centralizing hegemonic power. It stands for, in Robert Young's words, "empowering the poor, the dispossessed, the disadvantaged, for tolerance of difference and diversity, for the establishment of minorities' rights, women's rights, and cultural rights within a broad framework of democratic egalitarianism that refuses to impose western ways of thinking on tricontinental societies" (2003:113). As such, it resists all forms of exploitation.

This brings postcolonial thought into the environmental as well as social spheres. It opens the door to critiques of environmental resource extraction, of the corporate versus social use of, and access to, the environment and its resources. Importantly, it challenges corporate capitalism's commodification of environmental resources. It recognises that at the root of most poverty is inequitable access to the basic resources – food, water, shelter – let alone the basic environmental resources that may provide wealth, health and wellbeing. Inequitable access may be for many reasons: the appropriation of natural resources by the powerful, unjust pricing of commodities and crops, control of distribution. Social, cultural and environmental relationships are often intimately linked: dispossession of land usually equates with dispossession of culture. This concern is global. While the most spectacular examples may be found in the second and third worlds – the Three Gorges Dams project in China, for example, the anti-mining movement in Bougainville (Melanesia), or the battles to protect forests in Africa and India – such movements are also important in all societies (Figures 9 and 10).

It has become, therefore, an important task for postcolonial scholars to examine the social processes, and effects, of the colonisation and decolonisation of the environment and its resources. It is this theme – albeit only one aspect of it – that I explore in this lecture.



Figure 9. Control and ownership of place and space is one of the fundamental environmental attributes of any society. This example is Tempelhof Airport, Berlin, recently decommissioned as a public airport, and taken over by the people. The banner declares: To whom does the city belong? The Berliners = All of us! Conserve 100% of the Tempelhof field! The airfield, formerly a central part of the power base of Berlin, and the focus for the survival of West Berlin as the Berlin Wall was being built, has now been taken over as a large recreation (middle) and bird conservation area, with community gardens (bottom) springing up at its edges. The citizens of Berlin, however, still wait for the government to ratify this citizen resumption of public space. (Photographs: Bill Boyd)



Figure 10. *Concern for access to, and control of, environmental and natural resources is a global concern. The anti-fracking campaign in Catalunya is but one example of community concern being voiced with regards to planned and implemented natural resource extraction. The photographs record graffiti in Garrotxa (left) and a public meeting advertised in the Eixample, Barcelona. (Photographs: Bill Boyd)*

Underlying social concerns

This issue is undoubtedly complex. It has given rise to a very vocal and passionate social protest movement. It has also given rise to an extremely acrimonious debate.

What underlies such passion?

In the lead up to the election poll, both sides presented their arguments to the public. Towards the end of last year, a research team from Southern Cross University conducted surveys of voters exiting the voting stations, to find out the reasons behind their vote (Luke *et al.*, in prep.). The main arguments advertised before the election were repeated to the research team. However, there was some selection or prioritisation. This suggests that some issues are of greater concern than others to the public. There was, for example, a clear message of environmental concern. All the known and previously expressed issues were mentioned in the survey: groundwater extraction; water system contamination; health effects; noise and infrastructure impacts; impacts on employment in other industries, tourism and agriculture; and greenhouse gas emission impacts of methane leakage. However, the most widely commented concern was about water quality. Regardless of the campaigning information, water quality was most important. This is a very similar outcome to those of surveys conducted elsewhere amongst various groups (Boyd *et al.* 2013; ADA, 2011; WVS, 2011; IPSOS 2009).

If, however, we dig deeper, we find some interesting results that suggest a more fundamental concern: the threat to sense of place, to community and to identity. There are several lines of evidence.

First, in analysing interview transcripts, one of our students, Hanabeth Luke, identified the following terms to be most common (in order): gas, water, companies, mining, laws, environmental, groundwater, inadequate, chemicals, pipeline (Figure 11; Lloyd *et al.*,

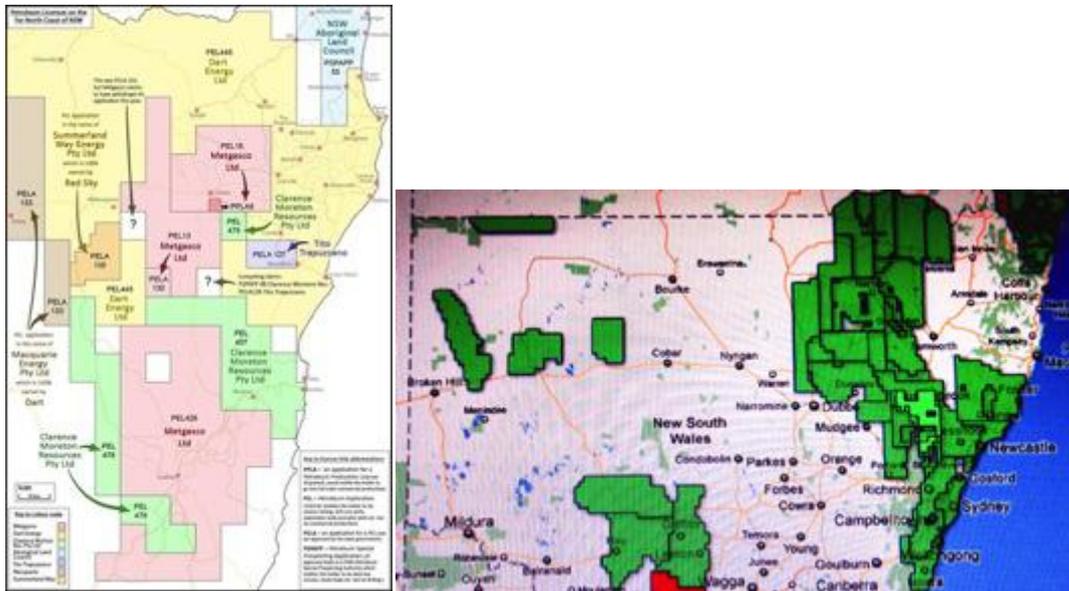


Figure 12. Maps of mining exploration leases in New South Wales, part of the public management of land and environmental resources. The publication of such maps in the press represented the first time that many, if not most, members of the public were aware of such seemingly widespread control of land. In the eyes of citizens who do not understand, or have not been explained the land planning system, these maps appear to represent the removal of their own rights to land. In a country such as Australia, where land ownership is very important for almost all citizens, these maps presented an apparent threat to personal ownership of land. They served to increase people's anxiety about the role of government, relationships between government and industry, and the possible loss of self-control of land. (Sources: CSG Free Northern Rivers, 2013b; Orange News Now, 2013)

What can we as scholars do about such situations?

Before I close on some comments on what I think this may all mean from a social process point of view, I will reflect on what you, as a postcolonial scholar, might be able to contribute.

As public servants, academics – staff and students alike – have a duty to create and disseminate new knowledge about how the world works. This may or may not involve activism. We are different from political activists in that our job is to rigorously examine, analyse and critique situations. If possible, we add to the sum total of our society's knowledge. We have a public duty to do this. How do we do this?

First, we should note that we have data gathering and analysis tools available to undertake critique. I will not review the wide range of philosophies, methodologies or methods available to you as humanity students, suffice it to provide a few examples. Porteous's statement about how the social sciences work provides, for example, one frame for you to examine the roles of all the players in a situation (Figure 13), whereas Dilling & Lemnos' (2011) model of how scientific knowledge agendas are established may provide insight into the process of knowledge transfer and creation (Figure 13). You could equally turn to social constructivism to allow you to accept the validity of all statements regardless of any factual truthfulness (Jackson & Penrose, 1993), a model that I have found very useful in analysing cultural heritage management issues (Boyd,

2012). You could equally turn to other sources for your conceptual framework: Homi Bhabha, Michel Foucault, Edward Said, and so on. There are so many intellectual tools we can use to analyse and critique our work: structuralist (quasi-scientific) to phenomenology and behavioural tools, the use of metaphors, culture as text.... In the humanities, we have access to multiple languages (art, poetry, prose, fiction, faction, performance and so on; see, for example, the most immediately previous issue of *Coolabah*: Boyd & Norman, 2013). It is your task, as students, to learn about these methods, and to master the skills of applying them to analysing the real world. That is why you are at University.

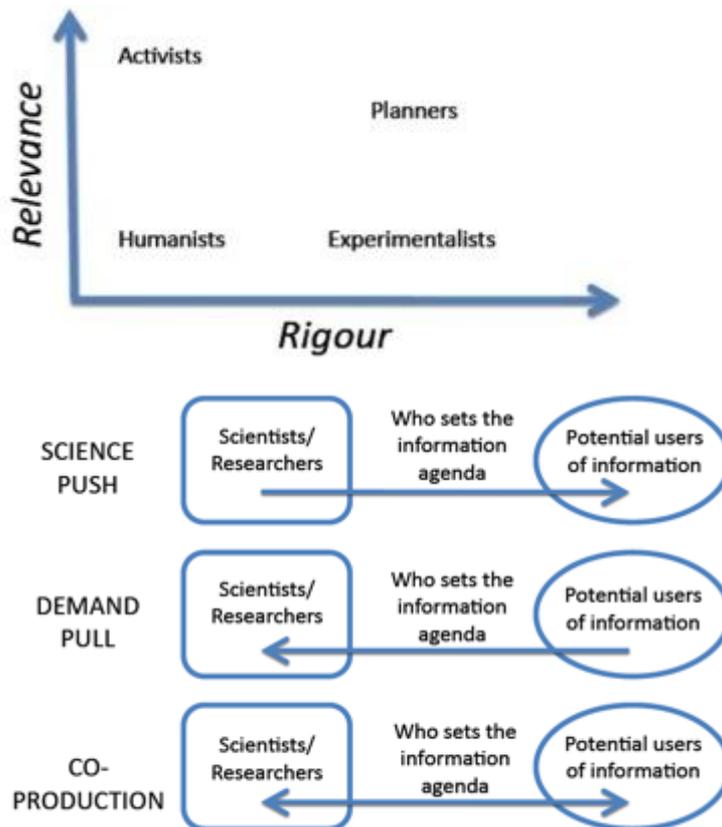


Figure 13. Top: A model depicting epistemological diversity in the social sciences. Such a conceptual model could provide scholars with a frame in which to analyse, for example, the various roles of professional people within a social issue or action. Bottom: Setting scientific knowledge agendas. This model helps in understanding how the public may interact with the special process of adopting, using and applying science in issues such as environmental management. At the top, the science push depicts researchers and information providers as setting the agenda for what type of science is produced and disseminated, whereas in the middle, the demand pull allows for priorities in the generation of new knowledge being determined by those making decisions outside of the scientific community; the lowermost depiction illustrates the iterative co-production of knowledge between scientists and potential users and stakeholders. (Top: Adapted by Bill Boyd from Porteous, 1996. Bottom: Adapted by Hanabeth Luke after Dilling & Lemnos, 2011)

Secondly, we need to be conscious of the role of reflective practice. In contemporary scholarship, at least within the social sciences and humanities, reflective practice is important. This is the skill of acknowledging our own position in relation to the situation we are studying. We need to think about the situatedness of ourselves as scholars, and of the institution of the University. We are part of the system rather than separate from the system we are analysing (Figure 14). Indeed, we are usually part of the problem rather than of the victims of the problem. We need to understand this. John Macleod (2000:22-23) has written eloquently about this.

So, freedom from colonialism comes not just from the signing of declarations of independence and the lowering and raising of flags. There must also be a change in the minds, a challenge to the dominant ways of seeing. This is a challenge to those from both the *colonised* and *colonising* nations. People from all parts of the Empire need to refuse the dominant languages of power that have divided them into master and slave, the ruler and the ruled, if progressive and lasting change is to be achieved. As Fanon wrote, '[a] man who has language consequently possesses the world expressed and implied by that language' (*Black Skin, White Masks*, p.18). The ability to read and write *otherwise*, to rethink our understanding of the order of things, contributes to the possibility of change. Indeed, in order to challenge the colonial order of things, some of us may need to re-examine our received assumptions of what we have been taught as 'natural' and 'true'.

This is probably your greatest challenge, as students of postcolonial studies. Despite social changes across the western world, scholars and academics tend to be middle class, professional people. They often have liberal views and a relatively strong sense of 'right' and 'wrong', the rule of law, justice as defined within their middle class society. The laws and rules of a liberal state tend, after all, to be middle class rules, reflecting the mores and expectations of middle class people.

Postcolonial studies force middle class scholars to engage and confront 'others': the powerful, the despotic, and the wealthy, on the one hand, and the marginalised, the disempowered, and the invisible, on the other hand. The scholar generally belongs to neither group, and therefore does not share the cultural and social mores and understandings of either group.

More importantly, these groups, if we accept the postcolonial views of early postcolonial scholars such as Eduard Said, hold views that are conditioned by the conditions of their own society. These are the very societies that marginalise others; they privilege the political and commercial systems in which the marginalised people must live.

It is, therefore, a serious challenge to you as students of postcolonial studies, to reflect on your own sense of being, and on the constructedness of your own assumptions about how the world is. This is a challenge worth taking up. It will make demands on you intellectually. It does not mean that you simply deny your own culture and uncritically accept another's. It demands, however, that you consciously examine assumptions behind your own views, you critically engage with ideas, observations and knowledge, and you try to develop a sense of awareness of difference, social construction, and context.

Buddhist thinking makes a distinction between 'consciousness' and 'awareness'. Consciousness means being *in* the present. Awareness means you *know* you are in the present. This distinction may usefully be applied to your scholarly engagement with postcolonial issues.



Figure 14. *Universities have been part of the power base of western society since the Middle Ages, and the institution of the University has often been very closely associated with the church, another significant power base in European society since the Middle Ages. As such they have provided the intellectual basis for European thinking and, especially, politics. The urge for European powers to expand, explore and colonise came from intellectual curiosity as much as from economic and political desires. Importantly, universities provided much of the intellectual justification for colonial power and its imposition on the colonised world, and provided the explanations for colonial thinking, especially with regards to the differences – especially hierarchical differences – between peoples. Increasingly, however, universities now provide alternative forms of social critique, and can be powerful forces for change in society. The images here are of the University of Barcelona, although images of almost any university would suffice. (Photographs: Bill Boyd)*

The academy, the west and the third world: WEIRD people

This brings us to the third important theme introduced earlier, and an interesting little detour. The institution in which we are considering such thoughts is very much part of the dominant system, and so we need to tread carefully.

The institution in which this lecture is being delivered – the academy and the university – has been part of, indeed right at the core of western thinking and society since its inception in late medieval times. It is fundamentally conservative, and while it may seem to provide a focus for liberal thinking, it is part of the *status quo* of a stable western society. Just consider what happens when intellectuals, scholars and students

oppose a government in some countries: universities get closed, funding cut, academics censored, imprisoned and assassinated. A common shorthand for political dissidents by many unimpressed governments is 'students'.

The original Tricontinental Conference was not an academic or intellectual conference. Its delegates were not from the academy, but were politicians and activists. They sought to liberate their societies from the west, not intellectualise the issues. They were fighters opposed to the effects of western colonialism in their countries.

As a white, middle-class, educated man myself, I am as much part of the third world 'problem' as is the industrialists, multi-national corporations, political elites and foreign armies. The academy is part of the social system that validates such institutions, affirms the conventional values of the west, and creates the next generation of industrialists, politicians, etc. In psychology, a recent term has been coined to describe the tiny minority of people, globally, who define the rules we are all expected to live by: WEIRD people – Western, Educated, Industrial, Rich and Democratic. WEIRD people comprise less than a single per cent of the global population (Heinrich *et al.* 2010; Waters, 2013). Yet WEIRD people dominate global intellectual thought and action, political thought and action, and economic thought and action. The world spins on the ideas and beliefs of a very small number of WEIRD people. And very few of these WEIRD people hold postcolonial perspectives on the fate of the vast majority.

So, you and I, as WEIRD people, educated in the academy, are privileged. That privilege comes with a responsibility. Our responsibility is to engage intellectually with this large and very different world. We are obliged to use the tools of our trade, the intellectual tools of observation, data collection, analysis and critique.

And what for?

To contribute to a greater understanding of how the world works. For those of us with a postcolonial inclination, the responsibility is greater: not to serve the *status quo* but to constructively critique it.

If you are lucky, you may also find clues to solutions, solve individual problems, find better ways for the world to work. And, for a few of us, we may discover a new way to understand, and be in, and to know we are in the world. And someone may hear us. And, very occasionally, someone may change their behaviour. As students, you are at the start of this path, learning the tools of your trade. Your teachers are somewhere on that path, contributing little by little to a greater global understanding of power, inequity and social disadvantage, and your mentors are the books of the great thinkers and activists, the Eduard Saids, Michel Foucaults and Homi Bhabhas of the world.

So ... how to understand the coal seam gas issue?

Having said all this, you will understand that, as scholars, we have responsibility to engage issues, and that responsibility is, inevitably, coloured by the intellectual tradition that we adopt. Regardless of which tradition you adopt, there will be many possibilities for analysis and critique. In this lecture I wish to illustrate how a postcolonial perspective may contribute to further understanding the processes of social protest in an environmental resource issue. In a single lecture, however, it is impossible to examine

any issue in depth, and so here I will provide the illustration of one specific postcolonial perspective that may be helpful, I believe, in understanding that has happened.

There are, of course, others interested in the behavioural social, technological and governmental processes. Examples of critical frames include recent discussions of social activism and engagement in the coal seam gas debate, examined from the perspectives of activism, social identity and risk scholarship, and of anthropology. Jacques & Galloway (2013), for example, discuss the dual identities of activist groups: the way they see themselves and the way others see them. To examine how effective such groups are, Jacques & Galloway apply activism, social identity and risk analysis, concluding that, “non-cooperation may limit activists’ capacity to achieve their objectives” (p.1). De Rijke (2013) on the other hand, advocates an anthropological examination of the social engagement with unconventional gas and fracking, demonstrating the potential for analyses of materiality, politics, discourses, rights, risk and knowledge. Other recent studies range from studies of the language and discourses being used amongst communities to recreate identity (McManus & Connor, 2013), through understanding the history of the national agenda on resource extraction as a national necessity (Duus, 2013), and studies of community perceptions and social processes (Petrova & Marinova 2013). These, and others, are equally valid analytical frames, and may all contribute to a greater understanding of such social protest. Here, however, I want to focus on a typical postcolonial issue: language.

Robert Young (2003) talks about the importance of language in colonial and postcolonial conditions. Languages exist in a hierarchy. Under colonialism, the colonising language becomes dominant, replacing and translating the indigenous language: “The colonial language becomes culturally more powerful, devaluing the native language as it is brought into its domain, domesticated, and accommodated” (p.140).

The colonising language will reflect the values of the dominant power. In the west, this has come to mean the values of science and technology, of economy and progress, of capital, all over-shadowing the values of community, environment and culture. The latter are fine in a democratic society, but are still largely subordinate to the former. The implication is that official business must be done in the language of science and technology, economy and progress, etc.

As with all dominant languages, access to limited technical, scientific and economic language, while superficially resembling everyday language, is specialist language. It is accessible only to those who are admitted to it, through education and validation by those with power in society. The adoption of such language by government and industry becomes part of the process of domination, and of achieving control over the general population.

The case of the campaign by the government and industrial companies to develop coal seam gas as an extractive industry in the Australian countryside is a good example of both the disempowering and empowering effects of language. McManus & Connor’s (2013) study of the social marginalisation of communities in the coal mining district of the Upper Hunter region of New South Wales, for example, demonstrated how communities use “new and reflexive constructions of ‘the rural’ that integrate traditional identity, discourses of sustainability and the re-centring of rural life” (p.166).

In the example I have been examining, I am interested in the broad forms of language evident in the argument between pro and anti coal seam gas lobbies. My interest lies in the ability of communities opposed to the development of such an industry to be able to engage it within the terms of the development itself. The language of the industrialisation of the countryside is the language of technology, of science, and of government. It is not the language of the community, of society and of culture. It is the language of resource extraction, and not the language of environmental custodianship. It is the language required to ensure successful industrial development in, and on the countryside. It would be remiss if it did not serve its purpose.

The opponents of such industrialisation of the countryside seek to influence government and industry. They have, therefore, to speak the language of technology, of science, and of government. Their objections need to express technological, scientific and governmental concerns, in the language that government understands. They are required by government to abide by certain rules of language, the rules of scientific argument, the rules of environmental impact assessment processes, the rule of technical logic.

Furthermore, opponents need to use this language within the communication structures established by the government. This further forces opponents to conform to the limited language of industrial development. That language is the language of successful industrialisation. Formal expression of concerns, already limited by governmental rules regarding the nature of allowable concerns, is the preferred form of communication of government.

There are three important consequences of this situation.

First, opponents are forced to express concerns about technical matters or scientific matters. They are forced to speak a language that legitimises the proposed activity. Their objections, in this language, are, at best, only likely to modify or limit, rather than negate, that activity in its final incarnation. Any good technician or scientist should be able to 'win' a debate couched in such language. It is their language, after all, codifying their knowledge, culture and history. It is structured to, as all languages should be, meet their cultural needs. It is the language of achievement not denial, of development not *status quo*, of progress not non-progress.

Secondly, opponents are not authorised within the formal sphere to express their own feelings – the language of social anxiety, of love of the country, of being in the community, of history. These are core to a functioning social community. They are not, however, part of the lexicon of technical and scientific language essential for industrial development.

Since there is no room for emotion, community or culture in the technical and scientific language of development, opponents are not allowed to express their real anxieties about a proposed development. They simply do not want the development in their landscape or within their community. They simply do not need it as part of their functioning community. And they fear the threat to existing community values. They do not want to change the identity of their community. But they cannot speak this when the government wants to hear about water quality and soil erosion. Water quality and soil erosion (and the rest) are important, but they are not at the heart of the language of the community.

So, thirdly, despite scientific and technical assurances, and regardless of whether the science and technology are as correct as they can be, if the community does not want the development in the first place, it finds itself in a typical cross-cultural dilemma. Either speak an inadequate form of language that the other party understands, but that does not actually express what you mean. Or speak your own language, and take the risk that the other party does not understand what you mean. In either case, real communication has failed, as, indeed, it is likely to do where any two languages are spoken in one conversation.

A conclusion

In closing, I note that there have been some very recent developments in the issue of coal seam gas exploration in New South Wales.

In February this year, one of the major coal seam gas exploration companies, Metgasco, suspended its operations in the region (Figure 15). The stated reason was that the State government had brought in new regulations that made continuing operations unsustainable. The new regulations introduced a 2km exclusion zone around residential areas and banned coal seam gas operations in certain areas of viticulture and horse farming. The local media reported that, “in an announcement to the media and the Australian Stock Exchange, Metgasco CEO Peter Henderson cited ‘the uncertain operating environment’ created by State Government regulations for their decision to suspend operations” (Parks, 2013). The same article noted that Peter Henderson retained options for later exploration:

He seems to have dismissed the idea of selling the company's exploration licences to another company, saying: “Once CSG investment regulations are firmly established and it once again becomes prudent to invest shareholder capital exploring and developing CSG reserves in New South Wales, Metgasco will resume its operations”.

And just this week (i.e. the week I delivered this lecture; second week of April), another company, Dart Energy, in a statement released to the Australian Stock Exchange, announced major cutbacks in its Australian operations, including a reduction in staff by 70% (Marshall, 2013; Broome, 2013b). The company's chairman, Nick Davies, blamed the political environment for the decision, commenting:

The Board of Dart is extremely disappointed with the uncertainty created by recent NSW and Federal government decisions in relation to CSG development in Australia. The consequence is that investment is leaving the country, field operations are being suspended, Australian jobs are being lost, and the impending energy crisis in New South Wales is not being addressed, and indeed, will only get worse.



Figure 15. Local newspaper headlines announcing the cessation of coal seam gas exploration by two of the companies involved in the industry in the north coast region of New South Wales. (Sources: Broome, 2013a, b; Holt, 2013)

Both companies have sacked staff, and both have indicated that they will continue their activities elsewhere. Neither acknowledged the role of the anti coal seam gas movement on their decision, commenting on the government's role and effects on share values. It appears, therefore, that even when the companies withdraw, they are still working in the language of government and commerce, not the language of the community.

Returning to the view that the postcolonial agenda seeks something more independent, something more transformative, than a simple transfer of power from one elite to another – in this case, the apparent will of the community to not have an industrial development in its countryside – we need to consider whether such transformation has been achieved. As Robert Young (2003:113) reminded us, “with sovereignty achieved, postcolonialism seeks to change the basis of the state itself, actively transforming the restrictive, centralizing hegemony ... that may have been required for the struggle against colonialism”. The companies may have removed themselves from the region, but it appears that they have not done so on a basis that suggests they understand the community's real concerns, or if they do, they are not yet ready to acknowledge them. They have not undergone the transformation that would suggest the postcolonial agenda is complete. Is the protestor's celebration premature (Figure 16)? While the protestors certainly appear to have successfully locked the gate to coal seam gas, they have yet to pull down the fences of language surrounding the industry in this rural setting yet.

For postcolonial scholars, the need for critical engagement remains ...

Metgasgone! Metgasco set to go

Andy Parks | 13th Mar 2013 2:43 PM



Figure 16. Jubilation amongst anti coal seam gas campaigners on the news that several exploration and mining companies had withdrawn from the region. The accompanying article opens with the words that the news “has been welcomed by those who have been campaigning against the development of the industry ... Lock the Gate spokesperson, Ian Gillard said its “a great day for the Northern rivers”.”. The campaign has locked the gate to coal seam gas mining, but has it pulled down the fences yet? (Source: Parks, 2013).

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Institute back in the 70s remind me that we have been postcolonials long before we ever knew the word existed.

References

- ABC. 2013. *Coal Seam Gas By the numbers*. <http://www.abc.net.au/news/specials/coal-seam-gas-by-the-numbers/> (Accessed 24.04.13).
- ADA. 2011. *Australian Survey of Social Attitudes 2007*. Australian Data Archive. <http://ada.edu.au/> (Accessed 24.04.13).
- APPEA. 2011. “*We want CSG*”: *Mythbusting*. Australian Petroleum production and Exploration Association. <http://www.wewantcsg.com.au/coal-seam-gas/mythbusting> (Accessed 27.03.13).
- Boyd, W.E. 2012. ‘A frame to hang clouds on’: Cognitive ownership, landscape and heritage management. Pp. 172-198 in Skeates, R., McDavid, C. & Carmen, J, (eds) *The Oxford Handbook of Public Archaeology*. Oxford University Press, Oxford.
- Boyd, W.E., den Exter, K., Christidis, L. & Lloyd, D. 2013. Current issues in environmental management in Australia – what do people think? *Coolabah*, 10, 31-50.
- Boyd, B. & Norman, R. (editors) 2013. *Coolabah Special Issue: Placescape, placemaking, placemarking, placedness ... geography and cultural production*. *Coolabah*, 11. 22pp. Barcelona: Centre for Australian Studies, University of Barcelona. ISSN 1988-5943. <http://www.ub.edu/dpfilsa/Coolabahindexvol11.html>. (Accessed 24.04.13).
- Broome, H. 2013a. Reactions mixed to Metgasco pausing exploration. *Northern Rivers Echo*, 15th March 2013. <http://www.echonews.com.au/news/reactions-mixed-to-metgasco-pausing-exploration/1792998/>. (Accessed 03.05.13)
- Broome, H. 2013b. Another CSG company drops out. *Northern Star*, 2nd April 2013. <http://www.northernstar.com.au/news/another-csg-company-drops-out/1814168/#comments>. (Accessed 03.05.13)
- Clark, T., Hynes, R. & Mariotti, P. 2011. *Greenhouse Gas Emissions: Study of Australian CSG to LNG*. Brisbane: APPEA & WorleyParsons Services Pty Ltd.
- CSG Free Northern Rivers, 2013a. *Glenugie Community Blockade Metgasco CSG*. <http://www.flickr.com/photos/lockthegatealliance/sets/72157632418786391/> (Accessed 29.04.13).
- CSG Free Northern Rivers, 2013b. *CSG in the Northern Rivers* http://csgfreenorthernrivers.org/wp-content/uploads/2013/04/NR_map_2013.jpg (Accessed 02.05.13).
- De Rijke, K. 2013. Hydraulically fractured: Unconventional gas and anthropology. *Anthropology Today*, 29(2), 13-17. DOI: 10.1111/1467-8322.12017.
- Dilling, L. & Lemos, M.C. 2011. Creating usable science: Opportunities and constraints for climate knowledge use and their implications for science policy. *Global Environmental Change*, 21(2), 680-689.
- Documentary Australia Foundation. 2013. *Coal Seam Gas – The Musical*. <http://www.documentaryaustralia.com.au/films/details/1586/coal-seam-gas-the-musical> (Accessed 02.05.13).
- Doyle, T. 2000. *Green Power: The environmental movement in Australia*. UNSW Press.
- Duus, S. 2013. Coal contestations: Learning from a long, broad view. *Rural Society Journal*, 22(2), 96-110.

- Henrich, J., Heine, S., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33 (2-3), 61-83.
- Holt, P. 2013. Arrow backs out of NSW licence to focus on LNG projects. *Northern Rivers Echo*, 20th March 2013. <http://www.echonews.com.au/news/arrow-backs-out-nsw-focus-csg-lng-projects/1798625/>. (Accessed 03.05.13)
- Hutton, D. & Connors, L. 1999. *History of the Australian Environmental Movement*. Cambridge University Press, Cambridge.
- IPSOS. 2009. *Climate Change Report*. IPSOS Eureka. http://www.ipsos.com.au/ISRI/lib/IpsosEureka_ClimateChangeReport2009.pdf (Accessed 24.04.13).
- Irvin, R.A. & Stansbury, J. 2004. Citizen participation in decision making: Is it worth the effort? *Public Administration Review*, 64(1), 55-65.
- Jackson, P. & Penrose, J. (eds) 1993. *Constructions of race, place and nation*. UCL Press, London.
- Jaques, T. & Galloway, C. 2013. Coal seam gas in Australia: Can activists be effective from the margins? *Asia Pacific Public Relations Journal*, 13(2).
- Julian, D.A., Reischl, T.M., Carrick, R.V. & Katrenich, C. 1997. Citizen Participation – lessons from a local united way planning process. *Journal of the American Planning Association*, 63(3), 345-355.
- Keep the Scenic Rim Scenic. n.d. *Keep the Scenic Rim scenic*. <http://www.keepthescenicrimscenic.com/signs-and-stickers.php> (Accessed 29.04.13).
- Lloyd, D., Luke, H. & Boyd, W.E. 2013. Community perspectives of natural resource extraction: coal-seam gas mining and social identity in Eastern Australia. *Coolabah*. 10, 144-164.
- Lloyd-Smith, M. & Senjen, R. 2011. *Hydraulic Fracturing in Coal Seam Gas Mining: The Risks to Our Health, Communities, Environment and Climate*. Bangalow, Australia: National Toxics Network.
- Lock the Gate Alliance, n.d. *Lock the Gate Alliance Australia and working together to protect our land, water, and future*. <http://www.lockthegate.org.au/> (Accessed 2013).
- Luke, H., Lloyd, D. & Boyd, W.E. In prep. Community views on coal seam gas: Results of exit polling at the 2012 Lismore City Council (New South Wales) local government election poll.
- McLeod, J. 2000. *Beginning Postcolonialism*. Manchester: Manchester University Press.
- McManus, P. & Connor, L.H. 2013 What's mine is mine(d): Contests over marginalisation of rural life in the Upper Hunter, NSW. *Rural Society Journal*, 22(2), 166-183.
- Northern Rivers Guardians. 2013. *CSG-The Musical*. http://northernriversguardians.org/?tribe_events=csg-the-musical (Accessed 29.04.13).
- Orange News Now. 2013. *Orange News Now downloads page*. <http://www.orangenewsnow.com.au/wp-content/uploads/2011/12/coal-seam-gas-map.jpg> (Accessed 02.05.13).
- Parks, A. 2013. Metgasgone! Metgasco set to go. *Northern Rivers Echo*, 13th Mar 2013 <http://www.echonews.com.au/news/metgasgone-metgasco-set-to-go/1790422/>. (Accessed 03.05.13).
- Petrova, S. & Marinova, D. 2013. Social impacts of mining: Changes within the local social landscape. *Rural Society Journal*, 22(2), 153-165.

- Porteous, J.D. (1996) *Environmental Aesthetics: Ideas, Politics and planning*. Routledge, London.
- Rural Affairs and Transport References Committee. 2011. *Management of the Murray Darling Basin – Interim report: the impact of mining coal seam gas on the management of the Murray Darling Basin*. Canberra: Commonwealth of Australia. 2011.
- Smith, P.D. & McDonough, M.H. 2001. Beyond public participation: Fairness in natural resource decision making. *Society and Natural Resources*, 14(3). 239-249.
- Tait, D.R., Santos, I.R., Maher, D.T., Cyronak, T.J. & Davis, R.J. 2013. Enrichment of radon and carbon dioxide in the open atmosphere of an Australian coal seam gas field. *Environmental Science & Technology*, 2013, 47(7), 3099–3104.
- Young, R.J.C. 2003. *Postcolonialism: A Very Short Introduction*. Oxford: Oxford University Press.
- Waters, E. 2013. We aren't the world. *Pacific Standard*
<http://www.psmag.com/magazines/pacific-standard-cover-story/joe-henrich-weird-ultimatum-game-shaking-up-psychology-economics-53135/> (Accessed 02.05.13).
- Williams J., Stubbs T. & Milligan A. 2012. *Some ways forward for coal seam gas and natural resource management in Australia. An outline of the report 'An analysis of coal seam gas production and natural resource management in Australia: Issues and ways forward'*. Report prepared for the Australian Council of Environmental Deans and Directors by John Williams Scientific Services Pty Ltd, Canberra, Australia.
- WVS. 2011. *The World Values Survey*. The World Values Survey Association.
<http://www.worldvaluessurvey.org/> (Accessed 24.04.13).

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