



Cholera in KwaZulu-Natal: Probing institutional governmentality¹ and indigenous hand-washing practices

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Though it might appear otherwise, my writing is not really about nations and histories, it's about power. About the paranoia and ruthlessness of power. About the physics of power. I believe that the accumulation of vast unfettered power by a state or a country, a corporation or an institution – or even an individual, a spouse, friend or sibling – regardless of ideology, results in excesses ... (Arundhati Roy, 2004:14)

Abstract

The paper reviews education activities in a successful anti-cholera campaign amongst rural communities in eastern southern Africa. It is centred on probing how a modern institutional governmentality was relatively blind to an historical legacy of Nguni hand-washing practices and came to exclude use of simple tests for coliform contamination in rural health education activities.

The study examines institutional processes, probing discontinuities between the health education message and the complex social ecology of cholera. In so doing, it uncovers how a post-apartheid institutional rhetoric of participation, empowerment and social transformation is playing out in communicative interventions to instil healthier practices amongst the rural poor. Institutional perspectives such as this are rooted in an institutional legacy of appropriation and control. Despite the current rhetoric of participation, instrumental orientations are being sustained as the radical critique of struggle for freedom and change gives way, through comfortable submission and intellectual conformity, to an instrumental conservatism in many post-apartheid institutional settings today.

The study notes and probes a surprising resonance between the ecology of the disease and an intergenerational social capital of indigenous hand-washing practices. The evidence suggests that these patterns of hand-washing practice would have served to contain the disease in earlier times and points to this social capital as a focus for co-engaged action on environment and health concerns. The findings suggest that an opposing of institutional and indigenous knowledge is not a simple matter and that moving beyond a legacy of cultural exclusion and marginalisation remains a challenge as the first decade of post-apartheid democratic governance comes to a close.

Developing Context of the Study

When there was a cholera outbreak near Melmoth on the north coast of KwaZulu-Natal (a province in South Africa), the response by water, health and education departments included the review of existing water education materials for an anti-cholera campaign. Besides the obvious instructions for sanitising contaminated water and posters on oral re-hydration, environment and health education resources included materials on patterns of water collection/storage by indigenous communities, as well as simple hands-on test kits for school and community groups to detect coliform contamination before engaging local health risk. The indigenous knowledge and coliform testing materials were noted for their local relevance by health workers and because they resonated with a departmental policy to work with people in participatory ways.

The Department of Water Affairs and Forestry and local water authorities thus supported the adaptation of school water audit materials to include materials on indigenous hand-washing practices and the use of a low-cost coliform test kit in curriculum and community-based environment and health education activities. The Health Department, as lead agent in the programmes, coordinated a joint operations task force in a responsive campaign to establish emergency re-hydration centres and to implement programmes of water supply improvement and toilet building in the affected areas. The supporting education materials for the anti-cholera campaign and water and sanitation programmes were:

- Anti-cholera posters on water sanitation and oral re-hydration that were printed and distributed to all clinics, community centres and schools by the cooperating government agencies and local authorities. The health message communicated in the materials exemplified oral re-hydration, the need for sanitising water and for washing hands after toilet use and before preparing or sharing food.
- Education packs containing water audit kits and the posters about cholera, hand-washing, oral re-hydration and water sanitising with Jik (chlorine bleach) were also supplied through workshops as a teaching resource to be adapted for use in the school curriculum.
- Coliform kits were introduced to health workers and were deployed on a limited scale before falling from use as the test was considered to be unnecessary when laboratories in Durban could more reliably produce the desired results within 24–48 hours.

The responsive campaign of mobile re-hydration clinics, toilet improvement, water provision and education was extremely effective because, of the over 160 000 cases of symptomatic cholera amongst predominantly rural people over the two years of the disease, only 373 died of cholera, a case fatality rate of 0.21%. Had the cholera campaign been a tragic failure, a review such as this would have done little more than compound the tragedy but with the programmes having been a success, it is hoped that research such as this might make continuing and future activities even more successful.

A Contextual Research Design

This review draws on materials collected over a four-year period from an initial encounter with responses to the disease during Water Week at Eshowe in 2001. An interest in education

and governance emerged through activities with Share-Net and the National Environmental Education Project that led to work with Ladysmith schools after the Christmas outbreak of cholera in that area. Project W.A.S.H. was first interacted with at its launch in the same year and reflexive review activities were undertaken with water, health and education groups as the epidemic abated. This paper was first drafted as a working paper for the 7th International symposium on Environment and Health Education at Anchorage, Alaska in 2003 and was refined and concluded in 2004 during further work on hand-washing that was undertaken alongside the *Eziko* action research process developed by Goduka (2005). The paper thus reflects an unfolding engagement in the cholera education process and a deepening struggle with issues and insights as these emerged in the review.

To review evidence of the shaping powers at play, the study gave attention to developing patterns of inclusion and exclusion amidst the interplay of institutional structure and human agency that played out in health education activities within the cholera campaign. It probes patterns of meaning-making interaction for a sense of how institutional processes in/of² the times did not take up and sustain an engagement with an Nguni cultural capital of hand-washing practices or use of simple coliform testing tools for local communities to participate in the determining of health risk.

An assumption in the review is that the inclusion of local people as more actively engaged agents must improve learning activities as well as strengthen the fledgling post-apartheid democracy in the region. Probing evidence of how institutional perspectives were blind to the relationship between an intergenerational capital of local hand-washing practices and the social ecology of the disease thus became a key concern. Similarly, examining the exclusion of a simple test of coliform contamination developed as an interest. How these served to exclude situated human agency except as a somewhat rhetorical outcome for empirical verification thus became a question around which the study design was developed.

Processes of social interaction were examined in developing context to shed light on the steering ideals and power relations at play in the emerging game. Most noteworthy is how institutional habits of mind (governmentality in relation to the administration of social life) inscribed particular patterns of inclusion and exclusion (power relations) within the social field of health education. In other words how developing discursive practices associated with these both shaped and played out in the education processes implemented in the anti-cholera campaign and its associated education programmes.

In this way, what happened and what was said/written (developing social processes and perspectives) are examined and reflected on as shaping social interactions within which choices were enacted (inclusion and exclusion). These are then traced for how they played out in particular ways within the developing campaign and associated activities. The depth and detail of shaping social processes such as these is often hidden from view in the taken-for-granted habits of mind of institutional context but can become more evident as activities and the associated discourses unfold or are carefully followed over time, as in this study.

Evidence informing the study was collected and assimilated through experiences in and from records of the education processes, as well as from a later review of documents and materials of the cholera campaign. I am grateful to colleagues who have shared their struggles and stories in

the review, and were willing to probe events with critical honesty. It was encouraging to have worked with a success story and to undertake this study in the hope that a careful probing of blind spots and paradox might strengthen the ways in which we might engage participants in the environment and health issues that confront us in the region.

Institutional Tensions in Developing Context

Health education workers enthusiastically worked with materials reflecting Nguni indigenous knowledge on water collection and storage. These Share-Net materials were seen as relevant to be reworked for the cholera education campaign. The indigenous water collection practices were set against the water contamination in many rural areas today. They were used to stress the need for people to sanitise water with Jik and to wash their hands so as to avoid the threat of cholera.

In the review and development of educational materials for the campaign, health workers were also enthusiastic about communities and schools using low-cost coliform tests. The use and implementation of these was not possible for reasons that were initially not easy to determine. A later probing for a sense of the institutional processes inhibiting their use revealed an institutional disposition that rural peoples would not be able to understand scientific ideas and would probably be unable to use the simple tests to obtain reliable indications of e-coli contamination. This explanation for the exclusion of low-cost coliform testing was not contested at the time. A further probing of a somewhat hidden institutional discomfort (axes of tension) shaping institutional narratives of exclusion suggests that a giving over of meaning-making control so that rural participants might determine problems with the tests threatened to disrupt established power relations (power gradient and established and outsider relations). Most notable was the professional role of the health worker as authority informing and educating towards good health practices.

The initial image that signified the test for use was how hands-on testing for coliform had been extremely illuminating for the health workers. Their encounters with bacteria had previously been through pictures and texts, not with the real thing, and through use of a research procedure. Whilst this had been significant on the training course, when back at work and interacting with their superiors, the enthusiasm appears to have been displaced by diverse worries. Notable was a loss of mediating influence (institutional power relations) and the need for a shift from lecturing demonstrator to facilitating co-worker (changing relational dynamics) that implied an increase in job demands.

Linked to this issue was the prospect that deployment of the test kit would bring an increase the job complexity, locating the interpretative and steering power lower down on the institutional ladder (power gradient). This was manifest in a voiced institutional fear that health workers might make mistakes in their use of the test when what was really at stake was the prospect of a loss in power and directive control at the upper managerial level in the institution that scientifically mediated and controlled the knowledge content of health messages. There was also a whispered fear that local testing and loss of instrumental control might reveal the extent of coliform contamination in everyday rural life. This might constitute a shift in power

and control that had the potential to expose flaws in or ferment doubt about the effectiveness of a political imperative for government institutions to deliver better water and sanitation services to rural areas (shifting power relations).

This interpretative evidence points to a web of intermeshed concerns that served to exclude participatory coliform testing. The interpretative ideas bracketed above, have been included in the text as an attempt to make subtle tensions and subverting concerns more explicit as social processes shaping developing patterns of practice. As sensitising concepts these propositions point to institutional habits of mind (social habitus) shaping emerging patterns of inclusion and exclusion amidst diverse actors (social figurations) interacting in the education activities that emerged in the anti-cholera campaign.

The unfolding story is one of how sedimented perspectives and power relations, constituted and sustained within the relational dynamics of day-to-day interaction, are a sustaining institutional currency that is surprisingly resilient and resistant to change. Popkewitz (2000) points out how robust and resistant to change institutional figurations can be, by examining evidence of how a discursive rhetoric can create the illusion of change. Institutional tensions and rhetorical processes such as this were evident where a narrative of community participation co-existed with an instrumental discourse of knowledge management as simple educational messages were constructed to change the hand-washing and health behaviour of rural target groups.

These processes gave rise to and sustained an institutional concern to develop and deliver a clear message so that communities might effect the necessary behaviour change themselves. Here the prospect of meaningful inclusion/participation becomes a matter of the message being taken up in the community. Processes such as this (down-loading) are noticeable in recent more consultative and participatory strategies, particularly in rural sanitation activities where communities are being required to deliberate on various options and to make choices without being privy to the institutional capital that might allow them to make informed decisions. A further probing of this anomaly must remain beyond the scope of this study.

Three Intermeshed Dimensions of the Campaign

The message of the cholera campaign was that people get the disease from contaminated water and dirty hands that are not washed with soap. Communities were thus exhorted to sanitise water and wash hands so that water and food is not contaminated and others do not get the disease. The sustained and simple message given to rural target groups reinforced the importance of clean water and sanitary practices, common-sense health behaviours determined by health professionals that rural people must practice to lead healthy lives free of disease.

The campaign had many dimensions, the most pressing being an immediate and effective response to the problem of death from dehydration at the onset of cholera. This was addressed with a simple emergency re-hydration recipe and the imperative to get the sick to mobile re-hydration centres where they might be treated and, if necessary, evacuated to hospital for drip re-hydration.

Alongside this were the education messages about what should be done to prevent the disease. The affected areas were also prioritised for water and sanitation programmes so that an improvement in water quality and toilet provision might reduce the threat of cholera.

The three intermeshed dimensions of the campaign were thus:

- emergency health provision (containment and reduce deaths),
- health education messages (responses/prevention), and
- water and sanitation development (long-term solutions to the problem).

These processes were shaped within a developing institutional logic in/of practice. It may be surprising then that they are emergent in a modernist appropriation of daily life, rooted in colonial intrusion and sustained and developed within the apartheid process of separate development, to the recent advent of community service institutions within the democratic state. Within these developing processes, as state institutions came to know more and better than rural people living in ignorance and at risk, so education and health services were constituted to effect the necessary life-style changes in the behaviour of differing target groups at risk to various diseases.

The Appropriating Roots of Education

In simple terms, within an appropriating development of instrumental functions in government departments during a fairly seamless transition from colonial to apartheid and democratic state, the rural peasant was variously portrayed as primitive, dirty and defenceless, lacking in capacity and the will to develop, and thus in need of development through the agency of others, the health education professional from their institutional setting in/of the modern state. A sustained denial of agency to rural peoples within the modernist state structures, and an emerging institutional imperative to cure disease and improve health through communication and development interventions, in effect, developed and functioned as a closed system of appropriation exacted amidst colonial intrusion, extended within an ethos of separation in the apartheid era, to currently reside in professional habits of mind within modern state institutions.

The racial oppression of apartheid came to a rapid end in the 1990s after protracted struggle through civil disobedience and guerrilla warfare. A government of national unity in transition was characterised by more participatory policy development to effect reconciliation with redress and community empowerment for previously marginalised human agency. An accompanying radical critique driving the empowerment and social transformation agendas appears to have become somewhat of a rhetorical process as criticism has given way, through comfortable submission and intellectual conformity, to a sedimented professional conservatism in/of modernist state institutional settings.

A key element here is a shift in earlier exclusions to the formerly marginalised taking up managerial positions in the administration. The momentum of a participatory imperative for people to voice their concerns, initially during the transition to wider democratic governance, began to falter as many of the new bureaucrats expressed how they knew the concerns of the people. In this way participatory processes initially served to sediment the new institutional order that approached participation as a rhetorical process and continued applying an instrumental rationality to enable participants to take up the desired health practices.

Ironically, a rhetoric of agency/participation at a policy level had produced policy-level transformation without much change in patterns of institutional practice. It is also noteworthy

that there is now a greater reliance on consultants as outside professionals who come in, often through donor-aided initiatives, to facilitate much of the steering work in/of state institutions. Here one finds the facilitative steering of others to develop the personal and institutional capacity to steer themselves. In education activities one also finds the emergence of action research as a rational process of co-mediated reflexive engagement under the facilitating hand of an external technical assistant from donor agencies. This is apparent in the externally funded Project W.A.S.H. that was launched at the conclusion of the cholera campaign.

Social processes such as those sketched above ensure that institutions and agents within these remain insulated from and blind to much of the knowledge capital and agency in/of rural communities. Despite a vibrant period of socio-political change with an accompanying rhetoric of democratic participation and transformation, institutions still seem to subvert a reappropriation of more steering control in the realm of daily life.

Complexities of the Disease are Lost in the Health Education Message

The ambiguous reality of cholera in a rural community context is that most people get a disease found in the water, from each other and not from the water they drink. This is the last thing that a health authority bent on improving the lot of rural people wanted to hear from the scientists. After years of exhorting people about building toilets, washing hands and the need for keeping their water supply free of faecal diseases, along comes cholera and operates outside this carefully crafted and deeply entrenched cultural framework of truth. The cholera organism does not live in fresh water for long, its natural habitat being the brackish water of coastal estuaries but it can enter community water supplies and be locally present from contaminated sewage systems. Within their natural habitats cholera remain benign for lengthy periods, intermingled amidst a myriad of other micro-organisms until particular environmental factors seemingly trigger the expansive growth of cellular foods and enzymes that accelerate reproduction through rapid cell division. In this way the benign in nature becomes a disease to humans.

When a person with the disease comes into a community the disease is passed on from hand to hand and hand to mouth. The reality is thus, that someone picks it up and then it is passed on to others as people move through an area. The problem is compounded with people being more mobile and travelling further afield in modern times.

Not surprisingly, to understand and communicate the disease in campaign messages, the health authorities could do little more than write the disease into the established cultural mantra of sanitation and health education. This allowed health workers to stick to the hand-washing and health story and for this to remain the story told to fight cholera amongst the rural poor. Senior health professionals who confirmed the more complex socio-ecological realities of the disease in discussions with me reported that it was better to continue to train health workers to give rural people a consistent simple message about water and hand-washing as this would contribute to their health and allow them to resist the disease. To reveal and engage the complexities of the matter might confuse them.

In this way 'sanitise your water' and 'wash your hands with soap', were the sustained and sustaining health education messages that were carried into the cholera campaign. These are

the health practices that the government has been trying to persuade rural people to take up for years. In doing so they had been working with and refining a simple message. There was little space for neither ambiguity nor doubt, either in the institution or in the image of its relevance to the picture of simple rural peoples that had come to circulate within this closed system of health provision. In this way the institution sustained its appropriated powers of mediating control over the health dimensions in/of rural daily life as author of messages and with authority over matters of health. All patterns of health and sanitation practice thus came to be understood on its terms and within its mediating authority. In doing so they had to expose the fallacy in other (indigenous) ways of seeing and doing things.

Seeing the Worst in Indigenous Ways

Health authorities were certainly not blind when it came to indigenous health practices. A professional disposition characterised by an authoritative mediation on matters of health and daily life developed with the earliest colonial appropriations of authority over the health practices of the rural poor. Traditional health practices were not dissimilar in the sense that the mysterious dimensions of spirits and herbal healing properties had come to develop and hold similar fields of power, not unlike modern medicine, and in ways that retain an authoritative hold.

The contesting mediation of a scientific perspective has meant that health-promoting initiatives have come to view many cultural practices as problematic and in need of mediated remediation. For example, the cultural practice of groups eating with their hands from a communal bowl was identified as a serious health risk particularly during the cholera problems. Communal hand-washing rituals at funerals were similarly noted as a health problem. In both cases these practices were hand-to-hand and hand-to-mouth processes that aided transmission of the disease.

The shared communal platter explained how every member of a family would tend to be afflicted with the disease if one got sick. There was also an instance in the Ladysmith area where an outbreak of cholera occurred and rapidly took hold in a wide area after one person had died and many who had ceremonially cleansed their hands took the disease home with them.

These cases of poor health practices branded the sharing of food from a communal platter and traditional cleansing practices as unhealthy and in need of change. Stories of unhealthy eating and ritual washing practices were rapidly incorporated into the health mantra without disrupting its message that each person must simply wash with soap before preparing food. The dangers of doing things together in unhealthy old ways provided a wonderful foil for health workers to introduce new and better ways of doing things and in which the people might participate out of fear so as to become more aware and to work things out for themselves. For example, a health worker described how, in response to the ritual cleansing problem, he introduced the problem of cholera and then asked the people what would happen if they were sick and prepared food for others without washing their hands. Or what would happen if everyone washed using a communal bowl of water as one would do at a funeral. In this way current practices were used as a foil in participatory drama as a democratically mediated probing of the problem for participants to acquire the desired action competence through a

mediated working of things out together. This evidence was particularly significant as drama and story were used as a scaffolded form of participatory engagement. It also reflects how a concern for action competence through participatory engagement came to be taken up and reshaped within the dominant culture of education.

The Institutional Message as a Mask

Discussions with health professionals suggested that the reduction of the complexities of the problem to a simple message and associated health promoting activities that directly targeted risky practices, contributed to the success of the campaign. One does not have to be a rocket scientist to see that the carefully crafted institutional recipe of simple message and dramatically illustrative portrayal to mediate local problem solving can make for a successful campaign.

My purpose here is not to dismiss processes such as these, especially after having spent many hours working on and sharing creative ways that messages and metaphor might grab us and help clarify propositions that are difficult to grasp. Seeing the value of processes such as this, what I want to do is to point to an accompanying blindness where simple message and illustrative process can also serve to subvert the capacities for people to take up the message and make meaningful use of it for better steering choices in everyday life. Probing participatory drama and story-centred approaches is particularly difficult as these have enormous appeal and create the illusion of participation as they play out in complex ways that often cut across and subvert the democratic co-engagement and meaning-making that they espouse.

In the case of cholera, institutional habits of mind founded on an appropriating authority, centred on the construction of a simple message and carried into effect through powerful illustrations of problem practices in daily life experiences, had a potentially subverting dark side. The institutional patterns of practice were blind to and served to mask a rich capital of intergenerational indigenous hygiene practices as a useful source for narrating healthy rural living and through this, better health practices.

Most of my interactions with departmental experts were characterised by an institutional scepticism about indigenous knowledge and health practices. This was often qualified by an undifferentiated acknowledgement of an intergenerational common sense in earlier indigenous ways of knowing, now seen as redundant, given the change and current health risk in rural areas. The abiding sense was that of a history of authoritarian institutional practices that has shaped a structural functionalist system disposed to oppose and exclude anything not ratified or verifiable within its institutional conventions. Rural peoples have thus become targets for simple health messages and mediated democratic engagement within which there is little or no space for critical participation beyond contrived processes of facilitated meaning-making constructed within the experience of health workers interacting with people to deliver the desired health messages.

The effectiveness of these educational processes appears to reside in an authoritative, mediating delivery of propositions (patterning of expectations) in ways that convince and convert (shape self-restraint) participants to adopt the desired practices (salvation). Mediated communicative intervention such as this, does not allow much scope for people to make steering choices (agency) in the educative process or beyond the inscribed outcomes. Yet, the activities are often

dressed up in a policy rhetoric that calls for participation for action competence around the desired patterning to be mediated into practice. This patterning is then closely rehearsed into the message for rational intervention and reasoned into the communication/education process. In participatory approaches the message is closely scaffolded and mediated within engaging activities that seldom give more than rhetorical attention to engaging existing patterns of practice.³ This is of note where, in this case, to contemplate the hand-washing cultural capital and capabilities that people already have could lead to a disappearance of the very problem to be rationally narrated and mediated into changed practice for good health.

Probing Nguni Hand-washing Practices

As health professionals had related the social ecology of cholera and how this was addressed by their health and sanitation interventions, key aspects of a more complex picture resonated with fragments of Nguni hand-washing cultural practices. Noting a lack of reliable evidence on traditional hand-washing practices, I asked some researchers involved in indigenous knowledge research to share what they knew or had come across.

The fragments of information that they sent had surprising continuity with the social ecology of the disease. To avoid the common intellectual error of generalising synthesis and an associated idealising of indigenous knowledge as harmonies misunderstood, marginalised and thus tragically lost within a legacy of colonial oppression, the ideas were verified with others and in developing interactions with educators as we worked in the area.

The most striking point was that historically, Nguni people did not immerse their hands in a tub of water when washing. Besides not having containers into which one could immerse one's hands, with the advent of these, they would either lift water in a cupped palm or, more commonly, pour for each other into cupped hands. Of equal significance was how people leaving a homestead would wash on their arrival home to guard against 'kuhabula', the breathing in of bad air/spirits. Mothers would wash their hands and breasts, as well as expel the first milk, before handling and feeding an infant on their return from the fields.

Many diseases, notably the Nagana cattle disease, malaria, cholera/diarrhoea, were said to be in the air and associated with bad air. Good air was the fresh air of home on the upland grasslands and bad was associated with the close humidity of lowland valleys and coastal estuaries. As people crested the upland ridges, presumably breathing heavily from the long ascent and then feeling the freshness of the upland winds of home, they were said to drink the wind/air (*Puza moya*).

People travelling through and up from the valleys were always offered food and drink after a customary greeting and sharing of news during which everyone would wash their hands.

Hand-washing practices are reported here as brief process descriptions to signify Nguni cultural traditions, namely:

- washing before preparing and sharing food
- lift and pour washing to use water sparingly and avoid contamination
- washing on returning home and when greeting strangers
- cleansing rituals at traditional ceremonies, notably burials

These hand-washing practices were related and described to us by diverse educators and learners participating in cholera education activities in the Ladysmith area. The patterns of practice range from the everyday to spiritual occasions and are far wider than the washing with soap promoted by health workers. The process images above can thus be read as an abstracted image of the intergenerational capital of hand-washing ritual that seemingly enabled the Nguni to live for hundreds of years in an area where cholera was a naturally occurring organism in the brackish waters of coastal estuaries. With diarrhoeal diseases being common and cholera not being linguistically differentiated from these, the evidence suggests that the Nguni had refined patterns of hand-washing practices that provided communities with some measure of protection from hand-to-hand and hand-to-mouth diseases. There is a surprising resonance between Nguni hand-washing practices and the social ecology of the disease, complexities that were not accommodated in the campaign health message for people to wash their hands with soap.

Some Conclusions on Education and Struggle for Human Agency

Reading the evidence in Nguni hand-washing practices against the social ecology of the disease and the earlier institutional data, suggests that indigenous ways of knowing and doing things have an implicit coherence that is still being suppressed and marginalised into the present day. A reading such as this is compelling evidence of opposing systems of knowledge (Western and Indigenous) and yet all whom we worked and interacted with on during the hand-washing campaign reported that the learning activities were useful and important for protecting their families against cholera. Without great care a dialectic analysis of the comparative data can shape an intellectual disposition where indigenous and institutional knowledge (Western/Colonial) are assumed to be contesting opposites. There are, no doubt, cases where particular ways of seeing and doing things have been opposed or where one way of seeing things has overshadowed others but, in this case, the meeting place between indigenous and institutional health science was engaging learning spaces of struggle with the disease.

Another reading is thus that the hand-washing campaign reflects a responsive process of community mobilising within the contingency of the disease in the present day. This interpretative proposition does not mean that an apparent institutional marginalising of indigenous ways of knowing and an exclusion of the coliform tests is educationally unproblematic. It points to how, despite an apparent levelling of power gradients within an emergent democracy, communicative interventions of rational imposition still serve both to subject people to healthier ways and yet subjugate them within a cultural habitus of the modern health-care system. Within a long-term view, one can find evidence that similar processes of social mobilisation served to shape and sustain social orientation in pre-colonial times (O'Donoghue, 1997). The ever-present prospect of excesses of powers, past and present, seem to bring challenges that require continuous critical reflection.

These interpretative readings of the evidence had me more closely consider how education often plays out as mediated processes of rational intervention that can serve to subvert human agency and subjugate participants in unexpected ways. The concerns that emerged in the study were less understood at the outset of the research and the evidence has left me with questions

on how to approach education activities in ways that are more culturally situated and orientated towards enhanced human agency for engaging widening environment and health concerns.

To begin to foster greater situated agency, we will need to give closer attention to how institutional processes shape educational perspective. Many environment and health institutions currently give somewhat rhetorical attention to participation and either do not value or overstate intergenerational ways of knowing. In developing and sustaining their authority, institutions commonly create questionable oppositions. They also undertake research to appropriate (denigrate or acknowledge) indigenous contingency and to mediate what counts as knowledge from the specialist institutional settings of the modern democratic state.⁴ These processes serve to appropriate knowledge and to expand the institutional influence, usually at the expense of more local social institutions. For local agency to be engaged through education and research, we may need to give greater attention to social processes that are co-engaging in/of local context and the contingencies across both intergenerational and institutional ways of knowing. This will require careful work amidst the instrumental rationality of modernity and its institutions, as well as a critical engagement with constructivist notions of the self in socio-cultural context. Both perspectives are contingent upon the ways they develop as steering ideas (theory) and came to be deployed in educational practices.

To end on a challenging note in this regard, it has recently been useful to work with and probe an African democratic process of change held in a developing notion like 'Eziko – Sipheka Sisophula'⁵ (Goduka, 2005). Here environmental learning is a co-mediated process in the world and around the hearth (*Iziko*) within indigenous perspective (language/culture). Those engaged around local concerns (*Eziko*) generatively cook-up ideas (*sipheka*) that are dished-out (*sisophula*) to be critically played out at the interface between what we know and the realities of the problems confronted in developing context. A compelling feature of situated process such as these, are reflexive processes ontologically situated in close engagement with the realities of the problems⁶ and the endeavours (reflexive processes) deployed in attempting to resolve them. There is evidence to suggest that situated processes and practices such as these can also serve to engage abstract/outsider propositions that resonate with the realities of a situation. On their own and as expert propositions communicated in messages to create awareness, these often fail to have the generative and reflexive power for much to be done about the problems that confront us in a globalising modern world.

If the intergenerational received wisdom in a developing context (indigenous/institutional) were congruent (right and true), there would be fewer things going wrong in the world. It is thus essential for those confronted by environmental problems to be able to look to what others might have to bring to a problem. Both the intergenerational/experiential constructs of communities and those of modern social institutions need to be reconciled in the somewhat harsh and unforgiving realities of the world.

Notes on the Contributor

Rob O'Donaghue works in the Environmental Education and Sustainability Unit at Rhodes University. He co-convenes a PhD programme and supervises MEd students. Many of

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Endnotes

- 1 Institutional habits of mind in relation to the educational administration of social life.
- 2 This convention, first encountered in the works of Lather, is useful for a sense of how processes *in* developing context can come to take up a character as habituated patterning of the times. This sensitises one to how particular patterns of process evident in learning contexts come to be educationally narrated in particular ways, a vantage point that points to axes of tension shaping emergent ways of seeing and doing things in the case setting.
- 3 Here the dialectic inscribed in the professional narrative, in this case that the nature of the disease meaning that people must wash their hands, excludes the prospect that they might already know how to do so, and the campaign message becomes one of getting to people to teach them what to do. The health risk is thus professionally solved through an education campaign.
- 4 As is attempted in this study. Research such as this merits review for how it comes to inform the ways in which others come to be engaged in education around developing risk and for how power comes to be deployed in processes such as this.
- 5 Two dimensions of these processes can be interrogated, firstly the developing salvation narrative and secondly the meaning-making interactions arising within this. Of concern is the extent to which the detail of histories and cultural capital are engaged in learning interactions. Popkewitz (2000) provides an historical vantage point for reviewing reform as developing systems of reason.
- 6 Whereas this proposition points to a realist/critical realist perspective it should be read as socio-culturally constituted after Elias. He points to how 'questions emerge and are solved as a result of an uninterrupted two-way flow between two layers of knowledge: that of general ideas, theories or models and that of observations and perceptions of specific events'. (Menell & Goudsblom, 1998:232). This should be interpreted within Eliasian social processes of reproduction and transformation (triad of controls) towards an increasing 'reality and object congruence', most notable in developing scientific knowledge. In one sense here, there are clear points of resonance between a realist ontology after Bhaskar (cited in Harvey, 2002) and an Eliasian social processes vantage point. Critical realist discourses that point to a relativist paradox in all contemporary interpretative traditions do not take adequate note of how socio-historically situated narratives are deployed in a real and changing socio-ecological world. Reality thus plays out as mediating processes refuting a dialectic posturing of a duality of praxis against a duality of structure, notably where the latter is historically constituted and mediated within changing patterns of risk in/as emergent patterns of practice out of the long term.

References

- Mennell, S. and Goudsblom, J. (Eds). (1998). *Norbert Elias on Civilisation, Power and Knowledge: Selected writings*. London: The University of Chicago Press.
- Goduka, N. (2005). Eziko: Sipheka Sisophula: Nguni foundations for educating/researching for sustainable development. NRF project working document, Rhodes University, Grahamstown.
- Harvey, L.D. (2002). Agency and community: A critical realist paradigm. *Journal for the Theory of Social Behaviour*, 32(2) pp. 163–194.
- O'Donoghue, R. (1997). *Detached Harmonies: A study in/on developing processes of environmental education in eastern southern Africa*. Unpublished PhD Thesis, Rhodes University, Grahamstown.
- Popkewitz, T. (2000). Reform as the social administration of the child: Globalisation of knowledge and power. In Burbules, N. & Torres, C. (Eds), *Globalisation and Education: Critical perspectives*. London: Routledge. pp. 157–186.
- Roy, A. (2004). *The Ordinary Person's Guide to Empire*. London: Harper Collins, Flamingo.

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