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EDITORIAL CONTACTS

SUBSCRIPTIONS

Social Alternatives
The School of Education
The University of Queensland
QLD, Australia 4072
(61 7) 3374 3608

ENQUIRIES

Barbara Young
barbarayoung@netspace.net.au
(61 7) 3374 3608

CO-ORDINATING

EDITOR
Don Fletcher
School of Political Science &
International Studies,
The University of Queensland
d.fletcher@uq.edu.au
(61 7) 3346 9615

SHORT STORY EDITOR

Matthew Karpin
The University of Queensland
matthewkarpin@yahoo.com

BOOK REVIEW

EDITOR

Clare Archer-Lean
carcher@usc.edu.au
(61 7) 5456 5029

POETRY EDITOR

John Synott
Humanities Program, QUT,
Carseldine
QLD, Australia 4034
john@socialalternatives.com
(61 7) 3864 4725

ARTWORK, WEBSITE & DESKTOP PUBLISHING

Andrew Keller
andrew@socialalternatives.com
(+61) 0413 225 134

Jill Lindquist
jill@socialalternatives.com
(+61) 0438 166 769

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Social Alternatives is an independent, quarterly, multi-disciplinary, refereed journal. It analyses, critiques, and reviews contemporary social, cultural, economic, and ecological developments to determine their implications at local, national, and global levels. Because we value artistic endeavour, we publish short stories and poetry.

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Because we make decisions democratically, Social Alternatives is managed by an editorial collective while a co-ordinating editor takes responsibility for managing the process. After contributions are blind refereed, the collective has final control over what is published. Thus, the editorial collective is a distinct entity from the advisory board (which assists in refereeing).

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Social Alternatives wishes to apologise to Alastair Grieg, for the incorrect spelling of his surname on the cover and table of contents of issue #1, 2008.

Governance and Justice in Water– Introduction

CLAUDIA BALDWIN

This issue of *Social Alternatives* about governance and justice in water argues for the need for a change in direction in addressing the escalating global water crisis. This shift involves an important value and perception change – from seeing water as a commodity to be exploited, often at the expense of one's neighbours and the environment, to seeing water as a shared and fragile resource to be used for the benefit of all people (Cosgrove 2003). It involves greater understanding of how institutions, social networks and individuals can provide innovative approaches to governance and equity. It foreshadows transformation, not just in the present but for future generations so they too will have options and opportunities to experience water in its natural state and use it for a variety of purposes. This means knowing how to share water fairly and efficiently with the environment among other uses. It means expanding options beyond 'big infrastructure' solutions, with individuals and communities taking greater responsibility for their use and water supply.

Globally, water is an increasingly scarce resource with demands for it to be shared among a range of users. In Australia, 26% of surface water and 30% of groundwater management areas are either close to or already overused. On average only 77% of water diverted for use in urban and rural areas actually reaches the customer, with the remainder lost to seepage or evaporation (NLWRA 2001). Stressed water resources and micro-economic reform have been drivers for institutional change about water management.

In rural areas, farming communities have had to cope with changing climatic conditions and a national approach to institutional water reform based on secure water property entitlements, market-based mechanisms, and allocation of water for the environment through the National Water Initiative (2004). Unfortunately, insufficient scientific knowledge, foresight, and policy mechanisms have made it difficult to deliver. The failure of the Murray-Darling River Basin system in south-east Australia is a case in point. A relatively sophisticated sharing of water between

various users occurred decades ago, supplemented more recently by an agreement allowing water trading. However, the recent years-long drought has illustrated that the quantities of water needed to provide ecosystem health were clearly underestimated (Rogers 2008, 31). In New South Wales, water plans were suspended soon after they were completed. Commercial users have been affected, receiving reduced or no allocation for irrigation, and the system has reached a crisis point with governments scrambling to find solutions. The market focus of reforms has inevitably led to an emphasis on economic options and costly solutions which will be borne by the entire country. This situation provides background to the discussion in this issue about a need for governance approaches that are participatory, deliberative and take account of community values.

Unusually dry conditions attributed to climate change have resulted in low urban water supplies around the country, resulting in a quasi-'state of emergency' response by State and Local governments. Some shortages were caused, at least in part, as a result of micro-economic reforms in which water authorities, increasingly separated from government became more profit-driven with insufficient regulation. This is exemplified by the case of Brisbane-based SEQ Water which increased its sales of water to Tarong power station which in turn augmented its output to sell energy on the grid to New South Wales (Davies and Travers 2008). This increased its profit, with the unintended consequence of a water shortage for the city of Brisbane. The response to the urban water crisis has been, in part, "big infrastructure" solutions: to recycle Brisbane's wastewater to initially supply non-potable water to power stations; to add purified recycled water as a domestic water source along with desalination plants along the coast; and to move water from other catchments as part of a regional water grid. Complementary to this response though, has been improved demand management which has seen Brisbane domestic water usage decrease from an average of 825.4 ML/day/person for the 2004/2005 pre-restriction period (QWC 2008a) to less than 140L/person/day in September 2008 (QWC 2008b).

This was accomplished through an educational campaign, incentives for 'distributed' systems such as urban rainwater tanks and compliance. A referendum proposing to introduce recycled effluent into the domestic water supply of the Australian city of Toowoomba was defeated 60-40 in July 2006 (ABC 2006), yet five months later 70% of Brisbane city

respondents to a survey of 880 South East Queensland residents indicated that they would be willing to drink recycled water providing health standards were met (Baldwin 2007). The announcement soon after that recycled water would be introduced to Brisbane's water supply barely raised a ripple. Community norms and values had responded to the drought and government policy kept in step. Similar pressures and responses have occurred around Australia and in other parts of the world and set the context for the articles in this edition by local, interstate and overseas authors.

Wolf et al. (2002) reviewed approximately 1800 conflicts and cooperation over water resource 'events' between nations over the last fifty years. They suggest that conflicts over water are often the legacy of past institutional arrangements that have not mitigated over-use, coupled with lack of understanding of resource availability. Very rapid changes, either institutional or in the physical system, appeared to be at the root of most water conflict. The authors hypothesised that 'the likelihood and intensity of dispute rises as the rate of change within a basin exceeds the institutional capacity to absorb that change' (Wolf & Giordano 2002). Hence it is not surprising that the authors in this edition offer their considered views on institutional arrangements promoting good governance and greater equity for the various players in this drama including the environment.

Finally, in setting the stage for discussion of the articles in this edition, it would be useful to ensure a common understanding of "governance".

Governance refers to the practices and procedures of governing, the ideologies and beliefs expressed through them and the legitimising authority for the processes and outcomes of governing. [It] is not confined to the actions of the governing authority but is dispersed through society as a culture of governing, enacted through a number of agencies ... to the level of the individual (Eddy 2006, 3)

Insights into governance and justice in water are offered in the following thought-provoking pieces.

Mackenzie's article sets the scene by tracing Australia's approach to water reform from international agreements which promote a participatory approach and consideration of economic, social, environmental and cultural values of water in decision-making. Coinciding with the ascendancy of community-based natural resource management, such agreements have provided the foundation for Australian water reforms over the last 15 years, culminating in the National Water Initiative (NWI) (CoA 2004).

The NWI has become a mantra for institutional change in water business in Australia. Its aims include increasing resource security and restoring environmentally degraded ecosystems by introducing a property market in water, among other things. With 15 years of public sector reform in the water business, both urban and irrigation water supply and infrastructure, traditionally a public service controlled by government, have progressively been privatised or operated at greater arm's length as government-owned corporations. In this history of reform and in the NWI, there is little explicit recognition of a need for equity in allocation, managing water for community well-being, or acknowledgement of water as common property.

Mackenzie points out that the NWI requires community participation to provide information and transparency to build certainty and confidence in the process. However the impression is that participation is seen as a means of gaining 'community acceptance' rather than 'enhancing the democratisation of decisions' about an increasingly scarce resource. He suggests that the predominance of property rights, trading, and pricing (market-based mechanisms) in the NWI overshadows the role of participation. Others too have suggested that community aspirations based on justice and equity may not be part of a governance framework based on economic instruments (McKay & Bjornlund 2002).

The NWI's participation approach either reflects or has contributed to approaches by State jurisdictions. A recent review of water planning in Australia found that almost all State governments, with responsibility for water allocation planning, used appointed water advisory committees as their prime means of community engagement. However, in spite of the fact that such committees are well suited to deliberative processes, few if any were involved in discussion about trade-offs that might involve equity issues (Hamstead, Baldwin et al. 2008). The focus on committees has led to a disproportionate lack of input from those whose voices are not easily heard – Aboriginal people, those who are not members of groups, and those distant from major centres.

Wong, in this issue, provides support for Mackenzie and others by suggesting that the focus on water as an economic commodity has led to a neglect of water as a community asset. There is a lack of recognition of the complexity of socio-psychological factors which affect negotiations about water. He suggests that the ambitious World Bank's Sustainable Water Framework, with its emphasis on good governance and institutional responses, needs to be 'humanised' with 'poverty-specific' principles. He claims there are: an inadequate understanding of human motivations;

structural factors which constrain peoples' participation; and over-optimism about institutional crafting – all of which disadvantage the poor. The importance of social reciprocal behaviour and mutual obligations in community, spiritual aspects, informal networks, and the need for flexibility in rules and enforcement are also raised by other authors in this issue (Baldwin, Soufoulis & Williams). Wong refers to the concept of social embeddedness to bring understanding to the link between individuals and social structure. He suggests improving knowledge of formal and informal networks, addressing social complexity, and understanding power better by examining the distribution of costs, benefits and risks.

The NWI (cl 40) commits jurisdictions to undertake water planning and put in place mechanisms to manage risk and adapt to improved information and knowledge. However, the lack of social and economic impact assessments of water allocation scenarios in water plans around Australia has limited the consideration of risks. This has resulted in lack of transparency and unintended consequences of cost and benefit distribution with implications for equity and fairness (Hamstead et al. 2008). With this in mind, the next authors, Syme and Nancarrow, suggest that attention to addressing the social functions of water has been missing from water allocation discussions. Account needs to be taken of water contributing to well-being in both its utilitarian and nonutilitarian benefits – providing not just for economic goods such as crops but also recreation, health and spiritual values reflecting human aspirations in terms of the triple bottom line. They report on the application of a Water Benefits Accounting and Assessment methodology used to assess attitudes towards the importance of a variety of economic social and environmental benefits that people feel they can gain from various water policy scenarios. This contributes to filling the above-mentioned risk assessment gap so that fairness and equity issues of different stakeholders can be understood. In conjunction with principles about distributional and procedural equity, action can be taken to identify and distribute benefits.

This leads directly to Baldwin's article which is based on the premise that understanding values improves the likelihood of stakeholders' views being reflected in potential solutions and reaching mutually satisfactory outcomes. In a southeast Queensland irrigation community, there was a diversity of values about sustainable water use from groundwater, the seemingly ever-flowing 'magic pudding'. Farming was seen as a contributor to livelihood as well as family and community well-being. Acknowledging values was fundamental to developing rules for co-management

of groundwater resources as part of a water planning process. Application of Ostrom's principles (2005) for self-governance of common-pool resources, could improve the co-management framework proposed by this farming community. Importantly one principle suggests appropriate distribution of cost and benefits. Rules should be tailored to the situation, and will be if they are values-based.

Following in the vein of appropriate rules to manage the 'magic pudding', Shepheard and Martin, refer to irrigators' responsibilities. They suggest that the right for an irrigator to extract water goes beyond having an entitlement conveyed through an irrigation licence. It should extend to a 'social licence' which reflects social expectations for accountability. The vehicles presented by Shepheard and Martin are commonly discussed within the irrigation community – a 'duty of care' and triple bottom line sustainability reporting, each of which has its advantages and disadvantages. Duty of care involves honouring rights and a duty not to cause harm. Triple bottom line reporting is about accountability and the relationship between individual and social, economic and environmental wellbeing. However, 'boundaries' are often unclear, as social expectations are constantly changing. Guidance is needed about the parameters of concepts such as stewardship and ecologically sustainable development (ESD). Like Soufoulis and Williams, later in this issue, the authors emphasise the need to build networks. Networks among both compatible and differing interests can foster support, enable learning from others, and build alliances, social trust and leadership. Processes need to include stakeholders in deciding on appropriate accountability reporting measures which can lead to continuous improvement.

While not mentioned by Shepheard and Martin, two other approaches to being accountable environmental managers are also applied by the farming community: codes of practice and Environmental Management Systems (based on international standards, ISO 14001). Like the aforementioned, such systems are often criticised for voluntary and uneven compliance and for identifying a path for improvement but not necessarily delivering. All of these systems have one thing in common; they require well-defined norms and stakeholder agreement achieved through dialogue.

While Shepheard and Martin refer to rules for rural use of water for irrigation, Butch focuses on how urban water use restrictions are primarily framed in anthropomorphic terms – the direct and collective impacts to people. Urban uses are given priority in water allocation and risk is frequently defined in terms of a decreasing quality of life and negative effects on urban growth.

This approach may be meaningful to urban consumers and has proven effective in reducing water use but a question among water policy advisers remains – will it last? Buth argues that the focus on restrictions as an end in themselves and the anthropomorphic emphasis unnecessarily limits the scope of sustainable solutions and the effectiveness of restrictions. If the definition of harm caused by excessive water use or water scarcity was based on an understanding of the effects on other species as well as on ecologic health it would be more consistent with existing environmental legislation and policy. Penalties could then be consistent with those associated with environmental harm.

The last two articles draw attention to the need to complement 'big infrastructure' traditionally used as solutions to water distribution, with individual and community-based options. Chappells and Medd suggest that 'big water' provides obstacles to water saving as it reinforces the concept of endless supply and locks in a narrow range of solutions. It removes users from taking responsibility for their own solutions. The 2006 drought in South East England challenged supply-led water management strategies, referred to by the authors as 'infrastructure as consumption'. The drought catalysed people to challenge the thinking behind large scale cost-ineffective and energy intensive water transfers via a national grid. While demand management was introduced with water saving publicity and banning of hosepipe use, consumers also introduced more flexible 'do it yourself' options such as new systems of storage and distribution to garden. It required a shift in values, for example, in accepting use of grey water on gardens, and required acceptance of responsibilities and skill sets that were different from standard efficiency measures. Consumers are prepared to innovate and have some expertise but could also use technical and policy support. To be more 'active consumers' the authors recommend more localised markets with technologies at multiple scales. They recommend co-provision of services rather than separation of supply and demand. Co-provision, warn the authors, entails more radical engagement.

The cultural innovation approach proposed by Sofoulis and Williams might meet this engagement demand. Water users are members of cultural and sociotechnical networks where habits and expectations are co-evolving. A redistribution of roles and responsibility in relationships between water users, technologies and water authorities is required through the process of 'growing networks of water-savers'. Water managers are challenged by cultural complexity when attempting to develop more effective water conservation programs. While demand management programs deal with people as individuals, most people operate within a

cultural network. Change can be facilitated by, for instance, networks based on a locality, shared cultural background, or hobbies.

Changing values however, need to be accompanied by changing technology – a 'sociotechnical approach'. New solutions will be more acceptable if innovations built on local knowledge are recognised and rewarded. The authors promote a co-evolutionary approach whereby consumers are partners with 'co-responsibility for water' located within a culture and network of 'water savers', rather than operating as individual 'atoms'.

Emerging themes from these articles provide insight about how to address the water crisis. Sound governance which is transparent, accountable, and acknowledges the diversity of stakeholder values is the foundation for effective water management. While charging for water is intended to motivate users to become more efficient, privatisation and 'big water' solutions do not necessarily encourage sustainable use nor do they ensure its equitable distribution (Strang 2004). Economic and market instruments certainly have a role, but they are only one of many policy responses to the increasing water crisis. A triple bottom line approach means environmental and social needs also must be addressed to achieve community well-being and realise a future that encompasses both continued consumption and ecosystem health. Benefits accrue from engaging consumers to take greater responsibility for water management and to co-manage and develop innovative flexible solutions to meet their needs, with support (including regulatory and compliance) from government and management agencies. A multi-level response internationally, nationally (as per the NWI), and at the social network level is needed to ensure procedural and distributional fairness.

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Unless They are Hired

Unless they are hired mercenaries
soldiers don't die for money;
nor do they sacrifice their lives
for medals awarded posthumously
or because their officers instruct them to do so.
Professional soldiers don't risk their lives
for promotions in the pecking order
on parade grounds at barrack depots,
nor do they die for ideologies,
for 'liberty, equality and fraternity',
nationalism, communism or any other creed or 'ism'.
No. Soldiers don't die for ideals.
The soldier's bond is to die with his mates,
whether named Ivan, Kemla, Sun-Lee or Neil.

Jeremy Gadd
Bondi Junction
NSW

Watered Down: The Role of Public Participation in Australian Water Governance

**JOHN
MACKENZIE**

Internationally and nationally, the importance of involving the public in the decisions and management of water resources is beyond reproach. Indeed, much of water governance reform has centred upon implementing governance frameworks that afford greater opportunity for widespread participation. In substance, however, national water reform is a complex exercise that seeks to reconcile diverse governance systems, including administrative, technical, market-based and participatory components. This article challenges the apparent ascendancy of the participatory approach to water governance by exploring these tensions, particularly between market-based and participatory approaches. It argues that the participatory approach to water governance evident in Australian water policy appears more about obtaining community acceptance of an economic rationality for water management rather than democratising decisions over an essential public resource.

Introduction

Community involvement has become axial to water planning and governance, to the extent that there is now widespread recognition that public participation is a key water management principle (Mostert 2003a, 179). The centrality of public participation in Australian water resource governance, though, is a relatively recent phenomenon, largely consequent upon the emergence of key international declarations and their subsequent ratification in national water reform policy instruments. Australian water governance has experienced a series of successive policy approaches: from the administrative edicts in the era of big dam building from the end of the Second World War through until the 1970s; to the technocratic efficiency and instrumentalist managerialism of the 1970s and 80s; to the emergence of the participatory approach from the mid-1990s, which is also marked by a devolution in decision-making through the expanded use of economic instruments (Tan 2006; Connell et al. 2005, 85-86; McKay 2006).

Each phase has seemingly afforded greater provision for community involvement, culminating in the National Water Initiative (NWI) – an agreement between the Commonwealth and all State Governments of Australia to a management framework for the achievement of sustainable water management. The expansion of public participation in policy development is typically represented through the theme of reversal: from top-down to bottom-up, from a technical to a learning approach, from a closed to an open process, from

professional to personal expertise (Quaghebeur et al. 2004). But can such a claim of dramatic reversal be sustained for water governance? This article charts the apparent ascendancy of the participatory approach in water governance internationally and nationally, before exploring the residual tensions between the economic and participatory approaches. It serves to problematise some of the assumptions about the extent to which a participatory approach to water resource governance is evident in Australian water policy.

International Instruments on Participation in Water Planning

The first evident international agreement as to the value of participation in water governance emerged in January 1992, at the International Conference on Water and the Environment in Dublin. A statement of principles on Water and Sustainable Development was adopted by the participants in the closing session of the conference. Of the four principles outlined in what has become known as the 'Dublin Statement', two pertain directly to the endorsement of a participatory approach. Most significantly, Principle Two states that 'water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels' (ICWE 1992). This principle has been reinforced in a series of international conventions and conferences¹, most notably at the Second World Water Forum and Ministerial Conference, which published the Ministerial Declaration of The Hague on Water Security in 21st Century in March 2000. The Hague Declaration

confirms that 'integrated water resources management depends on collaboration and partnerships at all levels, from individual citizens to international organisations, based on a political commitment to, and wider societal awareness of, the need for water security and the sustainable management of water resources'.

The Hague Declaration also introduced the notion of values to consideration of participation in water planning, a concept which has continued to structure much of the consideration of participation in the ensuing years. One of the main challenges to water security identified in the Declaration was 'valuing water' and its signatories recognised the challenge 'to manage water in a way that reflects its economic, social, environmental and cultural values for all its uses' (WWC 2000, 1). This represents a subtle shift in language of participation, which is now presented as a means of assessing the values of water, ultimately 'towards pricing water services to reflect the cost of their provision' (WWC 2000, 1). In other words, the public participation component is intended to operate as a conduit to a greater understanding of the subjective preferences of 'consumers' in emerging water markets, as opposed to 'citizen participation' in the governance of a public good.

In subsequent international agreements, the role of participation is particularly emphasised in the development context, where water planning was seen as co-constitutive of initiatives to address socio-economic development and poverty alleviation (Schriener and van Koppen 2003; UN Water 2003). In this context, participation is frequently subsumed within a broader discussion of improving governance arrangements in countries generally, as water reform is seen to coincide with reforms that provide greater possibility for participation, transparency, decentralisation and, in turn, the possibilities for integrated resource water management (UN Water 2006, 7-9). For example, *Water: A Shared Responsibility* states:

Unless water concerns are integrated within broader national and international processes of trade, stability and more equitable governance, the chances of achieving the international water targets remain poor. Thus there is a need to collaborate with new partners outside the water realm and form more inclusive water development networks (UN Water 2006, 8).

The Declaration ... recognised the challenge 'to manage water in a way that reflects its economic, social, environmental and cultural values for all its uses'.

Simultaneous with the widespread agreement as to its importance, evaluative studies of water planning have substantiated the benefits of participation. A frequently cited statistical analysis by Narayan (1994), for example, examined 121 rural water supply projects in Asia, Africa and Latin America. This analysis found unequivocally that participation was the single most important factor in determining the overall quality of the implementation of water supply projects. Participation was also demonstrated to provide salient benefits to project effectiveness, and demonstrated a significant statistical correlation with the health of the water systems, the overall economic and environmental benefits for the community from the project and the level of engagement as a proportion of the population. The effects of participation extended to capacity-building at an individual and community level, resulting in community members acquiring new water-related and organisational skills and strengthened community organisations which went on to undertake further development activities. Similar reviews of participation in France (Rinaudo and Garin 2005), the United Kingdom (Page 2003) and the United States (Creighton 2005)

have confirmed that including community knowledge, values and preferences generally assist in identifying issues and formulating policies for water management planning.

The ascendancy of the participatory paradigm for water planning internationally has a number of implications for water planning in Australia. First, it has established the platform upon which the national water reform process in Australia has been launched. In a formal sense, Australia has an implicit obligation as a signatory to these agreements. This gives rise to Taberner et al's (1996) assertion of 'co-operative sovereignty' with regards to the regulation of environmental and planning matters. This term is seen to capture the diminished autonomy of Australian governments with respect to both the growing influence of international law and the rise of public participation (Taberner et al. 1996, 265).

Second, the broad statements regarding participation in the proliferation of international agreements and position statements do not specify appropriate means of community participation or pathways for implementation. This is evident, for instance, in the European Water Directive Framework. Established in December 2000, the Directive binds the Member States of the European Union to an agreed framework for the water management, with a key target of

'good water status' for all European waters by 2015. Public participation is both endorsed in principle and specified in the regulatory mechanisms of the Directive, particularly in relation to the development of river basin management planning. Public participation is affirmed in Preambles 14 and 46 of the Directive, which explicitly state that the success of its implementation 'relies upon close cooperation and coherent action at the Community, Member State and local level as well as on information, consultation and involvement of the public, including users.' Member States are required to 'encourage the active involvement of all interested parties in the implementation of this Directive' although what constitutes 'active involvement' remains unspecified (Mostert 2003b). The implementation of participatory approaches is hence left to the discretion of individual nation states.

Public Participation in Australian Water Reform Participatory approaches to water governance find expression in Australia through three main national policy initiatives: the 1994 Council of Australian Governments (COAG) Framework Agreement; the 1996 National Principles for the Provision of Water for Ecosystems (and its 2001 revision) and the 2004 National Water Initiative. In building upon and expanding the 1992 Intergovernmental Agreement on the Environment, these three initiatives are the keystones of the ambitious national water reform agenda. In addition to the international ascendancy of a participatory model of water planning outlined above, a number of other factors contributed to the inclusion of public participation components in these reforms. First, the enactment of this reform process was contemporaneous with international and national agreements on the principles of 'environmentally sustainable development' (Pigram 2006; McKay 2006, 117; Tan 2006, 13) and the emergent success of a community-based natural resource management movement in Australia (Martin and Halpin 1998; Curtis 2003; Cary and Webb 2000), both of which endorse public participation as a means to sustainable environmental management. In addition, though, McKay (2006, 117) argues that the reform was also prompted by community demands themselves, particularly 'by community reactions to large dams and environmental degradation of land and water'.

The COAG agreement specifically required that public consultation processes be instituted in relation to its recommendations on water allocation and trading, and required jurisdictions individually and jointly to develop public education programs in relation to the water use

Clearly, the bulk of the NWI is directed towards establishing trading systems and pricing mechanisms. Comparatively, public participation ... receives little attention.

and the need for and benefits from reform. Stronger support for participation is found in the National Principles for the Provision of Water for Ecosystems, devised in 1996 to provide national policy direction for the allocation of water for ecosystems. Principle 20 in this document provides for public participation specifically in consideration of environmental water provisions, and extends participation to 'all relevant environmental, social and economic stakeholders' (ARMCANZ & ANZCC 2001).

Adoption of the National Water Initiative (NWI) in June 2004 re-established the core principles of the 1994 water reform, based on ten years of experience in implementation. Like the preceding 1994 COAG agreement, the NWI is an intergovernmental agreement between the Commonwealth and State Governments of Australia.

Whilst Connell et al. (2005), suggest that the NWI represents 'a new philosophical approach to water management', it can be better understood as a consolidation of the logic of micro-economic reform in water which had been established by the preceding reform instruments (Tisdell et al. 2002). The departure of the NWI from the preceding reform agreements is in the scope of its operation, namely the establishment of a nationally 'compatible, market, regulatory, and planning based system for managing surface water and ground water resources ... that optimises economic, social and environmental outcomes' (Pigram 2006).

Outcomes envisaged by the NWI include the improvement of security of water entitlements, the restoration and maintenance of ecosystem health through the protection of identified environmental assets at a catchment² scale, the encouragement of 'best use' of water resources through the expansion of water markets and trading, and greater efficiencies in water management, particularly in urban environments (McKay 2006, Pigram 2006, Connell et al. 2005). The scope of the NWI, the requirements for unprecedented collaboration between multiple levels of government, and the unresolved tensions between the regulatory, market and participatory components have been recognised by a number of authors as engendering significant challenges, 'the resolution, or at least negotiation, of which will need to be attended to in implementation, as they were unresolved in the policy formulation stage' (Hussey & Dovers 2006, 36; also Connell et al. 2005). The role of improved mechanisms of collaboration and participation as a means to resolve these inherent tensions in the NWI is touched upon in the agreement.

Section 93 identifies the three objectives of participation as:

- improving certainty and building confidence in reform processes;
- transparency in decision making; and
- ensuring sound information is available to all sectors at key decision points.

These objectives are to be achieved through 'open and timely consultation' (ss95 & 97) in some instances, and the provision of 'accurate and timely information' (s96) in others. Consultation with stakeholders is required in relation to more contentious planning issues, such as structural adjustment pathways and other impact mitigations from reductions in the availability of water for consumption. Schedule E to the NWI provides additional guidelines for the preparation of water plans, which are required to include consultation with stakeholders and the application of socio-economic analyses. In addition, the preparation of water plans is to provide adequate opportunity for consumptive use, environmental, cultural, and other public benefit issues to be identified and considered in an open and transparent way.

in the process of water reform. To date, there are no national guidelines to give effect to the implied role of public participation in water reform in Australia, and, as a consequence, 'stakeholder input to the decision making process for prioritising water resource plan scenarios is not transparent to all stakeholders' (Arthington 2006).

In substance, public participation receives only cursory attention in the content of the NWI. Of the 72 key actions outlined in Schedule A of the NWI, only three pertain to public participation under the theme of Community Partnerships and Adjustment, and the figure below is indicative of the greater emphasis on water markets and trading, water pricing and water resource accounting.

Clearly, the bulk of the NWI is directed towards establishing trading systems and pricing mechanisms. Comparatively, public participation (alongside consideration of environmental water and capacity-building) receives little attention. But there is also significant emphasis on the establishment of clear uniform property rights in water. The establishment of

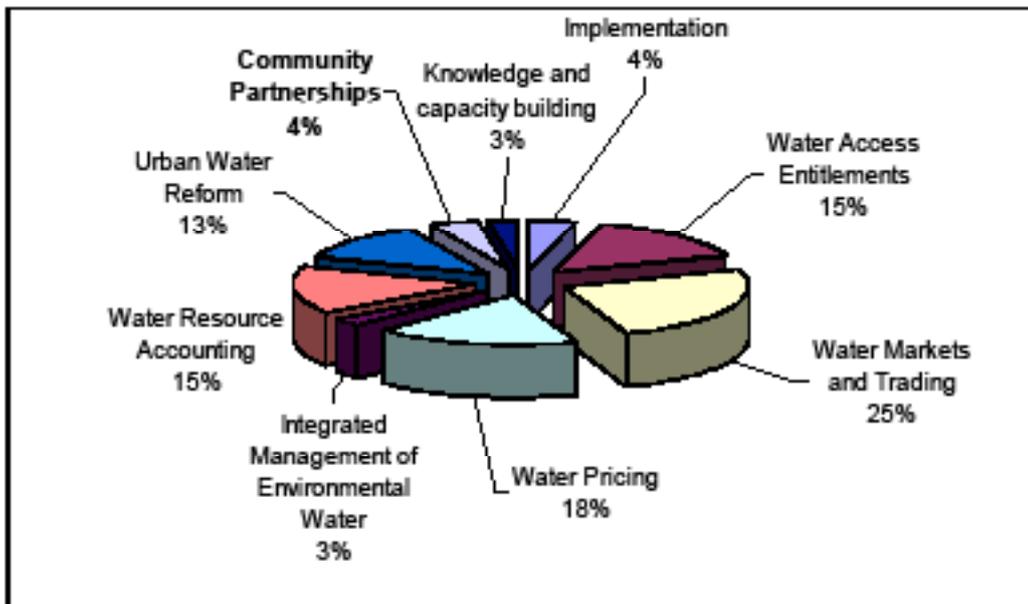


Figure 1: Proportions of key actions relating to themes of the NWI

Whilst the NWI does have general sections pertaining to public participation, the requirements for public involvement are more implied than explicit within the document. Like much of the NWI, the methods and approach to public participation is to be resolved through implementation by individual states and at the level of catchment-based water resource plans. The NWI provisions on participation are 'discretionary' (MacFarlane 2004), and whilst this does allow planning processes sufficient flexibility to be tailored to the needs, context and aspirations of specific catchments, it does create uncertainty and a lack of transparency

property rights is crucial to the establishment of an effective water trading scheme, and on the face of it, this seems to be the implicit direction of the NWI. The establishment of property rights is dependant upon secure access entitlements and appropriate systems of water resource accounting, and these components are also integral to the establishment of any trading scheme.

It is important to recognise that clear, comprehensive and enforceable property rights are a fundamental requirement for the effective governance of common pool resources, including water, even in the absence of markets or trading. Blomquist et al. (2004) argue that in the absence of clearly defined property rights, the community bears the costs of resolving conflict and negotiating solutions in the co-ordination of water management. Hence, whilst the establishment of clear property rights around water forms part of the requisite governance regime regardless of whether a regulatory, market-based or participatory approach is adopted, the establishment of market-based mechanisms is impossible without them..

To the extent that public participation is provided for in current water reforms, clearly the emphasis is on two aspects: firstly, 'mitigating the adverse impact of changing economic circumstances rather than promoting the growth of communities' (Connell et al. 2005, 85); and secondly, establishing 'community acceptance of the NWI and belief in its fundamental fairness' to shore up its credibility (LWA 2005, 11-12). This leaves the NWI open to the critique that it does not promote meaningful collaboration in water resource planning per se, but uses the rhetoric of participation to facilitate the emergence of a new policy regime based on market-based mechanisms. Connell et al. (2005, 83) argue that the NWI augurs an emergent approach to water management which extends 'neoliberal thinking about the role of governments and markets with regard to the management of public goods'. Hussey and Dovers state this point categorically:

It is clear that the overarching objective in the National Water Initiative, upon which all other objectives depend, is the establishment of clear, nationally-compatible water access entitlements to facilitate the operation of water markets within and between jurisdictions (Hussey and Dovers 2006, 41).

This 'neo-liberal thinking' regards the establishment of national markets, including tradeable water entitlements, as a more efficient means of resource allocation decision-making than by governments or the wider community. The extent to which public participation or dispute resolution is provided for in the NWI could be seen only to facilitate the establishment of a nationally uniform water trading regime (Connell et al. 2005).

The establishment of water trading as a surrogate mechanism of water management, waters down, or at least places in contention, the role of public participation. There is an inherent contradiction between the promise of citizen empowerment through public participation, and the imperative of the market-based instruments to prioritise governance by the functioning of economic logic over that of community aspirations. Issues of justice and equity, which were to be addressed through enhanced community access, may not be part of a governance regime premised upon economic instruments (McKay & Bjornlund 2002). The over-emphasis on economic design considerations

could exclude other significant facets of water management, including environmental security, social values, local knowledge and expertise, and community and regional aspirations, from consideration. Indeed, the reforms to Australian water governance mirror the international trend towards market-based resolution of difficult trade-off decisions about natural resource futures.

Conclusion

At both a national and international level, public participation in water resource governance has been widely recognised as a central management principle. Yet the concept of public participation has a wide ambit, and both the objectives and provisions for public participation in international agreements and the Australian water reform process admit a wide array of potential modes of participation. The requirements for consultation with relevant stakeholders on the development and review of water resource plans, on structural adjustment pathways, and means of ensuring the incorporation of Indigenous values are open to interpretation by State authorities in the development of specific catchment resource plans or water allocation plans. Not all approaches to 'consultation' and 'information provision' can be considered

The reforms to Australian water governance mirror the international trend towards market-based resolution of difficult trade-off decisions about natural resource futures.

participatory, and closer examination into the substance of these requirements is warranted. The lack of rigour in defining 'participation' often results in water planners, and their government agency supervisors operating in an environment where terms such as 'involve', 'consult', 'collaborate' and 'partner' retain a cultivated ambiguity. In this context, the requirements for participation in contemporary water governance would appear to be intended to engender

community acceptance of the extension of the micro-economic reform process to water resources, rather than enhancing the democratisation of decisions over a precious, and increasingly scarce, public resource.

(Endnotes)

1. Among these, the UN Conference on Environment and Development (1992), the UN General Assembly Special Session Programme for the Further Implementation of Agenda 21 on Freshwater (1997), International Conference on Water and Sustainable Development (1998), the First Petersburg Roundtable: International Dialogue Forum on Global Water Politics: Co-operation for Transboundary Water Management (1998), and the Commission on Sustainable

Development 6th Session: Decision of the Commission on Sustainable Development on Strategic Approaches to Freshwater Management (1998).

2. A catchment is the area of land which collects and transfers rainwater into a common stream, lake or waterway. Also referred to as a 'basin'.

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Author

John Mackenzie is a political sociologist, and a research fellow with the Socio-Legal Research Centre at Griffith University. His research centres upon the governance of natural resources, with a particular emphasis on Australia's national water reform process and community based environmental management initiatives.

Polystyrene, forever

our plastic kiss
twists off at a
certain point
like plastic aeroplane model parts
with no casualties
comes clean
like the top of a new tube of glue

no sound
not even
a scrap of
leftover plastic

a twist separation
no bakelite snap
but the modern dynamic
polymer split

Kim Mann
Henley Beach SA

Gaza Strip

Happiness is tossing a bunch of cane-mulch

Settling it around the plants

Eating strawberries on the couch

Gazing at fish that dance

In Gaza Strip it's hard to find at all

You might be shot and have to crawl

All the way to hospital

Or you might be made to crunch

When your house is bulldozed

While the family's having lunch

In Israel you might be showered

With an exploding Muslim powered

By a bomb

It won't be long...

I'm amazed

Where happiness has gone

Shame on you John

For supporting war

You're up to your eyeballs in gore

Roger Callen
Glass House
Mountains Qld

Humanising the World Bank's Sustainable Water Framework With 'Pro-poor' Principles of Governance

SAM WONG

The universal application of the World Bank's Sustainable Water Framework in developing countries is problematic. It challenges the underlying institutional thinking of the Framework for an inadequate understanding of human motivations, playing down the structural constraints of public participation, and being over-optimistic about institutional crafting. Drawing on social embeddedness theory and an extensive review of literature, this article urges the World Bank to humanise the water policies by putting 'poverty-specific' principles of governance into the Framework. This article argues that considering relationships in access to water, making power more explicit in the process of rule-making, and acknowledging the complexity of institutional building, are the alternative thinking that would make the Framework more effective in achieving its goals.

Introduction

The World Bank's Sustainable Water Framework (hereafter the Water Framework) has been universally applied in developing countries. It is influential both at the theoretical and policy levels. Community participation, decentralisation, cost recovery, good governance, strict enforcement and monitoring and appropriate use of technology are the general prescriptions of the Bank's water reforms (World Bank 2004). As Lemos and de Oliveira (2004) argue, the Bank's water model is ambitious, touching not only upon the policy process and practices, such as transparency and democratic decision-making, but also upon policy outcomes, through more efficient water management.

The Water Framework has, however, strongly been challenged. Critics argue that the universal application of the Water Framework fails to embrace the diversity and complexity of cultural characteristics of water use and distribution in different countries. Defining water as a purely economic commodity has caused controversy since this neglects another important side: that of water as a community asset (Strang 2004). Political issues, such as access to, and distribution of water, are not properly addressed (Mehta et al. 1999). It is also criticised for an insufficient gender analysis of the competing use of water in communities (Vernooy and Fajber 2006).

I intend to build on these critiques in two aspects: first, I criticise the Water Framework for focusing narrowly on economic rationality without considering a wider range of socio-psychological factors and cultural contexts that mediate people's daily negotiations over water. Second, I highlight the complexity of institutional crafting by

illustrating with examples how the interplay between formal and informal institutions and permeable water boundaries shape access to water. In this article, I draw on literature of water governance in the developing world context and develop my arguments based on the concept of social embeddedness by Granovetter (1992). The concept helps to explore everyday social interactions which link individual agency and social structure. It is used as a sociological lens to consider how water is accessed and distributed.

This article begins by introducing the guiding principles of the Water Framework and its underlying institutional thinking. It then analyses the limitations of the Water Framework by drawing on social embeddedness theory. It concludes by suggesting three principles which will help improve the effectiveness of the Framework in achieving its goals. Due to space constraints, this article focuses solely on water supply, and it does not discuss issues around sanitation.

World Bank's Sustainable Water Framework
The World Bank's sustainable water management framework is summarised in Figure 1. In this new framework, finance, governance and ownership are the three principal concepts. The five key policy prescriptions are: privatisation, improving governance by decentralisation, stakeholder participation, effective enforcement and monitoring, and appropriate application of technology.

The Water Framework stresses the importance of co-management. Stakeholder participation represents a bottom-up approach in that community members are encouraged to participate in water management and decision-making. The aim of participation is to

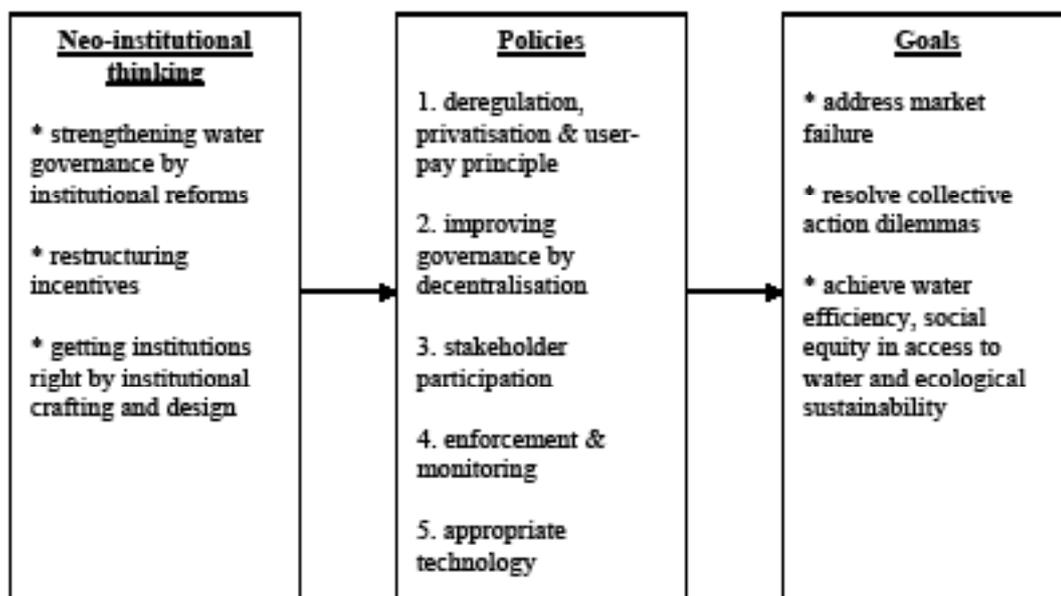


Figure 1: Sustainable water management framework
 (source: author's original diagram, based on ideas from the World Bank, 1993, 1994, 2004)

'influence policy formulation, alternative designs, investment choices and management decisions affecting their communities' (World Bank 1993:4). By information sharing, increasing transparency and open communication, different stakeholders feel the ownership of, and share the responsibility for, water management. This then improves incentives for cost recovery and service quality.

A decentralised approach to water regulation transfers the major responsibility, service delivery and power from central government to local governments, private sector and community organisations, such as water user associations (World Bank 1993). Assertions are made that centralised practice involves high administrative costs and results in low efficiency, and the goal of decentralisation is to 'improve service provision by making it more responsive to those being served' (IDA 2007, 1).

Calls for deregulation and privatisation are another essential part of the water reforms. Deregulation re-defines water ownership and leads to a reduction of government control in water governance. It is claimed that implementing privatisation by selling previously state-owned water enterprises to private investors brings competition, and therefore better services. A new water pricing system and the principle of full recovery of the costs of water services are considered to provide adequate incentives for efficient use of water (Kallis and Bulter 2001).

Effective monitoring and enforcement mechanisms are also central to the Framework. They lay down clear

rules about what water-using behaviour is desirable. Sanctions are applied to 'bad apples' who fail to comply with the regulations. The role of technology in the framework is different from previous practice. While technical knowledge and water-saving innovations remain critical in providing reliable water delivery, more emphasis is placed on minimising the negative environmental impact caused by technologies.

The Bank's institutional thinking
 The key concept underlying the Water Framework is institution. The failure to achieve good water management in many developing countries, the Bank claims, lies in 'low capacity and poorly developed institutions' (World Bank 2004, 5). For example, the Bank suggests that rules governing the allocation of water resources in many cases are not properly enforced because of 'a lack of equipment, knowledge and training; a lack of political and administrative leadership; and resistance from stakeholders who do not accept the legitimacy of the rules' (World Bank 2005, xvii). The nature of water resources as public goods also makes effective governance difficult since multiple users can lead to contentious issues of ownership. The temptation to free-ride is also strong (Mansuri & Rao 2003).

The solutions, the Bank proposes, are to get the institutional arrangements 'right' (World Bank 2004, 10). Clearly-defined organisational structures and explicit responsibilities for regulation and management of water are essential to build efficient regulatory and legal arrangements (Salman & Bradlow 2006). Water is re-defined as an economic good. Economic instruments,

such as user-pay principles, are deployed, aiming at 'improving allocation and enhancing quality' (World Bank 2004, 1).

According to Agrawal and Gibson (1999, 638), to manage resources effectively at the local level, requires 'the exercise of authority and control by local actors'. The five principles for authority-building are: first, making clear rules about the use, management and conservation of resources; second, implementing the rules that are generally-agreed; third, effective enforcement and monitoring of the rules, so that people know what is expected of them; fourth, promoting stakeholder participation to 'improve the acceptability of rules' (World Bank 2005, xvii); fifth, social and legal sanctions used to deter free-riding behaviour; and lastly, setting up mechanisms to resolve disputes during the interpretation and application of the rules (Salman & Bradlow 2006, 139). Such new institutional arrangements are claimed to be a low-cost mechanism since they encourage negotiation and re-adjustment and secure a self-enforcing form of governance (Mansuri & Rao 2003). Only by getting the institutions 'smart', the Bank claims, can poor countries achieve economic efficiency, social equity in access to water and ecological sustainability simultaneously.

The Bank's institutional thinking marks an important shift from the traditionally dominant supply-oriented modes of planning to the demand-side. It differs from neo-liberalism since it promotes the 'private-public' synergy and takes a more positive view on the role of the community. It considers that the state can play a proactive role in creating a favourable environment for water governance. It also recognises that regulations are necessary to address market failure in achieving equitable water delivery. Environmental sustainability and water efficiency, from the Bank's perspective, are not necessarily a trade-off. Through institutional design and providing appropriate incentives, individual and collective interests are aligned, and free-riding behaviour is deterred by the fear of legal and social sanctions (Hotimsky et al. 2006).

Limitations

The Water Framework, stressing good governance, gender representation and conflict resolution, is not without problems. The limitations of the Water Framework can be summarised in three aspects: inadequate understanding of human intentionality, under-estimating the costs of public participation, and over-optimism about institutional crafting.

Water interventions do not stand apart from human values and social contexts.

It is necessary to make power more explicit in the process of rule-making and institutional strengthening.

Inadequate understanding of human motivation
In the Water Framework, water users are assumed to be deliberately calculating based on the expected rate of return on investments, and to be consciously weighing up relative costs and benefits. The Bank states: 'self-interest was a powerful incentive for stakeholder involvement ... once stakeholders possessed sufficient knowledge, they were willing to sacrifice short-term profits for long-term benefits' (World Bank 2005, xviii). In their study on canal irrigation systems in India, Meinzen-Dick et al. (2002, 652) also suggest that individual farmers will not participate in collective action if the additional direct and indirect costs and the intangible transaction costs outweigh 'the benefits that the farmers value'. This assumption of individuals as calculating agents, largely based on economic rationality, is crucial to the understanding of the World Bank's water policies. While user-charge principles in the water sector are intended to generate a sense of ownership because water users are regarded as 'co-owners of both the infrastructure and the water' (Dinar 2004, 12), sanction-in-use is thought to increase the opportunity costs of free-riding behaviour.

In reality, however, human motivations are more complex than the Bank suggests. Despite limited resources, Uphoff and Wijayarathna (2000, 1877) find that poor households are willing to make physical and/or financial contributions to maintain, clean and repair canals. This is an act 'according to their respective and shared ways of thinking and acting'. Despite the acute threat of water shortage, Tod et al. (2003) find out that pastoralists, farmers and hunters in the Western India Rain-fed Farming Project have a strong feeling of water sharing because they think it is the 'right' way to share limited natural resources within communities.

Structural constraints and costs of participation

The Water Framework encourages negotiations between different users over the use of water. The dialogic process of making decisions and active involvement of the public are intended to open up possibilities for powerless people to access new space, resources and rules (Mansuri & Rao 2003). This perspective, though well-intended, tends to offer an over-simplistic account of agency by playing down the structural constraints which people face in the process of bargaining. This brings us to the need to examine how individuals act within structures and explore how structural forces influence the exercise of agency. Diverse and internally differentiated participants competing for the same social space, for instance, may put the

poor, the uneducated and the sick at a disadvantage in articulating their needs. Concerning the nature of negotiation, Berry (1993, 206) argues that 'culture and ideology are continually redefined through practice, which they also shape'.

In addition, community participation has different impact on the poor and the less-poor. It costs the poor considerable time, resources and energy, puts them under stress and creates competing demands. The extra burden hinders them from building new, and maintaining old, social networks. It is a deep worry that the current practice of extracting time and labour from the poor in the name of promoting sustainable water management can be exploitative, and that further undermines their well-being. Many NGOs have recognised the downside of participation and offered extra support and resources to poor people in order to address the issues of inclusion (Hickey and Mohan 2004).

Over-optimism about institutional crafting

The assumption of 'institutional crafting' in the Water Framework lies in the desirability and possibility of replacing existing ineffective institutions with new ones for specific purposes. Forming water users' groups, setting up water tariffs and using water permits are a few examples of institutions used to shape specific types of interactions and cooperation in order to achieve rapid and visible results.

Institutions, however, are more diverse and complex than the Bank suggests. For example, in their study in Tanzania, Cleaver and Frank (2005) challenge the single-purpose, manipulative and narrow view of institutions by exploring the diversity of institutional forms. While some institutions exhibit higher stability, others are more ad hoc, intermittent and fragile. In their case study of canal irrigation systems in India, Meinzen-Dick et al. (2002) suggest that relations of cooperation, such as canal cleaning and repair, happen spontaneously at certain periods of the seasons. They also report on several occasions that farmers organise agitations and demonstrations to press their demands and fund trips by a voluntary collection from farmers. These examples demonstrate that collective action can be ignited by a single few incidents, arranged on an ad hoc basis, and then die away when circumstances change. These examples highlight the dynamic and fractured nature of institutions (Mehta et al. 1999) and show the need to be flexible to respond to changing circumstances.

Re-drawing the Water Framework with a human face
The limitations of the Water Framework have impacted on its effectiveness in achieving good governance. This requires alternative thinking in order to re-design

it. Granovetter (1992) is the scholar who popularised the theory of social embeddedness. He suggests that research tends to fall into a false dichotomy: depicting agency as either under-socialised or over-socialised. The former indicates the indeterminate nature of human actions and the capacity of individuals for willed and voluntary action which is not governed by social structure. The latter, on the contrary, argues that individual actions are predetermined and constrained by social structures. It portrays agents as passive recipients who are totally incapable of resisting the structures that surround them. This theory, stressing the interactions between agency, institutions and structure, offers a better understanding of human motivations and power dynamics in water governance.

Wider motivation & relational reasoning of agency

Fine et al. (2003, 19) argue that the World Bank considers social relationships function as 'an investment strategy' without considering adequately the relational understanding of claims and obligations that are deeply enmeshed within social relations in communities. Joshi et al. (2003) draw on their research in the Himalayan foothills and show how local villagers rely on their kin, neighbours, friends and community members to provide mutual support. Formalising water rights may not have significant impact on poor people's lives if it is not backed up with good social relationships in their communities. House's research in Tanzania (2003) finds that as long as they can secure minimal access to water, poor people avoid taking any risks which have the potential to damage community harmony and long-term cooperation.

The Water Framework needs to consider a wider range of motivations that affect natural resource management. The sense of spiritual merit, for example, remains a force of motivation which guides the social reciprocal behaviour in many developing countries. In their analysis of how institutions work, Joshi et al. (2003, 2 & 5) talk to local villagers in Chuni in the Himalayan foothills. A villager tells them: 'Chuni is known as the village favoured by the Jal Devi, the water goddess, ... pollution by the Dalits will not be tolerated'. This remark underscores that traditional superstition and customs remain salient in guiding people's moral behaviour and instructing them regarding what can be and cannot be done. Religion and spiritual feelings are collective experiences with implications for resource management for common purposes.

Making power more explicit in the decision-making process

The World Bank water strategic report states clearly that 'the enforcement of water legislation and policies depends on the relevance of the regulations and on the administrative machinery required to ensure

compliance' (1994, 33). Rule enforcement is expected to evoke cooperative effort because 'people expect that this is how things should and will work in that community' (Uphoff & Wijayaratra 2000, 1877).

This perspective, however, tends to consider rule enforcement and role-making as politically-neutral. In reality, however, it is not clear whether rules and roles can be effectively externally imposed. Neither is it certain that uniform rule enforcement fits with the needs of different water users. Women, for example, have specific needs with respect to water and they have different water preferences from men. In order to cope with the demands of domestic consumption and productive use of water, women express 'a clear preference for irrigation at specific times of the day when they are not busy with other tasks such as cooking' (Zwarteveen 1997, 1338). Rule-based procedures on a non-discretionary basis may require individuals facing different social circumstances to bend the rules to obtain even minimal access to water. The inflexibility of rule enforcement can restrict informal access of the needy.

Setting up formal conflict resolution mechanisms, such as court and arbitration groups, may not necessarily be effective in settling disputes over the use

of water. This is because such external intervention in establishing new patterns of authority pays insufficient attention to existing informal rules that may already be in practice. The new, 'modern' structures of authority should not supersede, but work along with, the existing, 'customary' institutional arrangements. Villagers may also prefer to solve disputes outside the formal institutions since this 'saves them the hassle of writing letters and making presentations in public' (Zwarteveen 1997, 1343).

Acknowledging institutional complexity

The Bank takes an instrumental view of institutions, considering that institutions are 'useful in lowering transaction costs and making productive outcomes' (Uphoff & Wijayaratra 2000, 3). This functional approach to institutions is accused of playing down the messy processes of institutional building (Mehta et al. 1999). In their case study of canal irrigation systems in India, Meinzen-Dick et al. (2002) show that institutionalising participation in well-structured irrigation organisations does not always give local people a stronger and a more legitimate voice in management decisions. Instead, they emphasise that it is the interplay between formal and informal institutions that shapes people's negotiation about water.

In addition, the call for clear watershed management boundaries has led to concern about the complex social arrangements and livelihood networks of different water users and whether these are adequately considered. Cleaver (2002) is concerned that rigid boundaries and specifications risk constraining negotiation and compromise between individuals. 'Modern' boundaries do not necessarily match either 'traditional' village boundaries or biophysical ones. The permeable and fluctuating nature of boundaries allows people to draw on a variety of institutional channels to legitimise their access to resources, and to utilise multiple social networks and both 'traditional' and 'modern' institutions to make claims and secure access and rights.

Conclusions and policy recommendations

This article has highlighted the shortcomings of the Water Framework in its underlying 'strong emphasis on the primacy of the economic over social and environmental principles in water resources use' (Lemos and de Oliveira 2004, 2132). This resulted in an inadequate understanding of human intentionality, under-estimating the structural factors that constrain people's participation, and being over-optimistic about institutional crafting.

This article has argued that water interventions do not stand apart from human values and social

contexts. The Bank needs to humanise the Water Framework by having a deeper understanding of the history and culture of social relations and existing relations of cooperation that shape water participation. It is necessary to make power more explicit in the process of rule-making and institutional strengthening by examining the distribution of costs, benefits and risks, along lines of caste, class and ethnicity. Any 'pro-poor' water governance reforms should ensure that efficiency is achieved not at the expense of equity and legitimacy. The contextual knowledge of both formal and informal channels through which people obtain access to resources and exercise agency also matters. These factors call for greater reflexivity and flexibility in the process of developing and implementing water governance frameworks, so that water sustainability can be achieved without undermining the already-limited social networks and unstable livelihoods of the poor. Acknowledgement of social complexity is both a threat and an opportunity for water intervention, but failure to address these issues will only perpetuate the problems in existing water programmes and reforms, and the ultimate losers are the very people these programmes are meant to serve.

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Author

Sam Wong is a lecturer in the School of Earth and Environment at the University of Leeds, UK. His research interests lie in environmental governance, natural resource management, theorising institutions, and community participation. Funded by the British Academy, he is currently conducting fieldwork in Ghana and Burkina Faso, examining the institutional arrangements of the inter-boundary water committees in the Volta River Basin.

Justice and the Allocation of Benefits from Water

GEOFFREY J. SYME &
BLAIR E. NANCARROW

As the limitations to Australia's water resources are becoming better understood the issues relating to water allocation are becoming more complex and contested. There is a need to interpret them in the context of the social functions of water. There are two important questions that need to be resolved in this regard. What exactly are we allocating and by what framework can we judge the justice of this allocation. In examining the first issue we suggest that water resource negotiations need to move from a quantity (or gigitalitre) approach to one of understanding the benefits that alternative water allocation policies can bring. We define Water Benefits as the ways in which water promotes or diminishes wellbeing in all domains both utilitarian and non utilitarian. We acknowledge that the same quantity of water can deliver multiple benefits as it moves through a catchment which makes it a difficult commodity for economic analysis. In answering the second question we examine Australian studies of lay ethics and common priorities for alternative uses to establish a methodological approach for evaluating the fairness of alternative allocation policies. This can be applied at both local and regional levels. The article concludes by demonstrating that there is ample opportunity for combining the benefits assessment with the systematic application of social justice analysis within the public discussion needed for procedurally just water reform. In this way the negotiations and conflict management accompanying water reform can be more accountable and systematically implemented than is currently the case.

Introduction

While social perspectives on water resource management have been researched for some time, there have been recent expressions of concern that such insights have not been systematically incorporated or institutionalised within natural resource decision making (Dale, Taylor and Lane 2001; Selin and Pierskalla 2005). Even though the water management literature actively embraces the rhetoric of sustainable management of water resources which supposedly, at minimum, includes the triple bottom lines of social, economic and environmental analysis, there is relatively little emphasis on the social dimension. The major discourse appears to be between the economic imperative and the need for environmental conservation.

This has clearly been the case in Australia where there has been a substantial effort in water reform. In 1992 the Council of Australian Governments (COAG) commissioned a joint federal-state working group to report on an efficient and sustainable reform of the Australian water industry. Many aspects of this report were adopted by COAG in 1994 (Smith 1998, 271).

Essentially, the thrust of the recommendations was to achieve sustainability by using markets to move water to the uses of highest economic value while protecting the environment by limiting human consumptive use. The third 'social' bottom line (of the Triple Bottom Line, TBL) was, however, relatively de-emphasised in the early period of reform. The recommended changes for the economy and the environment were supposed to be delivered within 'social constraints'. These constraints were never defined although there was to be an emphasis on consultation and public education. Culture as an input to water resource policy has been relatively ignored. While other nations such as the USA and South Africa have been more explicit about what should be included in social accounting for such issues as water investment, the uptake of such accounts has been sporadic in practice (Delli Priscoli 2005).

This is of some concern for water management generally as reliance on conventional economic analysis may be difficult as water is not regarded as a typical economic good by all (e.g. see Batten 2007; Savenije 2002). To some extent water's economic value depends on where it is in the water cycle. This has been demonstrated by Hoekstra, Savenije and

Chapagain (2001) at the catchment scale in the context of the Zambezi River. From their viewpoint, if a cubic metre of water gives some kind of ecological benefit or some aspect of economic value, it needs to be viewed not only at that point in space and time, but in its previous stages in its journey through the catchment. That is, in economic terms the same drop of water has many, and often related values, and the total value of water depends on its context or place in the hydrological cycle.

Similar observations can be made from a social perspective. For example, the same drop of water can provide for both health and recreation and these social values can accumulate as the water moves down the catchment. Perhaps a more difficult problem than understanding what should be counted, is deciding on the distinction between what should be counted as economic and what should be counted as social in terms of value. While some human variables such as spirituality or ethics are clearly difficult to view through an economic lens and therefore can clearly be classified as 'social' or 'cultural' it can be contended that others are not. Some of these can and have been viewed through social or economic lenses at the same time. For example, the importance of health and recreation can be regarded slightly differently through social and economic traditions. The question then arises as to whether one counts both economic and social values separately or whether one value includes the other and therefore a single value will suffice. Ideally, since there will be overlaps or correlations, to avoid double counting it is important to find a way to include them in one integrated score. Thus social valuation does not become a separate issue and it is automatically integrated and included in an overall score. If each component is counted separately the difficult issue of how to combine them to come to some meaningful overall assessment then needs to be addressed. This problem is, of course, the basis of the difficulties found in incorporating social assessment in increasingly difficult allocation decisions.

In what follows, we begin to address this problem by examining allocation problems. We do this by moving from a quantitative or gigalitre approach into one in which the overall perceived benefits from access to water (incorporating social, environmental and economic components) are the focus of allocation decisions. We contend that the most important outcome of water resources management for people is the subjective overall benefit that they derive from it (Moran et

al. 2004; Syme et al. 2008). That is, it is the human aspirations in regard to the social benefits, perceived environmental goals, and required economic outcomes that are the key elements of sustainable water reform. A water benefit is not the quantity of water in itself. It is the subjective benefit that is derived from drinking it in terms of refreshment, or the feeling of enjoyment of the amenity of a vase of flowers. We contend that some of these benefits can be measured in dollar terms but some cannot (Ackerman and Heinzerling 2004). Many of these non-economic commodities such as culture or spirituality are firmly in the social category. Nevertheless, both economic and social benefits are important and both need to be included with environmental benefits in any evaluative analysis in the same metric if the success of our water management is to be understood.

Allocating Water Benefits from Subjective Scaling

While money is often the obvious common metric, it is our view that not everything can be measured in these terms. Another simple metric common to psychological measurement is that of how relatively satisfied people feel with alternative ways of allocating water and the alternative benefits that this allocation implies. For this reason a Water Benefits Accounting and Assessment (WBAA) methodology has been established (Moran et al. 2004; McIntyre et al. 2006) that attempts to establish and apply such a metric. Basically, the methodology is based on a hierarchical multi-attribute utility framework (Michaud and Apostolakis 2006). In short, it assesses individuals' attitudes towards the importance of a variety of benefits the community feels

it can gain from a particular body of water and the degree to which people feel they are achieving those benefits under current conditions. People are then asked the same questions in regard to what they feel would happen to the achievement of each benefit if a particular policy were adopted. In this way, the change in score will measure the overall potential increase in benefits if alternative policies or plans were adopted (see McIntyre et al. 2006, 22). Ideally also the 'do nothing' case should be investigated to accurately assess the value of any policy. That is, if no plan or policy was introduced what would be the effects on the delivery of benefits over time due to current pressures on the water resource. Is there a stable condition or are things likely to improve or deteriorate if nothing is done?

More particularly, in the case of an adopted plan and limited resources to implement it, a benefits map can be developed which will show the decision makers and the community which priority actions can be

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taken to maximise the benefits outcome from the implementation of the plan. This benefits plan can provide very useful input into the debate about priorities for implementation. This debate will also, of course, have to consider issues such as the resources, skills, and state of knowledge available to implement particular activities. WBAA, including the benefits map, has been recently applied in two cases of water resources management. The first related to the potential benefits of the introduction of a desalination plant in Katanning in Western Australia to alleviate soil salinity problems and provide additional water resources for the town. The second study examined the benefits associated with the implementation of the Lake Milwala Water Quality Plan on the border of Victoria and New South Wales. Prior to the implementation of the latter plan it had been the subject of severe community controversy and the benefits map provided an agreed template upon which to move forward.

Another advantage of taking this approach is that because interest groups and demographic and locality information is collected at the time of the interviews to identify the benefits, WBAA is capable of demonstrating which parts of the community will perceive different benefits from water plans and for what reasons. It will also do the opposite in being able to define negative impacts on some sectors of the delivery of benefits to particular groups. Potential conflicts about fairness and equity issues can consequently be collected in an open and quantitative way. Negotiations and conflict resolution can then be appropriately targeted rather than the vague and often heated arguments about gigalitres of water or need for water quality targets. But procedural justice would demand that we have a negotiation procedure that is transparent and open to all over time so that the values behind benefits allocation are as evident as the benefits that are bestowed. Procedural justice demands that such key variables as 'voice' (or being heard), good communication between all parties, and an adequate and visible representation of all values and viewpoints are provided during decision making. The WBAA approach provides an output that can provide an important and understandable evaluation tool in this regard.

Measuring and Evaluating Justice

In approaching empirical methods for dealing with the incorporation of justice in the allocation of benefits, an obvious starting point is the social psychologically

based social justice research literature. This literature centres on ideas of equity, procedural justice and fairness among other concepts. Although this research has been applied most often to distribution of human

resources, it is equally pertinent to the allocation of benefits from water. For the planner it also has the advantage that it often uses reliable and valid psychological scales to provide a quantitative indication of relatively how much 'justice' has been dispensed.

Equity defines the principles that should underpin the distributive

allocation of resources. Generally speaking it has been shown that there are two components that are used when we make judgments in relation to equity (e.g. Rasinski 1987). These have been termed equality (everyone should have equal opportunity for access to a resource) and proportionality (people should be allocated resources in response to the effort that they have made to gain access). Both dimensions are used in each judgment with differing emphases on each depending on the issue at hand. Procedural justice relates to the perceived justice in the decision making process itself. There are a number of criteria or components that define procedural justice (see Tyler and Blader 2001; Lawrence et al. 1997) such as representativeness of public interests included in the decision making process, planning activities that are easy to participate in, provision of sufficient and clear information to encourage participation, voice (or the opportunity to influence the decision), personal respect (sometimes called interactional justice) and so on.

Syme, Nancarrow and McCreddin (1999) have also shown that in addition to the two components of equity the public have a wide range of lay ethics or philosophies that they can bring to bear when deciding whether an allocation of water is fair or not. The fairness heuristic is said to include both procedural and distributive justice components. In their studies these lay ethics associated with distributive justice were measured at two levels. Those ethics relevant to specific water allocation decisions, and those overarching principles that need to be included when thinking of the overall outcomes of water allocation in general were measured at the same time. Both were included in the evaluation of regional water allocations decisions. In short, the community can provide ethical criteria against which national policies and individual localised decisions can be empirically assessed.

It is interesting that the range of principles used by the general public is similar in many ways to the formal

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philosophies espoused over the years in relation to resource allocation (Wenz 1988). Any decision can then be crafted to incorporate as many of the basic principles of fairness that are required to represent as many of the community's views on fairness as feasible. Syme et al. (1999) show how most in the community could have at least some of their fairness views included in a potential decision on reallocating groundwater in a situation in New South Wales where significant cuts in allocation were required. Access by farmers to the fairness judgments of other community members exposed to the outcomes of the re-allocation, and their views of the specific means to address them, can provide a constructive basis on which to design the associated public involvement in decision making.

Combining the Approaches

From the above it can be seen that we now have the basic tools to reallocate water in a socially accountable manner. Firstly the potential benefits of the resource can be defined. Simple analyses can be conducted to demonstrate how water can be managed for overall wellbeing. The current distribution of these benefits can be established and the effects on that distribution because of changes in water management can be identified quantitatively. 'Winners' and 'losers' can be identified using this method and potential conflicts better understood. If there are alternative policies for re-allocation or water planning generally, the relative fairness of the proposed actions can be examined and changed if necessary to more fairly reflect the fairness principles espoused by the public. Public discussion and planning can then be interpreted in an accessible way to ensure that the social component of sustainable water management is met in a way that it is not currently. That is, the effects of decisions on overall community wellbeing are demonstrated by WBAA and clarity and resolution of the justice issues associated with sharing are facilitated by the fairness analysis. By applying both benefits and fairness methodologies, conflict management can be enhanced in the short and long term. Regardless of the outcomes of a particular decision, longitudinal analyses over time can improve the inclusion of a wider range of community groups. The negative impacts of any particular allocation on a specific group can be compensated or offset in ongoing decisions for other water bodies.

Australian water reform has not to this point systematically included measures of wellbeing and justice which has left the social bottom line largely ignored. By taking benefits and justice considerations seriously and including them in a systematic empirical and theoretically consistent way this problem can be significantly alleviated.

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Authors

Geoffrey J. Syme, Centre for Planning, Edith Cowan University
Blair E. Nancarrow, CSIRO, Land and Water.

The authors have a combined experience of more than 50 years in the research of social aspects of water resources management in both rural and urban spheres throughout Australia. They were founding members of a national centre in CSIRO to bring specialist expertise to research in this area. Geoff Syme is now a Professor for Planning at Edith Cowan University in Western Australia.

The Innate Gypsy

I've been gathering driftwood and tumbleweeds
An attempt to squirrel away an untamable traveler
And on second thought there are the squirrels in the trees
Out beyond the tropical vines of a blue Buddha café

I'm searching for the romantic to adorn my own back yard
Flaming patio torches and rusty tin can lanterns
Lined up in a testament to Australian outback culture
Even the sweet scents on the air beckon me to stay a while

Yet world news broadcasts speak too often of Spice Islands
And as the sea breeze snuffs my carefully placed torches and lanterns
I'm left in the dark contemplating across what distant shores
These driftwoods have drifted and tumbleweeds have swept

Melanie Busato
Elliot Heads Qld

Rules for the Magic Pudding: Managing Lockyer Groundwater

CLAUDIA BALDWIN

Groundwater resources are often referred to as the 'The Magic Pudding' after Norman Lindsay's Australian bush tale, because of its apparent never-ending availability. As a common pool resource however, without rules to constrain use of groundwater, all users will eventually be affected by diminished flows. This research refers to the case of the Lockyer valley west of Brisbane where inadequate regulation of groundwater extraction for agriculture has led to inequitable and decreased availability and use. As part of the broader Queensland government water planning process, Lockyer irrigators have proposed a system of co-management to meet a number of their values for procedural and distributional fairness, triple bottom line sustainability, and stewardship of the resource while at the same time meeting basic needs for security, self-sufficiency, and sense of belonging. Just as rules were needed to manage the unruly Magic Pudding, protect it from thieves and to maintain social norms, a set of rules for self-governance of common pool resources developed by Ostrom can be applied to the Lockyer to maintain viability, long-term sustainable use, and a sense of community.

Introduction: Groundwater as a 'Magic Pudding'

"You'll enjoy this Puddin'," said Bill, handing him a large slice. "This is a very rare Puddin"...the penguin leaned across to Bunyip Bluegum and said a low voice, "It's a Magic Puddin."

"Observe the rules, Bill," said Sam hurriedly...
"To Jeredelum with the rules", shouted Bill..."

Bunyip Bluegum: "To have one's noblest feelings outraged by reposing a too great trust in unworthy people, is to end by regarding all humanity with an equal suspicion" (Lindsay 1918, 21, 48, 98).

The metaphor of 'The Magic Pudding' is from Australian Norman Lindsay's 1918 story about a pudding that never ran out and the 'rules' and strategies that were devised to protect the pudding from thieves. The Magic Pudding is analogous to the situation in the Lockyer valley, 100 km west of Brisbane in Queensland, Australia. Until recently groundwater was widely considered a secure source for horticulture irrigation in the Valley, however water resources have been increasingly stressed as a result of high extraction of water by users, minimal regulation of take, and little replenishment of the aquifer due to drought. For more than 20 years farmers have been treating groundwater resources like the everflowing magic pudding. Lindsay's

pudding is 'treacherous' – like groundwater resources, it is unpredictable. High levels of groundwater extraction in upstream areas have reduced both surface water flow and groundwater recharge in downstream areas. Because of high surface water and groundwater interconnectivity in the alluvial aquifers, baseflow to the creeks has reduced over the past 30 years with groundwater levels falling below the creek bed (NRM 2005) resulting in no visible surface flow for most of the year. Decreasing availability of water has had a substantial economic impact on horticultural irrigators in this farming community.

Like many folk stories about limitless wishes, there is a hidden trap or punishment for being too greedy: the magical gift must not be abused. As Bunyip Bluegum warns, there are broader social consequences if the rules are abused by a few and trust is no more. Historically, government regulation of water use in the Central Lockyer only has led to substantial local discontent. Supplementation of reserves through centralised irrigation infrastructure works (storages and pipelines) in the Central and Lower Lockyer has proven ineffective resulting in little community trust in any future government-derived solution.

In the Lockyer an opportunity to address the situation arose in 2005 in the form of the Queensland government's Moreton Water Resource Planning (MWRP) process, which included the Lockyer.

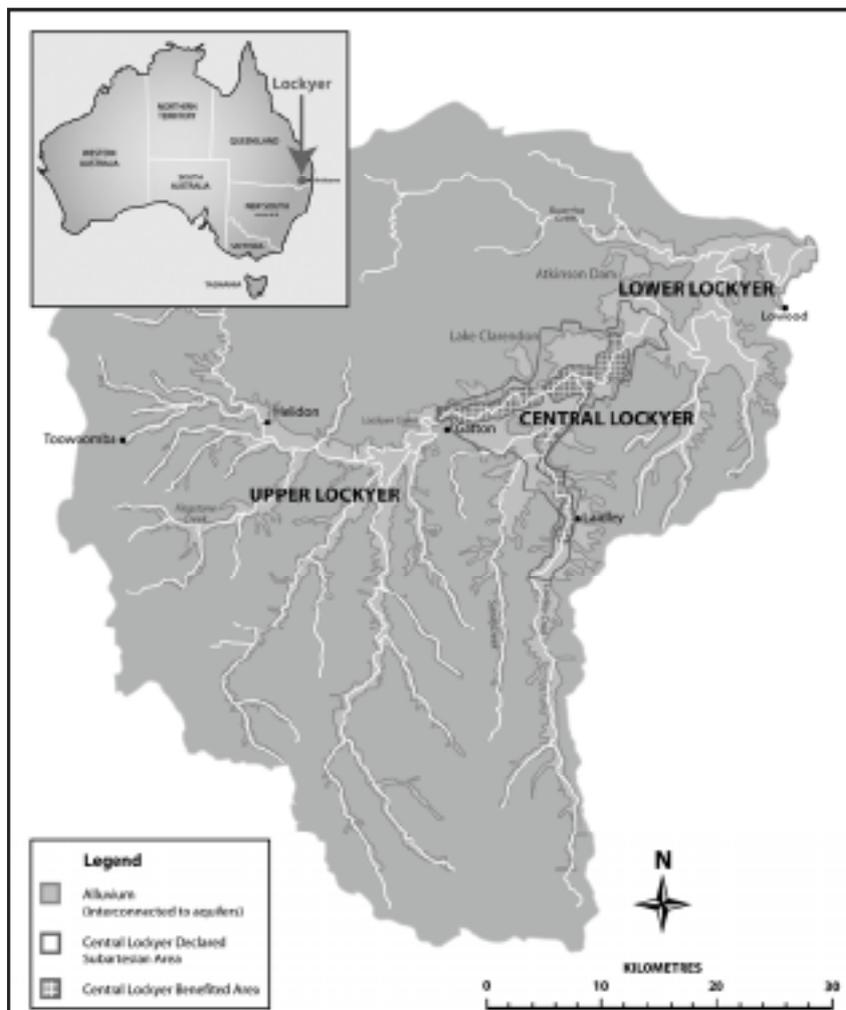


Figure 1: The Lockyer Valley illustrating Upper, Central and Lower Lockyer and regulated areas

Landholders had been making ad-hoc adjustments in their practices for some time, but did not consider managing water cooperatively on a catchment (i.e. watershed) basis until they suffered the effects of a drought and encountered the “threat” of additional regulation by government. The leadership required and the rules devised to protect the pudding required cooperation among the pudding owners. Likewise irrigators understood that appropriate rules, cooperation and trust would be needed to minimise threats to economic viability and community well-being in the Lockyer. In response to these threats the Lockyer Water Users Forum (LWUF – a coalition of 17 sub-catchment irrigator groups) proposed a collaborative approach – co-management – to aim for water resource sustainability through the MWRP process. The effectiveness of this approach required a broad understanding of the values underpinning economic viability and community well-being.

Identifying Values through Photovoice Research

This article reports on research over the period 2005-2007 about diverse values about sustainability within the community and the culture of independence that Lockyer irrigators needed to confront in order

to resolve conflicts and respond effectively to water reforms. Conflict often relates to deep human needs and values (Tillett 1991). Understanding values thus improves the likelihood of stakeholders having their views reflected in potential solutions and finding a mutually satisfactory outcome (Hassan 2001; Ross et al. 2002). Qualitative research methods enable discovery of rules that are considered legitimate by those involved (Trottier 2001). A regime that brings local communities into management and decision making would reduce disparities and achieve better outcomes for all.

In 2005, 33 stakeholders (irrigators, landcare/catchment management, and government) involved in Lockyer water issues participated in photovoice interviews¹ in which photos taken by participants were used to elicit values and interests about water. The interview analysis revealed the differences in values and interests of various stakeholders that needed to be taken into account to negotiate an agreement acceptable to two major players, the LWUF and Queensland government. Strong values about sustainable water use and fairness were evident:

- Irrigator views about how to achieve the goal

of sustainable water use ranged from limiting extraction of water within the bounds of the aquifer to adopting more efficient methods of water use. Government and catchment-care participants on the other hand, indicated that sustainable water use also included returning environmental flows to the creek to increase surface water flows over time.

- Upper catchment irrigators were less positive about water being allocated for the public good or for the benefit of downstream users. Strong fairness values were exhibited by those irrigators most negatively affected by existing inequitable regulations and lack of water (i.e. those downstream; distributional fairness). However all participants indicated community should be involved in decision-making (ie. procedural fairness).

In addition, different styles of decision-making were evident between irrigators and government participants. There was a strong need for independence and self-sufficiency among irrigators yet their business was highly integrated with family, community, and the land. Sense of community, sense of place and land stewardship values were important. Government decision-making was more collaborative within and between agencies but agency officers were more detached from the outcomes of their water management decisions – they did not need to live with them on a daily basis and their income, family, homes and community were not directly affected.

Lack of information about water planning and data about aquifer behaviour was considered critical. LWUF needed to understand implications of the MWRP and how they could influence it. The lack of hard data about the behaviour of the aquifer and interconnectivity with surface water caused disagreements among irrigators and with government on how groundwater should best be managed. All parties recognised that better information was needed on the relationship between extraction and aquifer levels.

LWUF proposed a system of 'self-management' later renamed 'co-management' as a way of engaging irrigators in managing the resource collaboratively with government. Key progress in consolidating irrigators' views occurred at an LWUF workshop in April 2006, at which the photos taken by irrigators were shared in small groups and agreement was sought around topics such as sustainable water management and

self-management. A major outcome of the workshop was the agreement among irrigators on an objective of self-management: 'Water users manage a just balance between effective and efficient use of the water resource for the community and environmental benefit' (Baldwin 2006). This objective captured irrigators' fairness, environmental, economic and social sustainability (triple bottom line) values. This was an important milestone that recognised the diversity of opinions within the group about environmental constraints and regulation, as well as the need to present a common voice when negotiating with government on the MWRP.

Rules that Acknowledge Values

When private benefit is considered in isolation to the extent that it ignores impacts on others or the environment, the term 'self-interest' is often used. Hardin's (1968) 'tragedy of the commons' concluded that, in relation to common-pool resources such as water, individual self-interest would prevail over cooperation unless constrained by some means. Groundwater is an example of a common-pool resource where there is 'low excludability of users' (beneficiaries are difficult to exclude) and 'high subtractability of benefits' (i.e. if used by one, then it is difficult for others to use) (Sarker et al. in press). In such 'social dilemmas' each person may act selfishly to maximise his or her own personal gain, but if all members operate in this way then eventually outcomes for all are reduced and everyone is disadvantaged. High levels of use can lead to degradation of the whole system and destruction of the resource (Van Vugt and Samuelson 1999). There is however substantial evidence that government, the community, and an awareness of impacts play a role in moderating

the predominance of individual self-interest. In fact, more than 30 factors have been identified as affecting successful management of commons in the collective interest (Agrawal 2003).

Ostrom (1992, 2005) argued that with a set of 'rules' and the support of governments, stakeholders can rise above their individual needs. Syme et al. (1999) found that the community sees a need for 'rules or guidelines' developed by stakeholders with government responsible for enforcing rules, in order to handle self-interest. A recent attitudinal survey of Southeast Queensland water use confirmed a high level of support (70%) for community management within government guidelines and a low level of trust of either self-regulation or regulation solely by government (Baldwin 2007). Accordingly, while there is a need

For more than 20 years farmers
have been treating groundwater
resources like the everflowing
magic pudding.

for community involvement, governments need to be responsible for policy, monitoring and enforcing rules made by the community to protect everyone's interests. Just as government plays a role in moderating self-interest, community values also have an effect. Natural resource management is a social dilemma of conflict between the short-term self-interest of users and the long-term collective interest of the user community. Shared knowledge and values are integral to concepts of community. Self-interest can be tempered by pro-social motivations such as fairness and efficiency when making water-allocation decisions (Syme et al. 1999). Such concepts are relatively complex. People can, at the same time, believe in equal opportunity for accessing water yet support rewards for those who have already invested in developing the resource. Solutions are related to the right mix of fairness ingredients (Syme et al. 1999), or in consensus-building terms, the right 'package' (Susskind and Cruikshank 2006). An alternative community-based model can foster self-restraint among users provided they feel attached to their community (Van Vugt 2002) and there is a sense of reciprocity (Marshall 2004). Managing a connective resource such as water should be through local, collective and inclusive methods that support sense of belonging, rather than distant alienating centralised institutions (Strang 2004).

Syme et al. (1999) also argued that people will modify personal demands if they believe there is adequate knowledge about their environment, and if they understand that management practices will alleviate the problem. Where there is high uncertainty, people tend to overestimate the robustness of the environment and not restrict their activities. Thus integrated mechanisms to 'distribute' credible data are vital for users to participate meaningfully in the process.

Water management decisions might also be motivated by basic human needs for independence and 'control over one's life' (Fisher et al. 1991). The norm of self-sufficiency 'implies that people should take care of themselves' (Hewstone et al. 2008). While there is a legitimate private economic benefit from water in making a living from the land, self-interest can predominate when faced with possible negative impacts from reduction of water use. Self-interest can be moderated by an overarching government framework, an ethic and understanding of environmental sustainability, sense of community, independence from excessive regulation, and involvement of the community in developing the

Values-based rules would go a long way towards achieving long-term sustainable resource use, economic viability, fairness, and a sense of community.

rules. Thus the onus is on parties to the Lockyer co-management concept to embrace appropriate and agreed management rules.

Rules for the Lockyer Valley Magic Pudding

As a result of negotiations with LWUF, the Queensland government agreed to 'investigate user-administered approaches to groundwater management' which might lead to a 'self-management rules framework with an underlying base level of regulatory management' (NRM 2005, 35). The MWRP released in July 2006 identified the next phase of water planning, the Resource Operation Plan (ROP), as the vehicle for incorporating negotiated rules on co-management. Largely this was a win-win solution. Because of insufficient data on water use in the Lockyer for making detailed decisions about ROP

allocations, co-management was attractive to the Department of Natural Resources and Water (NRW). It would allow for adaptive management as information became available and would assist irrigators to take responsibility for their regulated use. Irrigators too, recognised that it was in their best interest to have well-managed water resources. Transparent co-management incorporating direct feedback on use and aquifer levels through metering, monitoring across the valley, and more informed sub-catchment decision-making, would alleviate concerns of inequity. Co-management could provide a framework for their input, replacing insecurity about unproven regulations with a process over which they had more control. Such a process though is dependent on NRW being convinced that co-management will achieve MWRP objectives and Queensland's commitments under the Intergovernmental Agreement on the National Water Initiative (COA 2004), relying on the LWUF to convince NRW that it would be a legitimate and accountable group to lead the process.

Design principles and rules for self-governing institutions of common pool resources, developed through examination of hundreds of cases of successful self-governing institutions (Ostrom 1992, 2005), could be applied in the Lockyer to ensure success of the co-management proposal (Sarker et al. in press). These rules can be used to moderate the short-term self-interest of users with the long-term collective interest of the user community, providing the sense of control over destiny sought by landholders and accountability sought by government. The LWUF proposal built in certain governance attributes recommended in Ostrom's (1992) rules for self-governance of common pool resources, such as monitoring, enforcement

and conflict resolution, recognising for example, that agreement on a safe yield for the aquifer is likely to be a major issue for sub-catchment negotiations.

Without going into detail about Ostrom et al.'s (1992, 2005) eight design principles, the co-management proposal accepted by government is either inconsistent with or not addressing four of the principles. There are two areas where the LWUF proposed co-management concept is consistent with Ostrom's principles but not accepted by government. First, an initial 'Ostrom' principle is that the area of the groundwater system and access rights are clearly defined. According to the MWRP, the Central Lockyer which is already regulated will be excluded from the area subject to co-management. There is thus a risk of continuing inequity and inconsistent regulation within the same system. Secondly, the fourth 'Ostrom' principle is that monitors should be accountable to the users or are the users themselves. LWUF proposed owning water meters with an independent auditor to monitor resource conditions, irrigator behaviours and compliance. NRW however insisted on compliance with its State-wide Metering Policy which mandates government ownership and maintenance of meters and control of monitoring. This challenges the irrigators' desire for self-sufficiency and independence and is contrary to the thinking that meters give users a sense of control and accountability over extraction patterns, with adaptation of use accordingly. Such structural interventions may not succeed if they are perceived as costly, unfair and infringing on individual freedom (Van Vugt and Samuelson 1999).

In addition, there are two unaddressed principles. There has been no discussion between LWUF and NRW in relation to the second principle which relates to proportional equivalence between benefits and costs, i.e. water extraction should be costed proportional to benefits from use. While charges for metering have been discussed, user charges for the amount of water taken or administration of the co-management system have not. Water pricing can encourage efficiencies, but irrigators were also concerned that paying for water would place unnecessary strain on those farmers already affected by drought and divert funds from introducing more efficient irrigation equipment. Water pricing was seen as a threat to irrigators' economic well-being and to long-term community sustainability.

Furthermore another 'Ostrom' principle (the third) involves extraction rules being negotiated within sub-

catchment management area groups – 'collective-choice arrangements', to tailor rules to local circumstances and devise rules that are considered fair by participants. This is a huge unknown in relation to the Lockyer proposal. Until co-management details are agreed between NRW and LWUF, the extent of irrigator control or input in negotiations about water allocation and management may simply be rhetoric.

Co-management is intended to put responsibility for sub-catchment management of groundwater in the hands of irrigators, with government support and over-arching regulation through the ROP yet to be developed. There are contentious value-based issues yet to be resolved. It challenges NRW to ease control. LWUF is still establishing itself as a respected peak body supported by all irrigators. Unless there is adequate organisational support for LWUF to enable equitable negotiations within the Valley and with NRW, co-management is likely to be token.

Groundwater in the Lockyer was once thought to be bounteous like the Magic Pudding. Just as rules were needed to manage the 'treacherous' Magic Pudding, protecting it from thieves, and maintaining social norms, Ostrom's rules for self-governance of common pool resources

Strong fairness values were exhibited by those irrigators most negatively affected by existing inequitable regulations and lack of *water*.

may be suitably adapted for Lockyer co-management. These rules illustrate the tensions about how the 'Pudding' – groundwater – should be managed. Values-based rules would go a long way towards achieving long-term sustainable resource use, economic viability, fairness, and a sense of community – core values of the Lockyer irrigation community. In the absence of value-based rules Lockyer irrigators are placed in a 'treacherous' position where the benefits of the magic pudding are put at risk for all.

(Endnote)

1 The methodology is explained in greater detail in Baldwin, C and H Ross (2006) and Baldwin, C. (under review).

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Author

Claudia Baldwin is a Lecturer in Regional and Urban Planning at the University of Sunshine Coast, Australia. Her research has focused on improving water allocation planning through addressing values and interests of stakeholders using a consensus-based approach; and collaborative natural resource management and governance in planning.

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Flash Cards

Always throwing you a scare.
 Have beliefs they can never pinpoint.
 Consider the world kissing kin.
 Age into looking like
 old goods up for a rummage sale.

...other side of the coin...

Right about everything.
 Keep the ol'wing ready to throw it.
 Consider affection
 in public unmentionable.
 Age into looking like old lefties.

Philip A. Waterhouse
 Sonoma, California

Social Licence to Irrigate: The Boundary Problem

MARK L. SHEPHEARD AND
PAUL V. MARTIN

The ability of an irrigation business to use water depends on having a property right to access water, but exercise of this right also depends on government decisions to allocate water or invest in water infrastructure. While this secure property right may be necessary, it is far from sufficient. A social licence is also needed.

It has been suggested that a legal 'duty of care', or triple bottom line reporting will protect that social licence. This article suggests that such rhetoric masks a fundamental management problem of the lack of boundaries to social accountability. Managers face a conflict between their legal duties to manage the enterprise in the (economic) interests of its owners and the vaguely defined expectation that they will meet unspecified social obligations.

Introduction

Social licence is a voluntary unwritten consent that a community attaches to resource use. The importance of social licence to farming is seen in processes like the re-negotiation of water sharing, or the continuance of self-management arrangements. More dramatic examples exist when a community punishes actions that are legal but violate community expectations (such as in the recent conflicts about mulesing).

A social licence depends on satisfying social expectations (Gunningham, Kagan, & Thornton 2002; Lynch-Wood & Williamson 2007). Expectations are not constrained by legal rights or obligations (Lynch-Wood & Williamson 2007) and do not necessarily respect private ownership. Ownership of a legal right to resources does not guarantee community support for the exercise of that right. Rather social licence depends on law, beliefs, relationships, administration and expectations. (Hone & Fraser 2004; Lyons & Davies 2007; Macintosh & Denniss 2004; National Farmers 2004; Raff 2003; Raff & Cooke 2005; Robertson 2003; Shine 2004; Spencer 2005; WWF 2005). Many aspects are inherently political, and not necessarily 'logical' from the point of view of an irrigation business manager. Property is about the rules governing access to and control of resources, that exists as a relationship between people (the giver and receiver of the access right) (Stallworthy 2002 see chapter 3, 77-78). A water entitlement as a form of property involves two property rights. One is the (tradable) licence to extract some percentage of the available water, with availability being

administratively determined. The second is the use right (usufruct) once that water is available. These rights are continuously adjusted through mixed political, legal and administrative processes. These include negotiation of water sharing plans and decisions about annual allocations, the development of laws to determine the priority of water access, and public investment in water infrastructure. These processes determine the conditions for trading, use and the availability of water. Many changes in access to water occur with limited regard to the apparent security (or property right) that a tradable entitlement to water suggests.

It is normal for property rights to be subject to constraint. Land zoning, natural resource management legislation, and industry or supply chain codes of practice are all formal expressions of social expectations of behaviour.

Social responsibility debates are important to irrigation businesses (Gunningham 2004). Water reform has changed how the water resource is shared, making the tradeoffs between the environment, urban areas and farming more apparent. Water enterprises are continuously engaged in a negotiation with society. Justification of the social licence is continuously required to succeed in these negotiations, suggesting that in the longer term the exercise of private property interests is materially constrained by accountability to the community.

Accountability and Boundaries of Responsibility
 Accountability exists in three forms (Figure 1). Compliance with formal legal responsibilities is the first. These formal requirements may be daunting, but they are generally well defined. There is little choice but to comply. The second form is the managerial responsibility of governance. Examples of managerial responsibility are a duty to manage honestly and in the interest of shareholders or the common law duty not to harm others through negligence. A business manager has little discretion other than to satisfy these requirements.

The third form of accountability is different. It is social accountability, reflecting expectations that are neither constant nor defined by any legal instrument. For example, the standards expected of a business for animal welfare, the environment, or treatment of people, are constantly changing. There are always groups whose demands go beyond contemporary practice. It is hard for the manager to say clearly where the boundaries of their social responsibilities lie.

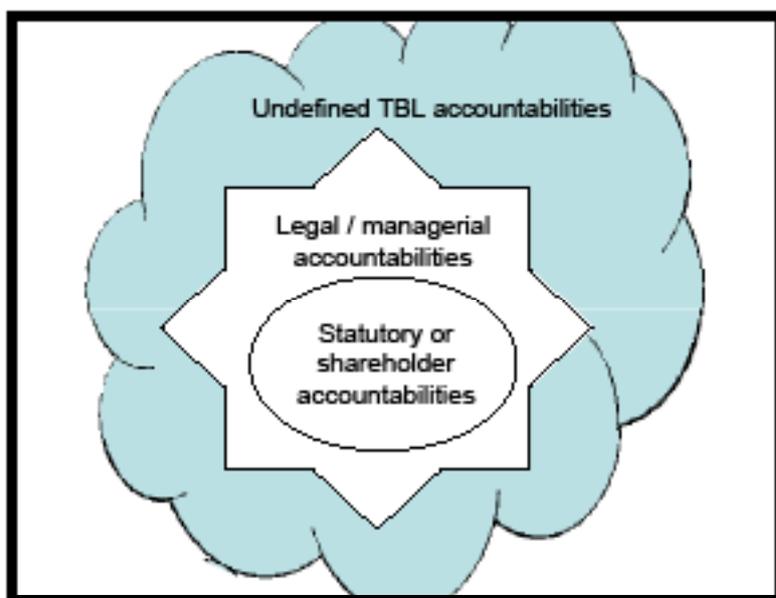


Figure 1: Three levels of accountability

Society expects that any business will not cause avoidable harm, will honour stakeholder rights and adhere to the ordinary canons of justice (Bowie 1991). Specifying such social expectations is difficult. This is because of their diversity, with the potential to cover many economic, political, ecological, social, and/or cultural concerns over the consequences of enterprise or management behaviour (Epstein 1987). Vague informal expectations of responsible behaviour are often couched as arguments about environmental stewardship and ecologically sustainable development (McKay 2006; Warhurst 2005). They do not provide

guidance at a level of precision required to design reporting systems, develop investment programs and train staff in response to social concerns.

A process to objectively define the boundaries of accountability is required to focus investment where accountability truly lies. This ought to provide a basis for genuine dialogue with stakeholders, an ability to guide the development of expertise and encourage management action that is disciplined by clear accountability. Without such clarity, water businesses face significant practical problems. These include investment of resources in pursuit of fruitless causes, naïve awareness about the relevant social and environmental issues, a weak basis for working relationships and reaction without the benefit of strategy.

Defining Managerial Boundaries of Responsibility
 Integrating corporate responsibility with business strategy requires that managers decide the social responsibilities, management goals and actions that they are prepared to embrace (Brooks 2005). Clarity about boundaries of responsibility will not be found merely by responding to the ever-shifting expectations of society. There are four logical approaches to help a business define its social responsibilities. These are: reference to norms of behaviour within society; dialogue with community partners; considering legitimacy and focussing on trust; or some mixture of these interlocking concepts. Table 1 outlines these.

The Boundary Problems

A legal duty of care and triple bottom line reporting are two approaches proposed to assist with defence of the social licence to irrigate. Duty of care is a process from the common law, used to draw boundaries of responsibility for harms inflicted on others (Cane 2002). The process has two stages. The first determines if one person owes another a duty to prevent certain harms (Fleming 1998). If a duty exists then specific behaviour is judged against the duty to determine liability. Triple bottom line reporting is derived from accounting and performance management in business. Reporting performance against three categories (the triple bottom line) is expected to provide transparency and through public scrutiny provide an impetus for improved performance.

Each of these approaches has limitations in providing clarity about undefined social accountability as neither reflects all the key dimensions (identified in Table 1 above) of a boundary setting framework. Duty of care emphasises norms of behaviour, while triple bottom line reporting is more focussed on alliance building with the community. Both reflect aspects of legitimacy and trust (Table 2).

Table 1: Boundary setting frameworks

Dimension	Description
Norms of Behaviour	Social 'norms' influence the expectations of industry behaviour (Hutter 2006). Morals, ethics and values help define what the accepted norms are (Bowen 1991; Carroll 1991; Epstein 1987; Moir 2001). Morals refer to personal standards of behaviour and distinguishing between right and wrong. Ethics is broader including formal and informal rules of conduct, while values are beliefs about what is valuable or important (Pearsall & Trumble 2001). Converting expectations to practice requires some correlation between the social norms, business culture and operating rules (Epstein 1987). This is more likely when there is a mechanism to hold decision-makers accountable for their performance against the norms (Bowen 1994).
Alliance Building	Alliance with stakeholders requires relationships that are significant to business performance (Longstaff 2000). Significance is based on power, legitimacy and urgency with the ultimate effect of identifying to whom responsibility is owed (Carroll 1991; Moir 2001). Alliance building requires awareness of joint interests and willingness to further those interests (Brooks 2005). This involves accepting that working together has its limits, relationships will not always be harmonious and that learning from each other is essential (Brooks 2005).
Legitimacy	Legitimacy arises from leadership and management, when a genuine dialogue with stakeholders is maintained reflecting genuine intent (Muller & Siebenhauer 2007). Strategic leadership is important to generate a conception of responsible behaviour that is evident throughout the business (Cramer 2005; Lantos 2001; Steiner 2006). Legitimacy helps to ensure a focus on what is expected under the social licence rather than trying to address an open-ended range of socio-economic and environmental ills.
Social Trust	Social trust is a key consideration in the maintenance of social licence (Australian Bureau of Statistics 2001; Davidin et al. 2004; Fukuyama 1995; Siegrist et al. 2005; Weber & Hennebloemp, 2005). During resource access conflicts partisan arguments are weighed in the light of what is known about the social performance of the sector. Perceived failures of responsibility undermine credibility relative to other interest groups.

Table 2: The emphases of accountability approaches

Attributes of Responsibility	Duty of Care	Triple Bottom Line Reporting
Norms of behaviour	Yes	No
Alliance building	No	Yes
Legitimacy	Yes	Yes
Trust	Yes	Yes

The Boundaries Problem in Duty of Care
 Duty of care has been promoted to improve clarity about social boundaries of responsibility (Gunningham 2004). This has strong political appeal from various quarters. Duty of care is expected to clarify the responsibilities of access to resources, provide regulatory targets for sustainable agriculture, and apportion costs for public good conservation (Australian Conservation Foundation 2002a, 2002b; Australian Farm Institute 2001; House of Representatives Standing Committee on Environment and Heritage 2001; Industry Commission 1998; Keogh 2002; National Farmers Federation 2004; The Wentworth

Group of Concerned Scientists 2003; Watts 2004; Young et al. 2003). However, from the law and the political rhetoric it is possible to distil twelve distinct meanings for "duty of care" (Table 3). Multiple meaning and lack of clarity will make duty of care an awkward tool for defining clear boundaries of responsibility. Even if these alternatives could be reconciled and a settled meaning for duty of care developed, this does not solve the problem that social expectations of irrigation businesses have a moral basis that defies clear definition. Many debates involve the relative moral value of irrigation versus other values (notably environmental). For example, a trade-off between water

Table 3 Overlapping possibilities for duty of care

Potential interpretations of duty of care	
Is it a flexible process for determining responsibility in a range of situations?	Or is it specific rules of practice that can be clearly stated?
Is it a method for handling disputes between individuals?	Or is it a method for determining compensation claims against the state for 'taking' of private resources?
Is its principle purpose to increase accountability for public good performance of private enterprise?	Or is it a means to safeguard resource use for private enterprise?
Does the term refer to a statutory duty of care, specified by Parliament?	Or does it mean a common law duty of care, developed by the judiciary?
Is it principally a tool used to frame political rhetoric?	Or is it a legally actionable concept with specific legal content
Is its purpose to define the collective duty of resource users generally across a generic range of circumstances?	Or is it intended to be a tool to evaluate individual performance in particular circumstances?

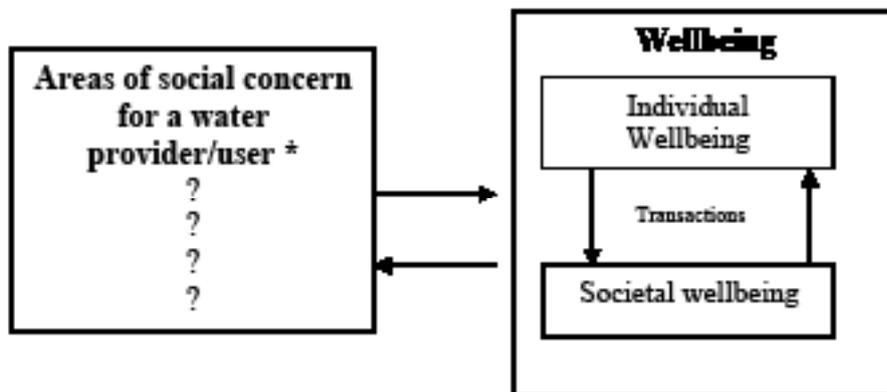


Figure 2 Framework for measuring wellbeing (Australian Bureau of Statistics, 2001)

*Areas of social concern do not ensure practical meaning without accountability and actionability by the enterprise

for the Macquarie Marshes and water for cotton farmers at Narromine is not just about whether the irrigators have done the right thing. It is also about the 'rightness' of allowing access to water that could otherwise help to maintain the values of the Ramsar wetland.

The intractability of moral issues raises the question about whether a social licence to operate is about formal accountability, or is based on expectations of the virtue of those who own or manage irrigation business. Accountability is a minimum required level of behaviour, while virtue represents a desired standard of ethical performance (Bovins 1998). The boundary between these two types of behaviour is not clear in discussions about duty of care and management of natural resources.

An alternative view proposes duty of care as a focus for debate and learning, rather than setting functional

boundaries. This envisages duty of care as one part of a cycle of learning about sustainable natural resource management (adapted from Woodhill & Roling 1998, 57). Active debate and grappling with the uncertainties of evolving social expectations is important to the development of better resource management. Conceiving duty of care as part of a learning cycle is probably more realistic than other interpretations, but is likely to disappoint advocates as it fails to deliver certainty.

Over time it can be expected that social learning will give the term more precise content, but meanwhile it seems unlikely to reduce uncertainty and address the immediate concern about ill-defined social expectations and act as a cornerstone of a social licence to irrigate. If a 'duty of care' model is unlikely to resolve the social licence boundary problem for managers, will greater transparency be more effective?

Will Triple Bottom Line Reporting Prove Responsibility?

Reporting should reflect those effects for which the business is prepared to be held accountable and committed to act upon. Without this, triple bottom line reporting is little more than public relations. Preparedness to act reflects the underlying values, socio-cultural norms and perceptions that exist about the organisation, its sense of its ethical obligations, its operations, and any other considerations that it believes define its boundaries of responsibility (Longstaff 2000; Muller & Siebenhuner 2007).

Preparedness to act is likely to arise through awareness of community well-being and through dialogue with the networks which link the business to society. Well-being is described as an overall satisfaction with life (Australian Bureau of Statistics 2004, 149) and is recognised as a valuable concept in developing expectations of performance associated with natural resource management (Lockie et al. 2002).

Critical evaluation of the social and environmental

performance of irrigation businesses occurs through networks such as local communities, environmental stakeholders, or networks of competing water users. Networks are likely to be the 'place' where criticisms of irrigation enterprises acquire political power. Networks then are relevant for considering social responsibility and defence of the social licence as they can foster shared norms and support cooperation that leads to changes in wellbeing (Organisation for Economic Cooperation and Development 2001). This suggests that boundaries of responsibility may be best refined through a process where irrigation businesses develop networks with their most relevant communities, through which they explore their specific contribution to wellbeing (figure 2). Attention to the welfare concerns of relevant networks makes it more likely that specific issues, circumstances and power relations will be reflected in a tacit agreement about social responsibilities (Lockie et al. 2002).

This would lead enterprises to report against specific contributions to welfare of specific networks, rather than more ill-defined generalities about corporate impact.

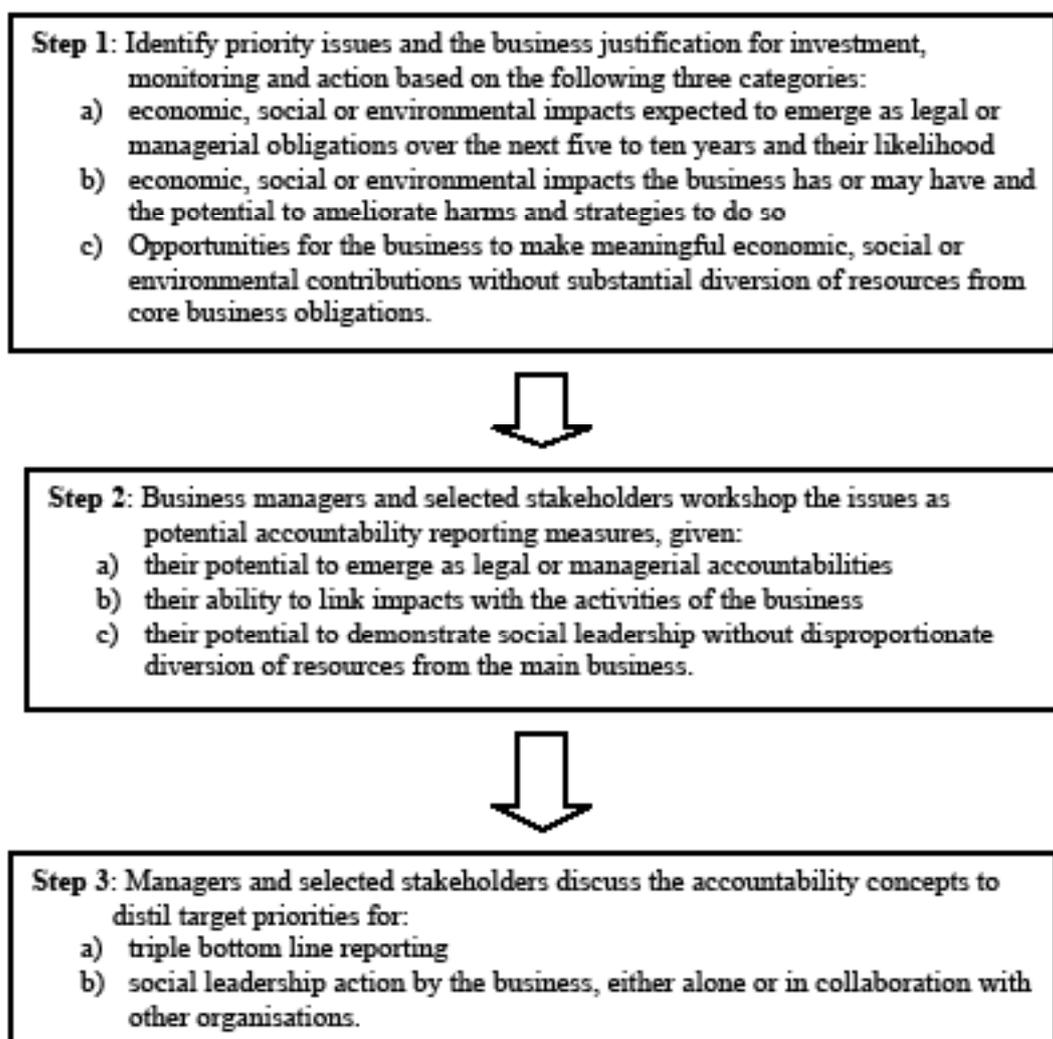


Figure 3 The suggested management steps to identify accountability

Triple bottom line performance reports from irrigation water providers typically classify social licence issues under the headings of community service, customers, staff and governance (Goulburn-Murray Water 2006; Murray Irrigation Limited 2006; Murrumbidgee Irrigation 2006; Southern Rural Water 2006; State Water 2005; SunWater 2006). It could be assumed that these reflect which networks' welfare are matters upon which the enterprise is prepared to act. It could be argued that a politically more sophisticated approach to protection of the social licence would be less focused on the interests of networks already aligned to the water enterprise, and be more concerned with likely opponents to its continued social licence.

While this would inevitably be challenging, it would probably be more meaningful in terms of the fundamental purposes of triple bottom line reporting. The question of what welfare issues (of what networks) are most relevant to social accountability is one that could be fruitfully researched.

It would seem that a process of deciding 'which networks' and then 'what welfare issues', may assist the business in defining its voluntary social reporting strategies. However, merely doing so may not serve to clarify the boundaries of its social responsibility. Some process for marrying self-defined views of responsibility seems to be necessary, with improved sensitivity to accountability likely to be imposed by others who do not necessarily respect that self-definition.

A Proposal to Action Social Accountability

Rather than leave this problem hanging over the heads of managers we conclude this article with a proposal for irrigation businesses to address social licence concerns. Figure 3 suggests three steps to better identify social accountability.

Once these accountabilities have been clarified, genuine engagement with staff and stakeholders can help managers to deepen their understanding of social expectations, and assist in refining the boundaries of the business' accountability. It could also make triple bottom line more meaningful.

Once accountabilities have been identified, the business can examine the appropriate measures for

Water enterprises are continuously engaged in a negotiation with society.

Justification of the social licence is continuously required to succeed.

reporting, and the internal processes required. This is an important practical step because reporting costs to the business arise largely from internal processes rather than external expectations.

The irrigation business will then be in a position to publically specify: its citizenship approach and the priorities for reporting and action, the issues and metrics to be used in reporting performance; and the internal business systems to be used to satisfy the accountability requirements. Such a statement of external accountabilities and leadership intentions can be circulated to owners and regulators of the irrigation business and selected stakeholder groups for review and feedback. This statement and its review process would form the basis for a formal citizenship strategy for the business, to be publically reflected in performance reporting. The strategy should be subject to regular management review and remain a foundation for reporting performance.

Irrigation Sector Strategy and Social Accountability Water will remain a contested resource. Political conflict over its best use will be a feature of irrigation. Those businesses that are best able to preserve the support of the community can be expected to be more competitive, particularly as water allocation processes and infrastructure provision for its delivery will remain substantially political. Defence of the social licence to irrigate is a matter of strategic and economic concern, thus social accountability is of more than academic interest.

Duty of care and triple bottom line reporting can be beneficial if they can be advanced to a practically useful stage. However the adoption of some aspects of community expectations into law or management practice will not eradicate disputes which prejudice the social licence to irrigate. Managers of irrigation businesses must expect that their use of water will remain contested as climate change, population increase and continuing changes in attitudes give rise to new social expectations and fundamental conflicts. These managers will have to re-define the boundaries of their responsibility. These boundaries will not be set by the law, but may be as powerful as the law in defining access to resources. We have suggested one possible process for tackling this difficult challenge.

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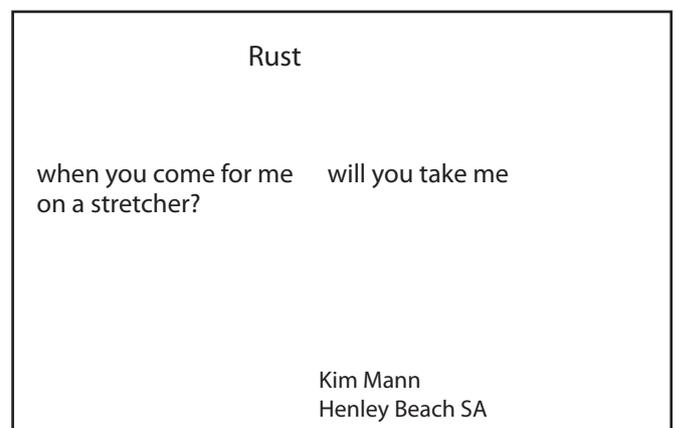
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Authors

Mark Shepherd is a PhD scholar at the Australian Centre for Agriculture and Law, University of New England. Mark has cross disciplinary interests in natural resource management, agriculture, environmental change, law and policy.

Paul Martin is Professor of Agriculture and Law and Director of the AgLaw Research Centre at the University of New England. Professor Martin has many years of business experience, including high technology enterprises, venture capital, and as a member of the NSW Innovation Council and the Australian government Pooled Development Funds Registration Board. He has authored books and studies on taxation, natural resources, and negotiation; and has advised local and international corporations and governments on strategy in a range of areas including taxation leveraged investment, harvesting and shearing robotics, chemicals, healthcare and high technology.

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Criminological Approaches to Residential Water-Restrictions: A 'Sensitising Perspective'

RHAIN BUTH

In many areas throughout Australia, water use is of prime concern and its management requires a complex grasp of a number of inter-related features. This article reflects upon Australian residential water restrictions in a criminological light. By underemphasising the ecologic and environmental impacts associated with breaches of residential water restriction schemes, the relevant harms are trivialised in scope and provide only a thin understanding of both the harm at issue and the underlying conditions which underpin the restrictions. Such regulatory frameworks operate to (1) frame the harm at issue in overly anthropomorphic terms as well as (2) concentrate on the instrumental impact of water-restrictions rather than providing a multi-dimensional understanding of those harms associated with breaching residential use. In light of such issues, this article discusses what is gained by viewing aspects of excessive water-use in terms of environmental harm.

The lavish use of water for residential purposes is eroding in the developed world, particularly here in Australia. Population explosions, irregular rainfall, lowering water-tables, changing weather patterns, the associated prospect of climate change and a range of other related issues make for haunting scenarios over dangerously low reservoirs and future water supply (Cullen 2005). In the main, such scarcities can no longer be ignored without placing at risk basic quality of life issues for future populations. In framing the Australian response, the perceived severity and scope of securing water for residential, commercial and industrial use is a problem requiring sustained regional solutions. These proposed solutions take account of increased internal water demands, shifting demographics underpinning urban planning, the effect of water-use on the economy and, of course, the impact on the ecologic health of the wider Australian landscape.

A significant re-think on water supply has been one of the main policy initiatives, with the Coalition of Australian Government's National Water Initiative (NWI) of 2004 reflecting the broad principles upon which issues of water are to be dealt with. One plank of the NWI is that environmental harm is created by not returning environmental flows to waterways and rivers (NWI 2004). Yet with growing urban populations, the demand for residential water has proportionately increased even with the present and future concerns of water scarcity. One common response has been to effect water restrictions. This article explores residential water restrictions in Australia, drawing broadly upon the criminological literature (See Halsey

1997a; Situ and Emmons 2000; Lynch and Stretsky 2003; Beirne and South 2007; White 2003; White 2005). I will argue that the harms which surface in breaches of residential water-restrictions across Australia are dominated by anthropomorphic concerns and a broader emphasis on ecologic health would be of benefit.

Regulating water-use raises issues for federal, state and local governments, the range of industries and commercial enterprises that rely upon infrastructures of water, as well as residential users' access to water. Schemes to restrict water-use are only one plank of a larger platform of reforms to address the expanding scope of the water problem; future water allocation, water infrastructures, supply and pricing issues are also relevant.

Residential water-restriction schemes are presided over by local government unless otherwise overridden by state governments. These bodies are able to account for the variables of rainfall, population density, weather patterns, local hydro-geologic conditions, water management infrastructures, as well as sensitively respond to the handling of current and future residential, industrial and commercial water-use and demand. Consequently, while remaining a complex governance issue with regional and national water-priorities at stake, local water authorities are positioned to make informed decisions about the quality and type of restrictions imposed on residential users.

Mapping Australian residential water-restriction schemes typically involves a series of decisions by the applicable water authority determining the level

of restriction applicable. For instance, the greater Brisbane area was subject to High Level Restrictions set forth by the Queensland Water Commission in July of 2008 (subject to being lowered to Medium Level Restrictions upon certain dam levels reaching 50%) (Brisbane City Council 2008). These restrictions dictate the use of water for cleaning cars, watering gardens, general outdoor cleaning, maintaining pools as well as providing targets for individual use per day. With the determination of a local level of water-restriction, a set of residential water-restrictions are triggered, linking unlawful uses of water to a range of penalties. For instance, keeping with the Brisbane example, a first breach of the water restrictions is a \$150 fine, a second offence within two years is \$450 and a third is \$1,050 (Brisbane City Council 2008). To compare, Adelaide's level 3 water-restrictions are detailed by South Australia Water with a \$315 fine for an initial breach with subsequent breaches by individuals liable for fine up to \$5,000 (South Australia Water 2008). Across Australia, households in breach of their geographically circumscribed water-restriction schemes are subject to infringement notices, fines and in rare instances, severe limitations on their water-use for a limited period of time.

As it is a mainstream criminological concern to comment on the regulation of certain harms, 'investigating environmental issues from a criminological perspective requires an appreciation of how harm is socially and historically constructed' (White 2003, 484). Of course, frameworks for understanding harms are complex, contested and embedded with a range of normative, social, cultural and technical orientations. Legal provisions may capture certain dimensions of harm and its redress, yet such provisions can also give legal sanction to such harms, as Halsey has demonstrated in his work on the clear-felling of old growth forests in Tasmania (Halsey 1997b).

While these and other factors sketch frames for conceptualising the harms at issue, which are important in and of themselves, this article follows the lead of White and Halsey (1998) who assert that three frames of reference are useful in understanding varying domains of harm associated with crimes against the environment:

1. an anthropomorphic position which transposes issues of environmental health as significant to human concern,
2. a bio-centric approach which raises the profile,

susceptibility and vulnerability of particular species and their relative diversity.

3. an eco-centric approach concentrating on the viability, vulnerability and health of a particular ecosystem.

Each perspective provides a register for understanding the terms of the harm at issue, which often overlap and most certainly interrelate. The anthropomorphic perspective presents harm as it directly relates to humans. Assaults, robberies, illegal drug-use and other conventional crimes are routinely understood in

these terms, focusing on the victims and the offenders. A bio-centric approach broadens the definition of harm to other species, articulating that harm can be understood in relation to, for instance, the abuse of companion animals, lack of protection for endangered animals as well as the excessive reduction of fish stocks. In this light, problems

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of water scarcity extend beyond humans and the frame of the harm in question extends to encompass other species affected by the breach of water-restrictions. An eco-centric approach widens the framing of harm even further, advocating that risks to ecologic health also constitute harms. Herein, this framing of harm suggests examining the broader ecologic systems that are impacted by residential water-use.

Interestingly, these three perspectives on harm are addressed in various pieces of environmental legislation in Australia in relation to water. For instance, section 14 of Queensland's Environmental Protection Act (1994) defines environmental harm as 'any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance'. This framing of environmental harm in terms of environmental values is given further specificity in section 9, where environmental values pertain to:

- (a) a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- (b) another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

Such broad articulation of environmental harms, and the environmental values upon which harms are defined, are given greater specificity in interrelated pieces of legislation. Continuing in the Queensland context, those environmental values are tied to

measurable water quality indicators for the Logan and Brisbane Rivers, hence providing greater clarity over what is meant in terms of environmental values, as well as how harm is to be understood in a specific environmental context. Hence one would expect such values to be embedded in the material relevant to residential water-restrictions.

However, this notion of environmental values underpinning and informing environmental harms appears to be less prevalent in relation to residential water-restrictions. There is an apparent premise that water-use in a residential context, whatever its symbolic and ecologic importance, should be managed for the sustained benefit of human societies. In reviewing the residential water-restriction material for Brisbane and Adelaide, it appears that the harms constructed in association with water-use are grounded in risk-thinking, where residential users place larger society at risk by their behaviours and choices in relation to their water-use. Harm materialises (to humans) with acute shortages of supply, decreasing the quality of residential life not to mention the deleterious effects on urban growth, as well as industrial, commercial and agricultural endeavours. White (2003) also notes this anthropomorphic framing of harm in relation to the uses of water. White emphasises that water is, obviously, given legitimacy for drinking yet asserts that other uses are more contestable, which he terms as 'mis-uses'.

In applying this line of thought to residential water-use, two central mis-uses can be identified (1) excessive water use and (2) improper use, where water could be used in a more productive or efficient ways. In reviewing public campaigns aimed at increasing water-conscious behaviours, mis-uses of water would include lengthy daily showers and baths, overly saturating water-intensive gardens, cleaning sidewalks or driveways with high-pressure hosing and the like, which seem distant from broader environmental concerns. Even emphasising the common-pool dimensions of water-use does not provide adequate linkage to water's broader role with respect to non-human species and ecologic health. To be clear, there is a practical, well-intentioned quality attributable to an anthropomorphic understanding of these harms. Indeed it is responsible to acknowledge the harms associated with unchecked residential water-use. However, by the very emphasis of such a construction, connections to the wider ecosystem, including issues over biodiversity and specific harms to a range of species, fauna and the general health of the environment are

Why... are the harms associated with breaches of water-restrictions framed so narrowly when in other instances ... the scope ... is so much broader?

written out of both the regulatory framework as well as the public discussion over residential water-use. Clearly, there is much to gain by holding onto and putting forward an anthropomorphic view of these harms. Ultimately it is for its effect on individuals and communities of this and future generations that regulating such harms is to have its most proximate benefits (May 1995; Braithwaite 2000). By framing harm in anthropomorphic terms we are putting forward, in many instances, a commendable response to the problems associated with the scarcity of water. However, overemphasising the anthropomorphic frame significantly detracts from appreciating the holistic nature of harms at issue as well as the pursuit of integrated and sustainable water solutions; in the context of water, harm reduction measures will not be sustainable if the broader context and ecological impact are withdrawn from the definition of harm.

One issue of concern in the anthropomorphic framing of the harms associated with breaches of residential water-restrictions is that it oversimplifies our understanding of the harm and limits the scope of sustainable solutions. With this view, harms are circumscribed by and understood through a lens of prospective risk to human populations and not a lens of greater concern for other species or ecologic health as a value in itself. In short, the negative ecological impacts on local environments, including species diversity and eco-system health, are positioned in the background of this discussion. Acknowledging that residential water-restrictions are embedded in discourses that value water-conscious behaviours does not necessarily emphasise the broader ecologic

importance of water nor necessarily identify the environmental harm at issue. In an issue as critical and environmentally symbolic as water, a dialogue that emphasises human, biotic and ecologic harms would

provide a more solid foundation for addressing the range of direct and associated problems. Why, it could be asked, are the harms associated with breaches of water-restrictions framed so narrowly when in other instances (such as when new dams and reservoirs are proposed or with the introduction of recycled water or desalination plants), the scope for appreciating the harms is so much broader?

In conclusion, this article draws upon a criminological approach to harms so as to provide a 'a sensitising perspective' (South 1998, 212) on the absence of environmental harms that surface in relation to a

generalised sketch of residential water-restrictions on offer throughout Australia. I am suggesting that residential water-use, as a matter of national concern, would merit a framework to promote established norms that fully legitimate the range of harms at issue. The harms associated with the regulation of residential water-use currently concentrate on direct and collective impacts to people. Cultivating an eco-centric or even a diversely integrated bio-centric approach could maximise rather than minimise the ability to moderate those harms. In short, the anthropomorphic framing of these harms waters down the prospect for sustained solutions in relation to residential water-use.

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Author

Dr. Rhain Butth is the Program Coordinator of the Justice and Legal Studies Program and a Lecturer at the University of the Sunshine Coast. His research focuses on the intersection of criminology and socio-legal studies, concentrating on the modes, processes and risks associated with legal and non-legal aspects of dispute resolution.

Faultline

Tiny wren, young squirrel,
in combat.
Attack, retreat, hide, attack.
All around the nut tree trunk,
among branches.

Which the aggressor first
tough to tell.

A nest was threatened,
or, it's a game,
or, state of the world.

Philip A. Waterhouse
Sonoma California

From Big Solutions to Small Practices: Bringing Back the Active Consumer

HEATHER CHAPPELLS AND WILL MEDD

This article examines the tensions between 'big' engineering solutions to sustainable water management and the role of the 'small' everyday innovations by domestic consumers. Using the recent drought in the south east of England as a case study, we explore how, within the context of the privatised water sector in England, different claims, and indeed future possibilities, are constructed by industry experts (water managers and regulators) in delimiting the role of providers and of the 'customer'. By juxtaposing accounts of everyday consumer practice and coping strategies with industry perspectives on the potentialities of charging schemes, water recycling, and leakage, we identify resistance to including the active consumer in the co-provision of alternative futures. In examining the reasons for such resistance we outline the possibilities for a 'co-productive' framework for sustainable water management and what this would mean for a reimagining of the active consumer and for policy.

Introduction

Drought is becoming a common feature of life in many developed societies and is set to challenge existing infrastructures of provision and consumption. Periods of water stress are not purely a 'natural' phenomenon but are a 'produced scarcity' in part shaped by incumbent infrastructures of water management (Swyngedouw 2004).

For example, analysing the 1976 drought in England, Morren (1980) identified the culpability of centralised institutions of water supply in producing vulnerability through rendering all areas, rural as well as urban, dependent on central priorities in distribution. Similarly, in a recent study of the prolonged drought in Australia, Allon and Sofoulis (2006) problematise the role of 'big water' – a system historically evolved to embody the fantasy of endless supply – in cementing social and cultural norms and values that provide 'built-in' obstacles to water saving. In both these accounts we see a strong narrative of embedded large technical infrastructures delineating the social practices of consumers that are dependant upon them.

Yet, arguably, the occurrence of drought can be seen to act as a catalyst for thinking about alternative, and potentially more flexible, infrastructures of provision and of imagining new consumer roles within them. In the Australian case, findings indicate that while people are 'stuck' within current socio-technical systems, many

can imagine alternatives and are prepared to take some 'do-it-yourself' (DIY) measures to save water (e.g. practicing greywater reuse in the garden) (Allon and Sofoulis 2006). In this article we explore this relationship between alternative urban infrastructures of water provision and the malleability of consumer practice, using the 2006 drought in the south east of England as a case study.

Water provision in England and Wales

In England and Wales much of the existing water infrastructure is based on a modern 'integrated ideal' (Graham and Marvin 2001). Huge reservoir and distribution systems, designed to meet expanding industrial and commercial demand in the 19th and 20th centuries, have traditionally rendered all users dependant upon them commensurate with the 'big water' vision of endless and universal supply. This configuration of big pipes and centralised sources arguably creates inertia when it comes to envisaging alternative infrastructural futures built on a more flexible concept of demand (Chappells 2003; Chappells and Shove 2001). As constant flows of revenue and resources are required to maintain the embedded system, users essentially become locked into particular scales of operation that help to perpetuate certain patterns of demand.

As part of a wider reconfiguration of urban infrastructures that has occurred since the late 1980s, there is growing recognition that managers of natural

resources must shift their focus from production and supply to finding ways of reducing user demand (Allon and Sofoulis 2006). In England and Wales, changing institutional regimes, including the shift from a state hydraulic model to market environmentalism (Bakker 2003) and new pressure on resources (drought and climate change) have reinvigorated debate about the relative inertia of large technical systems and the need for alternatives at multiple scales. Moreover, new regulatory institutions that place an emphasis on the balance between the needs of commercial providers, shareholders, consumers and the wider environment have contested the notion of water resource management as a problem solely for large-scale supply engineering to address.

The alternative 'twin-track' water strategies currently defining water policy in England and Wales (DEFRA 2002), feature a mixture of new supply infrastructure options (which has included proposals for desalination plants and new reservoirs), and demand side management (featuring metering, new charging structures, and water efficiency). However, what has been lacking within this policy field is an understanding of how these new infrastructural configurations challenge the relationship between supply and demand, for example in generating a significant cultural change in practices of water provision and consumption. By examining the drought in south east England in 2006, we can start to unravel the malleability of social arrangements of domestic water consumption embedded within the existing infrastructure of supply.

Big engineering, drought and future demand
The eradication of water stress in England and Wales, as in many other developed societies, has historically been viewed as a techno-managerial problem involving the development and distribution of new sources of supply to meet changing demand for water provision (Guy and Marvin 1996). This dependency on supply-led water management strategies has been challenged since the 1990s as concerns have grown over the economic and environmental costs of unrestricted infrastructure growth. As part of a wider process of what Graham and Marvin (2001, 102) describe as 'splintering urbanism' it is suggested that infrastructure networks can no longer be dismissed as universal and homogenous grids or 'as local public goods which can remain the arcane preserve of the civil engineer'.

Privatisation of the water industry together with the elevation of environmental concern has promoted a new approach to resource planning, including the

emergence of more demand-oriented strategies (Guy and Marvin 1996). Such developments have taken place in the context of what Bakker refers to as a new 'market environmentalism' where growing demand, environmental and economic pressures have seen the severe undermining, if not necessarily the collapse, of the integrated ideal (cf. Graham and Marvin 2001). This has included the retreat of state controlled forms of collectivised provision, the emergence of new regulatory regimes, and the shift from large-scale infrastructure investment to risk-based asset management. Within this context, it has been argued that single monopolistic grids have given way to multiple, separate circuits of infrastructure customised to the needs of different users (Graham and Marvin 2001).

Drought can be seen to act as a catalyst for thinking about alternative, and potentially more flexible, infrastructures.

The historical development of infrastructures of provision has, in its wake, created what we might think of as 'infrastructures of consumption' (van Vliet et al. 2005). From the concept of universality – where the standardised relationship between user and provider is supported by homogenous infrastructure

arrangements – we have seen a shift towards a more differentiated concept of consumer-provider relations supported by multiple grid arrangements. The 'captive consumer', associated with monopolistic modes of provision and uniformity of services, has diminished alongside the emergence of more active consumer roles – including 'customers' who can choose from a range of lifestyle options, to 'co-providers' involved in developing new forms of utility provision at a local level (van Vliet et al. 2001, 47-49). Such developments have been associated with the extension of opportunities for the management of demand; for example, through the differentiation of infrastructure services and charging regimes, and through building opportunities for the engagement of consumers in small-scale low cost infrastructure solutions (Graham and Marvin 2001). Yet, these changing consumer roles have not developed evenly and the extent to which we can talk of more 'active consumers' is unclear.

Droughts represent significant moments through which to trace changing infrastructures both of provision and consumption. Disruptions shed light on the extent to which big engineering solutions have begun to disappear into more localised markets of water provision, or to be replaced by technologies organised at multiple scales. The experience of the 1976 drought is exemplary of a time when water management in England and Wales was still dominated by an engineering based logic. New reservoir schemes to

meet anticipated demand were already planned, and during the drought the focus was on supply solutions, including reversing river flows (by pumping water back upstream), and squeezing every last drop out of reservoirs (Andrews 1976; Morren 1980). Whilst appeals were made to 'citizens' to practice water conservation, demand side management (DSM) was not yet regarded an integral part of water planning. The drought of 1995, which affected mainly north western parts of England and Yorkshire, revealed multiple cracks and fissures in the logic of big infrastructure. This drought showed the contested political ecology of water in England and Wales following the full privatisation of the water sector in 1989 (Bakker 2003). Technical weaknesses in regional distribution systems (e.g. leakage and distributional issues) were highlighted and failings in how newly privatised water companies understood their consumers were exposed (e.g. customers reportedly resisted appeals to save water as providers announced substantial profits) (Haughton 1999; Osborn and Marvin 2001). The limitations of existing infrastructures in meeting the needs of market environmentalism were here beginning to show – as witnessed in the subsequent redefinition of headroom (i.e. the margin between supply and demand that defines spare capacity in the system) and of leakage targets that effectively restrained supply.

Historical analysis of drought therefore helps to provide a sense of continuity and change. We now turn to address what the 2006 drought can tell us about the configuration of contemporary infrastructures of provision and consumption. In particular, how can we use this moment of crisis to understand continuing tensions, debates and possibilities involved in thinking beyond big water solutions?

Between 2004-2006 the south east of England experienced one of the driest periods since the 1930s. Two successive winters of below average rainfall saw groundwater supplies reach very low levels in some areas (Environment Agency 2006a). During 2006, eight water companies in the south east of England banned hosepipe use for 15.6 million people: for 3.4 million people this was the second consecutive summer of water restrictions (Environment Agency 2006b). The water shortage accentuated existing concerns about high per capita consumption in a region where infrastructures and resources are already under pressure from new housing developments, excessive river abstraction and the unsustainable use of groundwater. These significant constraints on the

flexibility of supply are coupled with tighter provisions for target headroom and emergency storage, more stringent environmental legislation on abstractions, and the restrictive costs of new infrastructure development, such that the capacity to meet increased demand in the south east of England is severely limited (Every and Foley 2005). These mounting pressures clearly signified the need for a radical rethink in the way in which socio-technical infrastructures for water provision are configured, and presented a significant opportunity for change in water cultures. In the course of the drought there were a number of ways in which this challenge was addressed.

At one level there was evidence that a big engineering logic was held up in the resurfacing of debates about a national water grid (Griffith 2006). While engineers supported large-scale water transfers, environmental regulators dismissed such plans on the grounds this would be a cost-ineffective and highly energy intensive option (Environment Agency 2006c). However, debate about greater interconnectivity between water companies on a local or regional grid basis as a means of ensuring the resilience of supply security continue to form an integral part of a new water strategy (DEFRA 2008). Another move in the direction of large-scale solutions was indicated in talk of desalination plants and new reservoirs – for example, the much

publicised case of Thames Water's planning application for a desalination plant, and for a new reservoir in Oxfordshire (Mukherjee 2006; BBC News 2006). Other strategies enacted by water companies during the drought suggested that

the configuration of supply solutions was increasingly framed by new imperatives of marketised provision. Companies had intensified programmes of leakage repair with relation to public perception and maintaining shareholder confidence. Water resource managers explained that because of the sensitivity around leakage they had delayed programmes of planned repair work (even if this might be more efficient in terms of productivity and water saving) to prioritise the fixing of visible leaks.

The experience of the 2006 drought was not to simply underline a supply oriented approach. DSM formed an integral component of drought planning and mitigation strategies – including hosepipe bans and intensified water saving publicity campaigns. There was evidence that water companies and environmental regulators were working more closely together to engage customers in coordinated water saving, including a much publicised regional 'beat the drought' campaign.

The limitations of existing infrastructures in meeting the needs of market environmentalism were here beginning to show.

Whilst this indicated a new emphasis on consumer engagement such initiatives suggested a rather limited notion of consumer expertise. The drought also showed that possibilities existed for more radical engagement – along the lines of what van Vliet et al (2005) would consider ‘co-provision’.

Limiting innovation in everyday practice

Droughts present a significant opportunity for change in cultures of everyday water consumption beyond the immediate responsive mode of hosepipe restrictions or appeals to water saving. The small DIY solutions encountered by Allon and Sofoulis (2006) in their Australian study provide evidence of the propensity for consumer innovation (e.g. in rigging up new systems of storage and distribution in the backyard) and for a shift in cultural values (e.g. using ‘dirty’ or ‘grey’ water rather than clean potable tap water on gardens). The acceptance of grey water reuse and rainwater collection is supported by findings of several public perception studies carried out in the UK and further afield (Jeffrey & Jefferson 2005, Hurlimann 2007; Po et al. 2004). A variety of individual and institutional barriers to the development and uptake of such solutions have been highlighted (Stenkes et al. 2006) but these do not diminish the need to take such solutions seriously especially in the context of climate change and increased likelihood of water stress. Quantitative studies have shown the significant savings that can be made from domestic water efficient technologies, ranging from rain water collection through to grey water reuse. For example, it has been estimated that rainwater collected on the roof and transferred to a water tank for storage has the potential to reduce the typical water consumption of a UK household by 6%, while reusing water from sinks, baths and showers has the potential to reduce domestic water usage by a third (Sim et al. 2005).

Evidence from households that were affected by the 2006 drought suggests these innovations have a history and a future in England and Wales (Medd and Chappells 2008). However, rather than a concern with understanding public perceptions or technical potentials, our interest lies in examining the implications of decentralised alternatives with relation to everyday social arrangements within households. Rainwater collection was already a popular practice for many people and there were plans to upgrade existing systems in light of continued uncertainty over water resources. While the use of grey water required a more substantial reconfiguration of domestic infrastructure, we came across a number of cases where people

had rigged up pipes to detour ‘used’ water from baths, sinks and washing machines to the garden. These innovations imply quite different responsibilities, sensibilities and skill sets (as well as supporting institutions) than do ‘standard’ water efficiency measures.

Different propensities to engage in rainwater use or recycling reflected the social orientations of different

Quantitative studies have shown the significant savings that can be made from domestic water efficient technologies.

householders and supporting institutional and technical arrangements. Questions of garden size, micro-climate and layout were important, as were household dynamics and social capacities. Households with small children often lacked the time

or resources to invest in such innovation and raised concerns over hygiene and safety aspects of water storage. Those with a keen interest in gardening and who had the necessary skills relentlessly experimented with new innovations and techniques, while less skilled novice gardeners sought advice from friends and neighbours. Many were prepared to innovate but people wanted more support from institutions. Water companies already promote small rainwater collection tanks as part of their DSM activities but during the drought some consumers reported a shortage in supply of the tanks. Some consumers argued that more might be done politically and institutionally to generate a momentum around greywater recycling rather than leave it to the wiles of individual households some of whom might lack the capacity for change. Practical suggestions from householders included the subsidised provision of some sort of device or kit to redirect water from the bath for watering the garden.

Among water institutions, however, there was endless debate on the limitations of greywater and recycling alternatives. Whilst there was general support for the ideal of some form of water recycling or reuse this was validated with arguments about scale, uncertainty and responsibility. Water resource managers claimed that they already practiced recycling through the recharge of rivers with treated effluent. Another argument highlighted the lack of certainty surrounding the operation of recycling at the household level. Managers questioned whether consumers would provide a reliable source of recycled waters and asked how this might be monitored and managed. Questions of how willing the public, or indeed shareholders, would be to support such initiatives arose, as did those of whether promoting innovation at this scale should actually be a responsibility of commercialised water institutions or other intermediaries (e.g. local government, planning).

Social alternatives such as water systems partly based on the engagement of consumers in forms of DIY recycling clearly present a particular challenge for contemporary water institutions in developed societies. These do not fit the 'big water' model, nor do they completely align with the futures envisaged in a market environmentalist framework (e.g. they do not represent a low-risk option or guarantee a short-term profit for water companies, private investors and shareholders). It is instructive and perhaps unsurprising that in the consultation process for a future water strategy for England and Wales, consensus was reached on the significant role of metering, tariff structures and planning – strategies which arguably maintain the status quo of provider-consumer engagement – while the role of dual water supply and storage failed to generate agreement (DEFRA 2007, 3).

An alternative of co-provision

Experience of the 2006 drought in south east England is suggestive of a much more inclusive role for consumers within the big water system (e.g. as partners in drought mitigation). Even so this movement is limited. Much of the renewed interest in DSM is restricted to the promotion of simple water efficiency devices, which may be effective in their own right, but are hardly challenging of an embedded water culture that maintains a reliance on centralised water supply for every use. Innovations which require a shift in the values of consumers, and/or the definition of new scales of provision, continue to be restrained while supply development continues to generate consensus and support. This inevitably raises questions about how far consumers become active participants in newly reconfigured infrastructures or whether they simply reproduce already embedded arrangements. The answer most likely lies somewhere between these two extremes; consumers become activated but only within certain accepted parameters delimited by existing supply arrangements.

The question of what then might be done to overcome this inertia is difficult to answer. Clearly there is a need at a conceptual level to think in terms of co-provision rather than separation of supply and demand (cf. van Vliet et al. 2005). At a policy level this might translate into the need to reframe a 'twin-track' rhetoric which currently implies that supply and demand management, while co-existent, are on somewhat separate tracks. The production of social alternatives does not only require technical or financial support, it requires a shift in how the consumer-infrastructure nexus is envisaged. For example, it requires recognising the expertise of the consumer and giving equal priority to the sensibilities and conceptions of water held by consumers who may view water not only as a commodity, but as a

service or convenience. This raises an altogether more challenging prospect of building future water strategies based on an understanding of the dynamics of everyday water cultures rather than on the techno-economics of supply (cf. Shove 2003; Sofoulis 2006; Strang 2004). Equally, infrastructure reconfiguration means not only attending to the need for new reservoirs or desalination, but to the local support networks in place for small providers and their relation to the embedded infrastructures of provision.

Ultimately the relevance of this discussion depends on what sort of water futures are being imagined and committed to by key stakeholders. Is it considered acceptable to hold up and reinforce the integrated ideal through the expansionist calls for a national water grid or does this run the risk of creating ever more demanding standards of provision that are increasingly difficult to fulfil? Is the challenge to maximise the pliability of the existing infrastructure through 're-scaling' at multiple levels in line with the demands of a new commercial and environmental context? Or, is it plausible to create a context in which a new more environmentally forgiving water culture – based on sensibilities and capacities of the consumer – might be forged? Such questions should continue to frame dialogue about social alternatives in water provision and consumption if concerns over the social and environmental sustainability and equity are to continue to be addressed alongside engineering and economic concerns.

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Authors

Will Medd (Bsc, PhD) is a Lecturer in Human Geography at Lancaster Environment School, Lancaster University. Originally trained as a sociologist, his research focuses on developing the social dimensions to sustainable water management, in particular working on demand management and flooding.

Heather Chappells is Honorary Research Fellow in Geography at the Lancaster Environment Centre (LEC), Lancaster University. Her research is concerned with the changing socio-technical dynamics of infrastructure management. Recent projects have focused on social and cultural dimensions of sustainable consumption in the UK energy and water sectors.

From Pushing Atoms to Growing Networks: Cultural Innovation and Co-Evolution in Urban Water Conservation

ZOË SOFOULIS AND CAROLYN WILLIAMS

Conventional approaches to urban water conservation programs are limited by their conceptions of the water consumer as an autonomous individual: a social 'atom.' These approaches typically ignore how cultural norms (e.g. of cleanliness), 'Big Water' infrastructures, and existing domestic technologies set the baseline of water consumption. We promote instead a 'cultural innovation' approach to urban water conservation that understands water users as members of cultures and sociotechnical networks, whose habits and expectations of water use are embedded in 'co-evolving' (Shove 2003) relations with water technologies and large-scale water systems. We outline some strategic principles for changing water cultures, with a focus on 'meso-level' groups and networks (friends, neighbours, clubs, etc.). The goal is a redistribution of roles and responsibilities in the relationships between water users, technologies and water authorities, initiated through the process of 'growing networks of water-savers.'

Introduction

Social and cultural researchers in partnerships with water authorities or others with scientific and engineering backgrounds can rarely luxuriate in comprehensive descriptions and elaborated theories to convey our views as we might *inter alia*. Ideas often need to be packaged into digestible points and straightforward principles that people from very different disciplinary backgrounds can grasp and apply. In a recent project investigating the discourses and practices of urban water demand management, the authors learned that while water managers sought a better understanding of water users, they were somewhat impatient with accounts of cultural complexity, and not terribly interested in the nuances of our analyses and critiques. Their concerns were practical: what kinds of implementable water-savings strategies arose from these insights? Similarly, this article's concerns are limited and tactical: how can social and cultural perspectives be articulated to help water authorities better understand users, and develop more effective urban water conservation programs? Our imagined audience therefore indirectly includes the natural resource managers and others with whom readers of this *Social Alternatives* may be planning or conducting water research. We hope these distillations of basic concepts and principles will help others explain their own starting points and project ideas to research partners.

Over an eighteen-month period commencing late 2005, we conducted a team project at the Centre for Cultural Research, University of Western Sydney, in partnership

with Sydney Water Corporation.¹ The project Demand Management through Cultural Innovation: User Models undertook a comparative study of water authorities' and householders' perspectives on domestic water, the user-provider relationship, motivations for and barriers to water-saving. Methods included a review of reports and policy documents, interviews with relevant Sydney Water personnel, a householder questionnaire on water fittings and practices, and the 'Water Diary', a guided series of reflective journal exercises and worksheets adapted from an earlier project, *Everyday Water* (Sofoulis 2005, Allon & Sofoulis 2006, Allon 2006). We aimed to stimulate more diverse future water demand management initiatives than 'one-size-fits-all' technological solutions for 'average' households, and we suggested initiatives involving community and neighbourhood groups, young people, and migrants. As the project reports remain confidential, we cannot present detailed findings here, and draw instead on starting points, principles and reflections.

We proposed that in addition to technological innovations, water saving could also be achieved through strategies of cultural innovation, that is, changes in cultural norms about what kinds of water is used for what purposes, shifts in habits and expectations around water services, and new relationships to water authorities and infrastructures. Yet far from encouraging changes in habitual uses, mainstream demand management initiatives usually aim to preserve them via efficiency solutions. Van Vliet, Chappells and Shove (2005, 16) state the problem in a discussion of an energy-efficient light bulb campaign:

...the focus is on the efficiency with which services are provided. As a result, questions about changing conventions and standards of lighting simply do not arise. As in so many other situations, contemporary expectations are naturalized and normalized: they figure as non-negotiable requirements that simply have to be met.

The term 'cultural innovation' is meant to suggest that abandoning current norms does not mean going backwards, but is a collective creative effort to adapt and adopt new shared values, practices and technologies. Some cultural changes can be inaugurated by voluntary efforts to compensate for wasteful and inefficient water systems, when for example people respond to water restrictions by recycling greywater or altering norms of privacy and hygiene by negotiating new etiquettes of less frequent toilet flushing.

We defined user models as sets of assumptions, categories, criteria, explanations and projections about what a user is, who or what they are connected to, what their capacities and responsibilities are, and whether and how they might change. Demand management strategies were constrained or enabled by the models of water users informing them, and different user models opened up different models for intervention and change. This point, obvious to those familiar with the social constructionist thesis and discourse theory, is not an easy one to get across to engineers and chemists who mostly do not even admit to having a model of users, expect perhaps the putative 'average customer'.

Our study of corporate perspectives showed that while older models persisted of the water user as a responsible (or punishable) citizen, a public health beneficiary, or a taxpaying elector to whom the corporation and government were ultimately accountable, the predominant user model was the individual customer. This model had been built up through more than a decade of customer studies, mostly large-scale market research surveys based in behavioural psychology and social demographics, with results reported in terms of population averages. In a related longer paper, we critically examine the models of individuals, agency and practice entailed in behavioural approaches like the theories of Reasoned Action and of Planned Behaviour (Ajzen and Fishbein 1977; Ajzen 1985) that have been deployed in studies aiming to identify the attitudinal and socio-demographic drivers—and ideally, predictors—of water

Our suggested 'meso-level' strategies could work through ethnic community groups, but we emphasise networks based in locality, or in shared hobbies, pursuits, and interests.

behaviour (e.g. Po et al. 2005; Trumbo et al. 2005). Problems include their failures to deliver the promised behavioural predictiveness, and the repeated finding that standard socio-demographic variables have complex, equivocal and generally weak correlations with water consumption (Eardley et al. 2005, 4-5, 58-60). People with similar housing and socio-economic status can have widely variant consumption levels (Eardley 2005, 60), while households of similar 'average' consumption may use water quite differently from each other (Medd and Shove 2006, Appendix 1). A finding from *Everyday Water* that 'almost everyone attempting DIY [do-it-yourself] recycling had some memorable prior experience of living where water was supplied and used differently, whether in rural Australia or overseas' (Allon and Sofoulis 2006, 51) suggests that water histories may be more salient to practice than current socio-economic status.

Cultural studies of consumption and everyday life, and sociotechnical perspectives (including actor-network theory) inform our model of users as active participants in cultures and social networks that include non-humans, technologies, and material infrastructures. Table 1, which draws on the humanities' critiques of Enlightenment notions of the individual, was developed in resistance to tendencies to translate our ideas into terms from behavioural psychology and market research (see also Sofoulis 2006). Unless we make it obvious, industry partners with scientific and technical backgrounds may not realise that our approaches negate, question or invert almost every assumption and categorical dichotomy on which their models of water use and users are founded.

A Cultural Approach

A cultural approach recognises that people's water practices are situated in particular historical, geographical and cultural contexts, are shaped by social, political, economic, and discursive conventions, and interact with particular cultural and technological formations, including 'infrastructures of consumption' or 'structures of provisioning' that deliver essential resources and services (Chappells 2005; Van Vleit, Chappells and Shove 2005). Water behaviour can be neither understood nor changed without regard to these contexts. If water uses are part of constantly evolving cultural and sociotechnical contexts, then the water industry's distinction between 'discretionary' uses (like garden watering) and 'non-discretionary' uses (like laundering and toilet flushing) becomes nonsensical. Garden aesthetics, cleanliness norms, and water-based

Table 1: Comparing User Models

CONVENTIONAL WATER CONSUMER RESEARCH	CULTURAL & SOCIOTECHNICAL FRAMEWORK
USERS	
Users are individuals	Users are members of shared cultures and social worlds
User behaviour is determined by individual attitudes and choices.	Water use practices are manifestations of shared ways of life and cultural norms.
Personal identities are fixed and define the whole, essential, person.	Identities are social, negotiated, flexible, partial and constantly (re)constructed, so new identities can be formed.
People's practices are outcomes (or expressions) of their identities.	People's identities are outcomes (or expressions) of their practices.
CULTURE AND SOCIETY	
Society is the aggregated product of individuals (equivalent to a population).	Individuals are products of society (which includes humans, natural and technical non-humans, infrastructures).
The population can be broken down to smaller demographics, each with distinctive lifestyles, mindsets, and consumption habits.	Society comprises overlapping social (and sociotechnical) networks that partially share a range of cultural forms, values and consumption practices, social norms and meta-norms.
There is a 'typical Australian culture' of water use.	There is a complex plurality of water users and practices.
Cultural differences present barriers to water saving.	Cultural differences are resources that can enable water saving.
CHANGING WATER USERS AND USES	
Water use is either discretionary or non-discretionary.	Water use is historically, technologically and culturally determined, and thus always partly 'discretionary'.
Users are the problem.	Users are the solution.
To change water cultures, need to educate and change individuals.	Change water cultures by building new water-saving identities and networks.
High water users (HWUs) are a problematic group needing surveillance and discipline.	Concentrate on middle range users; HWUs become rarer as cultural norms shift.
Water saving strategies involve either behavioural or technological change (and occasionally both).	Water saving strategies are sociotechnical, involving changes in both practices and technology (and sometimes, systems).
Technologies can change water use without changing user cultures or the role of the utility ('green consumer' model)	User cultures, large scale systems and technologies change through interactions with each other (co-evolution model).
Water authorities and experts are the prime source of knowledge and skill, while the public is information-deficient and needs educating, including in value of water.	People already have high water-saving values and interests, many skills and relevant knowledge that could be mobilised to expand water-saving networks.

toilets are technical and obligatory, but can still be renegotiated, changed or abandoned.

To the extent that our water habits are imbued with symbolic, personal, cultural and even spiritual meanings, they have dimensions unaffected by

do
or.

Simply undertaking a water diary can prompt changes in practice: even self-identified 'responsible' users reported finding more ways to save water, greater motivation to do so, and higher interest in water-saving devices.

Entangled in collective ways of life and shared values, water consumption patterns are linked to cultural identity and social belonging. In complex societies, such identities and affinities are not necessarily stable and can be dynamic, partial, multiple, and hybrid. People may participate in a multiplicity of social networks: they have gender, ethnic, professional and generational affiliations; they belong to cultural, religious, sporting, political and other interest groups, and participate in local, national, global and virtual communities. In all these contexts groups of people learn, establish, negotiate, reinforce and renegotiate cultural norms and identities—including around water. These are the ‘meso-’ levels of social organisation—in between individuals and populations—where we believe cultural innovation approaches can facilitate change.

Whilst there are specific meanings and practices around water in different cultural groups, those groups overlap and interact in complex ways, and all are mediated through ‘meta-norms’ of the dominant Australian Anglo-Celtic culture, which include historical expectations of abundant, low-priced, high quality, all-purpose urban water. The complexity means that ‘one size fits all’ solutions can never fit ‘all’, while initiatives targeting specific sub-groups can never capture evolving hybridities. On the other hand, the ‘water wisdom’ of migrants acutely aware of wasteful Australian water ‘meta-norms’ adds to the store of cultural resources for evolving new hybrid cultures of water sustainability.

Despite a myriad of cultural differences in the diverse populations of Australian cities, people live in houses with similar basic plumbing and appliances, depend on the same water supplies and systems, and face a common future. Acknowledging people’s unique cultural histories is important, but cultural innovation may also require building new kinds of identities (‘recyclers’, ‘watersavers’). Our suggested ‘meso-level’ strategies could work through ethnic community groups, but we emphasise networks based in locality, or in shared hobbies, pursuits, and interests. Such groups may include culturally diverse memberships.

This cultural approach challenges the conventional emphasis on individual water consumers, but does not disturb the conventional dichotomy between the behavioural factors and the technical aspects of water saving. For this we need a sociotechnical perspective.

A Sociotechnical Perspective

We agree with Latour’s critiques of sociology for having overlooked how human societies could not exist

without the myriad of non-human entities (technologies, plants, animals, the elements) with which everyday human lives are entangled (Latour 1993, 2005; see also Michael 2000; Harrison et al. 2004). From a sociotechnical perspective, societies are heterogenous assemblages (or networks) of humans and non-humans, where technologies may have agency and produce effects, and powers and capacities can be redistributed between humans and non-humans (Latour 1992). This redefinition of society necessitates a redefinition of ‘socialisation’: both humans and non-humans are ‘socialised’ by and in the network of actors. Socialisation around water is less about learning abstract ‘values’, than practical interactions with water

Changing water conservation ‘values’ will have little effect on savings unless accompanied by practical changes in water techniques, technologies and systems.

and technologies, whether drawing water from a village well and pump, or showering in a house connected to a gigantic water system. The pump, the shower and the municipal infrastructure are devices that socialise water as well as users (as elegantly demonstrated by de Laet and Mol 2000).

Changing water conservation ‘values’ will have little effect on savings unless accompanied by practical changes in water techniques, technologies and systems. As European sustainability researchers Loewe and Lichtl note:

Concrete consumption patterns in day-to-day life do not fully reflect the preferences of individuals or private households ... the options open within the scope of day-to-day lifestyles are restricted to an average perspective through strategic consumption decisions such as selecting where to live, how to live, and the fittings provided (cited in ENRC 2005, 91).

From this perspective, the attitudes/behaviour gap represents the difference between conservation aspirations and infrastructural constraints.

Whereas psychological approaches assume attitudes produce behaviour, a sociotechnical model understands how changes in practice can generate new values and social identities. In her analysis of kerbside recycling, Gay Hawkins finds that gathering up newspapers, rinsing bottles, and crushing cartons are ethical practices of managing waste that help create a new identity, the ‘recycler’ (Hawkins 2006, Ch. 2 and Ch. 6, 107-8):

[I]t is wrong to assume that agency comes before actions, that the thinking self makes the body change its habits. [...] Despite all the

representations of recycling as a new waste policy smoothly transmitted to the population, my argument is that it was through changes in bodily actions and habits of waste management that the recycler was constituted (115).

A sociotechnical perspective suggests multi-dimensional strategies that foster changes in the norms and routines of water use, innovations in technologies and infrastructures, and shifts in relationships between them. We find the diagram in Figure 1 a helpful

User cultures, technologies and large-scale systems interact with each other and change as a result: they co-evolve. Two-way arrows indicate these mutually shaping interactions between user cultures, objects, and systems.

In interactions between user cultures and objects (Dimension 1), the consumption habits of water users both influence and are influenced by interactions with water and the everyday water technologies that mediate those interactions (taps, flushing toilets, hot water, washing machines).

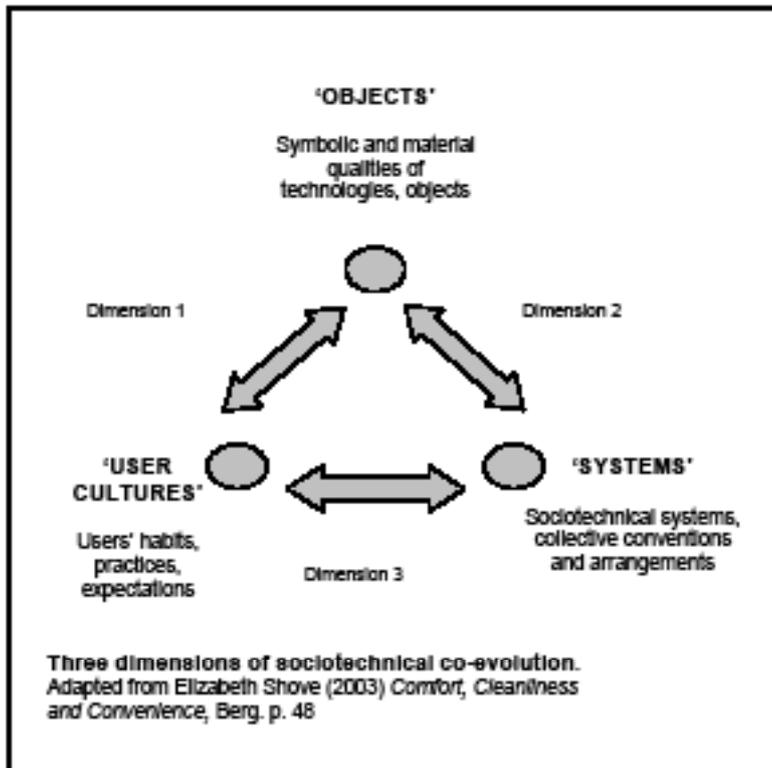


Figure 1: The Co-evolutionary Triangle

starting point for communicating about these ideas across the disciplinary divide. Adapted from Elizabeth Shove's illuminating study *Comfort, Cleanliness and Convenience* (2003, 48), it sketches interactions through which key 'actors' in a sociotechnical network can mutually shape each other in a co-evolutionary process. User cultures are the habits, expectations, shared ways of life, rituals, and standards of living that establish baseline levels of resource consumption

Large-scale systems include the technocracies and infrastructures supplying resources and services according to conventional social, economic and political arrangements. Objects include technologies and materials (the 'non-humans') that have built-in functions and efficiencies (or inefficiencies), as well as material, aesthetic and symbolic qualities that help shape user habits and expectations.

Contrasting with quantitative understandings of water consumption (litres per capita per day), Shove and her associates² understand consumption as an 'inconspicuous' consequence of accomplishing everyday routines to meet social norms (Shove and Warde 2001; Shove 2003, 4). The washing machine is not used in order to consume up to 90 litres of water, but to achieve clean clothes and maintain the personal cleanliness and odourlessness deemed necessary for self-presentation as a socially acceptable person. That is:

... people do not consume energy or water. In reality, such resources are used in the process of accomplishing normal social practices and achieving taken-for-granted standards—for example, of comfort or cleanliness. Demand consequently depends upon how these all-important services are defined and delivered and on patterns of resource consumption thereby entailed (van Vliet, Chappells and Shove 2005, 4-5).

Interactions in Dimension 2 (systems/objects) allow technologies to emerge that fit in with larger-scale systems and arrangements, and that can in turn bring about alterations in these systems. For example, flushing toilets and private showers co-evolved with the urban infrastructures delivering water and sewage services. Household fittings thus embody a certain relationship to complex assemblages of materials and people (pipes, pumps, treatment plants, access points, plus engineers, microbiologists, managers, technicians, repairers, etc.).

In Dimension 3 (user cultures/systems), users are shaped or defined in their interactions with large systems like water authorities and infrastructures. Modern municipal water systems were initially developed to meet social goals for better public health and the creation of clean modern citizens, while nineteenth century sanitation projects 'became a matter of prestige and national pride in Western

cities' (Kaika 2005, 86). Large systems are influenced by interactions with the expectations and practices of users. For example, water restrictions and other demand management options may be planned with regard to limits of acceptability to 'customers'. Changes in water use norms can affect the system. For example, less frequent flushing produces more concentrated sewage that can cause problems of odour and pipe corrosion, as the sewerage system's own demands for water are no longer being met.

Cultural Innovation

If water uses are established through culture then cultural processes are needed to build new consumption cultures with new practices and related identities (e.g. as water savers and recyclers). As numerous social movements around the world have found, the most effective 'units of change' are not private individuals ('atoms') but intermediate or 'meso-' level networks in society—often catalysed by energetic individual 'change agents.'

In response to questions about reluctance and responsibility around water-saving, one User Models diarist with a migrant background wrote:

Might look out of place if take a lot of emphasis on this issue to other people. They might think I'm fanatical about it.

When we see that our neighbours don't water the grass and gardens we don't water the garden that often either.

Targeting meso-level groups—including the street or neighbourhood—can allow group norms to be renegotiated according to new values (such as sustainability), making it easier for people like this to take further steps to change. For example, Sydney Water's Landscape Assessment Program, trialled during our research, offered selected high-water using households soil testing and watering advice. This could be 'tweaked' into a 'meso-level' program by seeking participants from the whole street for a 'streetscape assessment exercise' to learn about their locality's soil types, microclimate, and recommended plantings and watering systems, drawing on expert as well as peer knowledge.

A cultural approach recognises that new knowledges and practices do not necessarily supersede established norms: old and new can co-exist in dynamic and sometimes contesting relations. Some elderly or traditional people, or those who use water as a status symbol, may not abandon their practices.

If water uses are established through culture then cultural processes are needed to build new consumption cultures with new practices and related identities ...

Shifts in norms (and meta-norms) can be effected without everyone participating. Change is easier if the new information 'makes sense' within established frameworks of reference and prior self-understandings. Conversations and shared activities can help people connect new and old norms and allow the meanings of pre-existing knowledge and practice to be transformed. Water diaries could help here—especially if undertaken in a small group. Popular histories of water systems and norms, and creative media are other potentially effective channels for renegotiating cultural norms.

Network-Building and Co-Evolution

Water restrictions are a crisis response that encourages users' expectations of 'slipping back' to established norms after bans are lifted. Since those norms 'co-evolved' in contexts that encouraged high consumption, long term change cannot rely on individual 'behaviour' and efficient retrofits, but requires changes in the whole co-evolutionary network. Change is inhibited if all these elements are not in place or in accord, even if people's intentions are favourable.

Water industry discourse portrays utilities as mere managers and suppliers of water to meet demand, it blames users as wholly responsible for consumption, and delegates to technologies the actual work of water-saving. A co-evolutionary model of change requires a more honest appraisal of how responsibilities for the supply, demand, and conservation of water are distributed in reality—an appraisal social researchers can provide. This could form the basis for a model of 'co-responsibility' for water shared across all actors in the network: not just heroic technologies or guilty consumers, but also the 'black-boxed' infrastructures of consumption.

A promising way to accelerate change in water cultures is to build or extend networks of 'watersavers'. The construction of new conservation cultures and identities can be motivated by shared concerns about environmental degradation and climate change, the welfare of future generations, and individuals' desires to effectively contribute to change for sustainability. This might involve new networks, or programs and activities within and between existing community organisations and interest groups. Growing networks entails recruiting people to adopt new water practices and encouraging desire and 'investment' in becoming a watersaver, as well as building relations with appropriate water technologies, techniques, and knowledge, and with water service providers and other relevant organisations. 'Meso-level' organisations could

be readily resourced and mobilised for further network-building activities that build up personal and community capacities for co-responsible water-saving.

Network building benefits from leadership, expertise and resourcing by water authorities or conservation bodies, as well as direct involvement of water users in planning and implementing locally relevant water-saving initiatives. Imposed solutions that do not fit local knowledge and practical needs will lead to disaffection and suspicion rather than network-building. Recruitment will be easier if innovations begun from below are acknowledged, facilitated, and rewarded, and if community activities build on local and practical knowledge, not abstractions like the 'value of water'.

Within a more general strategy to accelerate change for sustainability, the longevity of water-saving networks is less important than their temporary role in re-setting consumption norms. Some new networks may become stable and durable, others will fall apart after a time. Once the desired changes have become normative, the networks are no longer required. If networks failed to win recruits, they are better abandoned for other approaches.

Conclusion

A combination of cultural and sociotechnical understandings points to urban water demand management initiatives quite different from top-down, customer-centred approaches, and more akin to the 'bottom up' approaches practiced in many overseas aid, public health and community development projects (including some rural and remote Australian communities). These typically value stakeholder involvement, working with community organisations, user participation and capacity building, and education strategies emphasising local and practical knowledge. Several contributions to the recent 'Water for People' issue of *Development* refer to such approaches, including an outline of Buddhist economics principles that resonates with our perspective (Abey Suriya, Mitchell and Willetts, 2008). We are calling for such approaches to be adapted to facilitate cultural innovations in urban Australian consumption cultures: instead of 'pushing atoms' and trying to get individuals to change, the emphasis should shift to growing and mobilising networks (e.g. of 'watersavers') in order to produce shifts in cultural norms and everyday practices while building community capacity for water co-responsibility, and exerting co-evolutionary pressure for further changes in technologies and infrastructures.

Endnotes)

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2. Our perspective is closely aligned with, and indebted to, that explored by Shove (2003) and Shove, Medd, and others in the *Traces of Water* project (a workshop series documented at <http://www.lec.lancs.ac.uk/cswm/Traces.php>) and related research (for example, van Vliet, Chappells and Shove 2005; Medd and Shove 2006; Medd and Chappells 2008).

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Authors

Dr Zoë Sofoulis (a.k.a. Zoë Sofia) is an independent researcher associated with the Centre for Cultural Research at the University of Western Sydney. With

background interests in the intersections of culture, technology, gender and irrationality, and recent projects in applied humanities partnerships, her current preoccupation is with how our cultural norms and identities are formed in relation with urban and domestic infrastructures, and processes of changing these relationships.

Carolyn Williams is senior research associate in the School of Education, University of Western Sydney. Carolyn has researched and published in a number of areas including postgraduate pedagogy and research methodology, changing work structures and vocational education, and student participation and engagement in secondary school curriculum. She also worked with Zoe Sofoulis on the Demand Management through Cultural Innovation: User Models project.

Second Generation

Effectively, you stop being a migrant
when the next group arrive, they
wear your old clothes, walk deserted streets,
eat food that was once your favourite.

They become the targets.
But when are you Australian?
When the forgotten first language
and the memories sewn into it
are places in a trunk and sent overseas?

The doors to the detention centre are flung
open.

Go.

The new migrants are here
to dismantle oceans, splice religions,
build cities along dead rivers,
bury everything beyond salvage.

George Toseski
Condell Park NSW

Schooling and the Settlement of Refugee Young People in Queensland: '...The challenges are massive'

SANDRA TAYLOR

This article reports on two phases of a larger research project on refugee education in Queensland. The first phase of the project investigated policy and provision relating to refugee education. The second phase of the research focused on how the complex educational needs of refugee young people were being addressed in state high schools in Brisbane. The article draws on interviews conducted with teachers and community workers working in schools with significant numbers of refugee young people. Problems with current policies and provision in refugee education experienced by teachers and community workers are outlined. Drawing on insights from recent UK research, the article suggests ways in which systems and schools could provide more effective support for refugee students in mainstream schools. It is argued that schools could play a crucial role in supporting transitions to belonging and citizenship for refugee young people, but that this will require more support from governments and systems in the form of appropriate policies and strategies, and the provision of adequate resources.

Introduction

In the last decade or so there has been a dramatic rise in the numbers of refugees and humanitarian entrants arriving in Australia from various countries in Africa. Refugees from this region have been described as having welfare and educational needs never before encountered in previous humanitarian flows to Australia. A discussion paper produced in late 2006 by an interdepartmental government committee on measures to improve settlement outcomes observed:

The African caseload generally has greater settlement needs than people from previous source regions, reflecting their experiences and circumstances prior to arriving in Australia. Some of these pre-migration experiences include higher levels of poverty, larger families, lower levels of education and English proficiency, lower levels of literacy in their own languages, higher incidence of health issues, longer periods spent in refugee camps, little experience of urban environments, and higher rates of torture and trauma (DIMA 2006, 7).

That new initiatives would be required to enable systems to respond to these greater settlement needs has also been noted:

Education providers recognise there are unique challenges in providing the African refugee population with the skills they require to function successfully, and to their capacity, in Australian society. These challenges will require new responses from governments, as it becomes

clear that the needs of this refugee cohort are quite different from previous immigration waves in Australia (Australian Council of TESOL Associations 2006, 7).

This situation has posed new challenges 'on the ground' for education systems and teachers, and there is evidence that teachers often feel ill equipped and under resourced to meet the complex needs of the increased numbers of new arrivals (Cassity and Gow 2005; Miller et al. 2005; VFST 2007). Research on the experiences of newly arrived African young people in three schools in western Sydney found that, despite a few 'success stories', in general 'the schooling system was not working well for many recently arrived African young people' (Cassity and Gow 2005, 13). Cassity and Gow raised some important issues about the role of schooling in the settlement of refugee young people, and argued for 'integrated approaches to settlement which focus not only on transition to schools, but also consider the longer term participation of refugee young people in their new society' (2005, 13). They further highlighted the crucial role that schools could play in facilitating 'the transition from refugees to participating citizens' (2005, 13).

This article reports on two phases of a larger research project which investigated refugee education in Queensland. The first phase of the project investigated policy and provision relating to refugee education in Australia. The second phase of the research focused on how the complex educational needs of refugee

young people were being addressed in state high schools in Brisbane.

The next section of the article reports on the first phase of the research and provides a brief overview of current policy and provision in the area of refugee education in Australia. In the second section of the article attention turns to what is happening 'on the ground' in schools in Brisbane with significant numbers of refugee students. The third section discusses recent UK research which has identified successful system and school approaches with refugee students, and which, it is suggested, provide some useful insights relevant to the Australian context. The final section of the paper discusses possibilities for change which might assist systems and schools to more effectively support refugees in their transition to citizenship as advocated by Cassity and Gow (2005).

Relevant policy and provision in Australia

Three trends in the broader social context have intensified the recent difficulties in resettlement of refugees in Australia mentioned in the introduction. There has been a general climate of fear in relation to asylum seekers and refugees in Australia (Gale 2004; Poynting and Mason 2007), together with a number of challenges to multiculturalism (Jayasuriya 2007). The move away from multiculturalism was reflected in the name change from Department of Immigration and Multicultural Affairs (DIMA) to Department of Immigration and Citizenship (DIAC) which was made by the Howard government early in 2007, and which has remained unchanged under the new Rudd Labor government. In addition, education policies have been influenced by neoliberal global policy trends, resulting in reduced education funding, reduced commitment to humanitarian aid and resettlement of refugees, and a general marginalisation of concerns about equity and social justice in education.

In general, settlement policies aim to integrate refugees into mainstream society as soon as possible, and the interdepartmental government committee on Humanitarian Settlement stated that: ... the most critical factors in successful settlement are learning English, getting a job, committing to Australian values and participating in mainstream activities. (DIMA 2006, 3)

In order to review policies relating to refugee education in Australia, data was collected in 2005 from publicly available web based material from Commonwealth and state/ territory government web sites relating to refugee education. Websites were searched under 'refugee education' – and allied key words such as 'multicultural', 'migrant' and 'ESL' (English as a

Second Language). In addition to relevant policies and guidelines, we were interested in how issues concerning refugee students were 'framed', the language used, and where they were located within government departments.

The website data: where were the refugees?

We found that refugee students were rarely targeted specifically on the government web sites. They were either 'invisible' or conflated with other categories (such as ESL or migrant students, multiculturalism, 'students at risk'). They were most often located with ESL students, and rarely situated within an equity/ social justice framework. In the website materials there was an emphasis on policy statements, guidelines, and legislation – rather than on resources and professional development materials - and there was an emphasis on visa categories and who was eligible for support. This was particularly the case in relation to funding for the ESL New Arrival Program (administered by the Department of Education, Science and Training) where the relevant web site displayed lists of over 100 different visa categories (DEST 2006).

Programs and funding to support the education of refugee students came from multiple and fragmented sources: from the Commonwealth, state and also some local government sources. Commonwealth and state governments were using partnerships with community organisations to address the issues. For example, in Queensland, partnerships between schools and community organisations developed to assist schools with significant numbers of refugee students as part of the Education and Training Reforms for the Future (ETRF) (Department of Premier and Cabinet, 2002) program. DIMA's Settlement Branch also introduced partnerships in the area of settlement services, with a tendering process in which community organisations involved in refugee support were required to compete for funds. They were also encouraged to form consortia so that DIMA could deal with larger providers.

In the absence of specific policies or strategies in most Australian states, it appears that the education of refugee youth in Australia is being 'left to chance' (Sidhu and Taylor 2007). The needs of refugee students, who often have no previous school experience, are not the same as those of other ESL students, such as migrant students and international students, with whom they were being located by government departments. The shift away from equity and social justice as a priority in education in Australia, together with the lack of a specific policy focus on refugee education, are likely contributors to this situation.

A similar situation has been documented in relation to policy and provision for refugee young people in the UK (Arnot and Pinson 2005). A survey of Local Education Authority (LEA) and school policies and practices found that the needs of asylum seeker and refugee children, and strategies to address those needs, were mainly located within existing educational frameworks (eg language, or 'at risk' policies), rather than being addressed through specific policies (Arnot and Pinson 2005). This study also found that most attention was given to ESL issues, together with emotional problems, at the expense of other learning needs. The survey also found that few LEAs saw a race equality framework as necessary to support the education of refugee children. Consistent with Australian reports and research, these researchers highlighted the complexity of the needs of asylum seeker and refugee children. In attempting to clarify the nature of this complexity, Arnot and Pinson (2005) identify their needs as being in three main areas: educational, social and emotional. This seems to be a useful basis for discussing the role of schools in the broader settlement process and the importance of recognising the multiple needs of refugee young people, and the support which needs to be provided to meet those needs.

What is currently happening 'on the ground' in schools?

In 2006, a series of in-depth interviews exploring the school-community partnerships supporting refugee young people in schools were conducted. Eleven community sector workers from four key community organisations involved in working with refugees in schools were interviewed, together with seven policy officers in State and Commonwealth government departments involved in funding and managing the school-community partnerships. The focus of the interviews was on their work with refugee students in schools (either directly or indirectly), and on any relevant programs and initiatives with which they were involved. We were particularly interested in how the partnerships were 'playing out' on the ground.

We also conducted a series of in-depth interviews with ESL teachers, principals/ deputy principals, guidance officers and liaison workers in four state high schools identified as having significant numbers of refugee students. (On arrival, refugee young people attend an intensive ESL Centre for a period of 6-12 months. After this period they transfer to a 'mainstream' high school.) Our focus was on school policies and programs concerning refugee students, rather than on pedagogical and classroom issues. Fourteen in-depth interviews were conducted in these four schools. The focus was on how schools were supporting refugee young people, any relevant programs that had been initiated at the school level, and what were the issues

schools were facing in supporting refugee students. Both series of interviews were semi-structured, approximately one hour in duration, and were audio recorded and later transcribed. In some organisations and schools, at their suggestion, two or more people were interviewed together. Fictitious names have been used in the following extracts.

The interviews: 'the challenges are massive ...'

In general, resources were inadequate to meet the complex needs of the growing numbers of refugee students in the schools in terms of teachers, support staff and professional development. This was reflected in both sets of interviews:

We have had incredible demand for us to be present in schools. We started off at Bunyip School. Then we moved into the major high schools that receive from Bunyip, and the primary schools which are located in the suburbs where the new arrivals settle. We have not been able to keep up with that demand (Coordinator, Community Organisation B).

The interview data provided examples of the many ways that community organisations were working in schools to support refugee students. At the time of the interviews, most of their work was with students from the African region, mainly from Sudan. Community organisations were involved in after-school homework, English and recreational programs. Community workers were also involved in one to one case management work with individual young people, for example, concerning transport problems, financial assistance for textbooks, mental health problems or childcare for teenage mothers. Often, their work was related to settlement issues rather than directly with educational issues.

The community sector interviews revealed that the new competitive funding model for settlement services introduced by DIMA was problematic for the community organisations working in schools. Previously successful partnerships were being undermined in the competitive environment, and the community sector workers commented on the time involved in participating in the tendering process. They also commented that the increased complexity of tendering seemed to be giving larger organisations competitive advantage. These organisations did not have the necessary experience or expertise in refugee support, but their corporate management strategies were attractive to DIMA in the climate of concern about risk management and accountabilities. In addition, we were told that they were able to employ specialist staff to work on writing submissions.

The school interviews revealed that ESL teachers were 'bearing the brunt' of the insufficient funding to support the growing number of refugee students. The following extract highlights the difficulties ESL teachers were having in providing holistic support for refugee students' needs: needs which were beyond their normal role of English language support, and which they felt ill equipped to provide.

Because [of the large numbers of] refugees, it is having a major impact on the ESL unit - an overwhelming impact, I might say, in terms of how to support these young people. Because, as an ESL unit, our designated role is to help young people to acquire language and to become proficient in it. The role has never been to provide them with education that they have missed from Grades 1 to 10. ... Usually one will expect that conceptually these young people will be proficient with that - and that is not part of our role. Likewise, ESL teachers are not teachers of reading. ... That is not part of our pedagogical skills because an ESL teacher in a secondary context is not expected to know that. So, the challenges are massive. And how to deal with those, and how to support each young person with their language development, plus their conceptual, educational development, plus their literacy development.... I don't ever like to use the word impossible - but it is so, so challenging (ESL teacher, School C).

School staff also reported that more ESL teachers and support staff were needed - both for the ESL units and also to provide support for mainstream teachers. Teachers felt that they needed more professional development, and often the ESL teachers themselves and/or the community organisations were filling this need. As well as these problems and challenges faced by the teachers, there was a tendency for teachers to emphasise the problems faced by the refugee students themselves in the interviews.

However, in some schools teachers mentioned refugee students' strengths - in particular their motivation and resilience - as well as their problems:

The thing with working with refugee youth is that they are resilient and strong, survivors. They have a lot of strategies, and strengths ... They come to school every day, sometimes they have a long journey. They don't give up - they never give up. They will be here till year 12. We have very few students who give up and leave school. They work really hard. They value education very much (ESL teacher, School A).

These schools were attempting to provide a holistic and inclusive approach. They spoke of the importance of their work with parents and families to improve home-school communication, and the social programs provided by the school aimed to meet the range of needs (learning, social and emotional), as identified by Arnot and Pinson (2005):

Obviously there are social issues. I mean being a refugee means by definition they're at risk. There are health issues and there are cultural issues. ... We're fortunate at this school that we have got a lot of support systems, which we built up over years that deal with those particular issues, almost all of them individually. We have a support team of about ten - a student support team. You can see there are various agencies that come into the school on a regular basis. One of my roles is to coordinate that and we meet three-weekly as a team (Guidance Officer, School C).

One school with previous experience with students from diverse backgrounds aimed to integrate students into mainstream classes as soon as possible, with support from the ESL unit.

For every child that comes to the school, I create a timetable so that they can slot straight away into the mainstream. And they are anxious to get into the mainstream, but it is extremely challenging for them. It takes them longer to do their work. Because they use dictionaries all the time to look things up and they are needy in the classroom and they are trying to use the teacher as much as they can. When you consider that a lot of content is dealt with by language. They have to take in that language and understand that language. Their conversational language is usually at a higher level than their written language (Deputy Principal, School A).

This school's approach is inclusive, in contrast to an attitude of 'othering' and marginalisation which is often experienced by ethnic minority students. This deputy principal spoke about how the school had made changes to respond to the increasing diversity of the school community:

I think at the root of everything if I look at my teaching staff here in school - given the high needs of the children - and yes, it's been hard going from the years of an academic school to have the diverse curriculum we have now and the diverse population and the diverse needs but I take my hat to all of them. They work so hard and they work really well together.

The general teacher here does not work in isolation in the classroom. My teachers would not know what to do being in isolation. In grade 8 & 9, we have teams of teachers who work together. So, they plan together, communicate together, they have common ways of approaching individual issues ... We know that we have support services in the school and we use them as best we can (Deputy Principal, School A).

However, this school had experienced problems in implementing this approach because of the high level of needs in the ESL unit. This impacted on the time available for ESL teachers and support staff to work with mainstream classes.

Other teachers raised the effects of the large proportion of refugee students on OP outcomes in the educational market context. This was a particular issue for schools which previously had an academic reputation:

They come because the train station is that close, they travel to come here. So it's posing quite a challenge actually because we're becoming almost specialist in a field and we're trying to balance mainstream – because this is essentially a white middle class richy area, but that doesn't reflect our clientele. So we're still trying to counter the fact that a lot of the parents do not see us as a viable proposition because of the large ESL numbers. But we're countering that. We had two OP 1s last year ... (Principal, School D).

A community sector worker commented on the importance of adopting an inclusive approach with refugee students:

There is a perception that the African case load has had a huge impact on all services. It's true to some degree. It's also about our capacity to be flexible and responsible with this case load. ... It's really about how we make this a normal process of understanding diversity and understanding complexity, instead of just singling out refugee kids. The resources are not there at the moment to make that happen (Coordinator, Community Organisation B).

This interviewee highlighted the importance of an inclusive approach - where schools are supportive of all students, and teachers respond positively to the needs of diverse student communities (Department of Education and the Arts 2005). However, she also mentioned that inadequate resources limited the implementation of an inclusive approach.

Clearly, the teachers we interviewed were struggling to cope with the increased numbers and demands of refugee students. Insufficient resources were mentioned as a major problem, which resulted in shortages in ESL and general teaching staff, and there was a lack of much needed professional development in relation to the needs of refugees. Most attention was given to language support, with less attention being given to other learning needs, and to social and emotional needs. Given that the ESL teachers were 'bearing the brunt' of the increased numbers of refugee students, it is not surprising that there was an emphasis on language support. Community sector workers provided support for the social and emotional needs of the refugees. These problems 'on the ground' in Brisbane schools were in part a result of the inadequacies in policy and provision documented earlier: inadequacies which led to the comment that the education of refugee students was being 'left to chance'. How, then, could systems and schools improve their support for refugee students?

Successful system and school approaches

Some recent publications from the UK (DfES 2004; Rutter 2001; Reakes and Powell 2004) provide some useful insights about how support for refugee young people in schools could be improved. The UK survey of Local Education Authority and school policies and practices in the education of asylum seeker and refugee children referred to earlier (Arnot and Pinson 2005) is particularly useful. Arnot and Pinson (2005) identified the different approaches to policy and provision in refugee education being taken by LEAs and schools, and further explored the values underlying these models. As mentioned earlier, they identified a holistic model as one which recognises the complexity of needs of asylum seeker and refugee children (ie their learning, social and emotional needs), and provided detailed case studies of three LEAs which adopted holistic models as providing examples of 'good practice'. In these three case studies, refugee students were understood as having multiple needs, and a support system was set up to meet all aspects of these needs. Further, all three case study LEAs provided a targeted system of support for refugee students (see Arnot and Pinson 2005, part 5). Other strengths of the UK good practice case studies were parental involvement, community links, and working with other agencies (Arnot and Pinson 2005, 48)

In terms of school ethos, the researchers found that the good practice schools had 'an ethos of inclusion and the celebration of diversity' and 'a caring ethos and the giving of hope' (51).

Other characteristics identified were having previous

experience with culturally diverse students, and promoting positive images of asylum seeker and refugee students. Both the Arnot and Pinson (2005) study and a Welsh study (Reakes and Powell 2004) found that LEAs and schools were generally positive about receiving asylum-seeker children. If schools are to play a key role in the refugee settlement process, positive and welcoming attitudes to refugee students would appear to be essential.

It is relevant to this discussion that Brisbane Catholic Education has developed a specific Strategy for Refugee Students as part of its current ESL Strategic Plan (BCE 2005). This plan highlights the need for a strategic approach to the enrolment and support of refugee learners and their families in Brisbane Catholic Education schools, and outlines strategies for system level support, school level support, family support and support from the local community. For example, an ESL New Arrival Officer works with refugee families on arrival and an ESL Secondary Cluster Teacher assists refugee students with the transition from primary to high school.

Concluding comments

Our research has documented a number of problems in refugee education, both at the policy level and also in Brisbane high schools. Refugee education does not

appear to have been a priority for governments, and there are no specific policies or strategies concerning refugee education in Queensland. In addition, there are insufficient resources to cope with the increased numbers of students with complex problems, and professional development for schools and teachers has also been inadequate. As mentioned earlier, the shift away from equity and social justice as a central priority in education in Queensland over recent years is likely to have contributed to this situation.

In their 2005 paper on the transition experiences of African young people in Sydney high schools, Cassity and Gow (2005, 13) commented: 'The challenge is to facilitate the transition from refugees into participating citizens, and schools have a key role to play'. Unfortunately, schools are still unable to play this key role in facilitating transitions to belonging and citizenship as well as they might because of inadequate funding and resources. Clearly governments have a major responsibility in making the education of refugee young people a policy priority, and a recent Victorian report on refugee education (VFST 2007, 5) recommended that the Victorian Department of Education 'develop a coherent refugee education strategy that draws together responses to meet the learning, welfare and family support needs of refugee students'.

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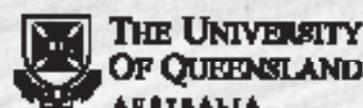
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However, the examples of good practice LEAs and schools in the UK discussed in the previous section suggest ways in which schools could provide more effective support for refugee students in mainstream schools. It is clear that schools need to take an inclusive approach, one informed by social justice principles, in addressing the educational needs of refugee students. The Arnot and Pinson (2005) research also showed the importance of a targeted policy and whole school approach to refugee education.

However, such school based change requires leadership, and ideally will be facilitated and supported by education authorities. For example, a comprehensive guide to good practice in supporting the education of asylum seeking and refugee children was published by the government for UK schools (DfES 2005). Although the New South Wales government produced the booklet *Assisting Refugee Students at School* (NSW Department of Education and Training 2003), some of the most useful material for teachers and schools has been published by community organisations. For example, in Queensland a number of very useful publications for schools have been published by QPASTT (2001, 2007); while in Victoria *Schools in for Refugees* (2007) was published by the Victorian Foundation for the Survivors of Torture.

It is significant that the Arnot and Pinson (2005) study found that schools with previous experience of an ethnically diverse school population were better able to meet the needs of refugee students, and a more positive approach was promoted by previous contact with diversity. Reakes and Powell (2004) also found that having a multicultural school population helped schools integrate asylum seeker and refugee students. In other words, the complexity of needs seemed to be more effectively met through a diversity framing. In a situation where the school population is diverse, and the staff are experienced in teaching in such contexts, refugee students are more likely to feel welcome and at home. And if refugee students are able to participate within the school community, this will help them to make the transition to belonging in the broader community.

Finally, Arnot and Pinson (2005, 64) comment on the value for everyone of a positive approach to education of asylum-seekers and refugees:

The celebration of cultural diversity in a diverse globalised world and the moral values of caring and inclusivity are values which are at the heart of education. A positive approach towards strangers, in this case asylum-seeker and refugee children, should be a central element in all children's learning. In this context

the asylum-seeker and refugee child is a litmus test of the ethos of schools. In other words, school and LEA policy towards asylum-seeker and refugee pupils could be used to assess the broader issue of school and LEA approaches to cultural diversity.

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Author

Sandra Taylor is an Adjunct Associate Professor at the Queensland University of Technology, and at the University of the Sunshine Coast. She has published widely in the fields of gender and education, and critical policy analysis. She is interested in social justice and education, and in policy processes and social change. Email contact: s.taylor@qut.edu.au

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Power Levelling

JANE DOWNING

She'd made them the small, twisted pasta. Myf called them butterflies. "I have butterflies in my tummy," she told her mother. Tarquin was moving his around his bowl, maneuvering individuals onto the rim ready for take-off. The bolognaise sauce dripped off like insectoid blood and guts.

They leaned in at the kitchen bench, relaxed because it was Friday. Even John had his tie off, totally off and gone. It was a snake crawling along the carpet toward the wardrobe instead of its usual weeknight manifestation as a hangman's noose, ready on the doorknob to hang around his neck the next day.

Andrea served John seconds. They had talked about the creeping of the years, the roundness of their limbs on other nights, but this was Friday night and they were not yet middle-aged. They were a more attractive foursome than the family in the photograph, framed and mounted on the wall like a trophy of success. For the studio they'd been all trussed-up and proper. Every hair on the four fair heads in place. Tarquin had aligned his features to match and looked po-faced. Myf had looked so pretty five minutes before but her curls had escaped their toggles so Andrea had dragged them back with a wet brush. For eternity Myf looked bedraggled and Andrea's smile was tight-lipped with guilt. Now, realtime, across the bench, they were mussed-up and lived-in, and happy.

John picked his laptop up from the coffee table where it'd breathed silently throughout dinner. "I'll check the Forums before tonight," he said, and left Andrea to it.

It: the school lunch boxes to empty, the dinner leftovers, what there were, to store in the fridge; the dishwasher packed and on, the washing on, baths for the kids too. A last story lying on Tarquin's bed as Myf played on the carpet beside them. Another chapter of "The Hobbit" finished.

"Hurry," John called down the hallway from their bedroom. Andrea had only moments to log-in on her own laptop before the time set for the meeting.

Andrea shed the night and walked into the glade in the brightest morning sunshine. The others in the Guild were already there in battledress, Leldoran13 showing off his new Howling Sword. Last week they'd completed a Dungeon Quest and with the topped up Experience had set their sights on a Raid deep into Azeroth. There was no time for niceties. Gair sent a message that appeared on the screen beside his armoured avatar. Short and sweet, the usual form of chat, hand already busy on the mouse, moving into the Raid. "Glad you got here," it read.

Andrea turned in the bed. John was propped on the pillow beside her, identical pose, legs extended, like a joint sarcophagi of a married couple from Ancient Egypt. He glanced up and sent the briefest of winks to end the message.

Then she was Xenedra, partner to Gair, proud owner of a crimson dragon whelping which flapped along behind her matching crimson cloak. Leldoran13, the Guild's Protection Paladin led the way onto a snow-blanketed mountain in Dun Morogh. There was an Elite Monster in a cave. They were assured it would emerge to do battle once they were within Aggro Radius.

A swoop of movement to the west swung Xenedra around. Only an Orc Horde on their slaving Wolf-mounts. The parties ignored each other for now. The silence was eerie. Lushspice, inappropriately dressed for battle in little else than a corset and a swathe of cloth, sent some chat down the line. "I'll go ahead." As a Feral Druid she had the Experience but Gair was close behind as back-up.

The roar drove the Raiding party back into a protective circle. Saliva drooled from the snarled lips of the bear as it presented itself. A ringing of swords sang out in opposition to the roar but too quickly the bear was on the smallest of them, the Dwarf Vixen. Vixen head-butted his iron helmet into the monster's jaws and fell back stunned. Xenedra dashed in with a healing potion.

“Mum? Mummy?” A small hand moved Andrea’s hand off her wireless mouse. Tarquin’s frightened face peered into hers. She blinked to adjust her gaze.

“There’s a goblin under my bed,” Tarquin was whispering. Afraid his words would stir the goblin in the room next door.

Andrea was gone some time, chasing shadows and reminding Tarquin about the boundaries between reality and fantasy. He went back to sleep, seeming happy. John was not. They needed five players to have a chance against the bear. Without her the Raid had gone badly.

“We can get help,” he offered. “There’s this agency Lushspice was telling us about on the Forum.”

Andrea wasn’t listening. Her arguments were burning too loudly inside her head. The things she’d never say. Like, we don’t need outside help, we just need you to help with the kids.

“We don’t want to drop you from the Guild,” he was saying. “But the rest of us are at level 70 already. You haven’t been putting in the time to get up there lately.”

The accusation was true. When was there time with work and family. Balance indeed.

“You could join a new Guild with nubes or something.”

The insult was like a slap. Andrea didn’t bite back her retort this time. She was stronger as Xenedra, could defend her avatar if not herself. The words typed up in front of her in a square of her vision — she often dreamed like this too — even as they sped out of her mouth. “You equate me to a nube? Someone whose just started and knows nothing? I’ll remind you I was in Azeroth before you.”

John lent across the snow-white bedspread. “Yes. It’s why I fell in love with you.” He was stroking her cheek, his form of apology, and of foreplay. “Come on. For us. We can afford it. It’ll only be \$50 or so to get you up the levels. We don’t want to eject you. We want you up at our level again. Then we’ll be fine.”

Power levelling. Where could there be any harm? They’d simply pay someone to play her avatar, gain the Experience, get her up to level 60, maybe even the whole way to 70. No-one seemed to think it was cheating. The agencies were legit, and quick. It’d take less than a week. These agencies understood that people like Andrea had money, but were poor in the commodity of time. And, perfectly, they were in another time zone entirely so Xenedra could battle the Horde and rise while Andrea slept.

Santoso’s friend from school’s cousin said there might be a job going so he walked across town to Jalan Lima, a road given a number not a name — the fifth road into the estate — because it was built for making money not making a community. Then he walked the same route six days a week. He knew he was lucky. It was better than factory work which was better than no work. There was a gasp at the drop in temperature every morning. Not many kids from his kampong got to work in air-conditioned comfort.

He didn’t kid himself, not after the first day, that any of this was for the fifty young men employed on a basic daily rate. The heat and humidity bugged the computers, valuable assets; Santoso’s comfort was a mere side-effect to sound business management. He was a peripheral to the hard drive, no more.

There was a worksheet to pick up at the door where they left their thongs in a mangled hill of rubber, then his eyes took a moment to adjust to the haze of shadow and electric glow in the warehouse. There was a hum to the place that reminded Santoso of the temple run by the Buddhist monks near his home. He never went in, but the hum of prayers came out. The likeness ended quickly. Once Santoso had logged-on he was ready for battle, killing and death.

Sometimes he found himself as a troll, gargantuan and green, sometimes a night elf with a high hat like Rama in the Wayang Theatre. Sometimes he was human, and female, which was disconcerting the first time. But this was work and he was lucky. He’d flag the avatar by toggling the option in the player menu and head into hours of PvP play. Mainly in the arenas — quick, clean, uncomplicated battle, one player verses another. Killing raised the points steadily. This was simply about getting the power levels up.

Xenedra was already at a high level when he picked up her worksheet. She had a lot of gold and could afford a dragon whelping. It could get lonely in this world, and the beast strangely made good company. Santoso never mentioned details like this after his brother had laughed at him about the thrill of riding a horse-mount, “Anjing hitam,” he’d cursed him under his breath, though he knew his brother was right. There was nothing real in this computer world no matter how it felt after twelve hours at the terminal with only two short breaks.

Budi joined him for a kretek during the first break one day. He was older, had been there longer.

“It makes you think,” he said. And left a silence for

Santoso to think into. Santoso was not yet back and was seeing a Griffin rise up out of the clove-scented cigarette smoke, a beast more frightening than the legendary Garuda he'd grown up with.

"About the people behind the avatars." Budi finished his sentence after another long drag on the kretek.

"What about them?" Of course Santoso had thought but there was something specific in Budi's eye.

"How much money they have."

"Yes, some have more gold than others stored in their..."

Budi, older, wiser, cut him short. "How much realworld money they have in their countries. Imagine having enough for this — to be able to pay us to play a game for them."

It was laughable indeed. Santoso was playing games to bring home money for his Bibi and his three younger brothers and sisters. A fact more bizarre than the Undead and the Draenei and the whole Azeroth universe.

"It's not fair, is it?" Budi said.

When Xenedra was stunned by an Orc in the arena, Santoso repeated the words. "It's not fair." She lay on the sandy ground with her cape spread around her like she was some huge jungle butterfly. If he wasn't being paid to be a Power Leveller he would have left her there to be killed.

Budi joined him often after that. Walked a way home with him. Talked about the other world linked to theirs through the game. A world of excess and affluence undeserved. Earned merely by the chance of birth and the ongoing exploitation of people like them, born in countries and on islands the rich folk wouldn't even be able to name. Places less real to them than this make-believe on the internet.

Budi explained economics so it made sense. Nine thousand rupiah, Santoso's daily wage, was a mere, solitary dollar. His time, his life for an amount so small the westerners wouldn't blink to lose it.

The rupiah in Santoso's pocket no longer seemed lucky and plenty. He watched the whites when they came in from the resort to buy carved idols and lacquered beads. One late afternoon he walked towards the resort and watched boys his age fly across the waves on gem-coloured surfboards.

It was like the game. The more power you had the more you got. Santoso dreamed of the many worlds butting themselves up against his when he slept in his family's two room shack under rain that drummed on the tin roof like an angry god.

Budi started to talk about a group who felt like them. Who had a mind to how things could be levelled a bit more. Santoso laughed at the idea. But it grew in him like a coconut beached onto a fertile shore. He knew he was good at the game, a resourceful killer, trained for attack. One afternoon he told Budi: "Give them my name."

Author

Jane Downing has had short stories and poetry published in Australia and overseas. Her novels (*The Trickster*, 2003 and *The Lost Tribe*, 2005) were published by Pandanus Books.

The Dancing Bears Return

When Leningrad went retrograde
and resurrected saintly
the dancing bears came back

Cub-trained on hot coals
they quickly learned to Fred Astaire
rhythmic patterns on blistered paws

So, in St Petersburg, the corpse exhumed
owners bring brown bears on leads
to grass patches by the neva

Tourist photographs –money in the fur-box hat,
wheezy accordion protesting the bitter wind
Everyone sells everything in St Petersburg

Teachers with no pensions sell their books
Babushkas sell knitted bits and bobs
Young girls and boys sell their bodies

The Mafia sells priceless dreams of blood and misery
The orthodox incense sells the golden mysteries
promising death will be better than this life

And every ordinary person
scraping an existence in the cold
dances with the bears
waiting for the next revolution

Maggie Emmett
Norwood SA

Democracy Incorporated: Managed Democracy and the Specter of Inverted Totalitarianism

by Sheldon S. Wolin.

(2008). Princeton University Press, Princeton and Oxford, ISBN 13579108642, US\$29.95.

Sheldon Wolin is the author of perhaps the best work on the history of political thought in the last half century. His magisterial work, *Politics and Vision*, published more than forty years ago, showed the influence of political imagination on political organisations and ideals. In this very recent work on the problems of modern politics, particularly in the USA, his liberal and democratic voice is still offering us unique insights. Wolin is likely to be scorned by those who merely skim the book title, and on this basis think that he is merely saying that America today, with its aggressive and illiberal internal and external policies, has some resemblance to the totalitarian states of the last century. The mainstream media, if it does not ignore the book entirely, is likely to see it as an attack on George Bush the Second from a supporter of the Democratic Party. Such reflexes miss the point: they are not what Wolin is saying at all. His much more profound message is set in the context of political thought about the struggle between elites and the demos since the time of ancient Athens, with references to the emergence of republicanism and capitalism in the last half millennium, and the emergence of elitist anti-democratic tendencies in the American Constitution.

For Wolin, the democratic success of American politics reached a high water mark at the time of the New Deal following the Great Depression. Since then, and particularly under the presidency of George Bush the Second, the power of elites have grown, and inequalities have endangered the realm of the public, the activity of the political, and the space for a democratic way of life. Wolin's language needs to be unpacked carefully. Superpower describes the mythical, almost comic book-like, American assault on the international obstacles to its perceived realisation of power. An empire of domination requires bases, markets, and consumers, but not necessarily direct rule. Superpower has used extraordinary methods, mostly unknown to US citizens, in confrontations that are simplified for media bites as struggles between good and evil, or as pre-emptive bids to save our freedom against those who hate us for having our

freedom. Internally America has become a base for global corporate interests, winding back social benefits to the demos and favouring the private interests of the few. These internal and external dimensions of state power draw on a neo-liberal elitist vision that is deeply, even secretly elitist, even as it professes patriotic and democratic legitimacy.

Inverted Totalitarianism is contrasted by Wolin with the old twentieth century regimes of Hitler and Stalin. The lives of the people now are not drab, harsh and dedicated to an ideological struggle. For most, life is materially tolerable, but democratic participation in public life is marginalised. The rule of highly efficient political operatives, with close affiliations to the military and the great corporations, is managed within a corporate ethos which stresses continuity, rather than abrupt change. It also marginalises notions of disinterest, the public good, and the political, as distinct from the grubby business of partisan attack politics. Politics comes to be seen as mere elections. More than this, democracy is misunderstood as a daily, constant election, where disinterest is forgotten, where all points of view are now seen as partisan, but where one side claims the monopoly of patriotism. Such cable TV constant partisanship is far from the ideal of democratic debate. Lies and misinformation, otherwise known as spin, prevent reasoned discourse, and academics and intellectuals are either marginalised or incorporated into the winning elite. In this way, universities, for example, lose academic authority as they are enlisted into the partisanship of elite political and corporate endeavour.

In a managed democracy apathy is encouraged by endless unresolved disputes about sexuality, the minutiae of policy and the endless speculation about the ambitions of the powerful. Political leaders here are celebrities, not the custodians of the public space and the activity of the political. Citizens in this realm are neither individuals nor collectives, just manipulated aggregates. Wolin's book does not make any references to Australia, but it has relevance to both the friends and enemies of the USA, and it should assist our Australian debates on the roles of our media, our corporations, our political leaders, our elites, and the state of our democracy.

Jeff Archer
School of Humanities
Faculty of Arts and Sciences
University of New England

Euthanasia — Choice and Death by Gail Tulloch (2008). Edinburgh: Edinburgh University Press. ISBN 0 7486 1881 3.

Death is an experience that awaits every living creature. While humans cannot prevent death, they have the power to prolong the odds of their longevity by adhering to a healthy diet and a resolute exercise routine. Then, as the end draws nigh, they may be fortunate enough to be able to determine the manner of their death. Considering the choice of how to die is a subject often dismissed for moral or religious reasons or because the mere thought of losing one's life is too horrific to even contemplate, but the choice (or lack of choice) can be seen as the foremost existential experience of a series of self-defining choices made throughout life.

Gail Tulloch calls on us to face the universality of death with the dignity of rationality once the imminent inevitability of death is beyond question. If life lingers on in excruciating pain or to alleviate the pain one needs to be rendered senseless, with no hope of recovery, the individual should be free to exercise his/her final will in a liberal society. By a liberal society is meant a society where the principle of personal liberty is allowed to the extent that it does not infringe on the liberty of others. As Tulloch contends:

(P)eople should be free to make their own life-choices and decisions. The state, acting through the law, should opt out as far as possible of the preserve of personal morality.... A strict line between the two spheres of personal morality and state intervention should be maintained. Equally importantly, in a liberal society there should be no state-imposed morality or religion (45).

Her argument draws on the ideas of John Stuart Mill in his essay *On Liberty* where his "conception of a worthwhile human life emphasises individuality, creativity and self-determination." His sovereignty of the individual is based on distinctive human qualities: "the faculties of perception, discriminative feeling, mental activity and moral choice" (42). A personal sovereignty dependent on these faculties will only be sustained in a society that proclaims and permits the individual to act freely throughout its institutions.

Tulloch sets up a typology that helps the reader to distinguish four distinct types of euthanasia. First, there is the voluntary/active category where the patient freely elects to shorten his/her life by taking an active step, such as calling on the doctor to provide a fatal injection when death is agonising and inevitable. Second, voluntary/passive occurs when the patient

requests that nothing be done, which hastens death. Third, involuntary/active takes place when action to terminate life is initiated but has not been sanctioned by the patient. Fourth, involuntary/passive refers to action effected by omission or withdrawal of treatment without consulting the patient. The possible reasons usually given for taking action without referring to the patient are that s/he is not capable at this point of making a decision, has in the past indicated a wish not to have his/her life unnecessarily prolonged, or is suffering great pain with little or no chance of recovery. Tulloch ranks the four types of euthanasia in the following "order of moral legitimacy or supportability:" voluntary/active, voluntary/passive, involuntary/passive, and involuntary/active (34). Both types of 'voluntary' are preferable, because, in line with the fundamental value of the liberal society, they manifest the autonomy of the individual. 'Active' ranks above 'passive' because it upholds the reification of the patient's free choice. In the case of the involuntary types, the 'passive' has slightly more moral legitimacy than the 'active' for the negative reason that someone else is not assertively depriving the individual of his/her free choice, which would constitute a greater loss of individual freedom. When resorting to involuntary euthanasia, the removal of the patient's free choice must be weighed against factors such as the degree to which suffering is reduced and dignity preserved.

The justifiability of voluntary euthanasia (active or passive) is neatly condensed by Tulloch into four main arguments:

- Autonomy of individual and the right to choose;
- Retention of the right to dignity;
- Reduction of suffering;
- Justice and the demand to be treated fairly.

The dignity and suffering arguments, as already indicated, also apply to involuntary euthanasia, but as Tulloch points out, the public debate centres mainly on the voluntary aspect.

She lists seven arguments that are usually raised against euthanasia:

- Sanctity of life doctrine;
- Possibility of misdiagnosis and recovery;
- Risk of abuse (role of unscrupulous relatives);
- Non-necessity (already occurring by medical profession, so no legislative changes are required);
- Discrimination (some lives considered more valuable than others);

- Irrational or imprudent choices;
- Slippery slope argument (from voluntary to involuntary euthanasia).

In her view (and I agree) the overriding argument in favour is based on the autonomy of the individual and the right to choose. Where I slightly quibble is her contention that the other three can be subsumed under the rubric of the first. Preserving dignity and reducing suffering, it seems to me, are worthy pro arguments in their own right.

She considers the most powerful arguments against euthanasia are the sanctity of life doctrine and the slippery slope assertion. The former runs into difficulties, she rightly notes, because it is not universally applied. The concept of human life's sacredness and inviolability come up against the exceptions of the just war doctrine, the right of self-defence, and for a large majority the advocacy of capital punishment. Justifying why the individual's autonomy cannot be preserved with euthanasia, while other cases of killing — including the mass killings of

modern warfare — are often sanctioned by the same people, poses a major problem for the opposition. By default, the slippery slope argument from voluntary to involuntary euthanasia would appear, then, to offer the strongest anti case.

It is difficult to encapsulate in a brief review the sophisticated manner and detail in which Tulloch has argued her case. The theoretical arguments, pro and con, are laid out in Part I and largely summarised in the Conclusion. A lengthy Part II examines critical cases that have occurred in four liberal democracies: the United States, England, The Netherlands and Australia. Her empirical evidence is crafted superbly so that the case studies — many of which the reader will be familiar with — will acquire a new meaning when imposed against the concepts rendered in Part I. The book, to my knowledge, is unequalled in the literature.

Ralph Summy
 Australian Centre for Peace & Conflict Studies
 The University of Queensland

Franchise

Driving through a home town

Has significance

Until it becomes one of many

And now the state

Seems crisscrossed with heart

Strings that catch on the most

Obvious things

Street signs greyed with mildew

Rivers polishing rocks

Creepers wrapping a water tower

And storefronts setting up smiles

All of it with a counterpart in another place

Emotion under franchise,

About as special as hamburger meat

And looking like the copy of a copy

Ashley Capes
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