Education in the Asia-Pacific Region: Issues, Concerns and Prospects 30

Margaret Robertson Po Keung Eric Tsang Editors

Everyday Knowledge, Education and Sustainable Futures

Transdisciplinary Approaches in the Asia-Pacific Region







EDUCATION IN THE ASIA-PACIFIC REGION: ISSUES, CONCERNS AND PROSPECTS

Volume 30

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Margaret Robertson • Po Keung Eric Tsang Editors

Everyday Knowledge, Education and Sustainable Futures

Transdisciplinary Approaches in the Asia-Pacific Region



Editors Margaret Robertson School of Education La Trobe University Melbourne, Australia

Po Keung Eric Tsang The Hong Kong Institute of Education Tai Po, New Territories, Hong Kong

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Series Editors Introduction

This ground-breaking and important book focuses on everyday knowledge and the traditional ways in which people can live their daily lives during a time of transformative changes, these changes being associated with globalisation and its impact on local communities. As the Report to UNESCO of the International Commission on Education for the Twenty-First Century (Delors Report, 1996) pointed out, major changes occurring globally, such as globalisation, the impact of new information and communication technologies and an increasing interdependence between countries, have resulted in major tensions developing which must be resolved if societies are to further develop and function harmoniously: between accommodating the local and the global, between cooperation and competition and between meeting the needs of individuals and those of the group.

Many contemporary key issues facing humankind at the current time can be best addressed by adopting a holistic approach and through a process of triangulation which takes into account the knowledge, experience and viewpoints of all relevant stakeholders who have a vested interest in the outcomes to be achieved.

In this regard, this book argues that to effectively cope with such important matters, a special emphasis needs to be placed on the notion of 'community wisdom, based upon the everyday habits and practices of different communities of practice across the Asia-Pacific region', and that when designing policy adjustments and directions, it is essential that decision makers listen carefully to the views of local communities.

The editors of this volume, Margaret Robertson from La Trobe University in Melbourne and Eric Tsang from the Hong Kong Institute of Education, are well qualified to have prepared this cutting edge volume, being leaders in the fields of education for sustainable development and environmental education. In addition to they themselves being significant researchers in this field, they also have extensive experience as policymakers and possess a wealth of experience as influential practitioners working at the grass-roots level, both within their communities and internationally.

This is an important book on a topic that is at the cutting edge of a current debate involving education policymakers, researchers and practitioners.

The contributors to this volume are drawn internationally but offer a particular focus on Asia Pacific. Between them they present different viewpoints on the importance of drawing on everyday, evidence-based, practical knowledge and experience in order to achieve sustainable futures, with particular reference to what this means in concrete terms in the diverse and complex Asia-Pacific region. However, despite diversity within Asia Pacific, it is clear that countries in the region share common, far-reaching challenges. They can productively learn from one another concerning how best to meet these challenges, since what works in one country can also work elsewhere, when policymakers and practitioners adapt these practices to take account of local conditions.

Each of the contributors seeks to explore evidence-based pathways through landscapes of local and global knowledge systems. As Robertson and Tsang point out, there is a pressing need to develop new narratives with the Asia Pacific to guide our lifestyles in the twenty-first century and beyond.

The Hong Kong Institute of Education University of Malaya Rupert Maclean Lorraine Symaco

Foreword

The title of this book points to three ideas: everyday knowledge, sustainability and education. I trust that you, the reader, are not opening the book under the illusion that you will find here a clear and uncontested definition of each of them. This is not the record of a collection of academics declaring the truth about one or other of these notions. Rather it is a series of invitations to look at a specific situation through the lens of a specific discipline, persuaded that reality consists and persists in a multitude of perspectives. Some of the lenses give us a long-distance view; some of them tend to the microscopic. We can read of the impact of globalisation on Mongolian nomads, the experience of adolescents in an Australian urban-fringe community, disaster management in Japan and the challenges for education in a post-carbon future and understand that these phenomena are intimately connected. The subject is in all cases the same. What is common is a focus on place, specifically place within the Asia-Pacific region. What is offered is the diversity of perspectives, emerging as they do from a diversity of academic disciplines. However, there is no fantasy that all these perspectives can blend into a coherent whole. Rather, like a Picasso portrait or urbanscape, the subject is seen from all angles simultaneously, in all seasons, at all times of day. Reality is seen to reside in the awareness of all perspectives.

We might wonder what academics might know about 'everyday knowledge', given that they are likely to see their task as getting past the obvious and the takenfor-granted and pursuing reality in its essence. However, what we find here is a respect for a diversity of traditional knowledges and a conviction that we must listen to the wisdom embedded in all of them. It becomes clear that it is not some abstract notion of the 'truth' about life which governs our behaviour. Rather it is the way we imagine it. Traditional knowledges and basic human common sense provide a necessary contrast and contradiction to the shared illusions which drive the political propaganda of advanced Western economies and the economies which mimic them.

In the following pages we find the sustainability lens applied to such societies, supporting the argument that the 'everyday' assumptions about the sustainability of a consumerist, growth-obsessed, fossil fuel-based society are delusional. What we find in conventional development theory is a commitment to 'growth', resisting even the notion of 'sustainable development'. Yet even sustainable development is no answer to the emerging catastrophe. We can reasonably argue that the expression is an oxymoron, that sustainability and development are incompatible and that we must reimagine a healthy society free from the cancerous growth of a greed-based economy. On the other hand, increasing population seems to be locking us into the 'growth trap'. Keep growing and we die: cease growing and we die. Traditional everyday knowledges, which served the planet well for millennia, may well be able to assist us.

It would be nice to be able to say with surety that education is the answer. Ever since education was recognised as a distinctive human activity, we have seen great minds, from Plato to Dewey and beyond, from the political right and the political left, from the libertarians and the social engineers, presenting us with the formula for best engaging in this enterprise. Ideologically driven education has its day from time to time, but none of these ideologies seems to be able to stake a permanent claim. Whatever Plato's Athenian contemporaries thought of Plato's formula for education, it is currently little more than a curiosity. Educational theory and practice seems to have an inherent tendency to swing back to the centre, drawn there by the 'everyday knowledge' of generations of parents and educators. A single narrow perspective may tell us something essential about the purpose and process of education, but it has to be balanced by other perspectives, even those that contradict it outright.

The sum of everyday knowledge contains multiple perspectives without bothering about the contradictions. Educating children simultaneously in a nation's indigenous culture and the global and national cultures within which it struggles to survive is not impossible. Rather it is desirable, even necessary. The global culture may appear to be dominated by the narrow vision of the World Bank, the IMF, the OECD and the multinational corporations. Nevertheless, there is another side to it. We can detect within the global culture movements which resist this monopolisation of thought, movements which are well represented in the chapters you are about to read: acknowledgement of diverse ethnicities, cultures and knowledges, respect for traditional ways of being, communication across hitherto impermeable boundaries and, above all, a distrust of the certainties which brought us to the present state of planetary emergency.

At the beginning of the twenty-first century, we have a dozen reasons to conclude that human society is on the edge of destruction: environmental degradation, overpopulation, a deepening abyss between the rich and poor, a collapsing financial system, the exhaustion of non-renewable sources of energy, the greenhouse effect, holes in the ozone layer, extreme weather events, the starvation of millions, global warming, melting ice-caps, rising sea levels, disappearing biodiversity, tribal conflict, uncontrollable pandemics, an ongoing and increasingly destructive arms race, the global slave trade, the displacement of populations, the global drug trade, preemptive wars, the engineering of hate and fear and epidemic mental illness. We find human alienation and frustration on a vast scale and ecological, financial, political and psychological feedback loops which seem to be rushing us towards catastrophe. We have evidence enough that we are currently in the midst of an era of ecological crisis and psychological incoherence, and our leaders – global and national – seem to be unable to address the crisis effectively. On top of all this, the explosion of information and communications technology over the past two decades means that we can no longer escape knowledge of the inability of the leaders we depend on to avert the catastrophe. We are constantly flooded with information telling us how bad it is. No wonder we are anxious – or in denial.

One aspect of this psychological incoherence is our unwillingness to see that in a complex, dynamic organic system such as the one of which we are part, all the elements – economic, political, cultural, social, environmental and psychological – are interconnected. I suggest that the cross-disciplinary approach taken by the editors and authors responsible for this book represents an important step towards the kind of understanding which can lead to action.

The Phoenix Institute of Australia Melbourne, VIC, Australia Bernie Neville

Preface

This book brings together an eclectic group of scholars who share an interest in knowledge creation and ways of improving their understandings of events and actions in the daily lives of populations. Representing a wide range of disciplines and personal experiences, the collection of chapters provides insights to the thinking processes and applications of ideas that embrace our actions within our widely dispersed communities. Whilst sharing a border with the Pacific Ocean, the Asia-Pacific region is geographically spread between the Northern and Southern Hemispheres. Over centuries the land links have enabled people, ideas and practices to disperse and embed disparate cultures in climatically and topographically different landscapes. Past isolation of populations enabled communities to thrive as separate entities. Protective borders helped build nations. However, today these borders are being weakened by global forces that transcend territorial boundaries. These include atmospheric change and associated weather patterns, movement of goods and services including minerals and energy supplies, communications and networks of information flows and commodification of travel affordability and community appetites for environment threatening consumerism.

Whilst valuing the role of education in local communities as a means of controlling the negative effects of global forces, we also recognise the need to maintain our links with that which sustains humanity – food, water and shelter. The intersection of the biophysical with the sociocultural interactions of people is a balancing act that increasingly confounds scientists. A new call to return to the basics is prompting a revaluing of traditional knowledge and ways of knowing.

Our book brings together perspectives on three main elements in this process. First, the theoretical meanings of 'knowing' and connections with indigenous practices which are first explored in generalities by Margaret Robertson in Chaps. 1 and 2 including references to historical developments and contemporary forces for change. In Chap. 3 the discussion is reported in the form of a conversation about what we mean by everyday knowing. Phillip Darby, Yassir Morsi and John von Sturmer focus on indigenous knowing (notably Australian Aborigines) as well as the tensions that arise in development away from traditional practices. Michael Mu's interpretation of Chinese language habitus in Chap. 4 highlights the complexity

of identity space in linguistic terms. In Chap. 5, Hēmi Whaanga and Rangi Matamua and, in Chap. 6, Naomi Simmonds explore dimensions of change within Māori communities located within Aotearoa, New Zealand. These chapters highlight different dimensions of Māori skills and knowledge ranging from astronomy and organisation around the lunar calendar to indigenous maternities. The final chapter in this collection is from Batchuluun Yembuu who writes about the village life of the Mongolian Steppes and how this is being adapted with modern technologies.

Subsequent chapters lead the discussion into the applied links between contemporary developments in technology, sustainability and economic management. In Chap. 8 Eric Tsang, for instance, demonstrates the connections between social media and disaster management. By contrast in Chap. 9 in the context of Papua New Guinea, Sean Ryan, Emmanuel Germis, Merolyn Koia, Gina Koczberski and George Curry provide evidence of the unevenness of opportunity to access education. In Chap. 10, Richard Bagnall proposes a way to link our need for sustainable practices in our everyday lives through lifelong learning. This chapter marks a turn in the book towards learning and education and helps frame the final set of chapters.

In Chap. 11 (Emilia Szekely and Mark Mason), Chap. 12 (Edmond Law, Maurice Galton, Kerry Kennedy and John C.K. Lee), Chap. 13 (Lesley Harbon and Catherine Smyth), Chap. 14 (John Morgan) and Chap. 15 (Mary Burston), authors provide analyses of situated learning and curriculum adaptations related to local knowledge in India, Hong Kong, China, Australia and New Zealand, respectively.

The penultimate chapter returns to the regional scale with an analysis of overall economic trends.

In the last chapter Eric Tsang and Margaret Robertson reflect on the content of the book as a fluid construct related to meaning making in a complex world where the everyday can often signpost pragmatic and sustainable decision making. The conversation ends at this point but if far from over.

Melbourne, Australia Tai Po, Hong Kong Margaret Robertson Po Keung Eric Tsang

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Contributors

Richard G. Bagnall School of Education and Professional Studies, Griffith University, Mt Gravatt, Australia

Mary A. Burston School of Education, College of Arts, Social Sciences and Commerce, La Trobe University, Melbourne, Australia

George N. Curry Curtin University, Perth, Australia

Phillip Darby Institute of Postcolonial Studies, Melbourne, Australia

Maurice Galton University of Cambridge, Cambridge, UK

Emmanuel Germis PNG Oil Palm Research Association, Dami Research Station, Kimbe, Papua New Guinea

Lesley Harbon Honorary Associate Professor in Languages Education, Faculty of Education and Social Work, The University of Sydney, Sydney, Australia

Lai Hang Dennis Hui Department of Social Sciences, The Hong Kong Institute of Education, Tai Po, Hong Kong

Kerry Kennedy The Hong Kong Institute of Education, Tai Po, Hong Kong

Gina Koczberski Curtin University, Perth, Australia

Merolyn Koia PNG Oil Palm Research Association, Popondetta, Papua New Guinea

Edmond Hau Fai Law The Hong Kong Institute of Education, Tai Po, Hong Kong

John C.K. Lee The Hong Kong Institute of Education, Tai Po, Hong Kong

Yu Wai Vic Li Department of Social Sciences, The Hong Institute of Education, Tai Po, Hong Kong

Mark Mason Centre for Lifelong Learning Research and Development, The Hong Kong Institute of Education, Tai Po, Hong Kong

Rangi Matamua Te Pua Wānanga ki te Ao, School of Māori and Pacific Development, University of Waikato, Hamilton, New Zealand

John Morgan Faculty of Education, University of Auckland, Auckland, New Zealand

Yassir Morsi Visiting Scholar, Institute of Postcolonial Studies, Melbourne, Australia

Guanglun Michael Mu Faculty of Education, Queensland University of Technology, Brisbane, Australia

Margaret Robertson School of Education, La Trobe University, Melbourne, Australia

Sean Ryan Curtin University, Perth, Australia

Naomi Simmonds University of Waikato, Hamilton, New Zealand

Catherine Smyth Faculty of Education and Social Work, The University of Sydney, Sydney, Australia

John von Sturmer Senior Fellow, Institute of Postcolonial Studies, Melbourne, Australia

Emilia Szekely Centre for Lifelong Learning Research and Development, The Hong Kong Institute of Education, Tai Po, Hong Kong

Po Keung Eric Tsang The Hong Kong Institute of Education, Tai Po, New Territories, Hong Kong

Hēmi Whaanga Te Pua Wānanga ki te Ao, School of Māori and Pacific Development, University of Waikato, Hamilton, New Zealand

Batchuluun Yembuu Mongolian State University of Education, Ulaanbaatar, Mongolia

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Chapter 1 Introduction and Overview

Margaret Robertson

Abstract The rationale for focusing on everyday knowledge and traditional ways of living our daily lives is receiving renewed attention in the research literature. Recognizing the transformative changes associated with globalization demands some anchors for comprehending the impact on local communities. Selected themes are introduced in this overview chapter.

Keywords Pedagogy • Postcolonial • Epistemology • Ontology

1.1 Background

The conference theme for the Kyoto Regional Conference of the International Geographical Union, July 2013, was 'Traditional wisdom and modern knowledge for the earth's future.' This was explained with the following Japanese proverb. 'An old Japanese proverb (on-ko chi-shin), taken from a Chinese one (wengu zhixin) says that only by exploring the old can one understand the new. We should first understand how traditional ideas, linked to interactions between society, culture and the environment, were formed in different countries and regions'.¹

Supporting a growing tide of interest in 'old knowledge,' the proverb entreats us to place a stronger focus on integrating everyday knowledge into decision making and education programs – at all levels of society and across all borders and territories. In his book the *Politics of Space*, first published in 1958, French philosopher Gaston Bachelard mused 'certain theories which were once thought to be scientific are, in reality, vast, boundless daydreams' (1994, p. 112). What might have been considered a somewhat frivolous observation more than half a century ago nowadays makes considerable sense. More than any other time in the history of human occupation on earth, people can be in almost instant communication with the rest of the human population. The Internet and social media have altered the power-

¹See http://oguchaylab.csis.u-tokyo.ac.jp/IGU2013/frontpage.html

M. Robertson (🖂)

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School of Education, La Trobe University, Melbourne, Australia e-mail: m.robertson@latrobe.edu.au

knowledge balance forever. Assumptions once made with a degree of scientific certainty can be challenged by local events, and local practices, readily communicated through mobile networks.

Recognized by Paulo Freire in his seminal work (1972) The Pedagogy of the Oppressed, the intersections, or meeting points of local, regional, and global knowledge power bases, provide the spaces for dialogue, negotiation, and sustainable outcomes. The first step is recognition of the power of other and a willingness to listen with sincerity. Consequently, for transformative social practices, we should conclude that there is increasing evidence of the need to view local wisdom with serious intent. Current and projected needs of planet earth and its people require more than grand narratives reminiscent of former lifestyles. Furthermore, political wisdom can draw little solace from traditional economic drivers. We need to discover new and imaginative ways of managing our lives. To do this, many scientific observers and researchers are revaluing the wisdom related to environmental events and cycles that local communities utilize (Singh et al. 2010). The outcomes are not likely to be simply represented. There is no one theory to follow. Hence, capturing events, interactions, and moments in time that can leverage located knowledge within a globally complex world, requires mental agility and flexible responses. As this book seeks to illustrate, landscape fluidity is at the heart of the new knowledge-power relations. By providing a collection of views on the intersections between local knowledge and global phenomena, as well as illustrations of emerging constructs in applied settings, our preconceptions are challenged and guided into more meaningful interpretations for learning, living, and actions within local, and neighbouring communities. This movement is recognition that our instinctive urge for survival may not be enough if we do not share our collective knowledge and learn more about the everyday habits, beliefs, and actions of communities spread across the region. Geography does matter (de Blij 2005).

Drawn from settings in the Asia-Pacific Region, examples of new knowledge are featured in the chapters that follow. They build on a number of parallel movements with direct implications for educational researchers and curriculum developments. Importantly, we make no assumptions about outcomes. Aimed at insights that are culturally and socially embedded, we hope to expand the knowledge base related to pedagogical and scientific traditions, past, present, and projected. While an interest in the relationship between cognition, the individual, and their surroundings is not new, the emphasis is changing. Ranging from cognitive psychology to critical theory and scientific discourse, there is a shift in thinking toward critical analysis of the relationships between people, place, community, and nationhood within local and traditional settings. The following themes are illustrative of the breadth of scholarship on the topic of everyday knowing.

Situated cognition: In their review of the literature on situated cognition, Wilson and Clark (2009) write: 'The task of developmental and cognitive psychologists is to uncover these innate structures and to understand how it is that they eventually give rise to the diversity that we appear to see in everyday cognitive activity' (p. 57). These authors conclude that the relationship between what goes on in the

mind and the externalization of cognitive activity is 'best viewed as an ongoing series of investigations into ... extensions of the mind into the physical and social world' (p. 58). Put another way, Tversky (2009) conceptualizes the activity of the mind in spatial terms. 'Mental spaces' are creations of the mind: 'One reason the mind creates mental spaces is to understand perceptions and action; another reason is to enable perception and action' (p. 202). Equally important in our understanding of cognitive processes is acceptance of emotional loyalty and the place it plays in our decisions as individuals and groups. Economic decision making (Frijters and Foster 2013) within the Asia-Pacific region provides ample evidence of this power-emotion connection through migration flows linked with capital investment (Allen et al. 1999).

- *Humanistic pedagogy*: In the Latin American context, the influential ideas of Paolo Freire helped sustain the debate surrounding democracy in education for most of the twentieth century. His book titled *The Pedagogy of the Oppressed* (1970) complements the enduring legacy of the writings of John Dewey (1916) which still provides motivation for postgraduate students and scholars. For instance, the writings of Kieran Egan (2008) entreat us to consider education from the ground up. Imagining the future is likely to be grounded in personal experiences.
- *Critical pedagogy*: The relationship between power, state, and knowledge became the primary focus of theory building and cultural commentary from the mid-twentieth century. The influence of Foucault and Gramsci, in particular, is evident in Australia and New Zealand education research (Goodwin-Smith 2009). Along with the Frankfurt School for social research, including Bourdieu (1993) and Habermas (1993), the theoretical framework progressively expanded Marxist views of capitalism to include family and forms of authority other than the state.
- Postcolonial discourse: In the postcolonial context, the Eurocentric views of modernity are appraised with respect and criticism (Bhabha 1994; Said 1994, 1979). As Said (1994) observes:

One of the canonical topics of modern intellectual history has been the development of dominant discourses and disciplinary traditions in the main fields of scientific, social and cultural enquiry. Without exceptions I know of, the paradigms for this topic have been drawn from what are considered exclusively western sources. (p. 41)

On ontological and epistemological grounds, the colonial discourse has been based on what Bhabha describes as 'other knowledge' (p. 77). However, located knowledge has been largely ignored in spatial terms. For instance, as observers, scholars, and travellers in South East Asia over many decades, Dahley and Neher (2013) lament the poor quality of commentary and limited research documenting the complexity of political, social, and economic changes occurring within the region. The demand for more contributions to help students and interested observers better understand this complexity is clear. There is need to reflect the diversity and all the geo-spatial differences within this vast region – environmentally, as well as in terms of population and identity, nationhood, culture, economics, and politics. In part, history helps identify the local belief systems and customs. For instance, how place, space, and life forces bring cultural meaning and identity for Australian Aborigines in their traditional settings. In postcolonial times, we can ask how does the totemic element of indigenous culture align with current political ideologies built on consumerism and the commodification of knowledge? (see Harvey 2009a, 2009b).

Urbanization: Illustrative of the cultural transition further and further away from our place in nature and largely recognized as a twenty-first century phenomenon are the megacities of Asia. Being far removed from the cultural roots of the landscape and as exemplars of the new internationalism megacities such as Shanghai, Seoul, Taipei, Mumbai, and Bangkok raises the question in the broadest terms about the strained relationships between people and nature. Is this big city lifestyle hindering sustainability in the post-humanist age (Bonnett 2004)? Is the city the millennial seat of capitalist citizenship and a new kind of agora (Merrified 2014)? Where is the residual knowledge of past ages located? Can we retrieve respect for indigenous ways of knowing the landscape and once again claim our harmonious relationship with the natural elements? What about the increasing gap between the rich and poor? Is social justice simply a phrase on paper? Or is it simply a matter of meeting Gandhi's Basic Needs principle for survival? Some of these questions are considered in Susan Bayly's (2007) analysis of Asian voices in a postcolonial age. In particular her analysis of the North Vietnam city of Hanoi helps heighten the local connections in postcolonial and post-socialist developments.

In brief, global trends demand that we expand our thinking beyond the narrow corridors of traditional academic disciplines. The mobility of people in real space, as well as the transmission of their ideas via new technologies, helps create an energy that permeates daily lives across boundaries, both real and imagined. New imaginaries of space and place relationships help start the process of comprehending the world in which we share resources as well as ideas and enterprise. The question to ask is how do local lived experiences connect with scientific endeavours, global commerce, and information sharing?

1.2 Scientific Versus Everyday Knowing/Knowledge

In his overview of the history of knowledge, Burke (2012) points to the critical discourse that arose around the privileging of the Western 'grand narrative' in the postmodernist movement. This trend in thinking, attributed in part to French philosopher Jean-Francois Lyotard, was instrumental in shifting the thinking back to valuing local knowledge – storytelling or 'history from below.' 'A major aim in each case was to allow the voices of ordinary men and women to be heard and to include in the story the ways in which they tried to make sense of their world' (p. 80). On epistemological grounds, doubt exists in the validity of traditional knowledge. However, at a deeper level, Newing (2010) points out that: 'Despite this, the importance of taking traditional knowledge into account in conservation management is now widely acknowledged' (p. 34). There is need to bridge the gap between the natural and social sciences through collaborative cross-discipline approaches that help us better understand the biases in our thinking, including blind spots to the 'other' forms of knowledge. In the case of the economic power shift to eastern cultures and away from the dominance of the Western view (Mahbubani 2008), there is need for students to better understand the underlying belief systems that govern behaviour and decision-making processes within the region.

Interestingly, reflecting this movement in educational policy is the decision by the Australian state of Queensland to place strong emphasis of making sense of the curriculum in terms of 'everyday life.' This phrase permeates the literacy and science curriculum statements in particular.²

1.3 Geo-spatial Technologies (GIS), Digital Technologies, and New Literacies

Geo-spatial technologies (GIS) deserve a separate space in this signposting summary. Nowadays, all digital smart devices are GPS (Global Positioning Systems) enabled. Our movements are accessible from signals sent - regardless of personal awareness. Arguably, GPS tracking of goods, people, services, and information is essential for the smooth operation of our daily happenings. As an industry, the commodification of Geographical Information Systems has facilitated modelling of all spatial data and brought infinite community benefits (Peterson and Robertson 2012). For instance, geo-spatial technologies enable fire, flood, and natural hazard management to be recorded during an event, thus, facilitating patterning both in real time as well as projected alternative outcomes. Working hand in hand with social media, these technologies are empowering local communities to be better prepared and informed in times of disaster and in the provision of information vital for health services and education (see Chap. 10 in the context of Papua New Guinea). Solar power low-cost devices make these services available to remote village communities. Just how local villagers use the tools is part of the interest in knowing more about local customs.

As technology and mass media have opened the possibilities for individuals, ruling hegemonies face continual emergent counter-hegemony, or counter-knowledge, with both influence over individuals' thinking, and the power to create alternative agencies of power. Social media enables ideas, information, and plans to be disseminated instantly. The private and public interfaces have fused.

²See http://pan.search.qld.gov.au/search/search.cgi?profile=education&query=everyday+&collect ion=qld-gov&form=simple&x=10&y=5

Pedagogies that ignore the people power of personal mobility (Urry 2007) run the risk of irrelevancy in students' perceptions and possible further alienation from mainstream education. Unless centrally controlled by governments, access to the power of the Internet is mainstream, and no amount of legislation, rules, and management policies can ignore its ubiquity. In Foucauldian terms, the power, place, and identity relationship is being rewritten (1970). To bring this into the twenty-first century context, the role of gaming in curriculum development provides a good illustration of the shift from top-down didactic pedagogical practices to embrace students' interests and context-specific skills. Where gaming is online, there is scope for real-time interactions and decision making in a mobile or fluid intellectual space (Massey 2005).

1.4 'East' Narratives: Unfolding Perspectives

Capturing the narratives of the Asia-Pacific region in the twenty-first century is a major task. Commentators can provide some directions for educators seeking resources to assist their curriculum development processes. However, we are of the belief that much can be learned from the storytelling of educators, researchers, students, and scholars working with local communities. This will provide some guidance for what will need to be an unfolding collection to build on progressively as the development processes unfold, and or we learn more about the fragility of our planet to accommodate the changes in lifestyle. Chapter 3 of this book exemplifies the kinds of conversations taking place on the theme of the role of the 'everyday' in people's lives. Many more conversations seem likely.

1.5 To Conclude

Our instinctive urge for survival may not be enough if we do not share our collective knowledge and learn more about the everyday habits, beliefs, and actions of communities spread across the region. The chapters following in this book include contributions from researchers active within local communities that can help build an education resource base of knowledge for reference material in schools and higher education. Capacity building of young scientists locally needs a blend of local wisdom and global science to forge better futures built on sustainable visions.

To bring these diverse, but overlapping traditions together with a focus on sustainable communities, everyday knowing and the Asia-Pacific Region, our book is organized around the following themes.

 Knowledge building: Perspectives include indigenous, community-based views, as well as national policy driven frameworks for education. Everyday meaning making is fundamental for educational responses that can build lasting skills and competencies to manage change within the Asia-Pacific regional context. This means valuing indigenous knowledge through collaborative curriculum design and policy development. Our position is that local action impacts on our global futures and vice versa. This theme recognizes that knowledge is culturally situated. How we view the world and communicate our understandings to others is filtered by our linguistic skills and religious and/or spiritual/philosophical beliefs. What may be privileged knowledge in one sociocultural context may take on different dimensions or significance in another geopolitical and cultural location. For instance, recognizing the growth dynamic within our region demands skills and knowledge that can interpret global market trends and provide responsible advice for nation building. Education of local communities to gain access to increased wealth in an equitable manner is problematic. Good models can help guide the development process. Along with economic change, the ways in which people adapt can be the key to lasting prosperity and sustainable lifestyle improvements. This process is complex and involves cultural, economic (work), educational, and spiritual (beliefs) imperatives. Can we learn from sharing the stories of how local communities approach the impact of external forces of change?

- Applying the knowledge: Our environmental imprint on our natural systems concerns everyone. We need a collective vision for managing our environmental behaviours and protecting our biodiversity. Highlighting the global forces of changes that are observable at local, national, and regional levels helps to identify and encourage much needed policy correction and behavioural change. Referencing examples of local best practice or illustrations of events that are practical, action oriented, and with measurable evidence or outcomes can help to guide the change process. How are nations responding to the needs of their people? How does the curriculum reflect the global trends in information sharing and open access to digital repositories? What restrictions and/or exclusions to information are structured into education policy frameworks? Is social media a force too large to control? What kinds of jobs are emerging and are we prepared for these career options? As the grand narratives of the East versus the West are diffused through mobility of information, people, and commodities including ideas and creative thought, are we seeing the emergence of a regional identity? What are our imaginaries for the future?
- *Everyday knowledge, sustainability, and educational responses*: Formal changes in education policy and curriculum development are part of a mix of significant educational improvement throughout the region. Chapters 11, 12, 13, 14, and 15 inclusive provide a range of insights to strategies being developed and implemented in local settings. These applied interpretations contribute to our developing appreciation of projected needs within the Asia-Pacific Region. Our contention is that success within the formal sectors of education is boosted by the changes that occur within the informal context. Often improvements in personal skills and competence are coincidental. Mostly, they come about through access to tools such as digital technologies and the inspiration of teachers or outsiders

with communication skills to bridge the language and understanding gaps. Building on existing understandings provides greater chance of sustained longterm learning.

1.6 Summary

The natural sciences and social sciences are reacquainting their interest in the everyday lives of citizens and seeing virtue in the intellectual wisdom associated with generations of continuous settlement in the one place. Capturing a variety of illustrations of related circumstances in diverse settings and nations is a start to what could become more detailed analyses – by nation, geopolitical alliance, city versus rural, coastal versus inland, highlands versus lowlands, etc. For educational curriculums to have meaning and result in improved teaching and learning outcomes, knowing the landscape in its broadest sense seems fundamental to moving forward toward sustainable futures in the region.

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Chapter 2 Knowledge, Change and Everyday Living

Margaret Robertson

Abstract The Asia-Pacific Region spans both of the earth's hemispheres with undeniable complexity in its physical and human geography. One way to comprehend the sociocultural landscape is to attempt a synthesis of major periods of human occupancy and migration patterns in history. Ideas, beliefs, habits and customs are linked to specific territorial landscapes. However, at some stage in former times, the human populations were much more closely connected. This provides one starting point for grasping the intersections between local, national and regional settings in the context of global events that transform local communities.

Keywords History • Culture • Migration • Heritage

Fashion or Faith - does it have to be one or the other?

2.1 Introduction

Framing a discussion about knowledge, change and everyday living within the context of the Asia-Pacific Region is undeniably complex but at the same time on the ground where people live can appear deceptively simple. How and what we accept as knowledge seems locked into our DNA. Our community place of birth exposes us to values and beliefs that are designed to guide our paths through life and lead us to success. Our dreams, hopes and aspirations for being the person we want to become or the person our parents and grandparents dream for us are surrounded by forces of tradition, expectations and rules that appear predictable – a lifeline of continuity towards a future that will come. In its simplest form, this vision may bring a sense of calmness or centred self where each moment in time is lived free of catastrophe and in a place where the real purposes of life through work, family and community are possible. A society where having a shared language, spirituality and

M. Robertson (🖂)

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School of Education, La Trobe University, Melbourne, Australia e-mail: m.robertson@latrobe.edu.au

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customs that order and shape our actions helps to underpin a sense of wellbeing and living well, that is, unless external forces result in contradictory polemics. The scholar and writer Homi Bhabha (1994) in his book titled the *Location of Culture* captures this argument well. In the context of events transcending and including race, religion, gender, language, cultural artefacts and the arts he reflects:

Beginnings and endings may be the sustaining myths of the middle years; but in the *fin de siècle*, we find ourselves in the moment of transit where space and time cross to complex figures of difference and identity, past and present, inside and outside, inclusion and exclusion. (p. 1)

Bhabha's writings provide provocation; he unsettles the ordered views of change within the region and brings the previously theorised views of events to account. The many 'isms' of modernism, and its successor in post-modernism, poststructuralism and post-colonialism, do little justice within non-European contexts. As Epstein et al. (1999) observed of post-Soviet events: 'In contemporary discourse postmodernism is usually interpreted as a profoundly western phenomenon whose appearance in non-Western cultures, such as the Japanese, is part of an inevitable and growing process of Westernization' (p. 2). Theorising the events of recent times somehow needs to go beyond these popular isms to capture the fluidity of change. The task is not easy and new imaginaries that capture the diversity of the present and what can be rather than the linear constructs of the past seem elusive and perhaps beyond our reach for the moment. The problem may well lie within our thinking and approaches to decision making both in the formal sense of schooling, commerce and industry, as well as more personal choices surrounding identity - including spirituality, sexuality, ambition and actions. In this regard, D'Cruz et al. (2008) and the collection of essays contained in their edited book challenge us to see ourselves as others see us. Along with the writings of Ashis Nandy (2005), ideas are explored that relate to a sense of being 'exiled at home'. Nandy describes the struggles of creating a nationality in post-colonial India. The huge population, growth in momentum of rural-urban migration, and the distancing of so many people from their traditional environment are nevertheless leading to a strong political entity and economic power within the region. At the same time, reporting on everyday life in local villages and communities, Nandy notes the persistence of traditions. The daily path being walked is the one walked by generations past. It 'tells the truth' of what life is meant to be. Meaning making is guided from birth and structured to align with the landscape with all its affordances and difficulties. In one of his comments he concludes: 'Perhaps the answers...lay not in objective history but in the fate of the shared traditions and moral universe of the residents....and in the ability of that universe to evoke a response in the rest of society' (p. 180).

Unravelling the history of the region is not the purpose of this chapter. However, to do justice to the intended overview of key concepts and issues within the geopolitical context of the many nations and ethnicities that criss-cross political boundaries some sense of the past, present and possible futures is important. In another view aimed at unifying the process, there appears to be a common theme of mobility

throughout the passage of time that is linked with adventurous and spirited individuals. Most likely, people moving around the landscape were, and have been, driven by necessity for survival (D'Cruz et al. 2008). A preferred motivation might be that people move from their birth places through a sense of curiosity, and to gain traction on their surroundings, with the hope of a better lifestyle. However, the more likely reason is diminished food supplies and the need to search for room to settle perhaps coupled with territorial wars and power struggles over land rights.

2.2 History of Four Major Movements

Four major movements appear responsible for the major variations that can be observed in the educational values and associated knowledge patterns within the wider Asia-Pacific Region. Represented in Fig. 2.1, the region includes the continent of Asia which rims the western Pacific Ocean; and the island continent of Australia which is surrounded by large island archipelagos including Indonesia, New Zealand, and including, the Pacific island atolls which are home to the many nations of Melanesian, Micronesian and Polynesian people. The region traverses parts of the Great Southern and Indian Oceans. Into these vast waterways flow great inland river systems like the Ganges, Mekong, Yangtze and Murray which have facilitated mobility of people and goods throughout the centuries. This geography provides the setting for the four tumultuous periods that appear to in part explain the diversity of thought, language and cultures within the region. Each is marked by great disruption, change and permanent movements of people, along with their ideas, their practices and their knowledge about social organisation, society and survival.

First, there were the ancient overland migrations. Possibly pre-Ice Age, this period served to separate people and over time led to significant changes reflective of the landscapes and survival strategies possible in their respective homelands. We can speculate on food and shelter arrangements as well as the evolving social interactions, organisational hierarchies, customs and beliefs, from the compilations of archaeologists, historians, sociologists and other scholars who have reported across the region. Perhaps the outstanding site to reveal the complexity of high culture is Angkor, recognised as the centre of the Khmer Kingdom. With World Heritage Listing under the terms of the UNESCO World Heritage Convention, the site is described as:

The architecture and layout of the successive capitals bear witness to a high level of social order and ranking within the Khmer Empire. Angkor is therefore a major site exemplifying cultural, religious and symbolic values, as well as containing high architectural, archaeological and artistic significance. (see http://whc.unesco.org/en/list/668/)

To have achieved this level of social complexity, we can assume an abundant food supply with adequate well-managed surpluses available for 'freeing' the time



Fig. 2.1 Map of the Asia-Pacific Region

of individuals with specialist skills. They likely included all manner of artisans, such as stonemasons and architects, as well as spiritual leaders, scholars and traders. Collectively, they designed and built whole villages centred on temples which reveal great architectural structures covering vast areas of land reputed to be in excess of 400 km². Angkor Wat in Siem Reap and in Angkor Thom, the Bayon Temple and other temples still being excavated are of grand design, embellished through art, some of which reflects the local landscape, but also the influences on their ideas, faith and spirituality. The period is thought to have extended over 6 or 700 years from the ninth to the sixteenth centuries (for images see Fig. 2.2). The influence of Hindu and Indian culture are part of the observable changes.



Fig. 2.2 Images of Ankor Wat, Ankor Thom and surrounds

In marked contrast is the story of Aboriginal Australians. Thought to have travelled along land bridges connecting the continents before sea level rises following the last Ice Age, Aboriginal Australians traversed the vast land mass, and over long periods of time that separated travelling groups, changes occurred that resulted in many different nations of people with unique languages, stories and cultures. In the twenty-first century, descendants of the original land owners of Australia are proudly rediscovering their languages and customs. Much has been lost through the oral traditions of the indigenous people of Australia. Trying to build a legacy of this past for the future that can be recorded using contemporary tools including digital records adds to the archive of resource material. For schools and the wider community, these materials help the nonindigenous populations to learn about their cultures and gain a sense of a world view where landscape and *being* are on a continuum of time and timelessness; or where the universe of nature, flora and fauna, including the people, are all of one entity. Indigenous Australians did not construct great edifices as artefacts of their achievements. Their cultures evolved in harmony with the natural world. 'Reading' the landscape and protecting each other, Aboriginal people developed strategic skills and passed on their knowledge through storytelling, art and rituals including dance. Whole of community approaches to child rearing and caring for each family member provide a model for the contemporary world of selflessness where the collective responsibility deals with the problems of its own members. Today, the judicial system in Australia is only just beginning to adjust to this reality and build bridges with Aboriginal communities through a dual education and reform system for young Aboriginals who find themselves in trouble with the 'white fella's' law of the country.

Further east in the region are island cultures that include the Polynesian people of Tonga, Samoa, New Caledonia, Fiji and New Zealand. The people of these islands were sea canoe adventurers whom we can imagine were always in search of reliable food supplies and shelter. Their tribal structures suggest a warrior social structure with distinctive social practices illustrated today in arts, crafts and rituals most often brought to the modern world by the New Zealand-based Māori people.

We can conclude from this very brief and superficial set of references, which touch on three distinct histories, that the whole region is peppered with complex sociocultural layers, the beginnings of which go back thousands of years. There is a sense of a landscape palimpsest where the surface has been reinvented over time, but where the original layer remains and often waiting to be discovered. The other caution from this reference to the first migrations and inhabitants of the lands is to acknowledge the distinctiveness of local practices and the close correlations they have with nature and its affordances. With reference to the valuing of the everyday dimension in contemporary lives and living this is important recognition of underlying influences on decision making.

The second great period of change came in the vanguard of the great long distance land and ocean explorations. These routes connected Asia with Europe, providing opportunities for ideas, and commodities. Recorded today in history books the tales of Marco Polo and others who proceeded him go back to around 300 AD. In his book titled Pathfinders, Felipe Fernandez-Armesto (2006) brings this period alive with images of artworks, maps, poetry and stories from the period. Fernandez-Armesto describes how monks in search of scholarly wisdom and Buddhist teachings ventured out along the treacherous routes north from India setting up monasteries along the way. In time these became extended and linked with the routes set up by Chinese monks from the north. The monasteries served as safe refuge for travellers during this early period and have remained so over the centuries since. Early quests to connect with the teachings of distant scholars helped establish trading paths in goods such as spices and silk. Eventually, in later mediaeval times, the famous Silk Routes connected China and Japan across Asia into Western Europe. The southern route traversed Tibet, Myanmar (Burma) and across the Hindu Kush into India, or west into Turkistan. To the north, the Russians ventured east of Lake Baikal from Siberia into China. Initially trading in pelts and ivory, the connection extended with time to minerals. The trans-Siberian journey was not easy. Expeditions including that of Russian explorer Bering sought to find the Alaska connection. Bering, after whom the sea separating Europe and North America is named, did not survive the journey. However, the cartographic information relayed survives to the present.

Complementing the land explorations were the great sea voyages and scientific expeditions of the eighteenth and nineteenth centuries including those of Joseph Banks and Charles Darwin. The sea voyages made the global connections. However, as Fernandez-Armesto (2006) describes, this took some time. The Pacific was an

obstacle; Western minds were slow to accept the scale, politics and navigational choices. Columbus did not 'find' Asia. This came with later voyages of Magellan and Da Gama, Flinders, Cook and others who followed. With their discoveries, the period of European colonisation of Asia began in earnest. From the eighteenth century, most of the region experienced some periods of invasion and significant disruption to local living and daily life. The changes to social and political structures are well documented and the visible legacy remains in classical influences on architecture, transport infrastructure and schooling practices (see Samoff 2013) – the latter reflecting the missionary zeal of both catholic and protestant outreach from European Christians.

To overestimate the impact of colonialism in the non-Western world of Asia is a lesson still unfolding in the west. There are major differences between the two traditions which Karan (2004) attributes to three elements. These are: the relationship to nature; the role of religion, and the relationships between individuals and groups. He cautions: 'The non-Western world should be viewed as a mosaic of cultures rather than as a big homogenous, undifferentiated area' (p. 9). Western arrogance during the colonial period assumed that the Western ways were best. Today, this can be viewed as ignorance of the complexities of the underlying influences on Eastern thinking and practices including Buddhism, Confucianism, Islam and Hinduism. Ephemeral, superficial and eroded in the post-colonial era, Western colonial influence is greatly diminished.

In the modern era, most nations have attained independence, although in Australia, New Zealand, Papua New Guinea, the Cook Islands and smaller island states like Pitcairn, there remain constitutional links to the British monarchy that are more symbolic in practice than real. Gaining of independence has not always been an easy transition. Battles to retain and gain sovereignty such as in Timor Leste are past and present. First colonised by the Portuguese, the people of Timor Leste finally gained independence from Indonesia in 1975 but as a nation remain vulnerable and weakened as its people struggle to rebuild. Elsewhere in the region, sovereignty built on inherited structures such as kingdoms has mostly transitioned to secular rule or constitutional law as is the case in Japan, India, Thailand, Australia and New Zealand. More turbulent periods have ensued where, in the wake of colonial domination, hegemonic dominance shifted on ideological grounds towards centralised domination in the form of communism. Emanating in China, which dominates in area and population, this form of communism became the new colonial force of the latter half of the twentieth century. Bordering on nations dominated by Soviet style communist rule, the tension along borders remains to the present time as sensitive to modern democracies.

The third great force is not mobility, or movement of people and ideas across great oceans or land masses, so much as internal migration. As China, India and Indonesia as the most populace nations are making their transitions from largely agrarian societies to modern urbanised industrial economies, rural to urban migration is changing life irrevocably for vast numbers of people. Family fragmentation is one element with lack of infrastructure to support the relocation looming as one of the greatest challenges of our times. Urban slums are creating megacities with governments struggling to find solutions. As a humanitarian issue, this ground swell mass movement of people creates demands on governments that can only be solved with housing, safe water and food supplies, transport, heath care and schools – all big-cost items with no simple solutions. The need to reinvent supply practices has led China to mobilise its giant workforce and take control of the building of new cities. These are emerging at breakneck speed. Innovative practices including prefabrication of whole buildings in advance of ground preparation are compressing the building time, as well as providing new work opportunities for relocating families. China's building wealth and middle class to oversee such projects is providing leadership with this challenge. The bigger question is how the food supply chain is being affected along with the nation's capacity to feed its people. However, China has the centralised authority to mobilise its people and resources quickly. India by contrast has a long established and stable democratic society. The response of the Indian government has not been to relocate its urban poor but make an attempt to improve life in the slums with access to water, sewerage, electricity and schools. As a short-term solution, there remains a huge problem to overcome. However, the economy is moving well. Its reputation for high-technology solutions grows, and in major fields, India is already a global leader (Chatterjee 2004).

Transforming such large nations, as well as the many other smaller nations within the region, highlights the role and importance of education. On the issue of education, indicators of development support strongly the assertion that: 'Education is one of the most powerful instruments for reducing poverty and inequality and lays a foundation for sustained economic growth'. In the small sovereign nation of Singapore, this process shines as an exemplar of success within the region. (See Table 2.1 for 2013 GDP per capita figures for selected countries in the region or where figures are available.) Figures show public expenditure in each sector per student as a percentage of GDP per capita. Interesting are the tertiary figures where substantial weighting has been given to this sector in otherwise small economies. Suggesting the importance of the knowledge economy and in recognition of the development role of education, the most recent OECD comparative figures for participating nations seem to support the direction of these policy decisions regarding expenditure of public funding.

Nowadays, Shanghai, Korea, Hong Kong, Singapore, Finland, Canada, Japan and New Zealand are the lead performing OECD nations according to PISA figures.¹ This is a remarkable turnaround from the traditional older economies dominating the figures a decade ago.

The fourth and current force working in conjunction with these movements is technology. Arguably, the impact of new digital technologies will reach its zenith and remain as the major contribution to societal change in this twenty-first century. As the unfolding phenomenon, digital connectivity links people everywhere regardless of wealth. Connectivity to the digital world of knowledge, health experts, consumerism, commodities and interlocking networks of information on a global scale has the capacity to distribute support services to people anywhere there is a network

¹See http://www.oecd.org/pisa/

	Total GDP per capita – 2013 estimates	% per student on primary education (per capita GDP)	% per student on primary education (per capita GDP)	% per student on tertiary education (per capita GDP)
World	10,170.7			
Australia	67,035.6	20.1 (2009 figures)	18.7 (2009 figures)	20.5 (2009 figures)
Bangladesh	747.3	8.8 (2009 figures)	13.7 (2011 figures)	19.4 (2011 figures)
Cambodia	946.0	6.8 (2010 figures)		
China	6,091.0			27.4 (2010 figures)
Fiji	4,437.8	15.7 (2011 figures)	5.7 (2011 figures)	9.7 (2011 figures)
Hong Kong (China)	36,795.8	14.8 (2010 figures)	17.7 (2011 figures)	25.8 (2011 figures)
India	1,489.2	7.3 (2010 figures)	13.8 (2010 figures)	69.7 (2010 figures)
Indonesia	3,556.8	10.5 (2010 figures)	8.8 (2010 figures)	23.7 (2011 figures)
Japan	46,720.4		24.3 (2010 figures)	25.3 (2010 figures)
Korea, Republic	22,590.2	23.3 (2009 figures)	23.8 (2009 figures)	13.2 (2009 figures)
Macao	78,275.1			
Malaysia	10,380.5	14.1 (2010 figures)	18.8 (2010 figures)	47.3 (2010 figures)
New Zealand	31,999.5 (2010 figures)	21.9 (2010 figures)	23.6 (2010 figures)	31.4 (2010 figures)
Pakistan	1,290.4			
Papua New Guinea	2,184.2			
Philippines	2,587.9			
Singapore	51,709.5	12.3 (2010 figures)	18.8 (2010 figures)	27.5 (2012 figures)
Solomon Islands	1,834.8	13.1 (2010 figures)		
Sri Lanka	2,923.1	5.8 (2011 figures)	8.3 (2011 figures)	31.8 (2010 figures)
Thailand	5,473.7	24.4 (2009 figures)	27.0 (2011 figures)	22.3 (2011 figures)
Timor-Leste	1,068.1			64.3 (2009 figures)

 Table 2.1 GDP per capita figures on education (refer The World Bank)

See http://search.worldbank.org/data?qterm=gdp%20per%20capita&language=EN

receiver. Satellites communicate with receivers to provide instant bridges to anyone who owns a receiving device like a mobile phone. The digital revolution dissolves traditional barriers for information sharing and knowledge building. Tribal and usually illiterate villagers in remote hilly regions of Papua New Guinea, for instance, now have power to send and receive messages to the outside world. Their devices are cheap, solar powered and available. Sometimes referred to as the commodification of knowledge, the social networks that flow from this connectivity can outstrip conventional means of disseminating information and provide more knowledge to local people that is relevant and purposeful for their needs. This phenomenon has already been observed in times of natural disasters such as floods and fire when evacuation processes rely on frequent updates of information. The social media networks can provide these inputs more rapidly than sophisticated centralised systems. Hence, unless the rule of land such as an in North Korea is able to quarantine its people from access to personal mobile devices and incoming signals, the battle by nations to contain information is largely lost. The more important question and phenomenon to monitor and record is how local people use this power. Democratisation of knowledge at the local village level has the potential for good by raising the profile of local community-based knowledge. There is also, however, the possibility of a new wave of hegemonic struggles.

Travel commodified: Whilst not the domain of poor people in remote villages, the other new dimension adding to the mix of ideas and access to 'otherness' is travel itself and a new class of traveller. The age of competition for the travelling air traffic public has lowered the cost. For many people of modest income, this has made overseas travel affordable and very attractive. Holidays within Asia are a practical option for working people with limited time and funds. They mirror the holiday abroad patterns for Europeans or the escape to the Caribbean for North Americans. It is more questionable how much of the local culture experienced at each destination is changing opinion or attitudes related to everyday knowing including the education and expectations of children who are included on these travels. However, the cultural exchanges that do take place are noticed and utilised by local vendors and users. Taxi drivers and stall holders need to communicate with their customers. There is need of language skills to make transactions, and this implies a burgeoning dialogue taking place that is very much at grass-root levels of knowing. Typical destinations for the moving public within Asia and from European origins include Thailand, Vietnam, India and China. As local costs rise, as is the case in Singapore, the preferences also change.²

Other migratory movements are more permanent. Business and educational exchanges between countries are of vital importance for the economic growth of the region. For instance, China's great trading power relies on informed communication. The same applies to India where the heritage of British colonialism is a strong English-Hindi language background for educated families. English is the recognised language for making contact with the outside world. International students, for instance, form an important and lucrative part of the education income in

²See http://www.businessinsider.com/tripadvisors-most-popular-travel-destinations-2014-4?op=1

Australia and New Zealand. Students seek higher education qualifications in English as a preparation basis for returning to their countries and contributing to the development of their local people and economy. Noticeable more recent entrants to this trade in education have been students from Arabic nations – especially the Gulf countries. Rapid development in the Kingdom of Saudi Arabia, for instance, where the population is scattered over a large area, has gained riches from oil-based revenue. However, the education programs remain based on old traditions in need of major reforms. For many international students, the decision to return to their homeland after a period abroad can be difficult. The dilemma is whether to seek permanency in their adopted nation and perhaps have a 'better' life or to return home and apply the new-found knowledge to changes at the local level. Reverse culture shock is part of the dilemma (see Pyvis and Chapman 2005).

Of all the historical movements described, the current flows of people, information and ideas are the least predictable. The patterns so often are of the moment. This spontaneity is changing the global village as well as the local village. Grand narratives are easily swept away during such toing and froing. Deciding who we are, or want to be, can be left to political parties setting social agendas for education, health and infrastructure, or decisions and new directions for social reforms can be nuanced by the kinds of public debate now possible that do bring the local to the global – instantly and often poignantly. Bridging the gap between the rulers and the ruled has become a lot messier than former times.

2.3 Revaluing Our Heritage as a Matter for Education

Traditional knowledge versus state- or church-driven education within the region provides ample illustration of the follies of outsider influence including the loss of cultural heritage and traditional life forces. The influence of Western education during the periods of colonial rule that so dominated in the eighteenth, nineteenth and early twentieth centuries had in many contexts irreparable consequences. Perhaps driven by good Christian intentions, the outsider's ways successfully demolished or repressed many indigenous traditions. Missionary practices mostly widely practised by the Roman Catholic Church imposed a different kind of religious teaching in communities scattered throughout China, Korea, India, Malaysia, Indonesia, The Pacific Islands, Australia and New Zealand. Missionary zealots who brought Christianity to local communities also encouraged formal schooling. On the surface, this appears to be an act of generosity. However, their curriculum mostly relied on Western education content with English, Dutch, Portuguese, French and German being the dominant languages. Hence, constructs related to mathematics, science as well as philosophy and religion more often than not conflicted with local knowledge and thinking. The 'new' language in written and oral forms, thus, diminished the value of local languages and their expressions through art and stories and song. Dialectic differences between mother tongue and the new language must have confused children and caused conflict at home. However, learning a foreign language or becoming unintentionally bilingual was only one outcome. Schooling or the places where children gathered with their 'teachers' was conducted in specially erected structures with desks and chairs plus boards on which to write. Rules included listening, being quiet and speaking only when spoken to. How different from the lessons learnt from the children's community – growing up by the sea for coastal and islander people, for instance, meant learning about the seas, the moods of the skies and recognising signs of what might be troubling times ahead? A storm or large waves disrupted the rhythms of daily life with potential threats to food supplies if the community relied on fishing and food gathering at sea. Learning to recognise the signs helped cope during these periods. Likewise, the traditions of oral stories, carvings and paintings guided desert people to fresh water and food supplies.

Bilingualism within remote and geographically seemingly isolated communities became a fact of everyday living for children educated in the 'outsider' ways, and a reality now 200 years on we are only beginning to fully comprehend.

2.4 In Search of a New Imaginary

Writers in the post-colonial tradition have found it difficult to avoid the trap of conceptualising the Eastern from a Western perspective most often linked with the periods of eighteenth and nineteenth century colonial rule. In his widely acclaimed book Orientalism (1979) the Palestinian New Yorker, and public intellectual Edward Said, is most critical of this outsider view. Said is critical of Western outsider arrogance of the east. Appearing to favour a hegemony imbued in culture and tradition, his ideas are worthy of re-examination in the context of contemporary Asia. Emergent models for business enterprises are contributing to massive economic expansion. Learning and education are integral to the success of this transition. However, it would be foolish to consider this process mirrors any such changes of modernisation that have taken place elsewhere in the west, or in existing modern Asian economies that include Japan, Korea, Australia and New Zealand. The power shift is to the east and the giant newly emerging economies. The new ruling hegemonies reflect a quest for a space at the global table that is unique in design, and managed according to home-grown imaginaries. For the old economies of the developed world, there are new players with whom to interact and learn about. Education is the vehicle for making the most of this transitional period.

In brief, we seem to have many unanswered questions. However, there are some principles emerging from success stories within the Asia-Pacific Region.

- Nation-building relies on the population and their capabilities to sustain the new economic activities.
- · Education delivery needs to keep pace with economic objectives.
- Old ways, skills and crafts can be core business for new factory-based enterprises. A superb example of enduring valuing of this approach is the German

Mittelstand companies, or those mostly family-based companies that have built their long-standing reputations on the quality and reliability of their products and skills of their crafts people.

• Local knowledge and wisdom are at the cultural heart of the population – whatever shifts and changes occur, this is a fundamental element of sustainable futures. In the context of international comparative education, Samoff (2013) aptly recognises this approach. 'Education for all. A global objective that must be accomplished locally' (p. 55).

Finally, the beginning quotation deserves an explanation. One of the societal tensions played out mostly through the media appears to place old ways, local customs and traditions within a competitive relationship with global trends including new ways of conducting business related to education. If we equate fashion with the innovative directions of new knowledge, new tools and new twenty-first century style skills, and equate faith with the old ways, we have a polemic for education that needs pragmatic solutions. Learning how to blend the local with the global and reinvent or modify education policy, processes and practices as part of the new nation-building processes within the region is a major challenge. In our book, we attempt to build confidence for this process with exemplars of local practices that are inspiring and encouraging for successful and sustainable future directions.

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Chapter 3 A Conversation About the Politics of Everyday Knowledge at the Institute of Postcolonial Studies on the 14th of August 2014

Phillip Darby, Yassir Morsi, and John von Sturmer

Abstract In this conversation, the speakers discuss the politics of knowledge in the context of the North-South relationship. Focussing on three areas – Australian Aboriginal societies, Muslim minorities in the West and the processes of change in the Asia-Pacific region – the conversation explores the relationship between so-called local and global knowledges. It raises questions about whether Western knowledge formations can engage productively with everyday knowledges in the formerly colonised world, especially bearing in mind the colonising tendencies of liberal and neoliberal thought. The speakers raise associated issues including the different ways of learning of some non-European people, whether the vitality of everyday life can be translated into modern ways of living, the sense of dislocation generated in some quarters by 9/11 and the clash of knowledges in the debate about development.

Keywords Orientalism • Colonialism • Neoliberalism • Intervention • World order • Self-other • Politics of knowledge

Phillip: A warm welcome to you all to this conversation about the politics of everyday knowledge. And a particular welcome to Margaret Robertson who is editing a book with Eric Tsang in Hong Kong on this subject to be published by Springer in the United States next year. Some time back I was approached by Margaret inviting

P. Darby (🖂)

Institute of Postcolonial Studies, Melbourne, Australia e-mail: postcol@netspace.net.au

Y. Morsi

J. von Sturmer

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Visiting Scholar, Institute of Postcolonial Studies, Melbourne, Australia e-mail: postcol@netspace.net.au

Senior Fellow, Institute of Postcolonial Studies, Melbourne, Australia e-mail: postcol@netspace.net.au

me to contribute a chapter to this volume. I was happy to do so but suggested that a conversational format might be more appropriate for the book she and Eric were planning. Margaret liked the idea – so here we are at the Institute this evening.

I should say a few words about why a conversation appealed to me. In some scholarly fields, there is much to be said in favour of varying the form of contributions, thereby bringing in alternative source material. Clearly this matters when it comes to local knowledge that the Western academy – which in many ways underwrites the global knowledge machine – has been reluctant to take up, often viewing it as custom, belief or superstition. In addition to the concern about the kinds of knowledge that tend to be privileged, there is also the issue of how it is required to be presented. As a rule of thumb, established scholarly conversations and the weight of disciplinary lineage bear down on newness, uncertainty and life experience. Writing of the victims of the Bhopal disaster in December 1985, Veena Das gives one illustration. In her view: 'the conceptual structure of our disciplines – social science, jurisprudence, medicine – lead to a professional transformation of suffering which robs the victim of her voice and distances us from the immediacy of her experience' (Das 1995).

Turning to our conversation this evening, the hope is to catch something of the cross-currents of thought about everyday knowledge and to personalise the narrative. Each of our speakers comes from a different field of scholarly enquiry. John has a rich knowledge of Australian Aboriginal life. Yassir will no doubt speak of his experience as a Muslim in the West. I will endeavour to bring in lines of thought about the everyday which have emerged in south Asia and black Africa. We will try to keep in mind that a conversation should be lively and ideally should provoke as well.

Although we haven't drawn up a game plan for our conversation, we hope to discuss why interest is growing in everyday knowledges in the non-European world, what might follow from bringing these knowledges into dialogue with Western post-Enlightenment thought and the problems associated with tapping into local or customary knowledges. Each speaker will introduce himself by saying something about how he became interested in everyday knowledge. With this by way of background, chances are that a conversation will emerge naturally – without too much structure – or as John would say in a higgledy-piggledy manner.

To set the ball rolling, my disciplinary training was in international relations and security studies – two decidedly Eurocentric discourses. For most of my career, I have attempted to challenge this Eurocentrism by retelling the story of Western involvement in the non-West by privileging the perspectives of Asian and Africans: to look at how people in south Asia and black Africa saw imperialism, the processes of state-building, the project of development and so on. Over the past two decades, my approach has been deeply influenced by postcolonial studies. Increasingly we have come to understand that the various encounters between the West and the non-West – and indeed what we now call the North-South divide – were shaped by different ways of knowing. On the one hand, there is knowledge tied to the Enlightenment vision, essentially about modernity. On the other hand, we have customary knowledges that are mostly localised and expressed in everyday life. The

gulf between these two sets of knowledge ranges across many different areas of human life – how societies should be organised, how wars are fought, matters of education and ideas about gender and sexuality. Postcolonial studies have played a significant role in opening up our thinking about the processes involved. The most influential single contribution was Edward Said's book *Orientalism* in which he argued that Orientalism is a Western style of thought 'for dominating, restructuring, and having authority over the Orient'. More than this, European culture gained in strength and identity by setting off itself against the Orient as a kind of surrogate self (Said 1978).

Over to John.

John: My interest is in different ways of doing things, thinking things. Knowledges arise in particular ecologies of being. There is a question we might ask ourselves, whether particular ways of knowing, or particular bodies of knowing, preclude others. Are systems of knowing truly in conflict - or truly incommensurate – hopelessly at cross-purposes let us say? As a preliminary remark, let us suggest that ways of knowing are finite and not all that variable from society to society. Were this to be otherwise, we would have trouble communicating at all. What we know, however, the body of thoughts and practices and recognitions we bring to bear in any situation are unlimited. Again, we might consider whether certain practices, ways of doing things, preclude certain other ways of being in the world. Methodologically it is probably better to assume radical alterity - radical difference or otherness - in dealing with others rather than a pre-posited similarity. We are the same and also different. Difference is both a way of marking out but also being with. If I go to the west coast of Cape York Peninsula, in north Queensland - I am thinking primarily of Pormpuraaw – manners require that one specify where one is going if one leaves the group. Instead of saying 'I'm going home', they may say 'I'm going west'. Driving in a vehicle now people may tell you where to turn not by saying right or left but kaw or kuwa, kungk or vibe (east or west, north or south). Right and left, then, are not directions, but maybe ways of self-orienting. In any case such a system of directionals requires a ready capacity to orient oneself to the cardinal points of the compass and finer grained: NE, NW, etc. (kungk kaw or kungk kuw).

To begin with, I will talk about Australian Aboriginal societies. I had to go to Edward River (now Pormpuraaw) where I started my field work in 1969. In that year I did a cross-country trip from Edward River (as it then was) overland to Aurukun. This was pretty much unprecedented. It took us 10 days and involved among other things building a frighteningly insecure bridge across the Kendall River. In recent days I have just come from Aurukun where I participated in discussions with the Prescribed Body Corporate (PBC), the body that holds title under the Wik and Wik Way Native Title Claim. In the course of 2 days we flew back and forth between Aurukun and Pormpuraaw twice, flitting over countryside I knew well. How do we begin to consider the ways in which this 'distanced' and fleeting view of things impacts on our knowledges, our recognitions, our ways of relating – this more or less momentary engagement with a landscape that unfurls almost too rapidly beneath us? We begin to feel detached. Our primarily emotional response is converted into something else, not just emptiness but a sort of bleakness. This is less about regret than it is about something like disorientation. Even so, I found myself attending to two things: the little river mouths and their array of sandbanks that seem to stretch further and further out to the sea and areas of burning – the creation of other 'islands' – areas in which the fires would be contained or run out of steam, their black after-trace rendering explicit the contours, can we call them, of the firing.

Do all practices lead to such explicit renderings or do some preserve themselves only in the most tender, fragile 'residues', creating what we might call 'niceties', points of subtle presence or discrimination? There is a sort of generosity in the world that is easily lost. History cannot continue to offer in such an open-handed way. Rather than knowledge we need to consider something else, what it is, for example, that keeps us connected. Knowledge in itself is not enough for this task. There has to be a relevance. Where this relevance resides, I'm not certain. I can only think it has to do with the living. I can only say that these swift traverses appeared to delete my own history – and I could 'read' my efforts to photograph an attempt to reinscribe myself inside what I had once known *intimately*, on the ground, with people. This now presented itself as largely an impossibility. The actual was not there or off somehow at an angle. Everything was present, everything was exposed – but where was it; what was it there as?

I first went into the field doing PhD research, directed there by my department. My interest was local astronomies - under the impulse of a little paper by Lévi-Strauss called Le Sexe des astres. It was not difficult in my mind to convert this to Le Désastre des sexes or something along those lines. I'd heavily invested in learning the heavens. And to inaugurate my research, I asked Mickey Edwards (an older Kuuk-Yak man and endlessly obliging) 'What's that?' pointing up to the skies. 'Must be good name somewhere', he said. This classic reply put an instant end to my research ambitions. Later I did discover a term for star: yuk thunpi - which was the same name as for a coconut palm and also a swamp grass to which it bore a loose resemblance. I would learn too that the sun was female and the moon was male: limitless sexual passion on the one hand and finite male fertility on the other. So much for those ridiculous speculations that Aboriginal societies had no knowledge of 'the facts of life'! Which should make us cautious about the 'scientific' enterprise of knowledge production. The department's spurious advice turned out to be a blessing in disguise: from ignorance something good. I was very young, very respectful and very cautious - fearful of a false step at every moment. It suited me very well. I was kept under surveillance: jealous business. One man made it his task to rake around my dongar every day - literally to keep track of who was visiting me.

You are manifestly aware that you are in a totally different world, everything is up for grabs. It is not a world that operates on formal instruction. You learn principally by emulation – a sort of wait and see. In point of fact Mickey did instruct me in language principally. His methods were direct and inventive. Standing on my feet so that I was totally immobilised he would then drag me off to my left – to the north, as it happened – and then he'd drag me back again, back to my starting point in the south: puy iya, he would say (roughly 'Go away'), then pal iya, 'Come here'. Away and back, away and return. Question: Tell us about local dancing? Answer: There is no oral instruction. Question: How do they learn what was right or wrong?

Answer: The young learnt by watching only. Watching then participating, throwing themselves in. There was no correction, no fault finding or verbal encouragement, for that matter. There is a pedagogy of emulation and self-expression. We might call it 'self-appearing'. Now, as to the question of getting it right. If you went to the Garma Festival in northeast Arnhem Land near Gove (I was there with Phillip some years back), you might witness something called the rag dance. It involves strips of cloth that are waved. A Gumaty dance - Gumaty is one of the clans. I witnessed a performance of this done by white fellas. There were 10 or 20, a large group. Presumably they had received some sort of instruction but I did not witness this. One young white fella took the lead. He thought he was 'pretty crash hot', as the expression goes. There was something eerie about the performance. It took me a moment or two to catch on to what it was. What was remarkable was the fact that the others danced in regular time with all the gestures as if synchronised. When the Gumaty mob itself appeared, doing the same dance, what was noticeable was the self-centralising of many of the dancers, not just one self-appointed leader. This was independent of age. Moreover, the gestures were not synchronised. Everybody did their own thing within a generalised framework. It was no longer a routine – more a flock of birds, let us say, each bird maintaining its independence and singularity. There was no single right way or wrong way. If there was variation, it might be found in the level of commitment ('throwenness', the will – or drive – to participate) - and hints of the virtuosic might appear also. My experience in ceremony is that if someone showed a special talent, they would rapidly be propelled to higher levels of the dance. They would be pushed, but in the performance of the dance itself, not exhorted independently of the performance. There'd be a stage 1, as it were, and then a stage 2 and then a stage 3. I don't recall ever seeing anyone corrected, just people propelled we might say into being. Aptitude is coupled with identity. It is stating the obvious to say that performance reveals being. It isn't a question of aspiring to something abstract but a revelation of what is already there. People do not learn, they reveal. At the same time, we might say that the generic is low grade - but the specific involves the potential to establish a way, a style: a 'here is'. The specific creates precedent but as an expression of what was always there. It is absolute and transcendent but exists in the real and is, therefore, an expression of possibility, thus, not transcendent in the least. The issue is to provide occasions when revelations can occur. 'That's the one now', people would say of something we might deem extraordinary, as if it is an expression in the moment of something that is deemed historically immanent and in that sense always there - 'from the start', as people say.

To be privileged to witness such things is chilling in two senses. First, the seismic shudder that such performances can bear within themselves, like a shifting of the tectonic plates of being and possibility. Some performances were devastating which might be an odd word to choose in the circumstances, but how else to capture something of their earth-shattering quality? And second, the certainty that it would all

come crashing to a halt in the face of what I can only term a derisory history. Why one could be so certain is another question. How one even begins to address it I do not know. It is inadequate to suggest that it has to do with forms of contempt that reduce acts or scenes of personal and societal transformation to mere spectacle or instances of 'culture' or the endless promotion of the superiority of 'the white fella way' and the mantra of 'Health, Education, Work' that is preached as some sort of secular doctrine or religion. We might suggest that there is no redemption through any of these.

The fact is that any expression of interest on my part was deemed an expression of interest. Mickey would sing for me day and night if he were permitted. He and his countryman Ned were intrigued by the sound of their own voices emanating from the tape recorder.

It was chilling in another sense, too, the sure knowledge that the people I was dealing with, having been spared the worst that history might have thrown at them, ultimately would not be spared. Stanner's history of indifference is a very feeble notion in the circumstances (Stanner 1977). I know of no adequate account of the death by a thousand cuts that these societies are subject to. I cannot say more at this point but will pose the question in a concrete way: how to maintain cultural practices which, on the one hand, were so thoroughly etched into the core of people's being, and which, on the other, people were so keen to transmit to their children and their grandchildren? There was behind this a strong ethic of caring and, of course, a desire to be remembered. Every cultural practice is a form of remembering and honouring the past. The conventional ethnographic practice was to record and to document – to record 'before it's too late'. The problem is that when documentation takes precedence over other ways of acquiring – by learning, by acquiring in action, by performing and by becoming an inhabited body – then it is already too late. The local is already winging its way to the archive.

Phillip: Is it implicit in what you are saying that local knowledge only has a future if it can establish its political relevance? And, if so, in what sense?

John: We might argue that local knowledge is at the end of the day tied to political forms and possibilities. It is what is salient in local knowledges that guarantees their survival - nothing else - and not only their survival but the generation and evolution, promulgation and reproduction of such knowledges. In this connexion, we might say that art is trivial except insofar as it 'represents' certain political or ideological orientations or 'settings'. Art in this sense is less knowledge than a series of 'tentatives', to use the French term - attempts, some to fix, some to shake, some to distort or disturb and some to 'confirm'. Behind all this is a question: what is the good life. I prefer this question to issues of belonging and the tendency to reduce wellbeing to matters of identity or 'inclusion'. How little this deviates from an explicit fascism! If Nazism was anything at all, it was an 'ideology' of belonging and identity. In such a context, we might wish to talk of the virtues of non-belonging ('non-tribalism') and post-identity. From another angle, we might praise societies precisely on their ability or willingness or fervent desire to 'include' and to tolerate difference - as an engaging, even entertaining 'good'. As a vitalising good, we might say. We might add that difference arises - in the normal process of self or group differentiation. We do not need to plan it, merely to allow it. From this angle, it becomes easy to see what the enemies of local knowledge are overinsistent routinisation, homogenisation at the level of dress or speech or public performance, an excessive exclusivity that refuses the otherness of the other and sees it as a threat and a source of anxiety. It might instead provide a source of stimulation and a basis for self-assessment or self-scrutiny as well as of a general awareness.

Yassir: The interest I have in the question of everydayness is to try and recognise what assumptions lie in normative practices and expressions; what politics is imbedded in my practices? This became more pronounced to me because of 9/11, which, as a Muslim in the West, became a disruption of the norm, it came to be a violent event that brought unceremoniously the assumed background into a confronting foreground. To give an example of what I mean, I tied the dots together, in the first few days of doing my PhD. I used to walk to the lab after locking my car, up the street, into the building, up some stairs, without concern, while only stressing about the problem of writing and researching. I also used to play some football on the weekends, and on one occasion I hurt my ankle rather badly. I was consigned to crutches for weeks. Well, the Monday after my injury, I found driving difficult, but even more so when taking the same trodden path to the lab, I suddenly noticed my surroundings. I noticed every step, every obstacle, everything that was once operating in the background, like a secret, when I had full movement, now came into the foreground, as a secret exposed. That is to say, it was that moment, I recognised what haunted me about 9/11, that sense of being sprained is what I felt like as a Muslim. Everything about the political that was in the background was now confronted. I began to recognise a racism that operated in the background. I began to recognise a whiteness that was imbedded in the normative and everydayness of my practices. After 9/11, every day was 'sprained'

Similarly, if I may guess, a lot of young Muslims have no choice but to be political; they must find crutches to deal with a new environment, and deal with not only being out of place but worse, in the same place that is now out of place. That sense of being sprained gets compounded, when you begin to address the political issue of the day and contest western forms of knowledge. At that moment, of contest, in the eyes of my opponent, speaking as a Muslim, it is assumed I am religious, displaced in time, unfamiliar to the area and disoriented by my oriental thought. I am not seen as a local who has gained a perspective of being dislocated and, thus, adopted a secondary glance on the local. No, it is assumed that I have always been on the outside and am involved in an ongoing struggle to properly recognise the inside. For instance, I don't particularly see myself as religious - strange but a fact - but I am not unreligious. But in the time after 9/11, my religion and its proximity to democracy became the site of almost all conversations. There was no in-between; there was no discussion of an Islam fostered within democracy. I spent a lot of time then thinking where I was metaphysically located as a speaker. An idea came to me in an airport transit lounge - aware of the temporary space of an airport between the gate and front door of the plane - 'my everydayness' is now in transit.

John: You ended up in a strange situation, forced to become more aware, to take nothing for granted. There was the risk of making the wrong decisions.

Yassir: I like the way you ask this question: making the wrong decisions. For example, 3-4 years ago, I was on the SBS television show 'Insight', one of the biggest mistakes I ever made. I rolled my eves at somebody's comment about the Taliban being lunatics and the camera caught it. Almost everyone who spoke to me about that episode, especially Muslims in the community, forgot what I had actually said on the show, they forgot what questions I asked or what I responded too. But, they all remembered that I rolled my eyes. Later I realised I was totally concentrating on what I wanted to say but not conscious of how I looked or came across. I think this is part of that unstated privilege. I don't think people of colour have the same amount of tolerance when it comes to dealing with excesses as racism, sarcasm or general bad manners. Since that episode I have been reluctant to roll eves or show any outward expressions of anger - my expressions are no longer mine. They became fielded within an existential discourse about what it means to be political and Muslim, and if you are angry, passionate and speaking against the West, it is not far from someone pointing out that you are a threat or, worse, your own community become worried that you affirm the stereotype of the terrorist. It is so draining! Anyway, when I went back to Insight, years later, I was overcompensating, smiling, nodding, etc. I eventually watched a replay of the show, and somebody on the show made a comment that I totally disagreed with and the camera zoomed in on me, and I was smiling and nodding! Yes, you are in constant dialogue with an assumed 'authentic' self, but that is a process of negotiating, and in a sense it is a process of dealing with, responding to, the inauthentic stereotypes of the other that you find yourself wanting to negate. In that context, you're right, you take nothing for granted, a smile, rolling your eyes, a nod, and all become political acts. But at the same time, these stereotypes can be strategic; they can become the new language of everydayness for some. I often go to western Sydney, where a lot of Muslim cultures mix, and I find I behave according to the environment, but more so I create relationships through the mocking and mimicry of these stereotypes, through seeing ourselves in the eyes of the Anglo-Australian, I exhibit a new sense of place, that of being out of place.

John: It seems to me that whatever you are calling Anglo-Australia may be subject to something of the same forms of oppression but just not aware of it. Their position becomes self-naturalising. What might be the conditions which generate awareness?

Yassir: I think it is the radically bringing into view that you are not seen as how you saw yourself. It is like that Fanon moment, when a young child points you out, when you are reduced to being that which is observed. Before that time, none of these things we are talking about would be a conscious talking point. In this sense, 9/11 was significant. I remember seeing my own reflection when staring at myself on the TV while watching the towers burning and falling down. It is that face that comes into visibility, but it is that moment that you are seeing yourself as seen that establishes the conditions that bring whiteness into visibility and in a sense your sense of being sprained.

Audience: Most Anglo-Australians looking at you would not know you are a Muslim as you are not (wearing) anything that signifies this. That is something you are taking on yourself.

Yassir: Well, somehow I am always recognised as Muslim, I'm not sure why, perhaps because I'm not usually walking alone. I'm with other 'more noticeably' Muslims: people with long beards and Islamic garb, a sister with a hijab. I guess part of the markers is where you are at and who you are with: there is no one way to look Muslim, but it does strike me that it is apparent to others who come up to me and say salaam alaikum (peace be with you). Indeed, when I try to look Muslim, it is always clear that it is a mimicry gone wrong; I'm questioned by other Muslims who know me. There was a moment that I just decided to dress as a typically looking Saudi and wore the red and white chequered scarf, the 'thaw', and I knocked on dad's door. He took one look at me, turned around and shut the door.

John: Let us attempt to shift the terrain of the discussion a little. What might local knowledge look like over say the next say 15 years? Why has it become a topic or a framework for looking at things?

I'll lead things off with a story. In the mid-1980s, I was asked to go to a seminar at what was to become Charles Darwin University. Discussion revolved around future curriculum. My own principal interest was how Aboriginal people were to be positioned within this new centre of learning. I knew straight off that the approach would be 'transitional'. This was the normal buzzword – and probably still is – if covertly. Of course if anything, it is straightforwardly assimilationist. You can go the whole hog, or you can do it 'transitionally': transitional housing, transitional forms of governance, transitional employment, transitional wages, transitional training and transitional education. Indeed, education was the very vehicle of transitionalism: how it was to be done. Transition was a training exercise.

Now here is Darwin sitting right in the middle of the most extreme expression of cultural difference in a continent marked by cultural, linguistic and other diversity. Linguists, I think, used to speak of 27 linguistic families all within easy reach of Darwin. Whether they speak like that now I do not know. I made several modest suggestions about how Aboriginal people and Aboriginal knowledges might be accommodated within the new structure. I'm not exaggerating when I say that my remarks were greeted with derision. And when I hear now of targets for Aboriginal enrolments in the tertiary sector (a national priority no less), I wonder if there has been any reflexion at all within the academy of what a proper incorporation of Aboriginal ways of knowing and thinking might look like - or how they might challenge the existing disciplines. I've had it said directly to my face by people who should know better that the notion of the intellectual cannot be applied within the Aboriginal world. One of my regrets is that I was not able to pursue the request made to me by certain senior men in Western Arnhem Land to run a university there. But let me assure you that the discussions we had late at night were more than the equal of any sociological analysis I encountered within the academy. Now, of course, there are programs devoted to Tropical Knowledge and Desert Knowledge. Indigenous knowledges have become all the rage. But is this lip service or anything more? Why now are local knowledges being given so much attention? Who are they

for; whose interests do they serve? What sort of attention do they attract and what are the consequences of this attention?

Phillip: I don't think there is a huge push but certainly there is growing interest in local knowledges. In part, this is a result of the downgrading or ignoring of such knowledges over a long period of time. The consequences of this neglect are now becoming more apparent. In so many areas the approaches and solutions of Western governments, the academy, corporations, development agencies and the like simply haven't worked on the ground. Invariably, problems such as failed states, the persistence of conflict in the South or the setbacks to development have been seen as located in the backwardness of the non-European world, whereas very often they have arisen from external intervention or been related to the fundamental inequity of the international political and economic system which was designed by and in the interests of the Western world. I would go on to argue that the case for taking local knowledges seriously is greatly strengthened once it is recognised that for all the achievements of Western civilisation, the basic structure of our approach to international relations and to the problem of war has not fundamentally changed for almost 500 years, from Westphalia in 1648. In short, there is a need to look elsewhere.

John: How practically is that to be pursued?

Phillip: I suppose much will depend on what one understands by 'practical' in this context. Quite a bit of work is now being done on the politics of precolonial, often stateless, people. For instance, the conventions associated with the movement of pilgrims and traders that very often in Asia and also Africa were regulated through tributary relationships, gift giving and ideas about hospitality. Then the Bengali social anthropologist, Amitav Ghosh, has written a wonderful book In an Antique Land about the intertwined histories of Indians and Egyptians, Muslims, Hindus and Jewish, beginning in the twelfth century AD and taking in what happened much later with annexation, partition and the violent disturbances that followed (Ghosh 1992). Many here will be familiar with the literature of the relationship between the Macassan traders in trepang and the Yolngu people in northeast Arnhem Land.¹ In the IPCS book series, we published an edited collection entitled *Mediating* Across Difference on Oceanic and Asian traditional approaches to what is now called conflict resolution (Brigg and Bleiker 2011). Nobody imagines that today we can somehow transpose traditional approaches to contemporary issues. Rather the hope is that a conversation between traditional and Western knowledges might generate thinking along culturally sensitive lines.

Yassir: I guess, in respect to the practical, it is the local knowledge that stands out for me. At times, I have no local knowledge. I'm in the transit lounge, as it were, with no practical way of negotiating. I visited Egypt recently, I feel at a loss. I don't know how to speak the local language without its being obvious that I've lived abroad. A friend said 'don't talk in the taxi'. I'm not to give away any hints as to my real identity, whatever that is. In Egypt, I'm trying to hide that I am Australian. How ironic is that! I recall that when I came back to Australia and I was driving, I was taking the short cuts, regaining the local knowledge as my every day, my practical

¹See for example Macknight (1976).

knowledge. But, I also, in that same vein, began in practice to respond to the call to be Egyptian at home in Australia as a form of political intervention.

John: Yes, these circumstances in which one has either to conceal or to announce one's own position...

Yassir: Yes, I was angry and didn't know how to deal with my anger. I'm not sure that any of it was justified but I did learn about what failed and what worked in practice.

John: This requirement to dissimulate, as it were, or to adopt this or that strategy in one's dealings in the world, even in one's most casual dealings, it reveals cracks in taken for granted or indeed what can be taken for granted, if anything at all!

Yassir: I certainly learnt the cracks in my assumptions of what it was to be Australian. I can't discount the possibility that the ones I failed to see had to do with my own inability to properly articulate my own fantasies – my own hopes even. I now had to answer questions all the time and realised I was 'postcolonial' in the sense that that so much of what I had to say returned to the site of disruption, or the myth of a Muslim world disrupted, and things that had happened prior to this which created events that were totally out of my control. In hindsight, this is not necessarily a bad thing. Yes, I am more aware. I was also made aware of how my first world was shared with the third and the extent to which they are implicated with each other. I realise I know somebody who knows somebody who lives in the slums of Egypt beyond me. In that sense, I am only a few degrees of separation from the local knowledge that governs the everydayness of Egypt – that sense of departure and nearness, near and far, came to be similar to that sense of being in transit.

John: I remember being in the Delta in Egypt. One of my host's jobs was to operate a pump as part of the post-Aswan Dam irrigation scheme. Locally this was a disaster from the salinity and the farmers quietly desperate with the tomatoes all spotted and ruined. However, watching the operation of the machine-operated pump was a revelation. The water rushed out, and down all the channels, not too fast for otherwise the soil, the fine silt of the past, would wash away. It was a masterful performance, finely calculated. When the water reached the very end of the last channel, all the water dried up. Not a drop of excess. I felt in the presence of a very ancient culture and system of knowing and practical expertise. Such encounters are deeply moving, the sudden revealed face of history. There is an aesthetic to such performances and to local knowledge's in general. They create an ethos.

Yassir: Similarly, I was fascinated by the skill of the bread makers and, at another aspect of local knowledge, the ability to manipulate pace: I took a taxi ride from one side of town to another. Normally it would take 35 min, this driver made it in 10. The driver had a cigarette, knew all the potholes and was chatting away with me, Quran in the background. He knew I was a stranger of sorts, in the same way he knew the turns in the road and I was amazed – pissed off about my safety but fascinated by his determination not to lose a single second. And maybe even to relish this opportunity to demonstrate his virtuosic knowledge!

Phillip: I wonder if at this point we might turn back to south and south-east Asia to discuss how contemporary debates about the divide between elite and popular

politics connect with everyday knowledges. The knowledges that shaped the course of the new states after formal decolonisation mostly came from the Western book – most obviously the commitment to the nation-state and its claims to territoriality, ideas about the workings of the economy (admittedly influenced by the colonial experience in which colonies often functioned as economic laboratories) and the project of development. But the Western agenda was not simply imposed from outside; it was actively taken up by nationalist leaders. Think of such a remarkable figure as Jawaharlal Nehru and his vision of a rejuvenated India. Or Sutan Sjahrir, Indonesia's first prime minister, who wrote that for him 'the West signified forceful dynamic and active life – only by a utilisation of this dynamism can the East be released from its 'slavery and subjection'' (Sjahrir 1949). The valorisation of Western knowledge was not confined to elites in formerly colonised territories such as India or Indonesia but extended to territories that kept their independence such as Siam. The Siamese court adapted European geographical knowledge to establish clear-cut borders and in the process laid the foundation of the modern Thai state.

Over the past two decades or so, a challenging literature has emerged that very often European political ideas have failed to address the concerns of ordinary people and that much more attention needs to be paid to local experiential knowledge. There is Ashis Nandy's insistence on the importance of myth that remains part and parcel of the lived world of much of south Asians (Nandy 1995). Partha Chatterjee writes that in most ex-colonial countries, the government has been emptied of politics. The real struggle is conducted by subaltern groups, at the borders of legality, outside the bounds of established political systems. Chatterjee coins the phrase 'political society' to distinguish this sector from civil society, which he argues is a closed association of elite groups (Chatterjee 2004). In a similar vein, Ranabir Samaddar conceives politics in postcolonial societies as a discourse of actions well removed from book learning. This directs us to a history of situations instead of a history of ideas (Samaddar 2010). Working along these lines would suggest too many of us that longer-term order and stability is dependent upon Asian peoples authoring their own politics.

John: Given what you have just said, what are the implications for development?

Phillip: It would mean that we would have to rethink the ruling approach to development today. This would involve challenging the paradigms of the international development regime consisting of the World Bank, the development agencies of Western states and the major international non-governmental organisations. It would also require the academy to review its priorities. With universities in the West strapped for cash, they have become dependent on catering to the needs of the market, resulting in courses which are oriented to career prospects in the development industry and to skills such as project evaluation at the expense of critical thought.²

In the large part, the dominant approach to development goes back to classical political economy as it emerged in the late eighteenth century and evolved in the

 $^{^{2}}$ For a strongly argued piece to this effect, see Schuurman (2009). See also Sumner and Tribe (2008).

nineteenth century. Material progress would flow from private individuals maximising their utility, but the state had a role to play by creating the conditions for the market economy to flourish. In the dictum of the time, the Great Commercial Republic of the world would deliver not only the wonders of the market economy but a more harmonious world order. Mostly, however, colonies were required to be self-supporting so little money was available for colonial development projects. What money there was went primarily to projects benefitting the home economy.

Since then and especially in the neoliberal era, the understanding of development has broadened substantially, and the emergence of a strict system of project evaluation has ensured that the kind of development that gains support accords with the objectives of donors, almost irrespective of the wishes of the people to be developed. Three features of development discourse extend the reach of the development project while at the same time further distancing it from a politics of the everyday.

First, there is the push for good governance that was initiated by the World Bank's 1989 study of sub-Saharan Africa. This has since become a conditionality of aid and a ticket of entry into restructuring non-European societies. Fundamental here, of course, was scaling down the state. Significantly, this was a reversal of earlier British policy of strengthening the role of the colonial state in providing infrastructure for development and in the case of Africa of establishing marketing boards for primary products.

Second, there is the construct of emergencies that emerged in the 1990s to legitimise intervention in the name of development in situations of political crisis or natural disasters. One example that comes to the mind is the reconstruction along the southern coast of Sri Lanka after the tsunami in December 2004 which resulted in the displacement of fishermen and their families by resorts for foreign tourists that brought in overseas capital. Another is the arrival of the US military after the hurricane in Haiti in January 2009.

Third, we have the growth of the belief that development and security are closely entangled and that you can't have one without the other. This became an article of faith with Western policy-makers in the 1990s, the fear being that insecurity in the South might threaten security in the North. A case in point is the Australian White Paper on development assistance of April 2006 which ties aid to the security imperative (AusAID 2006).

Well, I think you can see that taken collectively, the processes I have been describing severely limit the scope for alternative knowledges about the development. The likelihood is that local knowledges will continue to be trumped by the global knowledge of neoliberalism. The 1998/1999 World Bank report on knowledge is surprisingly revealing about this. It begins by observing: 'Poor countries – and poor people – differ from rich ones not only because they have less capital but because they have less knowledge'. It goes on to declare that two kinds of knowledge are critical for developing societies: knowledge about technology and knowledge about attributes, 'such as the quality of the product, the diligence of the worker, or the creditworthiness of the firm, all crucial to effective markets' (World Bank 1999).

Equally to the point, knowledges about the world system that do not mesh with liberal orthodoxy will fare no better. I am thinking here of dependency theory and later Latin American writing about coloniality, world systems theory and the radical strands of thinking in international law that attribute underdevelopment to external intervention.

Finally, knowledges about the social will remain marginalised because of the rise to prominence of macroeconomics valorising the market. Such knowledges have been part of the lived experience of the non-European world for centuries. Much has been written about the *Mahabharata* in India and its concern with the relationship of people to each other, and John has spoken about the importance of the social in the Australian Aboriginal world.

John: I am interested in what you say. But how might development be done differently?

Phillip: In my view, much of the work of development should be done in the North, not in the South. A good deal of the knowledge that stands most in need of change is here in the West, not in the non-European world. The burden of my argument has been that we constantly locate the site of a problem as being located somewhere else, mostly in the formerly colonised world (which includes Australian Aboriginal societies). This imaginative geography, to use a Saidian term, applies not only to poverty and underdevelopment but to violence, the drug trade, dysfunctional societies and lacks of all kinds. It serves to screen from view the part the West has played in creating or exacerbating such problems. Think here of the role of colonialism in appropriating the resources of the tropics or strengthening ethnic identifications in colonial territories also, of the consequences of military and other interventions after decolonisation. Then, there is the flawed international economic system with which developing societies have to contend. Not to put fine a point on it, the system is rigged to benefit the rich countries which stymied the Third World attempts to change.

In the interests of a better understanding of the interrelationship of North and South, a revision of the Western knowledge bank is required, supported by advocacy of the claims of non-European people and a campaign for more enabling representation of the other. One is hard-pressed to be optimistic about the prospects of such a venture. Yet I am encouraged by the answers to a question I set for my fourth year honours students at the University of Melbourne drawn from a seminar given by John. The question read something like 'Would you agree that the unresolved issue of the marginalisation of Australia's indigenous people requires us to rethink the nature of our political institution and our culture?' I was also heartened by the response at the IPCS early last year to an address by Yassir on the difficulties faced by Muslims in the country after 9/11. I realise that my students in Melbourne and members of the Institute are hardly representative of contemporary Western thought. Still, I put it to you that they are illustrative of the openness to change of a new generation.

Speaking as I have of development and its knowledge base leads me to reflect more generally on our conversation this evening. Without wishing to strain the material discussed or to deny the differences in the approaches of John, Yassir and myself, I am struck by the thought that the three of us share a concern with the skewed nature of the Western knowledge system and the politics embedded in it.

Perhaps John or Yassir would like to comment or to give us a concluding thought.

John: One thing the local will not do is to define itself in relation to the global or issues of North-South or putative lack or inadequacy or any of the terminological practices brought to bear on the 'problem'. This is part of the problem. The local is local; for the local, that local is a world. There are, as there are in all societies, issues of social reproduction: how do we know we shall be here tomorrow, what does the future look like and how do we build a world for our children and grandchildren? These are personal and personalised concerns. They see history through actual bodies. The society is transcendence; the society is posterity.

Strategies of development are strategies of incorporation. They unify the other in terms of an imagined unified political order. They are geared – whether this is the real aim or not – towards augmenting or extending the reach of the market. There is no compelling reason, not on the surface, for extending this political order or the reach of the market when the aim of localism is to maintain a high level of self-sufficiency linked with the expression of what we might call local styles. Resource politics is the ever-enemy – though presenting itself as 'the proper way' and 'how things are to be one'.

We might argue for proper equity arrangements and forms of local control. At the same time, we might note that all efforts by the state to incorporate minorities or small-scale societies, even the recognition of rights, involve considerable distortions. The law is apt to become the mega-discourse.

At the end of the day, who defines the good? And what status are we to give what we might call organic processes? In what direction might they head - and how do we assess this?

May I make this final comment? We may be inclined to think of knowledge or knowing as transparent – but in fact societies operate through a deletion of knowing as much as through the application of knowing. To give what is possibly a bad example: there is a general agreement that 'school is a good thing'. We don't need to get bogged down as to what is meant here: the school itself, school attendance, schooling in general or education. We might note in passing the degree of vagueness we are ordinarily apt to tolerate. We might equally consider that school is cruel or boring or even 'a waste of time'. When push comes to shove, these 'knowns' may be put to one side - relegated to the position of the unspoken or the unspeakable. How odd! We know - and we don't know. The riddle, the conundrum, is at least partly set aside in practice: non-attendance is treated as illegal. It may even be thought of as the first step in the direction of criminality in general. Behind the scenes the good is at best a contested good. The bad is allowed to continue in the name of the good. This reveals among other things, a hierarchy of social assessments – and yet we are happy to assert that the good does not justify the bad. My general point is this: that the local can involve - perhaps inevitably involves - forms of ignoring or papering over. This, of course, doesn't apply only to the local.

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Chapter 4 Negotiating Chineseness and Capitalising on Resources Through Learning Chinese Heritage Language: Habitus and Capital in Fields

Guanglun Michael Mu

Abstract The increasing linguistic and cultural diversity of our society has seen the growing salience of facilitating heritage language learning of ethnic minority people. The maintenance and development of Chinese heritage language (CHL), given the long history and the large scale of the migration of its speakers, has gained much scholarly attention. This leads up to a rich stream of research addressing Chinese heritage language learners (CHLLs)' perplex, multifaceted commitments to, and their subtle, multilayer identities in, CHL learning. Much, if not most, of this scholarship draws on social psychological and poststructural frameworks and provides empirical evidence predominantly emerging from North American contexts. The current chapter differs, however, in its use of Bourdieu's sociology to speculate CHL learning in Australia, an idiosyncratic cultural and social space for CHLLs. I will open the chapter with a panoramic review of different approaches to CHLLs' commitment to, and their identity construction through, CHL learning. This will give rise to my sociological investigation of how Chinese Australians negotiate Chineseness and capitalise on resources through CHL learning.

Keywords Chineseness • Habitus • Capital • Field • Bourdieu • Chinese heritage language

G.M. Mu (🖂)

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Faculty of Education, Queensland University of Technology, Brisbane, Australia e-mail: m.mu@qut.edu.au

4.1 Self-Perceived Identity, Socially Constructed Identity, and Habitus

The ethnic identity-Heritage Language link has been well documented in the literature (Mu 2014a). Regarding CHLLs, the immanent relationship between their ethnic identity and CHL proficiency has been widely debated in different camps of scholarship. The social psychological school largely adopts a quantitative approach to examine the mutually constitutive effect between CHLLs' self-perceived ethnic identity and their CHL learning. In the United States, young Chinese American adults' CHL proficiency was found to be positively related to their sense of belongingness to a Chinese ethnic group, their perceptions of the meanings attached to this membership, and their exploration of Chinese history and culture (Kiang 2008). Similar phenomena were found to be associated with Chinese American adolescents (Oh and Fuligni 2010). Findings from Canadian research are consistent with those from American studies. Canadian university students of Chinese ancestry considered CHL learning to be an integral aspect of their self-concept; the more they integrated CHL learning into their being, the more they were motivated to learn the language and the more important they felt Chinese ethnicity for their sense of self (Comanaru and Noels 2009). CHL learning of Chinese Canadian university students was also found to be associated with learners' desire of participation in their ethnic community, their sense of connection to ethnic homeland, and their motivation to be integrated into ethnic culture (Feuerverger 1991). Since classical social psychological models emphasise how CHLLs' self-perceived identity predicts CHL proficiency and how CHL helps to inform such self-perceptions, these models tend to follow an individualistic framework to scrutinise the linear relationship between CHL and ethnic identity. Consequently, the classical social psychological scholarship oversimplifies CHLLs' life trajectories in relation to their CHL learning and ethnic identity construction.

In contrast, findings from some qualitative studies challenge the social psychological understanding of ethnic identity as the individual trait of CHLLs. Chao (1997) observed the transformation of Chinese Americans' sentiment from the teenage years' desire to be integrated into American culture and the English-speaking community to the gradual awareness of CHL learning as an undeniable part of their Chinese identity in their young adulthood. This indicated that Chinese Americans' 'ethno-racial identity' and their 'native tongue' (Chao 1997, p. 8) were entangled through an ongoing and shifting process. He (2006) found that Chinese Americans studied their CHL to re-establish either similarities with ethnic Chinese members or differences from members of mainstream American culture and that they were committed not merely to inheriting their CHL and maintaining their Chinese cultural identity but also to recreating and redefining their identity. This indicated that CHLLs' identity construction through CHL learning across time and space is a socialisation process with multiple agencies, directions, and goals. Ang (2001) discussed her own predicaments of looking Chinese but not speaking Chinese. She failed to claim her Chinese identity because 'not speaking Chinese' did not give her a recognised, 'real' Chineseness. To tackle the sense of alienation that took hold of her, she contended that 'not speaking Chinese' can cease being a problem for overseas Chinese in diasporic contexts. In other words, diasporic Chineseness cannot be envisioned in any unified or homogeneous way. Rather, it is a diverse, heterogeneous, and ultimately precarious hybridity. Different from the classical social psychological thesis, these studies conceptualise Chinese identity as contradictory, multiple, and fluid, contextually embedded and socially constructed through CHL learning. In this respect, much of this work falls into the poststructural school.

However, the poststructuralist concept of multiple identities without foundational basis has its limitations. The assumption that human identity is wholly malleable and that the body can be styled to assume an invented identity runs into problems when faced with the durability of human beings' internal schemata, which are the products of kinship and blood (Luke 2009). On the one hand, embodied propensities and inclinations can stay with CHLLs so that the relationship between their ethnic identity and CHL proficiency can be predictable, as suggested by the social psychological literature. On the other hand, CHLLs' ways of thinking, being, and doing are contingent on external conditions. Hence, their identities are constantly shaped and reshaped through CHL learning, as evident in the poststructural literature. In summary, both social psychological and poststructural schools offer meaningful insights into the ethnic identity-CHL relation, while they inevitably receive critiques from other perspectives. To reconcile the tensions between the social psychological 'inside-out' approach and the poststructural 'outside-in' approach, I propose the use of Bourdieu's sociological notion of habitus to conceptualise 'Chineseness' and link this Chineseness to CHL learning.

Habitus denotes 'systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures' (Bourdieu 1977, p. 72). To clarify, habitus is a set of embodied dispositions that serve as principles to structure representations. Its continuity comes to shape internal attitudes, values, perceptions, and dispositions. Habitus can also be understood as 'a subjective but not individual system of internalised structures, schemes of perception, conception, and action common to all members of the same group' (Bourdieu 1977, p. 86). This sameness within a group indicates Bourdieu's interpretation of identity through habitus. Ascribed identities, such as race, ethnicity, and HL, are not of people's own choice. They stay as an embodied presence and cannot be erased. Habitus is the tendency to perpetuate these attributes (Bourdieu 1996). In this vein, there is often an interplay between habitus and identity (Rowsell 2008). Identity draws upon and reflects habitus (Zacher 2008). Habitus, in this way, comes to generate identity (Rowsell 2008).

One of the ways that make sense of ethnic identity has also been through Bourdieu's notion of habitus. Connolly (2011) demonstrates how habitus helps children to embody and internalise the cultural propensities and the ethnic awareness of their respective ethnic groups. These embodied dispositions of the ethnic groups, such as affiliated cultural, experiential, and historical memories, may not stem from their own conscious choice and may largely remain durable and transposable across different times and places in their lives (Luke 2009; Webb et al. 2002). As such, ethnic and racial dimensions are constitutive of habitus (Cockerham and Hinote 2009; Diamond et al. 2004; Horvat and Antonio 1999; McClelland 1990; Reay 2004). Following the route of these scholars, I understand Chineseness with reference to Bourdieu's concept of habitus and interpret this Chineseness as a set of durable and transposable tendencies to think and act in such a way that has been inculcated by their Chinese heritage, cultural history, and ancestral roots.

It is noteworthy that habitus offers an opportunity to examine the relationship between practices and identities (Bartlett and Holland 2002; Costello 2005; Holland et al. 1998; Pahl 2008). Agents are endowed with durable cognitive structures and a dispositional sense of action that direct them to appropriate responses to given situations (Bourdieu 1998). Habitus captures how agents carry their culture, experience, and history within themselves and how they make choices to act in certain ways rather than in others. As a system of dispositions to certain practice, habitus constructs an objective basis for regular modes of behaviour (Bourdieu 1994). These modes of behaviour can be predicted by virtue of the effect of the habitus because agents who are equipped with it will behave in a certain way in certain circumstances (Bourdieu 1994). Specifically, Bourdieu (1991) theorises that people make choices about languages according to the habitus they have. This argument contends that habitus is the generative basis for language practices. It also leads up to a hypothetical relationship between Chineseness and CHL learning.

4.2 Motivation, Investment, and Capital Behind the Commitment to CHL Learning

CHLLs' commitments to CHL learning have also been discussed through social psychological and poststructural schools. Informed by motivation theory (Gardner and Lambert 1959, 1972) and self-determination theory (Ryan and Deci 2000), social psychological literature seeks to examine integrative versus instrumental reasons behind CHL learning. The integrative interest in Chinese culture and the internal desire to understand their historical heritage, as well as the instrumental orientation to fulfil course requirements, were found to be the initial motivation for CHLLs' choice of learning Chinese in US universities (Wen 1997), while the decision to continue their Chinese learning was instrumentally associated with the perceived usefulness of the language career wise and the perceived importance of the language in the global economy (Wen 2011). This was largely consistent with Canadian studies. Li (2005) found that most CHLLs in a university were driven by both integrative and instrumental orientations – to learn more about their ethnic culture and to increase their future career opportunities brought by the growing Chinese economy.

Interestingly, integrative motivation was found to be more important than instrumental motivation for CHL learning, with the pursuit of Chinese heritage roots to be the most important dimension within integrative motivational orientations (Yang 2003). Compared with non-CHLLs, CHLLs felt much more strongly that Chinese was a central part of themselves or they had a stronger self-imposed feeling that they ought to learn the language (Comanaru and Noels 2009). However, some comparative studies indicated contrasting results: CHLLs sometimes were found to be more instrumentally motivated to pursue Chinese than non-CHLLs (Lu and Li 2008), while at other times, both CHLLs and non-CHLLs valued the usefulness of Chinese language and studied the language for future opportunities, and no significant difference in instrumental motivation was observed between the two groups (Wen 2011).

Empirical studies acknowledge that traditional motivation dichotomies become blurred and blended amongst CHLLs. In this vein, extant research points out the limitation of using motivation theories to investigate CHLLs within an individualistic, reductionist framework. This framework considers motivation no different from an individual trait of CHLLs and attributes ineffective CHL learning to the failure in sustaining a necessary level of drive in the learning process. These assumptions overlook the fact that motivation is contextualised in social structures (Norton 1995) and anchored in learners' reciprocal relationships and collective practices (Celik 2007).

Unlike the social psychological approaches to motivation, poststructuralist theorists view commitment to language learning as a co-construction with discursive and social structures that cannot be simply and easily compartmentalised into one type or another originating uniquely from or residing within the individual learner (Li and Duff 2008). In light of feminist poststructuralism, Norton (1995) argues that the classical social psychological concept of motivation does not pay attention to the complex and dynamic relationship between the learner and the social world. She criticises the view of language learners as static individuals who are inadequately labelled as a constellation of binaries - motivated versus unmotivated. In an attempt to critically conceptualise the complex relationship between the language learner and the social world, Norton (1995) proposes the concept of 'investment' to recast the concept of 'motivation' (Gardner and Lambert 1959, 1972). According to Norton (2000), language learners will expect some return on that investment, which is commensurate with the effort expended on language learning. In other words, learning a language is investing with the hope of gaining access to a wider range of symbolic resources, such as education, occupation, and friendship, and material resources, such as real estate and money (Norton 2000).

Drawing insights from Norton's (1995) concept of investment, Weger-Guntharp (2006) revealed CHLLs' various reasons behind their CHL learning, including the intended use of Chinese for future work, attaining advanced levels of Chinese, and understanding their cultural heritage. In addition, CHLLs' investment was found to be changing and shifting across time. Many CHLLs reported that learning Chinese was once an unpleasant activity forced on them by their parents, while later they considered Chinese learning a wise and worthwhile investment (Weger-Guntharp 2006; Wong and Xiao 2010). As a return on this investment, many CHLLs believed that Chinese proficiency would enhance their job prospects and favourably position them in the global markets and that Chinese proficiency was a means to foster their connections to Chinese-speaking communities. In brief, the poststructural notion of

investment accounts for CHLLs' commitment to CHL learning in relation to their imagined future in the lived social world. As a return on this investment, these learners can expect to gain access to a wider range of resources.

The notion of investment helps to explain CHLLs' commitment to their CHL learning, whereas it has not gone without criticism. Menard-Warwick (2005) suggested that the notion of investment does not adequately consider both the structural and agentive forces that shape a learner's language development and faulted this notion for not offering an adequate investigation into learners' trajectories. In addition, the notion of investment fails to conceptualise the nature and dynamics of the resources available to language learners (Mu 2015, 2014b).

To complement the use of Norton's poststructural notion of investment, I propose the use of Bourdieu's sociological concept of capital because investment demands capital and capital has or adds value to realise the return on the investment. To clarify, capital refers to accumulated resources and has the potential to produce profits and to reproduce itself in an identical or expanded form (Bourdieu 1986). These forms include economic capital, financial wealth; cultural capital, socially valued cultural objects; embodied knowledge, behaviour, and modes of thought; and institutional credentials; social capital, the possession of durable networks of acquaintance and recognition (Bourdieu 1986); and symbolic capital, 'a reputation for competence and an image of respectability and honourability' (Bourdieu 1984, p. 291). In a language learning context, language learners' capture of any accessible capital may have the potential to produce proficiency in this language, a profit that in return is convertible into various forms of capital. This gives rise to a hypothetical relationship between capital and CHL learning.

4.3 Habitus, Capital, and Field: A Sociological Framework

In the previous two sections, I have debated the use of Bourdieu's sociological notions of habitus and capital to examine CHL learning. It should be acknowledged that neither capital nor habitus can be divorced from 'field'. The three notions form an interdependent and co-constructed triad, with none of them primary or dominant. To clarify, 'a field is a structured social space, a field of forces, a force field' (Bourdieu 2011, p. 40). The forces of a field define the required resources for entry to this field, set the positioning rules in the field, and shape the practices within the field.

Formally, Bourdieu (1984, p. 101) has offered the equation '[(habitus) (capital)] + field = practice' to summarise the conceptually and empirically essential relationship amongst capital, habitus, and field, which informs individuals' practices. The equation implies that manners of being and thinking, routine behaviours, and patterned sociocultural activities in which individuals engage (practices) result from the relations between individuals' dispositions (habitus) and their social resources (capital), within the current state of play of a particular social arena (field). More specifically, Bourdieu (1991) theorises that people make language choices as a form of social practice according to the quantity and the quality of capital and habitus that they have within a given field.

For Bourdieu, 'language choice' refers to a choice of a particular set of vocabulary, a certain form of parlance, or a strategic way of speaking within a given language. In this chapter, I extend Bourdieu's standpoint to a choice of a language within a multilingual field, the structures and forces within which come to shape the social practices associated with the chosen language. Consequently, the theoretical assumption here is that CHLLs' habitus of Chineseness and various forms of capital within certain linguistic fields formulate the immanent mechanism that largely generates their choice of CHL learning and ultimately produces their CHL proficiency. This is the focus of the empirical study reported below.

4.4 The Study

Much, if not most, empirical work concerning CHLLs emerges from North American contexts. Different from the bulk of North American studies, the current study sets its scene in Australia, an idiosyncratic cultural and social place for Chinese Australians, their ancestors, and descendants. The 'gold-rush' age saw the agitation of European diggers towards Chinese diggers due to the lure of gold and the competition in gold mining. This agitation resulted in restrictive anti-Chinese legislation in the late 1850s and the early 1860s. Later, the so-called White Australia Policy promulgated in 1901 constructed the legal basis for the racial superiority of 'whiteness' over 'Chineseness' and other 'colouredness'. The White Australia Policy did not leave the scene until the arrival of multiculturalism in the late 1970s. Since then, Australia has deviated from its racist past and stepped into a culturally inclusive society. Recently, the 2012 Australia in the Asian Century White Paper (Australian Government 2012) increased the linguistic value of Chinese language and favoured the cultural identity of Chineseness. In brief, Australia is a complex social place for Chinese Australians who firstly suffered from the potholes and distractions brought by the historical discrimination against their Chineseness and then enjoyed, consciously or unconsciously, the rejuvenation of this Chineseness brought by the multicultural social orders.

If Chinese Australians' habitus of Chineseness embraces a set of embodied dispositions, it should be able to remain durable and transposable all through the vicissitudes of the Australian social structures. If the contemporary multiculturalism favours Chinese elements, Chinese Australians should be able to accrue greater quantity and quality of capital inaccessible four decades ago. Nevertheless, how Chinese Australians negotiate their Chineseness and capitalise on resources through CHL learning are largely unknown. I aim to make a contribution in this regards.

Data reported in this chapter were generated through my completed project. The quantitative data were produced by 230 Chinese Australian respondents to an online survey. These Chinese Australians constituted a demographically diverse group of people. There was a roughly equal gender distribution in these young people. At the

time of my research, they ranged in age between 18 and 35, living in capital cities of Australia, where an overwhelming proportion of Chinese Australians reside. They were born either in Australia or in the Chinese Mainland, Hong Kong, Taiwan, Macau, Singapore, Malaysia, Indonesia, Vietnam, and New Zealand included. The non-Australian-born participants all came to live in Australia before the age of 13, a conventional age criterion for designation as heritage language learners. Their CHL proficiency varied widely, from zero to nearly native command of Chinese. Hence, the quantitative sub-study aims to predict their CHL proficiency by their habitus of Chineseness and various forms of capital. The qualitative data were produced through multiple interviews with five Chinese Australian young people, a subset of the survey respondents who accepted the interview invitation. The qualitative sub-study aimed to capture the niceties and specialties embedded in the entanglement of Chineseness, capital, and CHL learning missed in the quantitative tendency.

4.4.1 The Quantitative Sub-study

The interdependence of habitus of Chineseness, four forms of capital, and CHL proficiency were speculated through structural equation modelling (SEM). Firstly, I developed measurement models for these constructs. Then, I established the structural model to interrogate the inherent relationships amongst these constructs. The development of measurement models was built on the operationalisation of the conceptual dimensions within each construct and the review of extant literature that engages with the measurement of these constructs. The establishment of the structural model was informed by Bourdieu's sociological framework, as discussed earlier.

4.4.1.1 The Measurement Model

Bourdieu (1990) indicated the quantifiability of 'the distribution of capital in its different kinds among the individuals' (p. 135). Following this advice, attempts have been made to quantify capital. For example, highest personal educational attainment (Bourdieu 1973, 1984; Veenstra 2009), attendance at high cultural events (such as concerts, galleries, and museums) (Bourdieu 1984; De Graaf and De Graaf 2000; DiMaggio 1982; Dumais 2002; Marks 2009; Sullivan 2001; Yamamoto and Brinton 2010), and ownership of cultural or educational objects (Roscigno and Ainsworth-Darnell 1999; Sullivan 2001; Yamamoto and Brinton 2010) could be used as indicators of the presence of cultural capital. Participation in different kinds of social associations and frequency of contacts with acquaintances, friends, and family members could be used as indicators of presence of social capital (Veenstra 2009). In this way, economic, cultural, social, and symbolic capital each was operationalised through four items. I have debated the reliability and validity of these measures elsewhere (Mu 2015, 2014b).

Habitus is a nebulous concept. Accordingly, it is difficult to measure in empirical research (Sullivan 2002). Despite this challenge, Cockerham and Hinote (2009) suggested that measures of collectivities can be especially useful to quantify habitus, where 'collectivities' refer to collections of agents linked together through particular social relationships and shared norms, values, ideals, and social perspectives (Cockerham 2005). In this respect, to understand the roots of these collectivities becomes the key solution to quantifying habitus.

Habitus works on 'the basis of the premises established in the previous state' (Bourdieu 2000, p. 161). The previous state integrates past experiences and functions at every moment as a matrix of dispositions, which generates infinitely diversified practices (Bourdieu 1977). This is made possible by habitus acquired through culture (Bourdieu 1984) and produced through history (Bourdieu 1990; Bourdieu and Wacquant 1992). Since Confucianism, Taoism, and Chinese Buddhism are the three major Chinese schools of culture/religion (Wong et al. 2012), norms, values, and perspective embedded within these schools are particularly helpful in terms of the operationalisation of the habitus of Chineseness. Of all the three schools, Confucianism is probably the most influential and enduring quasi-religious and ideological system in Chinese history and culture (Lee 1996; Tan 2008). Therefore, Confucianism can be understood to constitute a cultural history or 'previous state' for Chineseness, because it is the bedrock, even the definitive core, of Chinese culture (Tan 2008). Since Confucianism is deeply rooted in Chinese societies and highly valued in the Chinese social fields, it has become a generative mechanism behind Chinese people's thinking, being, and doing. In this respect, 'history turned into nature' (Bourdieu 1977, p. 78) and habitus is an 'embodied history, internalised as a second nature and so forgotten as history' (Bourdieu 1990, p. 56). Consequently, 'the active presence of the whole past' becomes 'the active presence' (Bourdieu 1990, p. 56) because what historically needed to be durable and transposable through a process of continuous reproduction is now inscribed through social regulations, forms, and norms. Given the nature of habitus, five items were developed and validated to measure habitus of Chineseness. I have debated the reliability and validity of these measures elsewhere (Mu 2015, 2014c).

To gauge CHL proficiency, a self-reporting strategy was used. This is a commonly used approach to measuring language proficiency in large-scale questionnaire studies where the direct testing of language proficiency is difficult (Phinney et al. 2001). There are contrasting views on the self-reporting approach. On the one hand, MacIntyre et al. (1997) seemed to indicate the biases in the self-reported/rated second language proficiency. On the other hand, self-reporting measures have been found to correlate highly with direct measures of heritage language ability (Kang and Kim 2012; Oh and Fuligni 2010). Hence, I adopted the self-reporting strategy to measure CHL proficiency. Four items were used to gauge the self-reported CHL: listening, speaking, reading, and writing skills. The four skills were addressed separately because HLLs often display wide gaps in these four skills (Carreira 2004; Dai and Zhang 2008; Mu and Dooley 2014). Mandarin proficiency was of particular interest because of its increasing value in various linguistic fields (Mu 2015), Australia in particular (Tasker 2012). I have debated the reliability and validity of the four measures elsewhere (Mu 2015, 2014b, 2014c; Mu and Dooley 2014).

4.4.1.2 The Structural Model

The structural relationship amongst Chineseness, capital, and CHL proficiency is illustrated in Fig. 4.1. Capital was directly related to CHL proficiency, while Chineseness was indirectly associated with CHL proficiency through capital. As is evident in the model, 73 % of the variance of CHL proficiency was explained. This can be attributed to the direct contribution of capital and the indirect contribution of Chineseness through capital. In other words, when young Chinese Australian adults had a stronger sense of Chineseness and more capital in various forms at their disposal, they tended to have a higher level of CHL proficiency. Yet, the indirect contribution of Chineseness through capital demands further scrutiny.

As an embodied property and 'incorporated and quasi-postural disposition' (Bourdieu 1985, p. 13), habitus serves as a form of 'capital' (Bourdieu 1985, p. 13), specifically a form of cultural capital in its embodied state (Bourdieu 1973). Accordingly, the habitus of 'Chineseness becomes a form of cultural capital' in certain contexts (Louie 2004, p. 21; Ong 1999, p. 6). In order to be a form of capital, Chinese Australians' habitus of Chineseness must be valued and recognised within particular fields. These fields are social spaces that favour Chinese sentiments, propensities, and inclinations, for example, Chinese families that vindicate a Chinesefriendly language politics, Chinese communities that accredit the legitimate Confucian cultural tastes, and a wider society that respects Chinese culture and history. Only when valued and recognised through the micropolitics and macro policies can Chineseness be understood as embodied cultural capital, integrated within the lasting dispositions of mind and body and existing as perceptions and behaviours of young Chinese Australian adults. In this way, Chineseness was embedded in the dimensions of capital. Young Chinese Australian adults may develop their Chineseness in relation to how much embodied cultural capital they have accrued in a Chinese favourable cultural or social field. This relationship is very important because it reveals how the amount of capital that they capture can condition their dispositions of being, doing, and thinking. The result emerging from SEM suggested that only when habitus of Chineseness becomes a form of capital can it project CHL learning in a durable and transposable way. This is very informative. The power of the field is noticeable but unseen and, therefore, is hardly measurable in a direct sense. Findings from SEM suggest, if not testifies, the existence of social fields that come to shape the CHL learning of young Chinese Australian adults. In the subsequent qualitative study, I will discuss how social fields can dis/ regard habitus of Chineseness as capital and how these fields define the value of Chineseness.

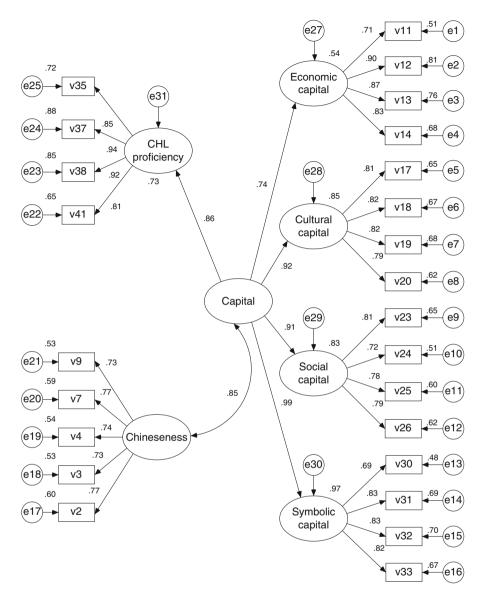


Fig. 4.1 Structural model - Chineseness, capital, and CHL proficiency

4.4.2 The Qualitative Sub-study

Habitus of Chineseness is durable and transposable across time and space. Nevertheless, habitus of Chineseness never has the absolute, universal, or guaranteed value in different fields. In other words, the exact same habitus may be regarded as capital in one field but completely disregarded in another field. The value of

Pseudonym	Adam	Bob	Crystal	Dianna	En-ning
Gender	Male	Male	Female	Female	Female
Age in years	28	18	18	21	23
Birthplace	Indonesia	Hong Kong	Australia	Taiwan	Australia
Age of immigration	12	9 months	N/A ^a	13	N/A ^a
Resident city	Sydney	Brisbane	Sydney	Brisbane	Canberra
Citizenship	Australian	Australian	Australian	Australian	Australian
Years of formal CHL	0	1	5	13	10
learning					
CHL proficiency ^b	2.76	2.21	2.57	6.27	2.89
Number of interviews	3	1	1	2	2

Table 4.1 Overview of interview participants

^aBorn in Australia

^bSee Mu (2015, 2014b, 2014c)

habitus of Chineseness often relates to CHL practices. This will soon become clear when I analyse the life experiences of my interview participants. Table 4.1 profiles these participants.

Twenty-eight-year-old Adam was born in Indonesia. He moved to live in Australia at the age of 12. He also lived in Singapore for 1 year at the age of 21 on an exchange program. Over the past 5 years, Adam visited China a few times for learning his heritage language and culture. Born and brought up in Jakarta, Adam did not have any opportunity to learn Chinese because of the anti-Chineseness movement in Indonesian history. Adam explained that there was 'a policy that nobody can learn a language other than English or Indonesian'. At that time, this policy came to shape Indonesia into a social field where 'Mandarin language was not allowed' and 'Chinese identity was banned'. Social fields like the then Indonesia, according to Bourdieu (1984), are social sites, 'which, by their positive or negative sanctions, evaluate performance, reinforcing what is acceptable, discouraging what is not, condemning valueless dispositions to extinction' (p. 85). In such a field, Chineseness was not a form of capital but a penalty, which, Adam thought, was 'one of the most challenging aspects to learning Mandarin'. The contemporary multicultural Australia, however, differs in its recognition of Chinese language and culture and its respect for Chineseness. Within this field, Adam tended to 'train' and 'force' himself to 'read Chinese news and watch Chinese TV' and tried to 'expose' himself 'as much as possible' to Chinese language. For Adam, the change of social fields helped to transform his Chineseness from a penalty to an asset, to redefine the value associated with his Chineseness, and, in turn, to reshape his Chinese learning. In his own words:

I couldn't do it (learn Chinese) because of the political reasons. I could keep saying I was the victim of the political situation back then, but now I have the chance and I will not let the opportunity pass. I am sort of trying to discover my heritage again. It was denied but now I have the chance and I am going to grab it... I was just a little bit behind because of

the policy I had back then. But of course I can't say, 'Hey, it got banned. I got left behind. There is no point of learning.' No, that's not the case. I just need to catch up. That's all.

Similar to Adam, 21-year-old Taiwanese-born Dianna also related her Chineseness to the social structures within different fields. Dianna moved to live in Australia at the age of 13. Since then, she visited Taiwan every 2 or 3 years. In Taiwan, Dianna had access to 'a whole bunch of' Chinese food, Chinese movies, and Chinese music. She uttered excitedly, 'Each time I was in Taiwan, I became a real Chinese. Everything is so Chinese there. I am glad I speak Chinese so that I am still connected to my heritage'. Later, she distinguished the social field of Australia from that of Taiwan, 'Of course Chinese culture here (in Australia) is not that rich (compared to Taiwan), but I am as happy as many other Chinese Australians. Australia is a much better place than it used to be. No discrimination'. What is interesting here is that Dianna considered herself to be 'a real Chinese' in Taiwan and one of 'Chinese Australians' in Australia. The exact same person can have distinct 'labels' in different field. Although different fields can give different meanings to a Chinese identity, the habitus of this identity, or the habitus of Chineseness, cannot be arbitrarily elided or removed. In Dianna's words, 'I was born into this culture, this colour, and this language'. That is to say, the embodied dispositions deeply rooted in the habitus cannot be easily erased or undone; hence, they stay durable and transposable across time and space. When the habitus of Chineseness is recognised as capital and accrues symbolic value, it forcibly bolsters CHL learning. This was evidently indicated by Dianna:

I am really, really proud of myself. I have two cultures and two languages. They are part of my identity, my Chinese identity. I need to keep my home language going no matter where I am. So I will pass it on to my children as well.

Likewise, Australian-born Crystal and En-ning as well as Hong Kong-born Bob who was brought by his parents to Australia at the age of 9 months were all aware of the value of their Chineseness, which largely generates their choices of learning Chinese. Consider a comment from En-ning:

I am very aware how lucky I am to be an Australian with a Chinese heritage. I feel a lot happier, especially in my gap year when I went to China and had the opportunity to explore that side of who I am. It was so amazing and incredible...Learning Chinese is definitely something that I am going to pursue in the rest of my life.

The interview accounts of the participants are consistent with the findings from the large-scale survey. Habitus of Chineseness is the generative, but may not be the decisive, mechanism for CHL learning. When valued as capital in certain fields, habitus of Chineseness can make more sense in CHL learning. These interview accounts are also complementary to the survey results. They make the forces of the field visible. Depending on the structures and orders of the field, the same habitus of Chineseness can accrue different value, which decides the opportunities for CHL learning, hence, may lead up to different learning outcomes.

4.5 Conclusion

The study reported in this chapter has several implications. At the methodological level, the study rises to the challenge of quantifying the involute concept 'habitus'. As 'inscribed in bodies by identical histories' (Bourdieu 1990, p. 59), habitus creates homogeneity in social groups. According to this Bourdieusian standpoint, habitus of Chineseness is historically informed by its cultural foundation, that is, Confucian dispositions. Although habitus of Chineseness is constantly shaped and improvised within the current social fields and its future cannot be wholly predetermined, the habitual dispositions of Chineseness structured in the cultural history cannot be arbitrarily denied or removed. If the habitus of Chineseness does represent a set of durable and transposable dispositions and does evolve from the same Confucian heritage, these 'structured structures' associated with habitus of Chineseness are quantifiable, at least to a certain extent.

At the practical level, the debates in this chapter provide an opportunity to speculate the better ways to accommodate linguistically diverse learners in language courses. The current century has seen and will continue to see the rapid growth in the number of Chinese learners all over the world, indicating the potential for the development of Chinese into an international language after English (Tong and Cheung 2011). Currently, Chinese has secured its presence amongst the priority taught languages in African, European, Australasian, and wider American settings (Lo Bianco 2011). For example, in Australia, an overwhelming proportion (90 %) of Chinese learners at senior secondary level are Chinese Australian students (Orton 2008); the positive gains in Chinese language learners' enrolments in higher education largely reflect the growing number of young Chinese Australian adults (McLaren 2011). These Chinese Australians are CHLLs, as distinct from Foreign Language Learners of Chinese. In response to this phenomenon, the Shape of the Australian Curriculum: Languages has suggested that different language curricula should be developed to address the different learning needs of HLLs and NHLLs. This highlights the importance of flexible teaching methods and pathways that accommodate Chinese learners' varied learning backgrounds. By examining Chinese Australians' identities and commitments to CHL learning, this chapter will be informative in terms of the development of Chinese language teacher training programs, Chinese textbook and curriculum design, and Chinese language classroom teaching methods to fit the CHL context in Australia.

Australia has transformed from a racist state to a multicultural society. The geographical closeness to Asia and the recognition of Asia as the economic powerhouse of the world have seen Australia urging more investment in Asian language education, identifying Chinese as one of the priority languages. In recognising the economic, cultural, and social needs to build a sound knowledge of Chinese language, Australia encourages her citizens to become more Chinese literate. Against the new social orders of Australia, Chinese Australians, by virtue of their habitus of Chineseness, various forms of capital, and Chinese language competency are powerful human resources that can serve the nation's economic, cultural, social, and political needs.

At the global level, the world is transforming from a geographically separate, socially distinct, culturally heterogeneous, and linguistically unintelligible one to a more interconnected and intermingled one. The cultural boundaries are no longer fixed and static; instead, they are becoming precarious and blurred. In this respect, I consider Bourdieu's sociology to be a diachronic framework that helps us retrospectively and prospectively contemplate the subtle, multilayered identities and complex, interested language practices within the constantly changing social fields.

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Chapter 5 Matariki Tāpuapua: Pools of Traditional Knowledge and Currents of Change

Hēmi Whaanga and Rangi Matamua

Abstract The study of astronomy has shaped cultures, societies, science and religion and influenced the evolution of all peoples. For Māori, the results of thousands of years of living with, studying and talking about the stars were woven into the language, culture and environment. Traditionally, Māori held a vast knowledge of astronomy, and their studies of the night sky played an important role in everyday life. This knowledge has, unfortunately, become less visible in the glare of contemporary European culture. However, in the last 20 years, there has been a renaissance in Māori astronomy and astronomical knowledge and, in particular, the revitalisation of the Māori lunar calendar (maramataka), ocean navigation and the Matariki (Pleiades) celebration. We focus on the celebration of Matariki and explore how this traditional practice is returning to play a significant role in the modern cultural landscape of Aotearoa New Zealand.

Keywords Indigenous knowledge • Social change • Māori astronomy • Matariki (Pleiades)

5.1 Introduction

Since antiquity, indigenous peoples have cast eyes to the heavens in search of a greater understanding of the cosmos and our place within it. From these humble beginnings emerged the oldest natural science, astronomy: the study of celestial bodies, planets, stars and galaxies. As the source of our deepest discoveries (Ekers and Kellermann 2011), astronomical knowledge is at the heart of the evolution of human societies, connecting scientific observation, cultures, religion, mythology and astrological practices across the world (Nicholas 2004). Celestial phenomena were correlated to terrestrial events and causal connections were drawn between

e-mail: hemi@waikato.ac.nz

H. Whaanga (🖂) • R. Matamua

Te Pua Wānanga ki te Ao, School of Māori and Pacific Development, University of Waikato, Hamilton, New Zealand

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them: the traces of this first science are interwoven into the ways we understand the natural environment 'such as the passage of time, the changing of seasons, the emergence of particular food sources, the timing of ocean tides, and the nature of transient celestial phenomena, such as comets, eclipses, meteors and cosmic impacts' (Hamacher and Norris 2011, p. 1).

For Māori, the indigenous people of Aotearoa New Zealand, the results of living with, studying and talking about the stars were woven into the language, culture, religious practice and environment. There is clear evidence showing that Māori maintained extensive knowledge of the night sky (Best 1922) and that this in-depth understanding of astronomy was central in the development of the complex relationships that exist between Māori and the natural world. In traditional times, Māori astronomy was infused across the breadth and depth of Māori society and was preserved in moteatea (traditional song), whakataukī (proverbs), karakia (incantations), kōrero tuku iho (oral tradition), planting and harvesting practices and building of ancestral houses. Detailed observations and astronomical expertise were also central in the settlement of the Pacific region and supported the ancestors of the Māori to undertake arguably the most remarkable voyage in the history of humanity (Matamua et al. 2013). It was their knowledge of the night sky that guided the Polynesians across thousands of kilometres of open ocean to settle in Aotearoa New Zealand, and once here, elements of the star knowledge of the central Pacific were adapted to become relevant to these islands and their climate.

Māori astronomy developed an awareness of the different links between movements of celestial bodies and seasonal patterns in order to ensure food security, whilst the screen of the night sky was one of the great resources for telling the mythical, historical, scientific and moral tales that helped shape a robust society in this part of the world. Over the next 800 years, Māori astronomy evolved with the people to become the situationally specific knowledge base that it is today.

5.2 Traditional Knowledge

A discussion of traditional astronomical knowledge would be incomplete without first attempting to define traditional knowledge (TK). TK is known by a variety of names in the literature including indigenous knowledge (IK) (Posey and Plenderleith 2004; Sillitoe 1998), traditional knowledge and wisdom (TKW) (Kellert et al. 2000; Turner et al. 2000) and local knowledge (LK) (Bicker et al. 2004; Turnbull 1997), where it is intrinsically linked with traditional ecological/environmental knowledge (TEK) (Berkes 2008; Martin et al. 2010) and local ecological/environmental knowledge (LEK) (Davis and Wagner 2003; Hunn 2007). TK defies a simplistic dictionary-type definition because it varies greatly depending on the community, the cultural context and the surrounding environment in which it is produced (Maina 2012). This complexity in defining TK has led many scholars to try to compare and contrast it to scientific knowledge (Agrawal 1995; Berkes 1993; Huntington 2000; Mazzocchi 2006; Moller et al. 2004). Furthermore, as Nakata et al. (2005, pp. 7–8) illustrate, IK defies simple definition noting:

Indigenous knowledge is commonly understood as traditional knowledge, although there is debate about whether the term Indigenous knowledge should be used interchangeably with the term traditional knowledge or whether it is more accurately a subset of the traditional knowledge category. Despite contentious terminology, Indigenous knowledge is understood to be the traditional knowledge of Indigenous peoples. In Australia, a common misunderstanding is that this equates Indigenous knowledge to 'past' knowledge, when in fact Indigenous people view their knowledge as continuing.

Whilst Indigenous knowledge systems are now recognised as dynamic and changing, orally transmitted from generation to generation and produced in the context of Indigenous peoples' close and continuing relationships with their environment, definitions, nevertheless, tend to reflect or include the particular focus of those who define it.

Berkes (2008, p. 7), in his seminal work Sacred Ecology, provides the following definition of TEK where he describes it as a 'cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment', noting that TEK 'is a way of knowing; it is dynamic, building on experience and adapting to changes. It is an attribute of societies with historical continuity in resource use on a particular land'. Later in Berkes and Berkes (2009, p. 7), they provide the following inclusive definition of TK describing it as:

A body of knowledge built up by a group of people through generations of living in close contact with nature. It is local knowledge held by indigenous peoples or local knowledge unique to a given society, including some non-indigenous ones. When the knowledge is of ecological nature (and not all traditional knowledge is) one may use the term, traditional ecological knowledge . . . Every society has its own understanding of how the natural world works, a repertoire of habits, skills, and styles from which members of a society construct their livelihoods. As a knowledge–practice–belief complex, indigenous knowledge includes an intimacy with local land, animals, and plants. It also includes institutions (rules and norms) about interacting with the environment, and it includes worldview, as the worldview shapes the way people make observations, make sense of their observations and learn. These levels of ecological knowledge may overlap, change over time, and interact with each other.

Although these definitions are useful in shaping an overview of TK, Battiste and Henderson (2000) suggest that instead of seeking to define TK's parameters in terms of a Eurocentric-based knowledge system, we should consider it is a distinct knowledge system in its own right. For this reason, we do not adopt any single definition of TK, but instead contend that it is generally understood to be a knowledge–practice–belief system, is a dynamic and changing system, orally transmitted from generation to generation and is produced in the context of Indigenous peoples' close and continuing relationships with their environment.

5.3 Te Whānau Mārama: The Origin of Māori Astronomy

Māori astronomy has its origins with the primordial parents, Ranginui (sky father) and Papatūānuku (earth mother). Locked together in an external embrace, the world was cloaked in perpetual darkness. Through the union of these original beings and

a series of acts of procreation completed, numerous offspring were produced who became everything that is seen and felt in the Māori world (Temara 2011, p. 24). Whilst the children of Ranginui and Papatūānuku are many, seven are recorded as being paramount and together they make up the pantheon of Māori gods, as shown in Fig. 5.1 below.

However, the world remained shrouded in darkness, for no light existed, and whilst Tāne had given the world space and possibility, he desired to bring light into existence. To complete this task, Tāne sought the assistance of his siblings, Tangotango and Wainui. These two beings were produced through one of the acts of procreation of Ranginui and Papatūānuku. The union of Tangotango and Wainui produced the 'Te Whānau Mārama' the family of light (Best 1996, p. 748), as shown in Fig. 5.2.

These children of light resided within a house that their father Tangotango had constructed. This house was called Huiterangiora (Best 1996, p. 752). Te Rā was suspended from the main ridgepole close to the door; Te Marama was situated towards the centre of the house, again suspended from the ridgepole. The stars had been arranged in lines and patterns along the walls of the house in a similar fashion to the lattice panels that still exist within many Māori meeting houses. Hinatore, Te Parikoikoi and Hinerauāmoa were positioned at the back wall of the house, for this was the darkest section of this dwelling, so here resided these faint glimmering lights (Te Kokau, n.d.). Tāne requested Tangotango and Wainui to give up their children so the world could know their qualities:

Tane is said to have visited Tangotango to remark, 'How brightly gleam the children of light!' And Tangotango asked, 'For what purpose do you require them?' Tane replied, 'To relieve our darkness, that light may shine across the breast of our mother' (Best 1922, p. 12).

Initially, this appeal was denied, but after much persuasion, Tāne achieved his objective and his brother entrusted him with 'Te Whānau Mārama' (Te Kokau n.d.). Tāne then moved to complete his next task, which was to suspend these objects in the sky. Taking fragments of fibre from the severed vines that had once held Ranginui

		Ranginui =	Papatūār	nuku	
Tāne	Tūmatauenga	Tāwhirimātea	Rongo	l Haumia-tiketike	Rūamoko

Fig. 5.1 The pantheon of Māori gods

		Ranginui	= Papatūānuku	Papatūānuku		
		Tangotango	= Wainui			
Te Rā	Te Mārama	Ngā Whetū	Hinatore	Te Parikoikoi	Hinerauămoa	
(Sun)	(Moon)	(Stars)	(Phosphorus light)	(Murky light)	(Tiny star)	

Fig. 5.2 'Te Whānau Mārama' – the family of light

and Papatūānuku together, Tāne constructed three baskets and used them to carry Te Whānau Marama. The first basket was called Raururangi and carried Te Rā. The second basket was Te Kauhanga and held Te Marama. The final basket was the receptacle of the stars and dim light of Hinatore, Parikoikoi and Hinerauāmoa. This final basket was called Te Ikaroa, also known as Te Mangoroa and Te Kupenganui, Māori names for the Milky Way. To adorn this final basket, Tāne hung Atutahi (Canopus), the oldest star on the outside of it. Atutahi is believed to be the most sacred of all the stars and is, therefore, tapu. He could not reside with the other stars and so was separated.¹

Tāne then carried the three baskets to his relative, Tamarereti to be transported into the heavens. Tamarereti is an early ancestor of Māori and was the owner of the first ever canoe, Puna Ariki.² Together, Tāne and Tamarereti, along with the three baskets, travelled into the heavens to suspend the children of light. Once they reached the chest of Ranginui, Tāne threw the anchor overboard, securing the canoe in the sky. The name of this anchor was Māhutonga and, along with Te Waka o Tamarereti (the canoe of Tamarereti) and its connecting rope, can still be seen in the night sky.

At first, Tāne hung up Te Parikoikoi and then Hinatore to light the heavens, but their strength was very limited, and only caused a very faith glow that was barely visible. He returned to his basket and drew forth Hinerauāmoa. This was a very petit and delicate female star whom Tāne found attractive. Eventually Tāne took her as a wife and together they begat Hineteiwaiwa, a well-known Māori goddess who is the patron of fine arts such as weaving.

Next, Tāne began suspending the stars in the sky. During this time, his thoughts returned to the house Huiterangiora and the manner in which the stars had been arranged along the walls in patterns. Tāne decided that he would place the stars in various designs and shapes in the heavens. Being the eldest and most sacred star, Atutahi was left on the outside of the basket, least his sacred nature having negative implications for the other stars. The first star that was placed in the sky was Rehua; being a chiefly star, he was accompanied by his two wives Pekehāwini and Rūhī and the other stars within the constellation of Scorpius. This group of stars is located very close to Te Waka o Tamarereti. Next, Tāne suspended in order Takurua, Tautoru, Puanga, Te Kokotā, Whakaahunuku, Whakaahurangi, Whānui, Poutūterangi, Whitikaupeka, Mariao, Hotuteihirangi, Marereotonga, Tariao, Otamarākau and Kauanga. Many of these stars were not suspended on their own but were accompanied by additional smaller stars that were groups together in constellations.

These where the earliest stars and are seen by Māori as the chiefly stars. Tāne then looked out across the heavens and was pleased with the early stages of his work. To celebrate this initial success, he put the basket still full of stars at his feet

¹Atutahi is seen by Māori as a tohunga or high priest. Because of his sacred nature, he was isolated from the community of stars so his tapu could be maintained. To this day Atutahi remains the brightest star outside of the Milky Way.

²Within some tribes this canoe is also known as Uruao.

and began a haka (dance) to express his joy. As the haka progressed, he became more enthusiastic, and in a moment of excitement, he thrust his leg out knocking the basket over and spilling the stars across the sky. Māori believe this is the reason some of the stars seem to be arranged in patterns, whilst others are scattered aimlessly throughout the cosmos.

Even with the addition of the stars, the world was still shrouded in darkness. It was then that Tāne drew forth Te Marama and placed this being in the sky. Whilst it did brighten the world, some darkness still covered the earth. It was not until Tāne suspended Te Rā to the chest of Ranginui that new light covered the world and this instance is recorded in the well-known Māori phrase:

Ki te whaiao, ki te ao marama In came the world, the world of light

5.4 'E ko Matariki e!' 'Tis Matariki!': Currents of Change in the Modern Cultural Landscape of Aotearoa New Zealand

The ancient astronomical knowledge within traditional societies – for instance, Greek (Efrosyni and Robert 2012; Hannah 2013), Mayan (Carlson 2011; Estrada-Belli 2011), Hawaiian (Kirch et al. 2013), North American (Aveni 2003; Aveni et al. 1982), Australian (Hamacher and Norris, 2011; Johnson 2011) – is being revitalised under the umbrella of the multidisciplines of archaeoastronomy, ethnoastronomy and cultural astronomy (Hannah 2013; Nicholas 2004; Ruggles and Saunders 2003). In Aotearoa New Zealand over the past 20 years, a similar renaissance of interest has evolved in the scientific study of Māori maramataka (the lunar calendar) (Tāwhai 2013), horticulture (Roskruge 2011) and waka navigation (Matamua et al. 2013). Leading the way in the ever-changing cultural landscape is the celebration Matariki (Hakaraia 2006, 2008; Harris et al. 2013; Matamua 2013).

Matariki is the Māori name for the Pleiades, also known as the seven sisters or M45. This open star cluster is located within the constellation of Taurus and includes several hundred stars of which only a handful are visible with the naked eye. Matariki is often translated as little eyes or small eyes, mata 'eyes' and riki 'small' or 'little'. In another account, Matariki is a shortened version of the name, 'Ngā mata o te ariki Tāwhirimātea' or the eyes of the god Tāwhirimātea. Māori mythology states that in the beginning, the sky father and earth mother were bound together in a tight embrace and between them existed the world which was cloaked in perpetual darkness. They were eventually separated by their children, who all agreed to this course of action except for Tāwhirimātea the god of winds and weather. Overcome with sorrow for his father, the sky, Tāwhirimātea, plucked his eyes from his face and threw them into the heavens to express his love and anguish. These eyes became the stars of Matariki (Matamua 2013).

For Māori, the heliacal (predawn) rise of Matariki in the Nor Eastern sky in midwinter signified the end of the sun's procession to the North, and its return to the East, bringing with it the warmth of summer and the promise of a bountiful season. Traditionally, Māori relied on their understanding of the environment in order to survive. The many phenomena of the natural world were keenly studied, and the changing of the seasons, the movements and migrations patterns of animals, the flowering of plants, the motions of the tides and the lunar cycles were known in detail. Moreover, the rising of Matariki was celebrated more extensively and religiously than any other natural occurrence (Matamua 2013).

In the ancient Māori settlements, sentries were posted along the elevated platforms that made up part of the fortified walls of the community. In mid-winter these sentries would scan the horizon, waiting for Matariki to appear. When it was seen, a cry would be heard, 'E ko Matariki e!' 'Tis Matariki'. Then, the traditional astronomical experts would assess the appearance of the stars in Matariki in order to determine the productivity of the ensuing year. If the various stars in Matariki were seen to shine brightly, and there was much separation between them with each individual star clearly visible, then a productive year would follow. On the other hand, if the stars were dim and clustered closely together, a lean year was forecasted (Matamua 2013).

Once the prediction for the year was confirmed, and various incantations were conducted to announce the arrival of Matariki, the village would gather together to remember those who had passed during the last year. The names of the dead were recited and the community celebrated their memory by mourning in a collective manner and shedding tears. Lamenting the dead is an important component of Matariki and is the basis of the proverb:

Matariki whanaunga kore, Matariki tohu mate Matariki the kinless, Matariki a sign of death

After these ceremonies were completed, festivities took place in these settlements. There was much feasting and more sedate activities that were undertaken at this time including art, compositions and leisurely pursuits. Because Matariki occurs at the coldest time of the year, there was limited manual work to be done during its appearance. The ground was covered in frost and was somewhat unproductive, so the village relied on the produce that had been stockpiled in the many storehouses to survive. Hence, people had more time to relax, to partake in meetings and discussions and to attend various schools of learning. The only major food source that was gathered at this time was the native wood pigeon, hence the saying:

Ka tū a Matariki ka rere te hinu

When Matariki rises, the fat (of the wood pigeon) is cooked

Matariki is the name that is generally applied to the entire star cluster; however, seven of the major stars in Matariki have their own individual names. They are Tupuānuku (Pleione), Tupuārangi (Atlas), Waitī (Maia), Waitā (Taygeta), Waipunarangi (Electra), Ururangi (Merope) and Matariki (Alcyone). Each of these individual stars represents either a food source or a weather occurrence. Tupuānuku

is connected with food grown in the earth, whilst Tupuārangi embodies the food that comes from the sky, including the fruit from trees and birds. Waitī holds the essence of food found in fresh water and Waitā the food in salt water. Waipunarangi is connected with rain and Ururangi the wind, whilst Matariki is the conductor of the entire cluster. The association between Matariki and food is evident in the names of the individual stars and is the reason Matariki was called 'he whetū heri kai' or 'a star that brings food' (Matamua 2013).

Matariki is also called 'te whetū o te tau' or the star of the year, and before European settlement in Aotearoa New Zealand, its rising signalled the New Year. It marked the changing of the seasons and signalled the promise of better times. Importantly, it also gathered people together to remember the past and to plan for the future. It was a time of celebration, of sharing and of unity. Communities and families came together at this time to celebrate one another in the spirit of good will. During Matariki kinship, bonds were reaffirmed, and collective identities were fostered and reinforced. This is the traditional philosophy that underpinned Matariki, and its celebration lasted from the first sighting for Matariki to the subsequent New Moon, usually a period of about 10 days (Matamua 2013).

Unfortunately, by the mid to late twentieth century, the celebration of Matariki had almost disappeared as a recognisable part of the cultural landscape of Aotearoa New Zealand. Successive polices of assimilation, integration, urbanisation, biculturalism and multiculturalism impacted profoundly on Māori cultural norms, collectivism, language and knowledge systems (Walker 2004). Elsdon Best, an early European ethnographer, claimed much traditional astronomical knowledge had died by the beginning of the twentieth century, stating (1922, p. 78), 'the available data concerning Maori sky-lore is now exhausted, and this account must be closed. The knowledge gained by us of this subject is meagre and unsatisfactory, but it is now too late to remedy the deficiency'.

However, by the early 1970s, a series of Māori-led campaigns, petitions and claims were undertaken focusing on issues such as the Treaty of Waitangi, Māori land rights, the Māori language and culture and racism (Harris 2004; Walker 1984, 2004). In the educational sector, initiatives such as Te Kōhanga Reo (Māori language early childhood centres), Kura Kaupapa Māori (Māori medium schools), Te Ataarangi (a method of teaching Māori language adapted from 'The Silent Way' developed by Caleb Gattegno in Switzerland) and Wānanga Māori (Māori tertiary institutions) lead the way in the revitalisation of the Māori language and the reclamation of Māori identity (Pihama et al. 2004; Smith 1997, 2004; Smith and Reid 2000).

Since the early 1990s, Matariki has found new status within Aotearoa New Zealand society (Hardy 2012; Miyazato 2007; Williams 2013). The regeneration of Matariki as a significant celebration began in various academic institutions such as Victoria University of Wellington as small gatherings. These Māori-led commemorations gathered together the few remaining Māori elders with expertise in traditional star lore for evening events discussing Matariki. By 2000, these celebrations have shifted to become larger events moving past Matariki as an astronomical event and focusing of wider issues such as development and identity. In recent years,

Matariki has transformed again from a celebration of Māori culture to one of Aotearoa New Zealand distinctiveness. Every year, numerous Matariki celebrations are held throughout the country, and people are once again using the predawn rising of this star cluster to foster unity and togetherness. Matariki has become part of the school curriculum, is included within the structure of city councils and other organisations and is promoted on television, via radio and in print. Whilst the seasonal signs of Matariki no longer play a role in the lives of most people, the underlying principles of celebration, sharing and unity remain.

As an intersection of cultural interaction, Matariki transcends the negative connotations that are associated with events such as the Treaty of Waitangi and has, therefore, become a common meeting place for Māori and non-Māori. All cultures have a connection to astronomy and understand seasonal change and celebrations such as the winter solstice. This has enabled Matariki to be seen as a more inclusive and an Aotearoa New Zealand wide festival encompassing both traditional Māori knowledge and modern Aotearoa New Zealand development.

Today, Matariki is extensively celebrated throughout the country during the winter months. Large cities like Auckland facilitate numerous activities including art shows, balls, dinners and even early morning viewings of Matariki. Institutions throughout the country like Kura Kaupapa Māori build their curriculum around the rising of Matariki and some marae and community take time to observe the tenants of this event. Matariki has also given rise to a number of commercial ventures including a winery becoming part of the Aotearoa New Zealand market economy. The traditions of Matariki reveal how important the environment was to the survival of Māori and just how connected the people were to their surroundings. Whilst our relationship to our world may have changed in a modern context, Matariki reminds us that this link between humanity and the environment will always remain.

5.5 Conclusion

Recent works by scholars exploring traditional Māori astronomy and the development of groups such as the Society for Māori Astronomical Knowledge and Research (SMART) disagree with the assumptions made by Best (1922). Whilst not practised to the extent it was when Europeans first arrived to Aotearoa New Zealand, there are pockets of knowledge existing within some Māori communities. Aspects of Māori astronomy remain scattered throughout the cultural record and Māori star lore is encoded in mōteatea, whakataukī, karakia, kōrero tuku iho, myth, legend, artwork, buildings, manuscripts and cultural practice and within the language itself. Many astronomical terms and names are maintained by tribal groups and exist within the linguistic landscape in names of traditional observatories such as Tirotiro Whetū (look to the stars) in the Horowhenua and Mātai Whetū (star gazing) in the Coromandel.

Increasingly, Māori-led astronomical research is being developed in institutions, like The University of Waikato in Hamilton and Victoria University in Wellington,

and such institutions are revealing a greater depth of knowledge in this field than previously thought. These new Māori-led and Māori-focused astronomy projects are part of a greater new age renascence in Māori studies, where Māori are no longer content for non-Māori academics and ethnologists to study them and their culture. There is a strong feeling that the era of writers such as Eldson Best and Percy Smith has come to an end, and it is now time for Māori to write themselves into history, rather than having their history written by someone else. In addition, the scope of this new movement is much more extensive than just recording the historical practices of Māori. More so, it is concerned with revitalising various practises and beliefs and giving them new life and purpose in a modern world.

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Chapter 6 Transformative Maternities: Indigenous Stories as Resistance and Reclamation in Aotearoa New Zealand

Naomi Simmonds

Abstract This chapter seeks to illustrate the transformative potential of local Indigenous knowledges pertaining to birth and mothering. In Aotearoa New Zealand, Māori (Indigenous peoples of New Zealand) stories, knowledges and traditions can serve to reconceptualise dominant maternities and ultimately transform the lived realities of women, their babies and their families. There are powerful and potent ways to reconceptualise maternities within Māori knowledge, particularly through understandings of land, language and spirituality. It is argued that the expression of our experiences as Māori women from a perspective that upholds the mana (power and prestige) and sanctity of birth and of mothering is a powerful act of resistance and decolonisation. Further, reclaiming Māori maternal knowledges has the power to transform the lived experiences of birth by (re)asserting the self-determination of women, of their babies and of their whānau (family) and, thus, the self-determination of Māori communities.

Keywords Indigenous maternities • Maori birthing • Decolonisation • New Zealand

6.1 Introduction

Stories matter. Many stories matter. Stories have been used to dispossess and to malign, but stories can also be used to empower and humanise. Stories can break the dignity of a people, but stories can also repair that broken dignity. (Adichie 2009)

I believe in the transformative potential of stories. Reclaiming and (re)creating stories that speak to the strength and vibrancy of Indigenous communities provide a means of resistance and can empower women in their experiences of birth and mothering. Indigenous knowledges are intimately connected to place; they are often

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N. Simmonds (\boxtimes)

University of Waikato, Hamilton, New Zealand e-mail: naomis@waikato.ac.nz

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unique to tribes, communities and sometimes even to specific whānau (family/families).¹ In Aotearoa² New Zealand, Indigenous – $M\bar{a}ori^3$ – stories, knowledges and traditions can serve to reconceptualise dominant maternities and ultimately transform the lived realities of women, their babies and their families.

For over 170 years, in fact, since colonial contact, Māori stories have been told and retold by non-Māori, usually by white, male ethnographers, in ways that have reshaped, and often erased or pacified, the important role of women. The impact of this has undoubtedly transformed the physical and discursive landscape of maternities in Aotearoa New Zealand. The effects of colonialism are ongoing and continue to be lived, experienced, negotiated and resisted by Indigenous women and their families. Adichie (2009) explains the power of a single story lies in its ability to define someone else's story but also to be the definitive story. By and large maternity stories within contemporary Aotearoa New Zealand remain entrenched within a Western colonial framework that serves to marginalise and isolate Māori women and their families in their birthing experiences.

Stories, however, can also be a means to resist and to provide alternative ways of seeing and knowing the world. It is argued that Indigenous stories, knowledges and practices represent critical sites of resistance, resilience and transformation. As Smith (2012, p. 4) notes: 'the past, our stories local and global, the present, our communities, cultures, languages and social practices – may all be spaces of marginalisation, but they have also become spaces of resistance and hope'. It is to these stories of resistance, resilience and transformation that this chapter is focused.

This chapter is but one story about Māori maternal knowledges. The diversity and complexity of Māori communities is such that rather than trying to tell a single story about Māori birthing, it must be acknowledged that there are, and should be, many. I posit that within the multiplicity of stories that serve to reconnect Māori women with a body of knowledge that speaks to the mana (power and prestige) and sacredness of birth and mothering, it is possible to find ways to move forward into the future with confidence and strength. In fact, the transformative potential of local Indigenous knowledges, I believe, can extend beyond maternities and can serve to decolonise other spaces such as education, sustainability and politics; the possibilities are endless.

¹Māori words used for the first time will be translated in brackets and then will be used without translation thereafter. A glossary is provided at the end of the chapter. It should be noted that translation of Māori words into the English language can be problematic, and for the most part translations provided here are the most common understanding of the term.

²Aotearoa is the Māori name for New Zealand. The term is thought at first to only have been used in reference to the North Island; nowadays, however, it is a commonly used term to refer to all of New Zealand.

³The term Māori is used to refer to the Indigenous population of New Zealand. The term is problematic in that it only came to be, through colonisation, as a term to describe the collective indigenous population of New Zealand. Until this time, communities were known by their iwi and hapū affiliations. I do not use the term as a generalisation or to suggest 'Māori' are a homogenous population. Rather, I employ the term as a political concept to identify collectively the tangata whenua (people of the land) of Aotearoa.

In what follows, I examine the importance of local stories, knowledges and practices that Māori women and their families can draw upon to make sense of their maternity experiences in Aotearoa New Zealand. Drawing largely from my doctoral research (Simmonds 2014), it is argued that there are powerful and potent ways to reconceptualise maternities within Maori knowledges and traditions. The diversity of Indigenous, and indeed Māori knowledges, contains nuances and specificities that can't be adequately conveyed in this chapter. There are, however, some common threads in what is a diverse tapestry of local Indigenous knowledges pertaining to maternities. It is to some of these threads that this chapter is framed. After discussing the local maternity context, I canvas three major themes that can serve to reconceptualise maternities from a Māori perspective. First, I examine Māori understandings of land and its relationship to maternities. Second, I highlight the role of language in conveying and protecting the sanctity of the maternal body and birth. Third, I discuss the significance of spirituality to understandings of birth for Māori women and families. It is argued that the entanglement of women's maternity experiences with wider understandings of land, language and spirituality opens up fertile possibilities for the way that we understand and perform maternities. The chapter concludes by considering the decolonising of politics that women are engaged within maternities in Aotearoa and argues that reclaiming and (re)creating Māori stories, tribal and family stories, are a powerful assertion of self-determination not only for women but for their babies, their families and Māori communities.

6.2 Listening for the Voices of Our Ancestors: Birth in Contemporary Aotearoa

Traditionally, women were (and many still are) considered gynaecological historians (Ramsden 1998) for Māori families and communities. Within an everyday context, women modelled behaviour and values which became implicitly woven into the fabric of that community (Palmer 2002). Māori maternities were not necessarily explicitly 'articulated' because 'it was an embodied reality, finding expression through a multiplicity of tribal practices' (Murphy 2011, p. 1). In other words, Māori maternal knowledges were traditionally lived and intimately woven into the day-to-day realities of iwi (tribes), hapū (subtribes/smaller social units) and whānau (family/families).

The expertise of women within Māori communities included intimate knowledge of tribal histories, cosmological narratives, traditional ecological knowledges as well as specific knowledges pertaining to maternities. Coney (1993, pp. 82–83) explains 'this authority is based on years of accumulated experience and wisdom, and also in a profound, carefully cultivated and often laboriously acquired knowledge – of genealogy, proverbial texts, tribal history, anecdotal information and narrative chant'. Māori maternal knowledges were imparted from generation to generation implicitly – through everyday and collective performances – and, therefore, may not have needed to be spoken. Our ancestors, however, understood the significance of these knowledges and, thus, ensured they would be sustained and protected beyond these everyday expressions. This is evidenced within tribal histories, creation stories, songs, chants and incantations, many of which are replete with legacies pertaining to the power and sanctity of reproduction, birth and mothering (see Mikaere 2003; Murphy 2011; Yates-Smith 1998). As one participant in my research highlighted:

That's what we grew up with [stories]. That it is a story; it's just storytelling. But in actual fact, for Māori that is us! That is actually how we function and how our customs and our traditions evolved. (Workshop participant cited in Simmonds 2014, p. 139)

Māori maternities were known and understood through lived experience, storytelling, observation, participation in ceremonies and spiritual pathways. Colonialism has made it such, however, that for many, these maternity stories are no longer accessible and/or recognisable.

Technologies of colonialism have sought to dismantle the social, cultural, political and economic conditions that facilitate this way of 'knowing'. The destruction of traditional tribal structures; the marginalisation of the Māori language, traditions and spirituality; and the loss and desecration of tribal lands have all served to disconnect women, and men, from a knowledge base that affirms the central role of women and children to the future well-being of communities. The physical and discursive spaces of maternities, in New Zealand, have not been free from these effects.

Colonialism almost completely transformed the physical and discursive landscape of birth in New Zealand. Policies in the early twentieth century saw birth for most Māori women be relocated from home to hospital. Further, birth was moved from the auspices of traditional birth attendants, spiritual experts and family to state-registered midwives (most of whom were non-Māori) and doctors (most of whom were non-Māori men). For example, the Midwives Registration Act 1904 was the one of many acts and policies which saw the knowledges, practices and procedures of Western maternity practice reified over Māori knowledges and practices. This act made it illegal for anyone not trained under a Western system of midwifery to practise as a midwife, effectively ruling out traditional birth attendants, unless they were willing to retrain.

Hospitalisation and the medicalisation in the early twentieth century were goals, for colonial authorities, and a number of measures saw Māori birthing become almost completely institutionalised so that by 1967, 95 % of Māori births occurred in the space of the hospital (Donley 1986). Despite the natural and active birth movements of the 1970s and 1980s, which lead to legislative change in 1990 to give midwives more power, these figures have largely remained unchanged for Māori women.

Under the Nurses Amendment Act 1990, midwives in New Zealand now practice under their own authority and since this time have been the predominant choice for lead maternity carer by women in New Zealand. Further, while home birth is a choice available to women in New Zealand, recent figures (depending on the source) range between 3.2 % and 10 % of births occurring at home (Ministry of Health 2012; New Zealand Home Birth Association 2014). An alternative, often considered intermediary, space that is becoming increasingly popular is secondary birthing centres which can appear as 'an attractive compromise between the impersonal nature of a large hospital and the idea of giving birth at home, which might feel very risky to women brought up in a society where hospital birth is the 'norm'' (Gatrell 2008, p. 81). Hospitals, however, are still the primary setting, accounting for 80 % of all births in New Zealand in 2010 (Ministry of Health 2012).

There have been numerous developments with regard to health research and delivery in New Zealand that seek to account for the needs and rights of Māori and the responsibilities of health providers in relation to guarantees made by the Crown in Te Tiriti o Waitangi (the Treaty of Waitangi). Within existing frameworks for midwifery, however, there is limited acknowledgement of and provisions for Māori knowledges and practices. There have been a number of values developed by the collective of Māori midwives, Ngā Maia, and these are included in performance criteria for professional competencies (Ngā Maia n.d.), but consideration of Māori maternities beyond this is limited. Further, research suggests that there is a poor understanding of these values and their application in practice (Kenney 2011).

There are a number of groups, individual women and families who are actively working to bring Māori knowledges and experiences to the fore within maternities in New Zealand. For the most part, however, birth within Aotearoa remains firmly entrenched within a dominant Western framework. Thus, contemporarily Māori are left trying to find meaning in the words and stories of others, stories that are often confusing, isolating and in many cases discriminatory.

For example, mainstream antenatal education programs are designed to 'teach' soon-to-be parents about labour and birth, and what can be expected of them, and the baby, when they become new parents. These classes are embedded within culturally and spatially specific discourses about maternities that often serve to marginalise Māori women and families. In fact, there is evidence that Māori mothers are less likely to access antenatal care and education, with women citing that classes are culturally inappropriate, too formal, not inclusive of configurations that fall outside of nuclear heterosexual family structure and too heavily focused on interventions, rather than 'normal' birth (de Joux 1998; Rimene et al. 1998; Simmonds 2014). Maternity education in Aotearoa New Zealand, while seemingly focused on 'natural biological processes', are imbued with social, cultural and political discourses about the 'right' way to birth which can have the effect of silencing Māori and Indigenous knowledges and marginalising women and whānau.

After some 170 years of imposed systems, ideologies and practices, the reality today is that for many, knowing and learning about maternities as our ancestors did is not possible. This is not unique to Māori; in fact Simpson (2006), who I quote at length,

summarises the experiences of colonialism for Indigenous women birthing in Canada, and the similarities to experiences here in Aotearoa are striking. She writes:

The birth of a child became something our women had to endure alone, rather than celebrated with the support of her extended family and community. Women were medicated and hospitalised, told that we could not give birth without the assistance of Western medicine. White doctors, who were 'experts' on birth, replaced our midwives and displaced our confidence in our bodies, our reliance on our traditional knowledge and our trust in our clans, our spirit-helpers, and our ancestors. Our midwives, aunties, and grandmothers were not allowed in delivery rooms, and neither were our medicines, our singing, our drumming, and our birthing knowledges. We were strapped flat on our backs on hospital beds, not allowed to use our knowledge of birthing which told us which positions to use, ways of minimising pain, and ways of birthing naturally and safely. Our male partners were stripped of their traditional responsibilities around birth and were relegated to waiting rooms. We were told that for the safety of our babies we needed intervention and to rely on the Western medical system; to do anything else, we were told, would be irresponsible. (Simpson 2006, p. 28)

In the face of comprehensive and targeted colonisation processes, however, Māori maternities have survived and continue to be a site of resistance and empowerment for Māori whānau. Despite the best, and continued, attempts of colonialism to undermine Māori maternities, Māori whānau have continued to birth and to mother in ways that reflect the values, traditions and stories of our ancestors. If we listen closely, we are able to hear the voices of our ancestors, to hear their stories of struggle and survival, their stories of triumph and celebration and their stories of resistance and transformation. Within these stories are ways to understand our lived experiences, as Māori women, from a position of strength. Within these stories are revolutionary teachings that are ancient in origin. Within these stories is the power to withstand, to create and to transform.

6.3 Land, Language and Spirituality

Consideration of maternities, from a Māori perspective, becomes inseparable from a wider politics of, amongst other things, land, language and spirituality. Women's role in facilitating these connections is significant. Mikaere (2003, p. 31) states 'the role of women as bearers of past, present and future generations is therefore of paramount importance. The survival of the whānau, hapū and iwi is dependent upon the reproductive functions of women'. In this section, I argue that the entanglement of women's maternity experiences with wider understandings and politics of land, language and spirituality opens up fertile possibilities for the way that we understand maternities. It is to these three interconnected themes that this chapter now focuses. A practice that ties these three themes together is the tradition of returning the placenta to the earth which will be used to exemplify the challenges and, more importantly, the possibilities of reclaiming Māori maternities.

6.3.1 Land

From a Māori perspective, the maternal body is intimately entangled with land and the 'natural' environment, both of which are personified by, perhaps the most important maternal body, Papatūānuku (mother earth). The creation stories of Māori cosmogony hold important clues to the sanctity and sacredness of maternal bodies. Gabel (2013, p. 56) points out that 'we should not be afraid to reconsider the stories of our cosmologies, to reassess them, critique them and to come up with our own relevant interpretations'. In doing so, I contend that it is possible to connect the past to the ideals and yearnings of the present.

The creation stories from a Māori perspective, particularly the birth story of Papatūānuku, are important here, of which I acknowledge there are important tribal variations. Papatūānuku is said to be born from the womb space of darkness. Her passage into the world of light (the world as we know it) is said to have been the same journey that babies make through the birth canal (for a more detailed account, see Mikaere 2003; Simmonds 2014; Yates-Smith 1998). This is reflected by Mikaere (2011, p. 210) in the simple but powerful statement that 'the process which brings each of us into being, brought the world into being'.

It is significant also that within the creation stories, the first human form created is female. Hine-ahu-one (first woman made from earth) was made from soil from the most fertile region of Papatūānuku where the female essence is located. She bore a daughter Hine-titama (woman of the dawn) who eventually returned to the darkness that Papatūānuku was born from and became Hine-nui-te-pō (woman of the darkness) who receives and nurtures those who have passed away. While not repeated in any great length here, these stories serve to entangle maternal bodies with the land and can serve as an important source of strength and inspiration for women today.

One woman in my doctoral research explained that it was this relationship that gave her the strength and confidence to resist the imposition of certain medical controls during pregnancy, labour and birth. She likens the control over her body, which she was feeling at the birth of her first daughter, to the historical imposition of systems on the land and on Māori communities more generally:

It applies in a health way too ... they have specific protocols that they have to follow. That in many ways was like the sort of imposition of a system on me, I guess in a way similar to the way that the legal system has been imposed on whenua Māori [Māori land] and all these other systems imposed on Māori people. So my ability to resist that and to cut through that in some ways was because I was Māori and I share in an experience of having those things imposed upon you. (Interview cited in Simmonds 2014, p. 160)

Reclaiming Māori stories and reconnecting to the land provides an important means of resistance to dominant Western understandings of maternities and of land, the environment and sustainability. This is not lost on those who seek to maintain the dominance of colonialism. In fact, attempts to sever the relationship between women and land have been an important tool of colonialism, the effects of which are felt by Indigenous women. Hutchings (2012) makes the point that the patriarchy of dominant discourses serves to subordinate both women and land. She (2012, p. 34) says 'a parallel can be drawn between the subordination of women and the subordination of Papatūānuku and nature, with the key principle of domination underlying modern attitudes towards both women and nature'.

Further, Smith (2005, p. 55) argues 'the colonial/patriarchal mind that seeks to control the sexuality of women and Indigenous peoples also seeks to control nature'. This is something that is well understood by Indigenous women who have been subjected to colonial and patriarchal control over their bodies and the body of mother earth. Not only does the relationship between the maternal body and the earth provide women with a means of resistance, but it can also provide a place of recovery and sustenance, with many women talking of the desire to be 'in nature' and physically and spiritually connected to the earth (see Hutchings 2002; Simmonds 2014).

There is, I believe, incredible transformative possibility in claiming and activating cultural understandings of the maternal body as inextricable from Papatūānuku, the land and the environment. From a Māori world view, the earth is our mother; our genealogies and histories tell us this. There is a political imperative in claiming this. Unlike Western patriarchal conceptualisations of 'mother', as the self-sacrificing and infinite giver, our relationship to Papatūānuku is reciprocal and highly interdependent. Understood, therefore, through an Indigenous cultural prism, the connection between women and land is an important source of resistance, strength and inspiration.

6.3.2 Language

The importance of te reo Māori (the Māori language) to understandings of the maternal body cannot be underestimated. Within our language, there are clues about the importance of maternities. In fact, there are numerous examples of words and concepts in the Indigenous language of Aotearoa that illustrate the importance of reproduction, birth and mothering to the survival, strength and vibrancy of Māori communities. The duality of Māori words provides a number of examples; hapū can mean to be pregnant and subtribe. Whānau can mean to give birth/to be born and family. Whenua can mean both land and placenta. Te whare tangata can mean womb and house of humanity.

Te reo Māori, and our ancestral stories, also tells us that the roles of men and women, while distinct, were not mutually exclusive nor were there thought to be particular hierarchies between men and women (Pihama 2001). This is evidenced by the lack of gendered pronouns in the Māori language, 'ia' meaning 'he' or 'she' and 'tōna/tana' translated as 'his' or 'hers'. Further, words such as rangatira (chief), atua (spiritual being/god/goddess), ariki (first born, of high rank) and tohunga (expert, spiritual expert) are not gender specific (Pihama 2001).

Within the Māori world, those who can 'mother' extend beyond those bodies that carry and birth a child. Mothering is a collective endeavour. This is further evidenced by the fact that there are no Māori words that distinguish between one's mother and one's aunty; the terms $k\bar{o}k\bar{a}$ and whaea (aunty/mother/woman of older generation) were used to refer to women of your mother's generation (usually those known to you). Therefore, while mother and nurturer are loaded terms in the Western sense, within te reo Māori there is protection from patriarchy and a much more collective, open and empowered understanding of mothering.

Through this very brief discussion of te reo Māori, it is possible to see how the marginalisation of te reo Māori has directly impacted gender relations and understandings of maternities today. The words, and worlds, with which maternities were traditionally known have been marginalised, oppressed and in some cases outlawed, leaving women and whānau bereft of a language that speaks to the power and sanctity of the maternal body. The forced use of English over te reo Māori in schools and other public and institutional spaces continues to be felt today. One mother, a participant in my doctoral research, reflected on this:

I wish I knew more about traditional Māori birthing practices. I wish it was general knowledge that was passed down through the generations but somewhere along the way Western medical practice dominated and they [Māori birthing knowledges] got lost. When my Dad was growing up te reo [the language] wasn't respected, not at school or in society, so he lost his connection to the language, and in a way to his culture, his birth right and so he passed on as much as he could but much was lost. (Diary entry cited in Simmonds 2014, p. 119)

Highlighted in this quotation are the multiple barriers that were imposed, through colonialism, restricting access for families to Māori maternal knowledges and, importantly, a language with which to convey them. What is more is that the language which has replaced our own, the language of the coloniser, has served to make women feel shameful and embarrassed about their maternal bodies. This is 'in complete contrast to our ancestresses who celebrated their sexuality through compositions that are still sung today' (Murphy 2011, p. 53).

Reclaiming maternities means not only reclaiming our stories but also the language(s) of our ancestors. In doing so, we reclaim a language which speaks to the power and sanctity of pregnancy and childbirth, a language which recognises the complementary roles of men and women, a language that tells us of the importance of the collective to raising children and a language that can propel us forward to imagine, dream and live new realities.

6.3.3 Spirituality

It should by now be evident that there are multiple and complex layers to how the maternal body can be understood within Te Ao Māori. One such layer that is inseparable from the physical is spirituality. Spirituality is a critical component of Māori maternities and can radically transform how pregnancy, birth and mothering is understood, experienced and performed. For many Māori this is nothing new.

Within broader Indigenous scholarship and practice, it is widely recognised that spiritual well-being is integral to the health and well-being of individuals, whānau and communities (see Simpson 2006; Smith 2012).

This significance of the spiritual to understandings of maternities was acknowledged by both mothers and midwives in my doctoral research. One mother wrote about the importance of spirituality to her during pregnancy, labour and birth. She said:

During pregnancy and strongly during labour I felt connected to something greater than myself, to something words can't describe you can only feel ... I believe that labour is a gift, our chance as women to grow spiritually, gain mana, to prepare us for the journey of parenthood. (Diary entry cited in Simmonds 2014, p. 164)

Another Māori midwife also explained the significance of the unseen to the physical experience of birth, she explained:

It is really important because whatever is going on for this woman spiritually is going to impact on how well she births and how well she actually enjoys her pregnancy, her birth and her pēpi [baby]. (Key informant interview cited in Simmonds 2014, p. 164)

The coexistence of the seen and unseen is nothing new to Indigenous communities but is something that Western colonial frameworks have had difficulty understanding. In fact, the Tohunga Suppression Act 1907, which remained unrepealed until 1962, was perhaps one of the most aggressive assaults on spiritual knowledges, and it had a direct impact on maternities. At its very core, the act defined what was considered important and credible knowledge. Māori spiritual knowledges were viewed as insufficient and improper, and, therefore, our ancestors were denied the right to access their own cultural and spiritual experts. Tohunga were often birth attendants or participated, in various ways, in ceremonies pertaining to fertility, pregnancy, birth and naming and dedication rituals for infants (Yates-Smith 1998). As a direct result of this act, 'the active involvement of Tohunga in childbirth was undermined [and] ... resulted in the radical and permanent loss of whānau and hapū specific mātauranga (knowledges) and tikanga (cultural traditions)' (Kenney 2009, p. 63).

I contend that the spiritual realities of Māori women are inextricable from their physical realities. This is a consistent and unwavering theme that runs through expressions of Māori maternities both inside and outside of the academy (see Gabel 2013; Grace 1992; Hutchings 2002; Kahukiwa and Potiki 1999; Mikaere 2003; Murphy 2011; Yates-Smith 1998). Our histories and cosmologies tell us that the integration of the physical and spiritual can be seamless. In a contemporary context, however, it is possible to see the fissures and cracks that have been caused by colonialism, and specifically Christianity, to the role of spirituality in maternities, particularly the ceremony of birth.

The result has meant that many whānau are trying to re-establish and recreate traditions and ceremonies that take account of the spiritual during birth and after birth. The use of karakia (incantations) during birth serves to illustrate this point. A number of women in my research referred to the importance of karakia during their births both to help calm and protect them but also to assist with pain and/or any

physical troubles they were experiencing. For many women and whānau, however, the form of karakia may have changed, the language with which it is performed may not always be te reo Māori, and the content of karakia may at times be founded in, or blended with, Christian ideologies. An important part of reclaiming Māori maternities, then, must involve reconnecting women to karakia that are founded within Māori knowledges, of which there are many (see Murphy 2011; Yates-Smith 1998).

It has been suggested, however, that as important as the form of a karakia, the intent with which it is performed is equally important, and it is to this end that karakia continues to serve an important role in the birthing experiences of women and whānau. The intent with which karakia were performed by participants in my research served to provide protection over mother and baby, acknowledge ancestors and whānau past, assist with the safe delivery of the baby and invoke a sense of calm during and after birth. Further, the function of karakia can have very real corporeal implications. This is reinforced by Yates-Smith (1998, p. 163):

The significance of karakia in people's lives should not be underestimated. Karakia had a very strong impact on the people involved. In the karakia pertaining to birth, the child and family received encouragement. During the birth karakia had a powerful effect on the woman, providing her with a source of strength in at least two ways; first by invoking her forbears to be present to protect her and the child, and second in a hypnotic way, by drawing her out of the pain.

Within this context, I contend, that by rereading our cosmologies and histories, it is possible to find spiritual knowledges that can help to make sense of the corporeal experience of birth in new ways and can offer women and whānau alternative ways of understanding and negotiating their maternity experiences.

6.3.4 Whenua ki te Whenua: Returning the Placenta to Land

Maternities, from a Māori perspective, are intimately entangled with, amongst other things, land, language and spirituality, and despite the attempts by colonialism to transform these relationships, all of the stories I have come across in my research, and beyond, provide assurance that Māori maternities do indeed exist. One example of this can be found in the tradition of returning the placenta to the earth by burying it in a place of significance, often on tribal lands. This tradition also serves to illustrate the entanglement of maternities with land, language and spirituality.

As stated earlier, the Māori word for land is whenua which is also the word for placenta. There is huge significance in this as illustrated by Rickard (as cited in Mikaere 2003, p. 33):

First whenua is land. Secondly, whenua is the placenta within the mother that feeds the child before birth. And when it is born this whenua is treated with respect, dignity, and taken to a place in the earth and dedicated to Papatūānuku ... and there it will nurture the child. You know our food and living come from the earth, and there also this whenua of the child stays and says 'this is your little bit of land. No matter where you wander in the world I will be here and at the end of your days you can come back and this is your Papakāinga [traditional home] and this – I will receive you in death.

Beyond the duality of the word whenua, this tradition serves to merge the land, our ancestresses and female goddesses, with mother and baby. Spiritually, this practice is significant in acknowledging the nurturance and sustenance provided to a baby through the placenta for 9 months will now be provided by Papatūānuku. This reinforces the responsibility that we have to look after the land, both in the physical and spiritual sense. Further, burying the whenua can serve to establish a sense of 'home' or 'belonging' for a child and, therefore, is particularly important to the wider politics of land rights in Aotearoa New Zealand.

The significance of this tradition was not lost on colonisers, and alongside the institutionalisation of birth in the twentieth century came hospital policy that the placentas were to be destroyed and not returned to families. The refusal to return whenua to whānau is perhaps one of the most visceral attacks on Māori maternities. One of the most vivid representations of this is in the movie White Lies. The film is an extremely moving and powerful depiction of birth in a changing world. White Lies (2013) is based on Witi Ihimaera's novel of the same name. Set in the early twentieth century, the film follows three women all facing their own challenges in a colonising world. Paraiti, a medicine woman and traditional midwife, is staunch in her identity and her belief of Māori medicine and customs pertaining to birth. The Tohunga Suppression Act (1907), however, is forcing her to work 'underground'. The movie sees Paraiti meet Maraea, matron to Rebecca Vikers. These three women forced together, through the unwanted pregnancy of Rebecca, portray the isolating, painful and often raw experience of being a Māori woman in early twentieth-century Aotearoa.

In one particularly harrowing scene, Paraiti asks if she can take the whenua of a stillborn baby back to her land and her people. The nurse tells her she can retrieve it from a rusted tin garbage can. It is beyond retrieving and 'the shock that such a sacred bond could be treated with such disrespect is written all over Paraiti's face' (Dunsford 2013, n.p). While this is a fictional movie, by most accounts, the pain created by hospital policy to dump or even incinerate the placenta has been and is felt by generations of Māori women and whānau.

This policy continued until approximately the mid- to late 1980s when hospital policy changed, and it is now relatively common practice that the whenua is offered to whānau. My parents and grandparents were refused the placenta. In my own family, my generation is the first to begin reclaiming this tradition. The intergenerational impact of hospital policies means that the way whānau 'perform' this tradition today is diverse and evolving. To meet the contemporary realities and needs of families, the where, when and how the whenua is buried are changing. What does not seem to have changed is the intent and function of this tradition.

For example, the impacts of land loss and confiscation and urbanisation mean that for some families, it is not always possible to return to their tribal lands to bury the placenta. Some women cannot return home immediately or are unlikely to return in the foreseeable future, and, therefore, some whānau are choosing to bury the whenua elsewhere or even in a pot plant until they can return home. Hooks (2007, p. 213) points out that 'returning to one's native place is not an option for everyone

but that does not mean that meaningful traditions and values that may have been part of their past cannot be integrated into home place wherever they make it'.

From incinerators and rubbish bins to putting them in plastic bags and ice cream containers in the fridge alongside food,⁴ hospitals have a 'colourful' history in terms of how they have dealt with the whenua. Such structural challenges are recognised by many women and whānau, yet in the face of such challenges, there is often a pragmatic approach in the uptake and performance of Māori traditions during birth and after birth. They are able to uphold the intent and values underlying the tradition while transforming the form to fit their needs. As such, the practice of returning the placenta to the earth, by women and whānau, can not only be transformed but it can be and is also transformative.

While this is the case with this tradition, it should be recognised that there are numerous traditions that are still yet to be reinstated pertaining to pregnancy, birth and mothering. The challenges to reclaiming Māori maternities, therefore, are ongoing and multiple. The energy, strength and determination needed to reclaim and sustain Māori maternities, against colonial and patriarchal ideologies within the current maternity framework in Aotearoa New Zealand, should not be forgotten. To conclude this chapter, then, I wish to touch on the collective responsibilities for decolonising maternities in Aotearoa New Zealand.

6.4 Decolonising Maternities: A Collective Responsibility

From the moment I found out we would be welcoming a new taonga [treasure] into our whānau [family], my world, as I knew it, changed. Everything I was so sure of suddenly became uncertain. Everything that I had one day hoped to learn became all the more pressing. My longing to find my place in the world suddenly became a deep seated need to weave a place for you. (Excerpt from a 'Letter to my daughter' cited in Simmonds 2014, p. 27)

Growing, carrying, birthing and nurturing a child are profound and life-changing moments. Becoming pregnant with my daughter prompted me to consider deeply my own identity as a Māori woman and what it meant to be a Māori mother in contemporary Aotearoa New Zealand. I had to consider my own politics of decolonisation and self-determination. Reclaiming uniquely Māori knowledges pertaining to birth and mothering provided an empowering body of knowledge which enabled me to not only make sense of my maternity experiences but ultimately to put my politics into practice and transform the spaces of maternity for myself, my baby and my wider family.

This is not always easy, and the challenges remain that for many Māori women, in fact for many Indigenous women the world over, their energies can be consumed by trying to survive in a world that is geared toward their demise (Anderson 2006). Yet, as Gunn-Allen (1992, p. 190) so rightly states, 'for all the varied weapons of

⁴The sacredness of the placenta means that it should be kept away from food, as food in Māori culture is seen to be a means to remove the sacredness from an object or person.

extinction pointed at our heads, we endure'. In fact, we do more than endure; in all that we face as Māori women, we fight and resist and sometimes we get angry. We reclaim, reframe and rename. We theorise, write and teach. Amongst the multitude of other things that engage the energies of Māori mothers, all of these things signify that Māori maternities exist and when supported have the potential to thrive.

I argue that the responsibility to reclaim Māori maternal knowledges and practices must be shared by many. The potential for overburdening Māori women, particularly women who are in the throes of caring for new babies and infants, is very real. As expectant and new mothers, and all the 'work' that comes with this, the responsibility that falls upon the shoulders of women, and sometimes their whānau, in reclaiming Māori maternities can be overwhelming. Anderson (2007, p. 775) explains:

Taken uncritically, ideologies of Native mothering run the risk of heaping more responsibility on already overburdened mothers. With so many Native mothers struggling to raise their children in poverty or in situations of abuse or neglect, we must question the logic of asking mothers to 'carry the nations' ... we must ask ourselves: Where are the men? Where are the communities? Where is the nation and where is the state? And – not to forget – where are the children?

It is to the empowering collective approach embedded in Māori maternities that we can turn for answers. It is from a Māori world view that it is understood that children are born into whānau – not just to a mother and father. It is crucial, therefore, that we decolonise Western patriarchal and heteronormative conceptualisations of family if we are to return to an empowered collective approach to mothering. As mentioned previously, those who could 'mother' in traditional Māori society were many and varied, and it was often the collective responsibility of the community to ensure the health and well-being of children and of their parents. These caregiving roles extended beyond the biological mother to aunties, uncles, grandparents and even other women who themselves were unable to bear children. Māori are not alone; Bedard (2006, pp. 73–74) explains that for Anishinaabe culture, in North America:

Some of the most important mothers are women in our families and communities who do not have biological children of their own, but take on the role of aunties, grannies, and even adoptee mother ... in Anishinaabe communities, mother, auntie and grannie are fluid and interchangeable roles, not biologically defined identities.

This is something that can be difficult for Western models of midwifery and mothering to grasp. Kenney (2011) argues that the dominant model of midwifery in this country fails to adequately account for the experiences of Māori whānau. She argues that the monocultural model of partnership between midwife and woman does not locate pregnancy and birth as a familial responsibility in its widest sense.

I implore readers, policy makers, practitioners, academics, iwi, hapū and whānau alike to 'do' maternities differently, in a way that is different to the colonial, patriarchal and often heavily medicalised approach. Self-determination then requires reinstating the collectivism of maternities. This contains a political imperative that the policy environment of Aotearoa New Zealand must recognise this and provide for Māori maternities in new and meaningful ways.

Within our stories are concepts, values and practices that can project us into the future with confidence. It is my hope that Māori maternal knowledges become the foundation of our experiences as Māori women and families, and not just strands that are woven into it, ensuring this is a responsibility that we have to our ancestors, to each other, to our children and generations to come. It is a responsibility that we must take up to ensure that the issues and struggles that consume Māori women, Indigenous women and Indigenous communities today will not be the same issues that our daughters and sons will have to face in generations to come.

To conclude, this chapter is one story about Māori maternities that highlights the possibilities for decolonisation and transformation. Transformation in this regard could mean different things as we reread our histories and create new stories of birth and mothering to account for the diversity of women and whānau. These variations are important; the subtle and sometimes unrecognised efforts to decolonise become just as important as the more obvious. As Gabel (2013, p. 161) points out, self-determination is:

The language that we speak to our children, it is the names we bestow upon them, the songs we sing to them, the whānau and the individuals that we surround them with, the tikanga we immerse them in, the educational experiences we choose for them. Tino rangatiratanga [self-determination] involves the decisions we make around our birthing experiences, the tikanga we follow during our pregnancies and during our mate marama [menstrual periods]. It is the choices we make every day, whether consciously or subconsciously. We should not underestimate the impact of these everyday actions on our children and more importantly on our future generations. Our everyday survival, resilience and persistence as Māori mothers is in itself a marker of our resistance.

There are many more stories to be told, reread, reclaimed and created. Evidence is abound that when Māori women can meet on our own terms, in our own ways, as Māori women, as mothers, the possibilities are endless. I am convinced that the potential for Māori knowledges to transform dominant maternities is absolute. Further, Māori maternities have incredible transformative potential for the lived experiences of birth and after birth for Māori families. What is more, transforming the politics of birth from an Indigenous perspective is to transform the politics of a generation. For as Simpson (2006, p. 29) says, 'self-determination begins in the womb'.

Glossary

The translations used in this glossary were sourced from a combination of The Dictionary of the Māori Language (Williams 1971) and The Reed Dictionary of Modern Māori (Ryan 1994). It is important to note that there are multiple meanings and translations available for many of these words. In most cases, I have presented the most common translation(s) of the word.

Ariki	first born, chief or priest
Aotearoa	New Zealand
Atua	supernatural being, god/goddess
Hapū	be pregnant, subtribe
Hine-ahu-one	first woman created from the earth
Hine-titama	daughter of Hine-ahu-one, woman of the dawn
Hine-nui-te-pō	woman of the night/darkness
Ia	he/she, him/her
Iwi	tribe
Karakia	incantation, chant
Koro	grandfather
Kuia	elderly woman, grandmother
Ngā Maia	collective of Māori midwives
Mana	prestige, authority, control, power, influence
Papa kāinga	village, original home
Papatūānuku	earth mother
Pēpi	baby
Rangatira	chief
Tana/Tōna	his or hers
Taonga	treasure, goods, possession
Te Ao Māori	Māori world
Te reo Māori	the Māori language
Te Tiriti o Waitangi	the Treaty of Waitangi
Tino Rangatiratanga	self-determination
Tohunga	skilled person, chosen expert, spiritual expert
Whaea	aunt, mother, woman of older generation
Whānau	family, to be born, give birth
Whare tangata	womb, house of humanity
Whenua	land, placenta

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Chapter 7 Mongolian Nomads: Effects of Globalization and Social Change

Batchuluun Yembuu

Abstract This chapter describes the changing lifestyle of nomads in Mongolia since the 1990s when social change was started from the former Soviet Union oriented socialism to the market economy. The description is embedded in a commentary on how local wisdom is interpreting modern society. For instance, young nomads are using cars for carrying their Ger (traditional housing) instead of caravans which are traditional transportation; using motorcycles for herding the animals instead of horse riding, and using refrigerators for keeping meats instead of drying meat, hence generating more waste than before. On the one hand, all these changes are getting closer to the Western living style but losing the sustainable traditional nomadic way of living. The framework of this chapter is the traditional way of nomads' daily life focused on their basic needs: food, clothing, fuel, transportation and traditional tools.

Keywords Nomadic life • Ger • Socialism • Former Soviet Union • Market economy • Sustainable life

7.1 Introduction

Mongolia is a geographically vast country (1.5 million km²) and sparsely populated (total 2.9 million people, as of 2013) and contains huge expanses of arable land. Much of its area is covered by steppes, with mountains to the west and north and the Gobi Desert to the south. Approximately 1.2 million inhabitants live in the urban capital of Ulaanbaatar, while the remaining population is widely dispersed throughout the country in rural areas. Mongolia has 21 aimags (provinces) and 330 soums¹ which are divided by bags (Administration of Land Affairs, Geodesy and Cartography of the Government of Mongolia, NSO 2014).

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¹Aimag divided by soums.

B. Yembuu (🖂)

Mongolian State University of Education, Ulaanbaatar, Mongolia e-mail: batchuluun@msue.edu.mn

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The Mongol social structure, economy, culture and language have changed little over many centuries. Mongolian people are basically nomadic pastoralists and superb horsemen, who travel with their flocks of sheep, goats, cattle and horses over the immense grasslands of the steppes of Central Asia. Nomadism is the main form of lifestyle typical of arid and semi-arid places in the world. Nomad people are said to live in 30 countries in the world (Tumurjav and Erdenetsogt 1999). Some classifications describe nomadism as 'full, semi, and partial, pure'. Mongolian nomads are considered semi-nomadic or sedentary (Scholz 2002; Shiirev-Adiya 1999). As they live in certain places or use the same land for many years, they are in regular contact with the local villages or soums to which they are registered for conveniences, including health care, education, community activities and administrative matters. They move between their camps seasonally. Mongolian nomads are examples of Central Asian sedentariness (Graivoronskii 1997). Full nomads have no sedentary camps or places, as they move around throughout the year.

Nomadic civilization is Mongolia's unique feature. Even the capital city Ulaanbaatar has moved 28 times in history until its present location (Bazargur 1999). The traditional Mongolian way of life is connected with pastoral livestock husbandry, where people have to be flexible and mobile following their livestock along the vast steppes in search of better pasture and water. As of 2013, there were 145,311 herder households (or 285,691 people) (National Statistical Office 2013) considered seminomadic. They live in *Ger* or traditional dwellings that have been adapted over the centuries to the realities of nomadic life on the harsh steppes. The Ger is warm in winter and cool in summer and easy to dismount and transport. These are important considerations for nomads during their all-year-round migration. About 80 % of Mongolia's total land area (128.9 million ha) is composed of natural rangeland ecosystems that have provided food for domestic herbivores for more than 4000 years (Sheehy et al. 2010).

Mongolian nomads live in small family groups and are related to each other by kinship relations (Humphrey and Sneath 2006). They move around an area of between 50 and 100 km, at least twice a year, in spring and at the beginning of winter. Their winter location is usually located near mountains in a valley; most families tend to have fixed winter locations. For many centuries, the people of the steppes adopted a pastoral way of life moving in search of better pastures and campsites. Nomadic life thrives in summer and survives in winter. Considering the climatic conditions especially during the winter, such lifestyles may seem to be a very hard way of living to the outside world. However, Mongolians have developed over centuries such qualities as strength and resilience that are essential for survival in this harsh nature, their cherished homeland.

The daily life of nomads is devoted to caring for their livestock – watching, milking, shearing or combing animals and living 'as free as the country is wide'. They live by and for their livestock, specifically: horses, cows or yaks, sheep, goats and camels. The Tsaatan people raise reindeers in the northern areas of Mongolia, around Lake Khovsgol bordering Russian Siberia. Life in the remainder of Mongolia, such as the capital, Ulaanbaatar, stands in stark contrast to the herder's rural existence.

7.2 Steps of Society and Nomads

Mongolia has entered an interesting period of social change. Until the late 1980s, it was a member of the socialist block under the rule of the former Soviet Union. Since 1990 there has been a shift to a market economy. According to some researchers, nomadic customs and characteristics enabled a peaceful democratic revolution in 1990, compared with more difficult transitions in former East European countries.

Historically, Mongolian nomads experienced sociopolitical changes owing to internal and external factors. After the establishment of modern Mongolia in 1921, all animals owned by nomads were moved under the control of cooperatives and later under the ownership of the state. Nomads were herded on state-owned property until 1990. As a result of a large-scale privatization process that began after the democratic revolution, nearly all of the state-owned livestock were given back to the ownership of the herders. This yielded a rapid increase in the number of livestock. It was a good development for nomad herders, who became owners of the livestock capital. On the other hand, the privatization of livestock led to decreased state support in veterinary, education, health and other services, which impacted negatively on both human and animal populations. For example, children of school age, mainly boys, dropped out of education in order to help parents raise their animals. This had a negative impact on the rights to education and development of younger generations (Bazargur et al. 1989).

The types of development anticipated in the Mongolian countryside have included physical infrastructure (i.e. transportation and communication), resources (i.e. mining, energy generation) and livestock production. These developments could potentially improve the economic livelihoods of nomads, but they also have the potential to degrade the environment. Mashbat (2004) noted that the communications, computer services and banking sectors are aggressively taking the place of animal husbandry in the Mongolian economy. This has contributed to the weakening of nomadic traditions in society.

The increased price of raw cashmere corresponds to a change in livestock composition, with the most dramatic shift occurring in the number of goats. Traditionally, sheep were the most valuable. In addition to wool and meat, sheep provide some milk and are a critical resource, namely, for their skins with heavy fleece that are used for winter clothes. However, since the market economy, the value of goats has increased because they also provide cashmere, a fibre that is in demand on the international market (World Bank 2008). The percentage of goats increased from 30 to 44 % between 1970 and 2012. Therefore, pastureland degradation and intensifying of the desertification is increasing (Dash 2010). In addition, mining activity has increased dramatically in Mongolia. Large projects to extract precious metals, highvalue minerals and coal for local energy generation and export, have been proposed throughout, especially in the Gobi region. Small-scale precious metal mining, usually illegal, is already occurring throughout the country.

The main characteristics of herder households in Mongolia are presented in Table 7.1. Data indicate that 84.1 % of herder households had electricity sources and 74.1 % had a television in 2013. In addition, 38.4 % and 47.2 % had automo-

Table 7.1Selectedindicators of herderhouseholds and number oflivestock in Mongolia (NSO2001, 2013)	Indicators	2001	2013
	Number of herders (thousands)	407.0	285.6
	Number of herder households (thousands)	185.5	145.3
	Households, with electricity (%)	13.4	84.1.
	Households with a TV set (%)	15.7	74.1
	Households with an automobile (%)	9.5	38.4
	Households with a motorcycle (%)	18.3	47.2
	Households with a tractor (%)	1.5	3.3
	Number of livestock (thousands)	26,075.2	45,144.3
	Percentage of goats in total livestock	36.8	42.6

biles and motorcycles, respectively. In comparison, in 2001 electricity sources were 13.4 %, television ownership 15.7 % and automobiles 9.5 % (Shagdar 2002).

Since 1990, despite the number of livestock increasing, the number of nomads has significantly decreased. Some herders may have already become 'climate refugees' as they gave up herding and migrated to cities (UNDP 2011). Many nomadic families lost their herds with *zud*. The Mongolian word 'zud' describes long-lasting or frequent snowfall, extremely low temperatures or drifting windstorms that reduce grazing time which have caused serious animal mortality (Batima 2006). The situation resulted in large rural-to-urban migration mainly in the capital city, the population of which has reached over a million people.

According to some researchers, one of the reasons for moving is 'migration for education'. Education quality and schools are a pull factor of nomad rural-urban migration (Steiner-Khamsi et al. 2003). Nomad children can live in school dormitories. Most countryside children have traditionally stayed in dormitories, because their parents are nomads, and this is the only way they can receive an education. However, with rural-urban migration the number of pupils living in dormitories decreased from 42,156 in 2009 to 34,704 in 2013. At 6 years old, children start to enter school, and at this point, many young families choose to migrate to urban areas.

One alternative for nomads has been employment in the mining industry. Since 2009 when the mining boom gathered momentum, herder shifting to the mining sector started. For instance, many herders of South Gobi aimag became a cheap labour force of the biggest mining company Oyu Tolgoi which opened in 2009. Climate change is having a negative impact on the nomadic way of life and threatening pastures and herds, while some of the world's largest reserves in coal, copper and gold are repositioning Mongolia. Overgrazing and desertification have depleted vegetation of the pasture lands, making it difficult for livestock to receive the nourishment they need to survive the increasingly harsh winters. The nomads

are especially sensitive to climate change, hence, the attraction for herders to work in the mining sector.

At the start of this millennium, Mongolia's herders and nomads had little access to modern electric power. In 2000, the Government of Mongolia began the National 100,000 Solar Ger Electrification Program. The program provided photovoltaic solar home systems that were portable in design making the systems adaptable to the nomadic lifestyle of herders and complementing their traditional way of life (Migara et al. 2012). As of 2013, 84.1 % of nomadic people had access to electricity (NSO 2014). They either have small-scale solar or wind power-generated electricity sufficient for their personal needs. The average number of sunny days in Mongolia exceeds 250 days a year. Therefore, harnessing solar energy is a useful way to provide electricity to herders that is also a clean and renewable source, thus making it more sustainable over time.

Most rural nomads have satellite television and mobile phones being used to arrange business transactions, for example, the sale of cashmere during the season. This is an important source of income for nomads. Of course, such technology is very useful because they can receive the most recent weather forecast, important for keeping animals safe.

7.3 Social Change and Globalization Affect the Nomadic Way of Living

Mongolian nomads' traditional way of life could have easily died out with the onset of globalization. Economic and social changes are forcing many Mongolians to leave their traditional ways behind. The nomadic lifestyle is a legacy of thousands of years of traditional culture and dependent upon a harmonious coexistence with nature. Between the thirteenth and fourteenth centuries, herder-settlements – groups of herder households forming small nomadic settlements – became the first major labour division of herders. Typically, every herder household raised a variety of livestock, as the different species provided various services and products, such as food, clothing, transportation, housing and production devices. During the summer, the busiest season for herders, they settle in one place to engage in various collective animal husbandry activities; when the winter became harsher, they move to their winter shelters. The livestock are, therefore, nomads' food, transportation and money. They have dairy products and meat to eat, dung to warm their Ger, and wool and skins to make their clothes, and cashmere which are also their main sources of income.

The herders live in Ger, burn dung, ride horses to herd their livestock and wear traditional Mongolian deel. Nomads devote the whole day caring after their animals – watching over, milking, shearing or combing to produce felt and felt clothes, cheese and other dairy products. Yaks and cows produce meat, leather and milk, used for making a variety of dairy products, such as yoghurt, cheese and aaruul (or dried cheese) that constitute the main diet of nomads during the summer months.

The country has been undergoing momentous social, economic and political changes. The accelerated rate of economic development and infrastructure construction has impacted on the nomadic lifestyle and natural ecosystems and traditional pastoral livestock production, as well as traditional knowledge and local wisdom which was more sustainable before.

7.3.1 Survey of Nomadic Families

I have first-hand experience of the changes. I was born and raised in the rural countryside, therefore knowing the traditional nomadic lifestyle quite well. To help explain the changes, I conducted a survey with 34 families who belong to Orlogo bag² of Umnugovi soum, Uvs aimag.³ The survey method included observations, questionnaire, interview and focus group discussions.

Participants were assigned to five groups based on how much they were affected by the social changes. The groups were: 'not affected', 'mildly affected', 'moderately affected', 'highly affected', 'almost forgotten' and 'forgotten'. The research data were used to evaluate how the nomadic lifestyle is changing with the effects of globalization and social transition at the bag level. Changes in tradition were observed in six aspects thought to represent the traditional nomadic lifestyle. These included:

- 1. Food and method of its preparation
- 2. Clothing
- 3. Method of fuel preparation
- 4. The way these people spend their free time
- 5. Transportation method used when moving the nomads
- 6. Knowledge of nomadic traditions

7.3.2 Traditional Food and Its Preparation

Nomadic herders have, for centuries, been dependent on mostly animal products. The extreme continental climate has affected the traditional diet, so Mongolian cuisine primarily consists of meat and animal fat which are necessary for the Mongols to withstand the cold winters and hard work of nomads. Winter temperatures are as low as -40 °C and outdoor work requires sufficient energy reserves. From ancient times, Mongolians have used abundant and peculiar methods for processing meat, dairy products and preparing food.

²Bag is closest administrations unit to the nomads.

³Administrative unit of Mongolia (as same as provinces).

Meat is the most important product of the national diet. In harsh climatic conditions on the Mongolian plain, nomads discovered a specific method for preserving meat. One of the more popular methods is to prepare borts (air-dried meat) for use in winter and spring. Borts are made from the meat of cows, goats and camels. The borts are stored in a hide; this is a bag which keeps longer than frozen meat. Borts preparation is becoming very rare, with fresh meat being stored in refrigerators instead.

Nomads make all dairy products for their needs, such as butter or cream, milkvodka, cheese and aaruul⁴ in summer for the long winter and spring. The aaruul is dehydrated and thoroughly dried in the air and sun. The remarkable thing is that there is practically no limit to its life. Specialists believe aaruul is one of the factors responsible for Mongol's strong and healthy teeth. But, the aaruul preparation method is decreasing, due to selling fresh milk to urban people for income. Preparation of traditional milk products is still a feature in remote areas, but it too will change in the next few years.

Beverages of nomads are based on milk such as 'shimiin arkhi'. It contains a little alcohol and has been made for many centuries since the first Mongol people, the Hun Empire. There once was an 'oral law' in Mongolia that 'just to test milk-vodka when you are at 40 and drink a little when you are at 50'. This shows that actually nomads never used strong vodka in the past, unlike today. Unfortunately, this tradition is disappearing and nomads often drink manufactured vodka. Yoghurt, which is used to prepare the shimiin arkhi, is kept in plastic containers, and the cone-shaped wooden barrels used in distilling have since been replaced by steel cones. Since the 'modernization' of traditional technology, the taste of shimiin arkhi is said to be of lower quality. The national beverage of the nomads, airag, is mostly produced in areas of the steppe zone, where weather conditions are more suitable for fermenting the mare's milk. Airag is still prepared, but its keeping bags have already been modernized by big plastic containers.

Barley was traditionally the main grain food. It is known as zamba⁵ and was eaten daily in the morning and at noon together with tea and dairy products. Today, no tools like the hand-powered stone mill are used to make barley 'flour' (Table 7.2).

7.3.3 Clothing of Nomads

The traditional dress of the Mongolian nomads has a rich history spanning many centuries. It is closely connected with the nomadic way of life, the harsh continental climate and windy weather. Each ethnic group of nomads used to wear their own clothing until the twentieth century; the designs were distinguished by cut, colour and trimming. Nomadic clothes suited the many different occasions of their life, for example, horse riding, staying overnight on the steppes or parading during national celebrations. For these reasons, clothes would have a simple and comfortable cut and, generally, a loose fit for easy wearing.

⁴Curdled milk.

⁵Similar term used in Tibet.

	Rat	Rates (how affected)				
Traditional way	1	2	3	4	5	Replaced by
Air-dried meat – borts	1			1		Frozen or fresh meat
Dairy products (aaruul)		1				To sell the milk
Barley (flour)			1			Very seldom
Salt from the lake or stone salt			1			Packaged-imported powder salt
Noodle soup by rolling flours with meat			1			Macaroni, paste, instant noodles
Meat sausage/blood sausage (handmade)					1	Factory-made sausages
Mongol arkhi ^a (or shimiin arkhi)				1		Manufactured strong vodka
Traditional bags to keep the dairy products and meat					1	Plastic bags, buckets and plastic container of water and tetra pack of juice

Table 7.2 Herders' responses related to the food and method of its preparation

^aFor recipes see The Food of the Nomads: http://www.mongolfood.info/en/recipes/

The deel⁶ is used in seasons. In summer, Mongol nomads wear a light coat or frock, in spring the 'terleg', in autumn a wadded deel and in winter a lamb skin or sheepskin dress will be worn similar to a fur coat. It is supremely well adapted to the conditions of life on the steppe and the daily activities of pastoral nomads. While nowadays Western-styled dresses are available in the countryside, deel is still used in daily life for nomads. Traditionally, the Naadam⁷ and Tsagaan Sar are occasions to make a new deel, especially for children. To make small accessories of deel like buttons is not easy; it needs certain skills from the makers. In the past, every woman was a deel maker; it was a criterion for brides. Nowadays, it is only made by special sewers. Only 12 women of the Orlogo bag responded that they make deels for members of their family. Therefore, new businesses are being established for deel making.

The sheepskin deel is being replaced by the synthetic skin deel. The Orlogo bag nomads explained that '40–50 years ago, it was very cold; therefore, cotton, skin and fur dresses were necessary. Now, winter weather is becoming milder and it is not suitable to wear the sheepskin thick deel' (see Table 7.3).

Traditional nomad boots were made from cow hide and felt. None of the respondents wore the traditional Mongolian boots. Mostly wrestlers wear them for special events, such as the Naadam festival and Tsagaan Sar.

⁶Long traditional outer dress with a high collar.

⁷Traditional festival.

	Rates (how affected)							
Traditional way	1	2	3	4	5			
Traditional dress/ethnic clothing					1			
Deel	1	1						
Traditional boots				1				
Felt boots					1			
Traditional hat					1			
Sheep skin deel					1			

Table 7.3 Herders' responses related to the clothing for daily life

7.3.4 Fuel Culture (Method of Fuel Preparation)

Mongolian nomadic civilization is one example of an ancient culture that has centuries of experience with regard to the utilization of eco-friendly energy. The methods used by the Mongolian nomads are both scientific and relevant to our aims to safeguard our present ecosystem. They revolve around the use of argal, a type of dried animal dung used as fuel, which is an excellent example of a means of energy generation that is not damaging to the environment and is, at the same time, renewable. The temperature of the argal fire is well suited for cooking, food processing, heating, making handcrafts and certain industrial uses (Delger 2013).

Argal is a waste by-product of animal husbandry and one that can be easily collected, avoiding the need to cut down trees for wood or the need to mine coal and damage the earth and the soil. It is a green fuel with no expensive production costs and is not harmful to the environment. Some research on biochar production suggests it is not only beneficial to the environment but also profitable for the economy. Besides using meat, milk, wool, cashmere and leather, herders can manufacture products with animal manure and compressed dung for obtaining revenue (Munkhbat 2014).

Today, collecting dung from the pastureland and preparing the hurzun⁸ are shrinking everywhere in Mongolia. Instead of argal, nomads are using wood (destroying the forest) and coal (digging coal mines and damaging the earth). During the 2-week observation period of this study, I never saw anyone collect dried dung. Forty years ago, it was daily work, especially in plains with no trees and forest like the Orlogo bag area. The arag⁹ and savar¹⁰ for collecting dry dung is hard to find, as well as 'seezgii' (small baskets). Nobody knows the past technology for making these baskets and wooden forks.

Most households of the Orlogo bag use an electric stove for cooking. They say dung is mostly used for heating. They burn wood and coal throughout the year.

⁸Frozen dung.

⁹Wooden basket for collecting dry dung.

¹⁰Wooden fork for collecting dry dung.

7.3.5 Culture of Spending Free Time

The traditional way of spending leisure hours for nomadic families was to play shagai¹¹, and morin khuur, and¹² finger games such as the finger-guessing game, and Dembee and Stone toys, storytelling or tales, and singing songs. Morin khuur is a Mongolian traditional musical instrument, but today, such traditions have been 'conquered' by television (as of 2013, 74.1 % of the herder's household had television sets). All families of Orlogo bag had a television with more than 60 channels; nomads pay by a mobile bank for using channels, including Russian, Australian Network, CCTV and DW National Geographic. Based on the responses, nomads' most loved channels are movies, including Korean soap operas which implicate traditional cultures.

Mongolian traditional folk games are considered vital elements of the intellectual and cultural heritage. Since ancient times, part of nomadic life was shagai (anklebone), the most popular game among adults and children. There are various shagai games such as 'to catch knucklebones' and 'to shoot knucklebones' (Tungalag 2013). 'Horse race' and 'multicoloured frog' are commonly played by families at the Lunar New Year (Mongolia Culture and Development Research Centre 2014). All reflect the unique aspects of nomadic lifestyle. For example, four sides of the shagai have names of livestock: horse, camel, sheep and goat. Playing with it, children gain rich knowledge of nomadic life and livestock from their early childhood. However, modernized young generations do not play such traditional plays. One hundred percent of respondents from Orlogo bag agreed these games have already disappeared from their daily life. Nomads, however, still collect sheep or goat anklebones for tradition, and some enjoy fortune-telling by four shagai falling into one of four different possible positions.

Traditional verbal games with strict rules of playing and fixed expressions were common among folklore games. Since learning to speak, children started to learn proverbs to compete with each other. These kinds of games were positive educational and behavioural influences on thinking, mental agility and perceptions of children. Traditionally, verbal and outdoor games of nomads were very popular. They had wide prevalence in the countryside and carried names such as 'throwing white stick wood' or 'guessing the white camels'. People used to play after their collective work like wool clip and comb-a-coats. Nowadays, young generations do not know about these outdoor plays. These were not only play pastimes, they were also ways of meeting young people and partnerships for nomads. Within forgotten games is 'horol', which is similar to Western dominoes. The intellectual games played an important role in developing the minds and thinking of children.

According to the respondents of Orlogo bag and as a result of observations made in different areas of Mongolia, all of these games have already died out from nomad daily life. In Orlogo bag, 'story- and tale-telling parents' are very rare; mostly they

¹¹Sheep or goat anklebones.

¹²Traditional musical instrument, UNESCO registered cultural heritage.

Age group	Upper secondary	Secondary	Primary or not completed	Total
18–25 age	7	5	2	14
26–40 age	0	4	32	36
41-60 age	4	6	2	12
Above 61 age	0	2	4	6
Total	11	17	40	68

 Table 7.4
 Parents' education level (Orlogo bag)

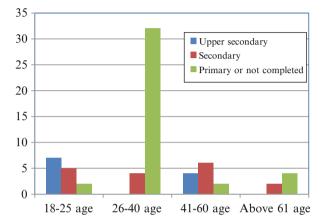


Fig. 7.1 Parents' education level of nomads (Orlogo bag)

are 'TV-generation parents'. Associated with this is a dropout from school phenomena which started in the 1990s with livestock privatization. The dropout rate was 8.2 % in the 1992–1993 academic years and mostly boys (Yembuu 2010). Now, the dropout 'boys' are already 40 years plus of age and heads of family who are semiliterate, with poor skills to read stories and tales to their children. Table 7.4 and Fig. 7.1 show the education levels of the 68 parents who responded to the questionnaire.

7.3.6 Transportation Changing

A strong part of the nomadic way of living is transportation. All nomads move between places depending on the season, vegetation cover and water supply. The moving distance between the winter and summer camp is different by regions; the average is 30–120 km. For instance, nomads of Orlogo bag used to spend 4–5 days travelling to the spring camp near the Uvs Lake by camel freight with their livestock. Now, several hours are sufficient by car. Traditionally, nomads used to move by horse or yak cart in the northern parts and camel freight in desert areas. Camels and horses are used mainly for transportation, camels to move camps and horses to

ride. Today, it is difficult to see camel freight; instead it is like a 'demonstration show' and is even interesting for Mongols.

Herders still move between places, but they are using cars instead of camels. The nomad's traditional freight (camel, yak and horse cart) is part of a sustainable living style. But today, nomads never use this eco-friendly transportation for moving. In the conducted interviews for this research study, only 1 family out of 34 claimed to use the camel cart for moving families of the Orlogo bag. The head of this family is a traditionalist. He has his own car and motorcycle; however, they are used for collecting dung and carrying the animals. Nomads like Russian-manufactured cars which are considered strong and convenient in the countryside and also easy to repair. But, their trucks use 20–25 l of benzene for 100 km. Generally, nomads wear no helmet or other defence clothing for motorcycle riding. There have been many occasions of injury and loss of life. The changes in transport impact on the spiritual traditions of Mongolia. For instance, the hospitality custom which meets moving families by camel freight was one form of communication between people.

Mongolian horses are small but strong and have adapted to the severe continental climate. Men, women and children all love to ride, and it is not unusual to see 7-year-old boys and girls herding on horseback. Mongol nomads, in fact, do not walk much like Ethiopians. Most households, on average, own nine horses and keep at least one mount saddled and tethered beside their Ger during the day, therefore, instantly available for herding, errands or visiting. Every household has horses, but nomads' favourite 'saddle animal' has become the motorcycle for looking after the animals.

7.3.7 Knowledge of Nomadic Traditions

For millennia, pastoral herders have had the knowledge of moving with their livestock according to the season. Greetings of nomads are connected with nature and weather like 'How is your winter?' (same as how do you do?), 'How is your summer?', etc. They obtain everything from their animal for making tools, bags and materials which are suitable for living. Due to isolated living conditions, they develop their own knowledge, such as how to predict the weather, to collect medicinal herbs and to treat their animals. But, the traditional knowledge of nomads is disappearing. Nomads' traditional customs and technology to produce many essential items and traditional knowledge are being erased by social changes and globalization.

	Rates (how affected)						
Traditional way	1	2	3	4	5		
Bags to keep foods and dairy products							
Tools by hair (camel halter)					1		
Tanning (of skin)							
Making leather ropes				1			
Hobbles for horses			1				
Make lariats			1				
Felt and felt making				1			
Sheezgii ^a					1		
Huhuur ^b					1		
Making hair tow rope				1			
Making hair twist rope				1	1		
Yak hair twist rope for Ger					1		
Wooden distilling cone ^c					1		
Tan vat (bag for tanning)							

Table 7.5 Herders' responses related to knowledge of making traditional tools

^aSmall wooden basket for collecting the dung making

^bBag or container for making yoghurt - hangs on the inside left wall of Ger

°Tools for preparing milk-vodka

7.3.7.1 Traditional Tools

It would not be possible to imagine a nomad's life without traditional tools for their daily needs, for instance, hobbles for horses, bridle, rein, 'argamj' (long rope for tying livestock for keeping to graze around), 'uurga¹³' or lasso made of tanning leather and birch (tools to catch a horse). Today, most of the tools for livestock handling are still used, but for making materials, the technology and methods are changing, and the old ways are dying out. Many tools for preparing dairy products, barley making and making bags for keeping foods, such as meat and milk products, are already forgotten.

Orlogo bag is the hearth place of barley; however, most families do not have the tools for barley producing. Only two families had traditional tools for barley producing: a stone hand mill, wooden bowl and grain breaker. Traditionally, most bags were made by skins (skin bags and leather bags), sheep farding-bag and stomach (for milk butter). Nomads believe that keeping barley in sheep (goat) hide bags, butter and milk cream kept in sheep farding-bag and stomach, is helpful for long time conserving. Today, herders use refrigerators for keeping milk and meat, as well as plastic bags and containers. Relatives who live in the city send to the countryside much of the used 'present of plastics' (see Tables 7.5 and 7.6).

¹³Handmade rawhide lariat.

	Rates (how affected)						
Traditional tool making	1	2	3	4	5		
Spinning by skewer				1			
Weather-predicting skills					1		
Livestock disease diagnosing and treatment					1		
To know medicinal herbs					1		
Traditional Mongolian folk medicine					1		
Spinning camel hair into thread				1			

Table 7.6 Herders' responses related to the traditional knowledge

7.3.7.2 Felt Making

Felt is a crucial product for herders, since it provides insulation for their Ger and is used to make felt boots for cold winters. The Ger is part of the Mongolian national identity, especially for nomads, made by the felt. It is in demand to replace worn sections of Ger and for making the new Ger, when each son establishes his own household. All families of the Orlogo bag have given up hand felt making, because cheap factory-made felt is available, and young herders do not know how to make it.

Nomads still make their own rawhide rope for lariats and horse tack and hobbles, argamj,¹⁴ but people who are familiar with the technology are ageing. Traditionally, ropes of different twists or braids which are sewn together in a band are important tools for Ger; for cord of a Ger upper frame covering and for making the lead or keeping animal babies: foals horses, calf, yeanling and lamb are made by yak hair and camel or horse hairs. From ancient times, nomads have had skills to predict the weather by using air humidity sensitivity or elastic property of the hair ropes.

7.3.7.3 Tanning

One of the traditional skills which are disappearing is how to tan a cowhide and sheep, goat and lamb skin by hand using a scraper or beating stick for producing tanning leather. From ancient times, Mongolian nomads have treated livestock leather to use in their daily lives (Mongolian Secret History Travel Company 2014). Their lifestyle is a legacy of ancestral generations and traditional culture. Young generations of nomads, however, do not know the methods of tanning leather, and master makers are ageing.

Today, the tanning vat, which was made of wood, has been replaced by plastic barrels. Young herders use cheap imported materials like lace, plasticized rope (synthetic material) and canvas. However, these plastic 'tanned leathers' are uncomfortable for the animals; they injure their legs and wrap their necks in the rainy weather. In addition, synthetic materials are non-biodegradable rubbish and waste after use.

¹⁴ Braids rawhide rope.

During the transition period around 1992, herders were returning to traditional technologies to produce many essential items (Goldstien and Beall 1994, p. 140). The period was short-lived, however, and today's situation is irrevocable, as changes are based on social and economic factors and globalization.

7.4 Conclusions

This century is proving to be an era of fast and furious change all over the world. In Mongolia, economic and mining development on pastoral livestock production has had many positive impacts. For instance, hard-surface roads have improved herder's access to health care, information and education services, rural links with urban centres and direct marketing. Small-scale solar and wind power generation could potentially benefit nomads' livelihoods by increasing access to electricity. These also bring many negative consequences which have contributed to the weakening of nomadic traditions in society.

Nomadism is a unique element of Mongolian life. But, traditions of thousands of years of wandering the Mongolian steppes are now at risk, as a consequence of the changing economic and environmental landscape. The most valuable aspects of nomadic civilization are disappearing and unlikely to be renewed. Researchers, policy makers, local governors and nomad herders themselves worry about pastoral degradation and desertification that have been influenced by mineral exploitation, climate change and the increasing price of goods. Traditional knowledge and the culture of nomads are disappearing faster than pastoral degradation.

Many nomadic traditional tools and technologies, such as those used to develop animal skins for storing foods, as well as spiritual customs, are already forgotten. Westernized young generations of Mongolians do not know these traditions and are not interested. There is some momentum to renew traditions, but they seem limited to old Mongolian scripts and folk literature.

With the mining boom in Mongolia, nomads' traditional horse-based culture is changing to vehicle-based. Real, nomadic living style is becoming an attraction at tourist camps, and ancient traditional tools of nomads are exhibited in museums. Unfortunately, too few voices are seriously noting the reducing tradition of nomadic culture in Mongolia. Perhaps such change is necessary; humanity has evolved and always will evolve and adapt to new eras, technologies and philosophies. But history and tradition have important roles to play even in the modern world, and it would be a shame to simply replace millennia-old wisdom with modern attitudes.

Mongolian's nomadic lifestyle has attracted researcher attention, but mostly by non-Mongolians. Generally speaking, papers are focused on land degradation, pastoral management and environmental and climate change, including natural disaster influence to nomads, as well as historical artefacts. Therefore, to study the traditional ways of nomads' lives and changes to traditional knowledge is important for comprehending sustainable practices.

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Chapter 8 Everyday Knowledge and Disaster Management: The Role of Social Media

Lai Hang Dennis Hui and Po Keung Eric Tsang

Abstract The connection between the media and disaster knowledge has been a subject of growing attention by both scholars and public officials. Adopting the theoretical framework by Michael Gardiner, this chapter looks at how disaster knowledge is constructed and disseminated by social media from an everyday perspective. It argues that with the proliferation of social media, disaster knowledge has been transformed from an expert-driven knowledge to an everyday knowledge, co-produced by different stakeholders. It also argues that social media can develop a stronger public awareness towards different forms of contingency by recontextualising disaster knowledge in the light of the diverse needs of local communities. This chapter makes use of Japan as a case study to illustrate how social media 'everyday-ed' disaster knowledge, thereby enhancing the disaster resilience of the local communities during and in the aftermath of the 2011 Tōhoku earthquake.

Keywords Disaster knowledge • Social media • Resilience

8.1 Introduction

Everyday knowledge has become an increasingly important theme in the academic field of critical sociology (Gardiner 2006). The purpose of this chapter is to examine the theoretical and empirical connection between everyday knowledge and disaster management. It argues that technoscientific knowledges about disaster management (prevention and mitigation) are increasingly demonopolised and assimilated into everyday knowledges by social media. In the light of this argument, the first part of this chapter traces and explains the importance of everyday knowledges in the

L.H.D. Hui

Department of Social Sciences, The Hong Kong Institute of Education, Tai Po, Hong Kong

P.K.E. Tsang (🖂)

The Hong Kong Institute of Education, Tai Po, New Territories, Hong Kong e-mail: etsang@ied.edu.hk

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society and how these 'repertoire[s] of shared and embodied norms, techniques and interpretative frameworks' (Gardiner 2006, p. 205) become significant in enhancing disaster prevention and mitigation. The second part reviews the importance of the media in disaster management. The third section reviews how traditional media and social media can create everyday knowledge in enhancing disaster resilience and in translating technoscientific knowledge into everyday knowledge. The final part examines the experience of Japan associated with the use of social media during the 2011 earthquake and how it can be used for promoting indigenous disaster knowledge on an everyday basis.

8.2 Everyday Knowledge and Disaster Management

How everyday knowledge represents a unique category of knowledges deserves attention. In the first place, everyday knowledge is characterised by a high degree of pragmatism (Maruzewski 1991). Essentially, individuals and communities construct and make use of everyday knowledge to satisfy certain self-professed ends. For example, how individuals can maximise their chance of survival by identifying the shortest route to shelters is an example where pragmatism and knowledge converge. Another important aspect about everyday knowledge is its democratic and consensual quality. As opposed to formalised, scientific knowledge, everyday knowledge can be mundane and unstructured (ibid). Yet, it is an open, unencumbered structure within which each individual can participate in its production. In short, everyday knowledge provides a more reflexive way for capturing the diversity of responses across different circumstances.

On the other hand, whilst our understanding of disaster has been advanced by decades of scientific development, substantial changes in the underlying philosophies of disaster management have been witnessed throughout the past decades. The more classical approach to disaster management is what we call a geomedical perspective. The essence of this perspective lies in how geography determines the likelihood of disasters, what kind of public health consequences they entail, and what kind of medical interventions should be implemented to reduce human loss. Examples of work from this perspective include Romero Arturo et al. (1978) and Gustavo Quesada et al. (1978). The geomedical perspective was soon refined by other interdisciplinary efforts and explored how social structure would affect responses to different disasters. The strategic-operational approach to disaster looks at how individuals, organisations and communities develop their competencies in response to contingencies. Carole Lalonde (2011), for example, looks at how strategy helps organisations to develop organisational resilience in disaster preparedness and management. John Handmer and Stephen Dovers (2013) examine the institutional aspect of disaster management. A communicative perspective to disaster management in the 1990s highlights the growing importance of taking agencies

seriously into the formulation of disaster management planning. Arjen Boin et al. (2005) examine the idea of crisis management as political communication and reveal the competing understandings about disaster. All these perspectives have, however, privileged expert knowledge over indigenous knowledge in disaster settings. In this chapter, we attempt to provide a community-based approach to disaster management by looking at the issue of everyday knowledge.

As far as disaster management is concerned, several characters of everyday knowledge deserve attention. Firstly, as pointed out by the United Nations Environment Program (2008), there is a need to recognise the role of indigenous knowledge in enabling individuals and communities to hedge against disaster-associated risks. Jessica Mercer et al. (2010) define indigenous knowledge as 'a body of knowledge existing within or acquired by local people over a period of time through accumulation of experiences, society-nature relationships, community practices and institutions, and by passing it down through generations' (p. 217). Whilst overshadowed by scientific knowledge, indigenous everyday knowledge, as contended by the UNEP (United Nations Environment Program 2008), is essential in enhancing the disaster management capacity of geographical localities. Whilst such local knowledge may not be readily accessible in codified forms, it provides indispensable biophysical, demographic and historical information that helps local communities make informed and immediate decisions.

Secondly, everyday knowledge gives rise to the formation of a so-called risk imaginary which is an important factor in heightening the alertness of a community towards disasters. The idea of risk imaginary refers to how a society develops a set of risk-related knowledges, discourses and perceptions around which people can organise themselves. To Anthony Oliver-Smith and Susanna Hoffman (2002), central to this risk imaginary/identity is the notion of vulnerability, which acts as a way for questioning the intersection between disaster, knowledge and subjectivities. Vulnerability, accordingly, should not be viewed exclusively in terms of its negative connotation; rather, it is a way for people to understand the 'interpenetration and mutuality between nature and society' in the context of crises and contingencies (Oliver-Smith 2004, p. 20). It follows that there is a need to interrogate how the everydayness of the production of risk knowledge in order to look at the extent to which risk imaginary is embedded into a society.

Thirdly, it is important to look at how expert knowledge can be demonopolised and assimilated into everyday knowledge. To Ulrich Beck (2005), rather than enhancing our understanding towards different forms of contingency, the dominance of technoscientific knowledge about contemporary risks and disasters actually disarticulates the risk positions of individuals. They are very often class-blinded. But, instead of denying their values, how expert knowledge can be reformulated and become part of our everyday knowledge, is of critical significance. Such reformulation usually takes place within agencies such as the media and school. This chapter pays attention to the former. It addresses specifically the role of how social media promotes the production and dissemination of risk-related everyday knowledge.

8.3 The Media and Disaster Communication

The connection between the media and disaster is a contested one. Whilst most of us believe that the media is vital for ensuring timely access to essential information, the media can sometimes 'politick' disasters for populist causes (Brauner 2000). The media can also promulgate 'erroneous beliefs about disaster behaviour' (Tierney et al. 2006, p. 57). We should, thus, be cautious not to take the connection for granted. From the literature, there are at least three dimensions that are essential in understanding the importance of the media in disaster management. Firstly, the media is playing an active role in disseminating information about the occurrence of disaster. Communities rely on the media to decide their own actions such as prevention and evacuation. Whilst this is a commonly understood function of the media, *what* is disseminated by it is even more important. Indeed, given the diverse sources of information on which the media relies, it is rather difficult to confirm the veracity of information. In addition, how audiences reconcile competing pieces of information.

Secondly, the media is responsible for disaster-framing. By disaster-framing, we mean how the media creates a cognitive-linguistic field within which disaster experience can be interpreted. Within this field, the media generate different powerful discourses, narratives and images that can evoke the emotions of audiences. During the September 11th incident, the media produced astonishing images which brought the public close to the idea of terrorism. Of course, the political inclination of the media does matter in many controversial matters, especially when the media is controlled by a range of institutional parameters. What is more important is, however, how the media generates a new set of new words, phrases and metaphors which represent certain premeditated ideas about a contingent event (Halliday 2011; Tierney et al. 2006).

Thirdly, moving beyond the linguistic and managerial role the media has traditionally been playing, sociologists point to the emotion support and companionship that it can create. Essentially, so long as the media can become a source of emotional support, it allows victims to remain connected with the outside world (Perez-Lugo 2004). The 'affective effect' of the media can, accordingly, be one important source for sustaining the coherence of the society in different kinds of contingent situations. Perez-Lugo goes further by arguing that the media is actually creating a disaster community which can also create new identities amongst members of an existing community.

In understanding the role of the media in disaster management, we could no longer limit ourselves to traditional media such as news and television; instead, we have to understand how social media (or known as new media or Web 2.0) has been transforming the landscape of disaster communication. Taking a communicative approach to disaster management, Houston et al. (2014) recently addressed the importance of social media in enhancing disaster communication. Building on the work by Boyd and Ellison (2007) and Blank and Reisdorf (2012), Houston et al.

(2014) define social media as a 'broad term for a variety of web-based platforms and services that allow users to develop public or semi-public profiles and/or content, and to connect with other users' profiles and/or content' (p. 3). Social networks allow 'individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system' (Boyd and Ellison 2007, p. 211). What is salient about the social media is its network effect which is referred to as 'the idea that some things are more valuable when more people participate' (Blank and Reisdorf 2012, p. 538). Social media can also be referred to those platforms (such as YouTube, Twitter and Facebook) which are 'simple, reliable environments where users can do what they want' (ibid, p. 539). The use of social media in everyday communication and knowledge generation has been critically analysed by José van Dijck (2013). To van Dijck (2013), what is so distinct about social media is not so much its ability to network one another, as its potential to platform sociality. The platformed sociality of social media is made possible by its high degree of interactivity. Using social media has eventually become our quotidian practice and reshaped the way in which communication works.

Such understanding can be extended into disaster communication and disaster resilience. There is an emerging body of literature on this area. In 2011, Bruce Lindsay (2011) made a pioneering review of the possible benefits of using social media in disaster prevention. Whilst he recommends for the systematic uses of social media as an emergency management tool, such kind of technocratic approach downplays the organic quality of communication in disaster settings. Others have pointed to the empowering effect of the media in disasters. Dhiraj Murthy (2013) has examined how South-Asian blogs have democratised the way in which victims can represent themselves. He also argues that social media has provided an important way for contesting the cultural hegemony in the mediascape. Houston et al. (2014) develop a new analytic framework to conceptualise the connection between social media, disaster management and everyday knowledge. Houston et al. (2014) have 15 aspects of disaster social media use. We here recapitulate all these aspects: (1) providing and receiving disaster preparedness information; (2) providing and receiving disaster warnings; (3) signalling and detecting disasters; (4) sending and receiving requests for help or assistance; (5) informing others about one's own condition and location and learn about a disaster-affected individual's condition and location; (6) documenting and learning what is happening in the disaster; (7) delivering news coverage of the disaster; (8) providing and receiving disaster response information; identifying and listing ways to assist in the disaster response; (9) raising and developing awareness of an event; donating and receiving donations; identifying and listing ways to help or volunteer; (10) providing and receiving disaster mental/behavioural health support; (11) expressing emotions, concerns, and wellwishes; memorialising victims; (12) providing and receiving information about (and discussing) disaster response, recovery, and rebuilding; telling and hearing stories about the disaster; (13) discussing sociopolitical and scientific causes and

implications of and responsibility for events; (14) (re)connecting community members; and (15) implementing traditional crisis communication activities (p. 8). These 15 aspects suggest that social media can actually create a collaborative basis for disaster management.

The transformational effect of social media in disaster knowledge sharing and management can be seen from the following dimensions. First is the formation of a collaborative platform on which expert knowledge and indigenous knowledge can be assembled. Social media, for example, can break down a large chunk of the professional (hard) knowledge into smaller chunks of everyday knowledges that are easy 'to acquire, share and, use' (Yates and Paquette 2011, p. 7). In addition, the intertextuality of social media has facilitated the cross-fertilisation of knowledge and information. For instance, the use of social media by a multitude of emergency agencies (communities, the police, the military, local governments, and hospitals) has allowed knowledge to transverse across different fields of discourses.

Secondly, social media has been providing a decentralised, un-brokered way for knowledge construction, transfer and preservation in both contexts of contingencies and normalcy. During disasters or crises, accesses to traditional media can be disrupted, resulting in ruptures in disaster communication. Social media, by contrast, tends to be more reliable in the sense that it would not require external (and locally based) agents to ensure the continuity of transmission. Such a network-based approach does not necessarily contest the cultural and social embeddedness of indigenous knowledge construction. What is equally important is that social media can extend the production of disaster knowledge beyond contingencies. As shall be seen in the case of Japan, knowledge sharing amongst the local community in post-Fukushima has not been brought to a halt; instead, it has been transformed into a form of community empowerment.

Thirdly, the creative dynamics of social media can enhance the adaptability of local communities by recontextualising disaster knowledge. The importance of social media in adding contextual information into the public discourses of disaster has been captured by Yates and Paquette (2011) who argue that, 'Wikis, online community forums, and blogs create instant feedback loops as knowledge recipients are able to immediately share their reactions with the author and other readers—in some cases, requesting clarification or additional information to help them overcome knowledge boundaries' (p. 8). Indeed, as warned by John Briggs (2005), in popularising indigenous knowledge, we should distance ourselves from attempting to universalise and 'scientify' them. Instead, we should be looking at how the society itself can derive 'contemporaneous' meanings out of it. The multimedia-styled platform of social media, in this connection, opens up possibilities for experiential learning for contextualising indigenous knowledge into different disaster scenarios.

In the following paragraphs, we illustrate these arguments by looking at the use of social media in the context of 2011 Tōhoku earthquake.

8.4 Social Media and the Challenges and Opportunities in Everyday-ing Disaster Knowledge: The Japanese Earthquake in 2011

As a country sitting reluctantly on the fault line, Japan finds herself no stranger to earthquakes of different scales. Previous deadly earthquakes in 1923 the Great Kanto Earthquake and in 1995 the Great Hanshin Earthquake entailed devastating impacts on and indelible memories in the Japanese society. No less important is the fact that the state has been experiencing occasional destructive climatic conditions which put its disaster management into test. For instance, Typhoon Wipha hit Izu Oshima in 2013, resulting in a number of casualties. All these articulate the importance of developing a robust system of crisis management in Japan.

Regrettably, crisis management has not been a core competence of the Japanese state. To scholars of Japanese studies (Sakaki and Lukner 2013), whilst reforms have been taken to strengthen disaster resilience, the Japanese system of disaster governance has far from being institutionalised. Crisis leadership has not been strong with rampant problems of political miscoordination (ibid). In addition, the localities have been ill-equipped financially in enhancing their crisis management capacities (ibid). On the other hand, crisis communication in Japan has yielded a mixed record. In 2004, in view of streamlining communication, the Japanese government introduced a satellite-based J-alert system which is now overseen by the Ministry of Internal Affairs and Communications. False alarms and delays have, however, put the system into a great deal of controversy (ibid).

On March 11, 2011, a magnitude 9.0 earthquake hit the eastern part of Japan, the strongest quake measured in Japanese history. The earthquake caused extensive damages along the north-eastern coast of Honshu and resulted in at least 13,000 deaths and 14,000 missing population (*Issue Brief* 2011). The earthquake also triggered the first nuclear crisis in the twenty-first century, when the accompanied tsunami struck the Fukushima Daiichi Nuclear Power Station. The government responded to this mammoth disaster through developing a Prime Minister-led emergency operation centre on March 11 and delegating maximum power to the Self-Defence Forces for handling contingencies (*Issue Brief* 2011). Whilst it is beyond the scope of this chapter to look at the institutional failures that limited the efficiency of different rescue operations, what is needed is to emphasise the problem of crisis communication as a driver for the extensive use of social media in disaster communication and knowledge construction.

One of the key criticisms that both local media and international observers have raised is the way in which information was released by the government and Tokyo Electric Power Company (TEPCO). Instead of disclosing the full picture of the incident, the Japanese government was accused to have downplayed the severity of the disaster by delivering 'partial, delayed and ambiguous information' (Figueroa 2013, p. 54). The community was in particular frustrated by the lack of clear instruction about issues relating to evacuation and electricity conservation measures after the nuclear meltdown (*Asahi Shimbun (Evening*) 2011). The selective disclosure of information backfired, leading to the heightened level of public mistrust (Figueroa 2013).

Alongside with the growing mistrust is the rise of community-led self-help initiatives in compensating for information/knowledge bottleneck in disaster management. We will be focusing on (a) the use and functions of social media in Japan, (b) the rise of social media in the 2011 Tōhoku earthquake, and (c) the 'everyday-ing' of disaster management of social media and the rise of citizen knowledge.

8.4.1 The Rise of Social Media in Japan

Social media has been gaining importance in the communications landscape of Japan. The main platforms of social media in Japan include Line, Facebook, Twitter and Google +; citizens aged between 20 and 29 are the most active users of social media (Institute for Information and Communications Policy 2014b). The expansion of social media in Japan was given a major boost in 2012, when the smartphone application 'Line' was introduced and surpassed other market players. Social media has been used in a wide range of contexts and purposes. For instance, Ryo Ueno and Yasuhiro Iijima (2013) have reported that at least 10 % (209 out of 1742) of the local governments in Japan have been making use of social media for different political purposes. According to the survey, communications with local residences and emergency communications are the key purposes for making use of social media for political communications (ibid).

Meanwhile, the growth of social media has been attracting policy attention. The Institute for Information and Communications Policy (IICP), for instance, has been surveying the usage of different types of social media in Japan, including SNS, regional SNS, blogs, Twitter and BBS and the underlying motives for using social media. For instance, in the White Paper of Information and Communications in Japan 2011 (Institute for Information and Communications Policy 2011), the IICP has used the case of Otsu to illustrate how regional SNS can be used for community building (p. 164). Still, the White Paper recognises that social media is used predominately for personal communication purposes.

8.4.2 The Use of Social Media in the 2011 Tohoku Earthquake

In retrospective, social media has been extensively used for different purposes after the outbreak of the earthquake. We provide a general overview here before looking at two specific contributions of social media towards the advancement of disaster knowledge. Ayako Shigyou (2011) conducted a relevant study surveying the use of traditional media and social media in the earthquake. Amongst 8104 respondents, 20 % of them expressed that they had made use of Twitter after the earthquake, 17 % mixi and 4 % Facebook (Table 8.1). Whilst the figures alone do not lend support to the extensive use of social media, we can identify how social media has played a central role in disaster mitigation and recovery in different aspects.

	Percentage (%)		Percentage (%)
Dedicated site of Yahoo	51	Websites of news agency	14
Google and Yahoo	25	Website of NHK	14
Twitter	20	Websites of private television stations	8
YouTube	20	Niconico	6
Dedicated site of Google	17	Ustream	6
mixi	17	Facebook	4
Blogs	15		

Table 8.1 The use of Internet sites and services after the earthquake

Source: Shigyou (2011). Higashinihon daishinsai nettoyūzā wa sōsharumedia o dono yō ni riyō shita no ka. How the people use social media during the 2011 Tōhoku earthquake. *Hōsō Kenkyū to Chōsa*, no. 8, in Japanese, p. 4

The most important use of social media during the earthquake was the dissemination of individual safety. For instance, individuals made use of Twitter for updating their families and friends about their situations and safety. Others attempted to facilitate access of information with Twitter. For example, Yusuke Wada compiled posts hashtagged with #anpi which enabled citizens to search for those who had lost their contacts for different reasons (IT Competence Lab 2012). The local governments also made use of Twitter for disseminating information. For instance, Twitter (@bosai kesennuma) was the key channel for the Kesennuma city government to communicate with its citizens when the city experienced an array of contingencies. This Twitter is still in current use and disseminates disaster-related information. In addition, social media was also used for fundraising. For example, mixi organised a fundraising sale of its applications for the Red Cross in Japan, raising an amount of 21 million yen within a month after the earthquake (IT Competence Lab 2012). Other SNS or blogs were also contributing to different philanthropic causes. An example is *Rescue 311* which is a blog (together with a Twitter account @ER311) formed by a group of medical professions. Citizens who experienced medical conditions could, accordingly, approach the group by emails and medical doctors would provide medical advices based on the information provided (http://www.311er.jp/).

8.4.3 Social Media and Knowledge Management During and After the 2011 Tōhoku Earthquake

Throughout the disaster, social media played a key role in bridging between expert knowledge and indigenous knowledge. The most spectacular use of this was Safecast (http://blog.safecast.org/ja/maps) which is a website developed by a group of citizens in monitoring the changes in the level of radiation after the meltdown of

the nuclear power plant in Fukushima. Masaharu Nakagawa, the Minister of Education and Science, praised the initiative in contributing to the knowledge basis of disaster management (*The Wall Street Journal* 2011). Essential to this initiative is how the cartographic competency of the local community becomes an important knowledge tool for enhancing awareness towards the regional variation of nuclear exposure. Similar use of cartographic technology is the case of sinsai.info which is an interactive website for individuals and communities to share locational-specific knowledges that rescuers and volunteers can rely on in making contingent plans. It is worthwhile to mention that the website was developed within four hours after the earthquake (IT Competence Lab. 2012).

Another important contribution of social media to disaster knowledge is the visualisation of knowledge. As argued by Yates and Paquette (2011), the visualisation of knowledge by social media ensures its greater circulation and expansion on an everyday basis. For instance, by 2012, a 'virtual' knowledge database comprising at least 36,000 pieces of news, witness' accounts and documentaries relating to the earthquake was formed on YouTube (IT Competence Lab 2012). The visualisation of disaster knowledge points to the growing recognition of images as a legitimate representation of reality (Rose 2012) and the need for a corporeal understanding of affect in disaster recovery. Images of mutual assistance, for example, enabled the Japanese community to connect community affection with the resilience of the state in the aftermath of the disaster.

8.4.4 The Social Media and the Everyday-ing Disaster Knowledge

Given the extensive use of social media in the Tōhoku earthquake, there are two questions that we need to look at and the connection between everyday-ing disaster knowledge and social media. The first is the extent to which social media is a proper arena for everyday-ing disaster knowledge. Indeed, we should be cautious when making the argument that the extensive use of social media qualifies it to be a desirable arena for knowledge sharing and construction. The first reason has to do with the prevailing mistrust towards social media. As reminded by the scholarship in knowledge management, trust is fundamentally connected to the motivation of knowledge transfer and build-up (Usoro et al. 2007). However, as indicated in the study conducted by Yusuke Horikawa (2012), there was a substantial difference identified in terms of the level of trust towards traditional media (television, newspapers, news, websites), as opposed to that towards social media (blogs, Facebook) (Table 8.2). Likewise, the IICP has conducted an annual survey about the level of trust the Japanese citizens attached to traditional media and social media. The result reveals that social media (around 20-30 %) and blogs (around 15-20 %) alike rank the lowest, suggesting that the reliability and trustworthiness of social media as a knowledge container and generator are in dispute (Table 8.3). Indeed, the prevailing

Table 8.2Level of trusttowards different sources ofinformation relating to theearthquake and nuclearaccident in 2011	Media	Percentage (earthquake)	Percentage (nuclear accident)
	Television	96.1	72.0
	News sites	88.1	73.4
	Newspapers	82.2	75.8
	Governmental websites	68.4	51.6
	Blogs	45.2	47.4
	Specialists' websites	42.5	54.8
	mixi and Facebook	49.6	44.4

Source: Horikawa (2012). Positioning of social media in the information acquisition at the time of the Great East Japan Earthquake. Higashinihon daishinsai-ji no joho shutoku ni okeru sōsharumedia no ichidzuke). Available at http://www.soumu.go.jp/iicp/chousakenkyu/data/research/ icp_review/05/horikawa2012.pdf, in Japanese, p. 19

	Television	Radio	Newspapers	Magazines	Internet and news sites	Social media	Blogs	Video hosting services
Political and economic issues (domestic)	86.5	85.3	88.5	41.6	74.8	27.1	17.4	23.0
Social issues (domestic)	86.3	85.7	88.8	42.0	74.8	28.8	19.0	23.7
Overseas news	83.2	81.0	85.0	41.0	70.7	27.5	17.7	22.5
Nuclear safety	52.2	52.7	61.4	28.7	51.7	21.3	13.8	16.7
East Asian politics	71.2	69.3	75.5	36.1	60.9	22.7	15.2	18.8

 Table 8.3
 Trust towards different media amongst Japanese citizens in 2013 (in %)

Source: Institute for Information and Communications Policy (2014a). The usage and utilisation time of social media in Japan in 2013 (Summary). Available at: http://www.soumu.go.jp/iicp/ chousakenkyu/data/research/survey/telecom/2014/h25mediariyou_2summary.pdf, in Japanese

mistrust towards social media stems from a number of sources which are beyond the control of the state and society. Issues, such as online privacy risk and manipulation, have exposed the users of social media to a certain level of disincentive for knowledge sharing (Lee 2013). Ryan Holiday's work (2012), for instance, has unveiled the massive scale of manipulation that social media has been infiltrated. Nor are those privacy policies regulating social media are useful in enhancing trust amongst members of virtual communities.

Recognisably, in reflecting upon the connection between trust and social media, we cannot confidently identify the so-called right level of trust between the audience and the user in the setting of social media. It follows that the collaborative construction of knowledge hinges very much on the level of the commitment, accountability and reputation of each participant. Whilst the work by Jeremy Lipschultz (2014) has suggested that social media may well be an arena for generating new ideas and for contesting the hegemonic dominance of certain sources of information and knowledge, how far social media can be transformed into a self-governed space in which everyone is committed to the highest level of normative responsibility in generating knowledge is subject to debate.

The second question is about the momentum of disaster communication in ensuring the continuity of disaster knowledge building. Community interests in disaster matters fade as the intensity of a disaster subsides. As far as this is concerned, we are in a way asking a deeper question as to whether social media should be viewed as a political technology in creating a risk imaginary around which disaster governance is organised. Such a normative question in turn unsettles the idea of self in everyday-ing risk. How serious individuals are taking risks into everyday life and whether individuals are willing to construct their relationality with others based on the idea of disaster are issues of importance in sustaining the everyday consciousness of disaster knowledge. Here, the idea of risk reflexivity advanced by John Tulloch and Deborah Lupton (2003) is instructive, in that it directs us to look at the connection between disaster knowledge and disaster experience at the everyday level and what the philosophical basis on which disaster communication should be based (Galliard and Mercer 2013).

8.5 Conclusion: The Way Forward and FutureDevelopments

Several issues can be identified from the above study. First is the need to problematise the idea of disaster knowledge. The theoretical discussion in the first part of this chapter suggests that disaster knowledge should not be treated as a static body of knowledge monopolised by technocratic imperatives. Instead, a more bottom-up understanding of disaster can highlight the value of indigenous knowledge in developing resilience of local communities. As such, there is the need to focus on the construction of disaster discourse in bringing expert and indigenous knowledges together. Second is the formation of risk imaginary by everyday disaster knowledge. We have argued that this imaginary is useful in organising the community around a sense of alertness. Social media in this connection provides a decentred site in which risk imaginary can be constructed and disseminated. Third, the case study of Japan's response to the Tōhoku earthquake points to the challenges in connecting between social media and everyday knowledge. Whilst social media has been recognised to have an active role in disaster mitigation and recovery, what has been less surveyed is how it contributes to the construction of disaster knowledge. We have highlighted two possible roles, namely, the bridging between expert knowledge and indigenous knowledge and the visualisation of disaster knowledge. We have also argued that mistrust and the difficulty in sustaining disaster communication can forestall a full integration between social media and disaster management and the everyday-ing of knowledge building and dissemination. How these two barriers can be overcome deserves further intellectual debate.

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Chapter 9 Challenges to the Democratisation of Knowledge: Status Hierarchies and Emerging Inequalities in Educational Opportunities Amongst Oil Palm Settlers in Papua New Guinea

Sean Ryan, George N. Curry, Emmanuel Germis, Gina Koczberski, and Merolyn Koia

Abstract This chapter examines the educational levels and opportunities among migrant oil palm farming households in the three main oil palm-growing areas of Papua New Guinea (PNG). Whilst average adult education levels in oil palm farming communities are higher than the national average, they are still low given most children do not finish primary school. Moreover, findings indicate that population and income pressures are leading to increasing social and economic stratification within and between families. Inequality is most evident by the fact that children from families without regular access to oil palm income have lower education levels than those children from families living on the same block who regularly receive oil palm income. Stratification as differential educational opportunities is a new phenomenon reflecting greater individualism and the rise of market relations and has considerable development implications particularly for policies aimed at reducing poverty and vulnerability levels in rural PNG.

Keywords Inequalities • Education • Poverty • Rural development • Gender

E. Germis PNG Oil Palm Research Association, Dami Research Station, Kimbe, Papua New Guinea

M. Koia PNG Oil Palm Research Association, Popondetta, Papua New Guinea

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S. Ryan • G.N. Curry (🖂) • G. Koczberski Curtin University, Perth, Australia e-mail: g.curry@curtin.edu.au

9.1 Introduction

This chapter examines some of the forces that are undermining the democratisation of knowledge in rural Papua New Guinea (PNG) (see Fig. 9.1) as a result of increasing social and economic stratification. This is a relatively new phenomenon in rural PNG where economic and social relations within kinship groups are traditionally underpinned by notions of equality and the communal ownership of resources. Generally, it is assumed that as economic development proceeds, educational opportunities for a population widen and a larger proportion of the population take up educational opportunities. As this chapter argues, this is not always the case and inequalities in access to education can increase if growth is not equitable. The focus of the study is smallholder households residing on the oil palm land settlement schemes in the provinces of West New Britain (WNBP) and Oro where inequities in educational opportunities are beginning to emerge amongst related households.

In PNG, 87 % of the population live in rural areas and are dependent largely on an agricultural-based economy. The vast majority of households produce their own food by swidden cultivation of staple crops like yams, taro and sweet potato supplemented with cash income earned from local marketing of food crops and from the production of export crops like coffee, cocoa and oil palm. Overall, development indicators are poor: PNG is ranked 156 of 187 countries on the Human Development Index (UNDP 2013) and the maternal mortality rate of 730 per 100,000 is over 100 times higher than that of Australia (UNICEF 2013).



Fig. 9.1 Map of Papua New Guinea

Education levels are also low despite the importance of rural education for social and economic development (Bourke and Harwood 2009; Connell 1997; Huffman 2001; UNESCO 2011). Thirty-five percent of school age children do not attend school. The average years of schooling received by people aged 25 years and older is just 3.9 years which, while comparable with regional neighbours like the Solomon Islands, at 4.5 years, is significantly lower than Vanuatu, at 6.7 years, and Fiji, at 10.7 years (UNDP 2011, 2014). Thus PNG has not met the millennium development goal of all male and female children completing primary education by 2015. Moreover, PNG is one of the few nations in the Asia-Pacific region yet to achieve gender equity at the primary school level (Asian Development Bank 2012).

Education is a key component of rural development and there is a positive correlation between people's education levels and their technical efficiency: educated farmers show a greater ability to adopt new agricultural practices and technologies than farmers with low education levels (Asfaw and Admassie 2004; Azhar 1991; De Muro and Burchi 2007). Research also consistently shows that the education of women is one of the most effective strategies for reducing intergenerational poverty. Educated women with knowledge about health practices and literacy skills to interpret modern health information typically apply and pass on their knowledge to the next generation (De Muro and Burchi 2007; Todaro and Smith 2003).

It is widely assumed that parental investment in children's education increases as household wealth rises and parents invest more resources in the quality, rather than the quantity of their children (Becker 2004; Becker et al. 1990; Gibson and Sear 2010; Kaplan et al. 2002). In the major oil palm-growing regions of PNG where there are land settlement schemes (LSS), rising income per oil palm holding (hereafter called 'block') brought about by high oil palm prices and productivity gains would suggest an improvement in education levels amongst smallholders. However, this does not seem to be the case and there is concern amongst industry stakeholders that the educational status of the farming community on the oil palm LSSs has not improved over the past 10–15 years. This may be due to rapid population growth, negating rising incomes per oil palm block from increased productivity and higher world prices for palm oil.

In WNBP, anecdotal evidence suggests that not all families residing on the Hoskins LSS participate equally in education or share equitably the income from oil palm. Unpublished data from Mendano (2012) indicated that on the Hoskins LSS, members of the immediate family who have ownership or management rights of the oil palm block had more schooling than other families residing on the same block. Mendano (2012) also suggested that as population and income pressures increased, priority in education was being given to children from primary households, that is, households that had primary responsibility for block management. It is likely that status hierarchies amongst different families living on the same LSS block determined control over access to oil palm income and other livelihood factors such as access to education. For example, some families, due to their limited access to the oil palm income, may have been more dependent on other income sources such as the production of food crops for sale at local markets. At the same time, constraints on the supply of land to plant food crops for sale at local markets may have undermined the financial capacity of some families to educate their children. Furthermore,

declining income per capita due to population growth may have further limited the capacity of some families to educate their children. Apart from this anecdotal evidence, little is known about authority structures and relative household status on LSS blocks that may constrain educational opportunities for particular people and families. This study aimed to fill this gap.

The significance of this research is twofold. First, the LSSs in PNG may be heralding a transition in PNG rural society where social and economic stratification is beginning to emerge as local economies become more market-based and as individualism rather than communalism becomes dominant. It has long been noted that PNG is a highly egalitarian society imbued with moral values of equality of opportunity: best exemplified by the 'bigman' system of political organisation where leadership is achieved amongst competing men, rather than being ascribed as in chiefly societies (Sahlins 1963). The egalitarian ethos is also apparent in the relational economy of PNG where resources like land access (communal land tenure), labour, food and cash income are widely shared amongst the kinship group (Curry and Koczberski 2013). The values that underpin the giving and receiving of resources permeate all aspects of social and economic life and are critical for the social and economic identities of individuals and groups (Boyd 2013; Curry and Koczberski 2012; Mosko 2013). Second, the research is important for providing insights into contemporary educational opportunities amongst rural households. Emerging inequalities in educational opportunities have considerable development implications, particularly for the adoption of agricultural innovations to raise agricultural productivity and incomes as highlighted above.

This chapter begins with a brief background to smallholder oil palm in PNG. The research methods are described next, followed by a discussion of the emerging inequalities in educational opportunities both within and across families living on the same LSS block. Some comparisons are made between smallholders on the LSSs and nearby villagers producing oil palm on their own customary land where land pressures are much less. It is argued that as population pressure begins to be felt on the LSSs, families are responding by limiting the range of claimants on the oil palm income. This is serving to marginalise the children of some families in the acquirement of modern knowledge, which is becoming increasingly important for livelihood success in the modernising economy of PNG.

9.2 Land Settlement Schemes and Village Oil Palm Blocks

The Hoskins and Bialla oil palm schemes in WNBP were established in 1968 and 1972 respectively, and the Popondetta Oil Palm scheme in Oro Province was initiated in 1976 (Fig. 9.1). The three schemes are based on the nucleus estate-smallholder model whereby land settlement subdivisions were located near private

¹Sahlins (1963) used the term 'big man' to describe Melanesian societies where leadership is achieved rather than ascribed and to distinguish them from Polynesian chiefly societies of inherited rank (for further discussion, see Feil 1987; Lederman 1990; Lepowsky 1990).

estate plantations and mills. The estate companies service smallholders by supplying oil palm seedlings, fertiliser, tools, interest-free loans and transport to cart smallholder fruit to the company mills for processing.

LSS farmers were recruited voluntarily from other provinces and allocated individual leasehold blocks of 6–6.5 ha, of which 4 ha was planted to oil palm, with 2 ha at the rear of the block reserved for food production (Hulme 1984). Later, nearby villagers were encouraged to plant 2 ha blocks of oil palm on their customary land, as part of the Village Oil Palm (VOP) scheme.

Smallholders harvest and sell their crop on a 10–14-day harvesting cycle, enabling each LSS block to receive up to two payments per month. Payments are made separately to men and women: one payment is for fresh fruit bunches (FFB) paid to the male leaseholder and known as Papa card income; the other payment is for 'loose fruit' (ripe fruitlets dislodged from the main bunch during harvesting) collected by women and usually paid to the wife of the male leaseholder and known as Mama card income (Koczberksi 2007).

On all three land settlement schemes, population pressures are emerging. For example, population density on the Hoskins LSS has risen from 5.9 persons per block in the early 1970s (Ploeg 1972) to an estimated 18.44 persons per block in 2010 (Curry et al. 2007). At the inception of the oil palm LSSs, beginning in the late 1960s, a 6 ha block was deemed sufficient for the needs of a single nuclear family. Today, the single household has been supplemented by several coresident households, as the adult children of settlers marry and raise their own children on the block (Plate 9.1). There are on average 4.3 children per family on the LSS blocks, which are comparable with the national total fertility rate of 4 children per family



Plate 9.1 Residents of an LSS block

(UNICEF 2010). Commonly, three generations and two or more families now share the resources of a single 6 ha block (Curry and Koczberski 2012).

It is not easy for second-generation settlers living on populated LSS blocks to migrate and seek livelihoods elsewhere. PNG's high unemployment rate and the opposition of most provincial governments to informal urban settlements (Koczberski et al. 2001) means that it is difficult for the adult offspring to establish themselves away from the LSSs (see Plate 9.1). Settlers' off-block residence options are further constrained by the difficulties they now experience in returning 'home' as many have lost access rights to land in their parents' source villages (Koczberski and Curry 2004).

9.3 Methods

To investigate education levels, questionnaire surveys were conducted amongst smallholder households at the three main oil palm-growing regions: Hoskins and Bialla in WNBP and Popondetta in Oro Province. In total, 279 LSS households (96 in Bialla, 91 in Hoskins, and 92 in Popondetta) and 60 Village Oil Palm (VOP) farm households (20 at each site) living on their own customary land were interviewed (Fig. 9.1). To examine problems relating to population pressure and educational levels, only LSS blocks with three or more households were included in the study. Blocks were also selected according to their location, so as to obtain a representative sample from different subdivisions in each region. Sometimes there was a 'snowball' effect whereby smallholders would suggest other highly populated blocks to include in the study, which in turn would lead to other blocks being selected.

Each questionnaire took approximately 50 min to administer with one or both parents present. Data were collected on block ownership and management, production strategies, household demographics, perceptions of the quality of agricultural extension services, education levels and strategies, income sources and block management. Interviewees were allowed to digress and often raised pertinent information that was not part of the questionnaire, but which helped illuminate some of the educational issues being discussed. Typically, older participants gave longer answers than younger ones, and men said more than women on the topic of agricultural extension services.

9.4 Education Levels on the LSS and VOP Blocks

School education levels of adults residing on both LSS and VOP blocks were higher than the national average. Adults aged 25 years or older had completed on average approximately 7 years of schooling compared with the national average of 3.9 years

	LSS mean (years)	VOP mean (years)	PNG national average (years)
1st-generation male	7.0	7.1	
1st-generation female	5.9	6.0	
2nd- and 3rd-generation ale	7.8	8.1	
2nd- and 3rd-generation female	6.7	7.6	
Mean	6.9	7.0	3.9 ^a

 Table 9.1
 Mean years of schooling for LSS and VOP residents in 2012/2013 aged 25 years and older

^aSource: UNDP (2014)

Mean years of schooling are part of the United Nations Human Development Index (HDI) to assess the average number of years of education of adults. The index uses the age cohort of 25 years and older.

 Table 9.2
 Mean years of schooling for LSS and VOP residents aged 25 years and older according to area

	Hoskins		Popondetta		Bialla	
	LSS	VOP	LSS	VOP	LSS	VOP
	(<i>n</i> =189)	(n = 28)	(n=270)	(n=38)	(n=177)	(n=45)
1st-generation male	7.9	6.4	7.0	6.9	6.1	7.5
1st-generation female	6.6	4.9	6.5	5.9	4.5	6.8
2nd- and 3rd-generation male	9.7	10.7	7.5	7.2	6.6	8.4
2nd- and 3rd-generation female	8.8	9.2	6.3	5.7	5.0	8.3

(Table 9.1). These levels of education were high in comparison with poorer provinces in PNG, but were still low considering that the average adult on an LSS block will not finish primary school (Grade 8).² Table 9.1 also shows, for both males and females, that second- and third-generation smallholders have completed more schooling than the first-generation smallholders who initially settled on the blocks. Thus, the children born on LSS and VOP blocks were better educated than their parents, most of whom were subsistence farmers prior to leaving their source villages and settling on the LSSs. This general improvement in education levels is in line with national trends that show higher literacy rates amongst youth (15–24 years) than adults (Asian Development Bank 2012; UNESCO 2011). See Table 9.2.

Smallholder education levels differed significantly across the three study sites (Table 9.2). Adults on the oldest LSS at Hoskins had the highest average education levels with approximately 8.1 years, compared with 6.9 years for Popondetta and 5.6 years for Bialla. For VOP smallholders, adults from Bialla had the highest edu-

²In 1995 the PNG education system was reformed by delaying the finish of primary school to Grade 8, effectively expanding access to secondary schooling in an attempt to increase school retention rates. Students now complete 3 years of elementary school before going to primary school which runs from Grades 3 to 8 (Gibson and Fatai 2006).

	LSS children attending primary school (%)	VOP children attending primary school (%)	PNG net enrolment rate
Male	69.7	80.4	n.a.
Female	73.5	81.8	n.a.
Total	71.5	81.0	69.5ª

Table 9.3 LSS and VOP children aged 6–13 years currently in primary school

^aSource: PNG Department of Education (2009)

 Table 9.4
 Differences in education attainment between LSS and VOP residents aged 25 years and older for Bialla and Popondetta (expressed in years and as a percentage difference)

	Hoskins		Bialla	
	LSS-VOP (years)	%	LSS-VOP (years)	%
1st-generation male	1.5	19	-1.4	-23
1st-generation female	1.7	26	-2.3	-51
2nd- and 3rd-generation male	-1.0	-10	-1.8	-27
2nd- and 3rd-generation female	-0.4	-5	-3.3	-66

cation levels with 7.5 years, compared with 6.8 years for Hoskins and 6.5 years for Popondetta. With the exception of Popondetta, first-generation females had the lowest education levels on both LSS and VOP blocks. The differences in smallholder education levels across the three sites are likely to reflect a range of factors such as age of scheme, educational opportunities in the source area of settlers, as well as local level factors in each area. For example, Popondetta has experienced considerable levels of ethnic conflict through the years and many settlers were evicted by customary landowners in the 1992 elections and their blocks occupied by customary landowners (Koczberski and Curry 2004).

Of primary school-aged children between the ages of 6 and 13 years old, approximately 72 % from LSS and 81 % from VOP blocks were attending school at the time of the surveys (Table 9.3). The school attendance rate for LSS children is comparable with the national net enrolment rate of approximately 70 %, but is low in comparison with other nations in the Asia-Pacific region. The significant difference in school attendance rates between LSS and VOP children is likely to reflect, in part, land and income pressure on the LSS. Also, some VOP families, being relatively resource rich, receive royalties from oil palm milling companies leasing their customary land for plantation estates and/or earn income from the 'sale'³ or 'rental' of land to migrants from other parts of PNG (Curry et al. 2007).

Further evidence of the income squeeze on densely populated LSS blocks affecting educational opportunities is the widening gap in educational attainment between settlers and customary landowners across generations (Table 9.4). At Hoskins, the oldest LSS, first-generation settlers were better educated than their VOP counterparts.

³The words 'sale' and 'rental' are in inverted commas because these are not pure market transactions. They are still couched in the language of indigenous exchange and the transactions are not permanent (see Koczberski et al. 2009 for further discussion).

But by the second and third generation, the education gap had reversed with VOP residents achieving higher education levels than settlers from highly populated blocks. At the more recent LSS at Bialla, first-generation VOP residents had more education than their LSS counterparts and this gap had widened considerably in later generations.

Retention Rates

Whilst attendance levels at primary school are reasonable, retention rates in secondary school are poor. The difficulty of retaining students into secondary school is reflected in the proportion of adults completing various school grades (Fig. 9.2). The largest proportion of both males and females on LSS and VOP blocks finish school after completing Grade 6 or 10. Approximately 47 % of students have completed their schooling by the end of Grade 6 and 89 % by Grade 10. Under the previous education system, primary school finished at Grade 6 and junior secondary at Grade 10 creating 'two major bottlenecks' within the system and a high dropout rate at the end of primary school (Connell 1997; UNESCO 2000). This is reflected in the LSS education data (see Table 9.4).

The high dropout rate at Grades 6 and 10 is, in part, due to families being unable to afford the increase in school fees after these grades. Over 50 % of households with school age children reported difficulties sending at least some of their children to school, and 87 % of those experiencing difficulties reported paying school fees or costs associated with schooling as the main constraint.⁴ The financial burden of sending children to school in PNG is well documented (e.g. Asian Development Bank 2012; Connell 1997; Papua New Guinea Institute of National Affairs 2012). In 2012, the government introduced the 'tuition fee-free education policy', but it remains to be seen what the impact will be on smallholder education levels.

Gender is also an important factor influencing educational opportunities of boys and girls. There is a significant difference between the highest education levels attained by males and females in the categories of those with no schooling and those educated to tertiary level (Fig. 9.2). Almost 9 % of female children have no formal education compared with approximately 4 % of male children and approximately 8 % of male children complete tertiary level education compared with just 2 % of females.

The discrepancy between male and female education levels is likely due to a number of factors, including the high opportunity cost of educating girls (girls tend to do more unpaid household chores and help with younger siblings than boys) and the general pro-son bias which is systematic of wider discrimination towards girls within Melanesian culture (Gannicott and Avalos 1994). Studies also indicate that there is a tendency for parents to invest in sons rather than daughters at tertiary level

⁴ In 2012 the government implemented a policy to provide free education from elementary preparation to Grade 10 and a 75 % reduction of costs for Grades 11 and 12. However, at the time of data collection, numerous delays meant only some schools had received education subsidies. In addition, many schools were still charging 'project fees' to cover various school costs. Therefore, only a small number of households had children enrolled in tuition-free schools.

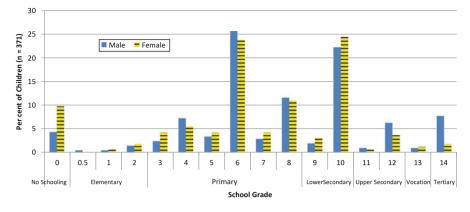


Fig. 9.2 Highest school grade completed by LSS children aged 15-49 years by gender

because of security concerns about girls travelling to education institutions far from home (Connell 1997; Hill and King 1991; Papua New Guinea Institute of National Affairs 2012).

Birth Order

Given the large family size on the LSSs and the financial burden of school fees, the research shows a relationship between children's birth order and educational attainment (Fig. 9.3). Second, third and fourth birth-order children all have slightly higher education levels than the first-born child and the overall trend for large families resembles a curvilinear relationship, rather than a linear one. An explanation for this trend is Dammert's (2010) argument that older children may be removed from school early to provide for the family while their younger siblings go to school. On the LSSs, it may be that first-born male children are leaving school to work on the oil palm blocks at 14 years of age (if starting school at age 8), or females are being removed to care for younger siblings and to do housework. In addition, other variables such as sibling composition and birth spacing are likely to influence parental investment strategies, although the study sample size was too small for these variables to be investigated.

In large families, the tenth-born child has almost 3 years less schooling than the highest achieving third born child. This finding supports the resource dilution model, that more siblings 'dilute' total education income, and also highlights the difficulty for large families to accumulate enough savings to send all their children to school. Interview data suggest some households stagger their children's school enrolments until sufficient savings have been accumulated. The consequence of this is that later birth-order children commence school at an older age. The average age of a Grade 1 child on the LSS blocks is approximately 8 years, meaning that by Grade 8, children turn 15 years: an age at which some girls marry or become pregnant and boys start looking for work. This pattern may also partly explain the large drop in the number of girls moving to Grade 9 (Fig. 9.2).

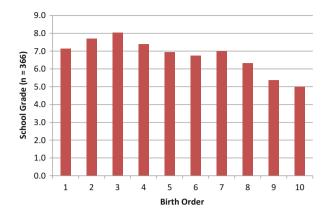


Fig. 9.3 Average highest grade achieved by LSS children aged 15–49 years according to birth order

9.5 Inequalities Amongst Coresident Families on the LSS

As noted above, anecdotal evidence from Mendano (2012) suggests that as the number of coresident households rises on an LSS block, competition for resources intensifies, particularly for oil palm income, leading to increased social and economic differentiation amongst coresident families. Households on the LSS were categorised as primary or secondary households, based on their role in farm management decision-making and their access to and control over oil palm income. Primary households are typically headed by the leaseholder who has control over the distribution of oil palm income and makes the major farm investment decisions on the block. Where the original leaseholder is deceased, the first-born son typically takes over block management and his household becomes the primary household on the block. Secondary households are headed by the married sons (and sometimes the daughters) of the original leaseholder and other relatives living permanently on the block (e.g. in-laws). Members of secondary households have less 'ownership' claims to the oil palm income, and their partly marginalised access to the oil palm income can be observed in their inferior housing compared with primary households. Plates 9.2 and 9.3 illustrate the typical housing styles.

However, during fieldwork there were some difficulties differentiating between primary and secondary households based on the claims of smallholders. There were two main reasons. First, it was not uncommon on blocks where the father was recently deceased for the older married sons to all assert leadership claims. Often there were conflicts amongst brothers as to who had the legitimate right to claim 'ownership' of the lease following the death of the father. Second, while some original leaseholders were the de jure head of the block, de facto leadership and management had passed to one of the married sons, particularly when the leaseholder was elderly or was unable to assert his authority over his sons. Therefore, frequency of access to oil palm income was used to determine household status, with primary households having the most frequent access to oil palm income.



Plate 9.2 Modern-style permanent house



Plate 9.3 Bush material house

Members of primary households had higher average education levels than those from secondary households. This appears to be related to access to income. There was a positive relationship between both frequency of access to Mama and Papa card income and smallholder education levels: the more frequent the access to oil palm income, the higher the education levels (Table 9.5). Smallholders who received Papa card income every month had 1.7 more years of education than those who never received Papa card income. The difference between those who received Mama card income monthly and never was 2.4 years, and when the two income sources were considered together, the gap widened to almost 3 years between smallholders who received oil palm income from both cards on a monthly basis and those who never did (Table 9.5). This is a substantial difference given the low number of school years most people complete.

Smallholders with the least access to oil palm income were far more likely to finish their schooling early (Fig. 9.4). Approximately 93 % of smallholders with no access to oil palm income had completed their schooling before the end of primary school (Grade 8), compared with 60 % of smallholders with monthly oil palm income access. Also, approximately 21 % of smallholders with no access to oil palm income had no schooling, compared with just 7 % of smallholders with monthly oil palm income access. Moreover, smallholders who received monthly oil palm income were more likely to complete some tertiary education.

Without regular access to oil palm income, secondary households were compelled to seek alternative sources of income, often off-block. Thirty-six percent of them were hired labourers, compared with 22 % of primary households. The income earned as a hired labourer and from other sources did not appear to be sufficient to overcome the educational gap between themselves and primary households. Hired labour work is often very irregular and short-term, and the pursuit of such livelihoods reflects the limited income choices for secondary households.

Educational Outcomes and Population Density

Rising population on the LSS blocks is leading to declining per-capita incomes resulting in lower average education levels. There was a negative relationship between block population and residents' education levels, whereby the higher the block population, the lower the average level of education. People residing on

	Papa card only	Mama card only	Papa and Mama cards
Frequency	Years (n)	Years (n)	Years (n)
Every month	7.4 (208)	7.5 (172)	7.3 (250)
Every 2 months or less	7.1 (118)	7.2 (67)	7.2 (110)
Every 3 months or less	6.9 (98)	6.9 (62)	7.0 (99)
Every 4 months or less	6.6 (76)	6.3 (39)	6.8 (84)
Every 6 months or less	6.8 (62)	- (0)	6.6 (64)
Every 8 months or less	6.8 (61)	6.4 (25)	6.7 (57)
Never	5.0 (17)	4.6 (14)	5.6 (33)

 Table 9.5
 Average years of schooling for second-/third-generation smallholders aged 15–49 years according to frequency of access to oil palm income

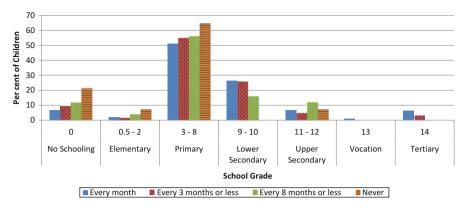


Fig. 9.4 Highest school grade completed by LSS children aged 15–49 according to frequency of oil palm income access

 Table 9.6
 Education level according to block population for LSS children aged 15–49 years not currently at school

	Number of people on block			
	1–10	11-20	21-30	31+
	(<i>n</i> =28)	(n=227)	(<i>n</i> =67)	(<i>n</i> =44)
Average highest school grade completed	9.4	7.1	7.4	6.6

blocks with the highest population density (31 people and more) had on average 2.8 less years of schooling than people on the least densely populated blocks (1-10 people) (Table 9.6).

These findings support Mendano's (2012) claim that a rising LSS population would lead to more inequitable educational outcomes with adverse consequences for children from secondary households. Despite increases in total oil palm income from rising palm oil prices, higher yields from improved planting material and increased productivity, population growth appeared to be eroding these gains to the extent that per-capita incomes were declining. In these circumstances, it appeared that heads of primary households were tending to invest in their own children, rather than in the children from related coresident households. Moreover, as noted above, within the household, parents were giving preference in educational investments to their children on the basis of gender and birth order.

9.6 Conclusions

This chapter has demonstrated that the range of education investment strategies pursued by individuals and families is determined by age, gender, birth order and the position of the household in relation to the control of oil palm production and income distribution. The main conclusions regarding education are that average adult education levels on the LSS blocks are higher than the national average but still low considering that most smallholders do not finish primary school. On average, children have higher levels of education than their parents though the education gap between LSS and VOP smallholders is widening each generation as VOP growers seem better able than LSS smallholders to capitalise on educational opportunities. Male adults have higher education levels than females, and females are more likely than males to have no schooling and no tertiary education. Lower birth-order children (after the fifth born) in large families have less education than higher birth-order children. Gender discrimination and differences in the educational outcomes of children by birth order have been recognised in the literature, but it is clear that there is a long way to go to achieving parity in educational outcomes between boys and girls and amongst different birth-order children in PNG. Finally, densely populated LSS blocks have the lowest average education levels, and children from households with monthly access to oil palm income have more school

In summary, status hierarchies on the LSS blocks are emerging and are reflected in the differential capacity of households to educate their children. Primary households appear to have more capacity to invest in their children's education. Their capacity to garner most of the oil palm income for their own immediate families is suggestive of increasing individualisation and the concomitant decline in communal values that have underpinned social and economic behaviour amongst kinship groups in the past. What is now occurring on the LSSs may be an indicator of rural futures elsewhere in PNG, where economic and social pressures are leading to greater individualism, more market-based relations and socio-economic stratification expressed in such arenas as differential educational opportunities.

As a final point, the pressures leading to stratification are likely to intensify as the LSS population continues to grow. Unlike in parts of Southeast Asia, where the safety valve of growth in formal sector employment has eased pressures in rural areas (e.g. Rigg 2007), the capacity to move off-block is not yet on the horizon in PNG. Emerging inequalities in educational opportunities, therefore, have considerable development implications particularly for the adoption of agricultural innovations to raise agricultural productivity and incomes as highlighted above.

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Chapter 10 Sustainability in and through Lifelong Learning: Making Space for Everyday Knowledge and Regionalism in a Globalising World

Richard G. Bagnall

Abstract Lifelong learning presents itself as an important idea through which to enhance environmental, economic, and cultural sustainability by building on everyday knowledge. Both lifelong learning and sustainability are, though, totalising normative philosophies of human development, which raises the questions of the extent to which each is compatible with the other, each leaves space for everyday knowledge and each may draw upon regional perspectives. Addressing those three questions, this paper argues: firstly, that there is a high degree of congruence in the moral value frameworks of lifelong learning and sustainability, indicating the appropriateness of using lifelong learning as a framework for offering programs of education for sustainability; secondly, that, although there is no space for everyday knowledge in either philosophies; and, thirdly, that transnational regional perspectives may be seen as providing another level of opportunity for negotiating the realisation of the universal moral imperatives of lifelong learning and sustainability philosophies in policy and practice.

Keywords Globalisation • Lifelong learning • Normative philosophy • Regionalism • Sustainability

10.1 Introduction

Lifelong learning presents itself as an important idea through which to enhance environmental, economic and cultural sustainability by building on everyday knowledge. It may be seen not only as a means of facilitating sustainability in other

R.G. Bagnall (🖂)

School of Education and Professional Studies, Griffith University, Mt Gravatt, Australia e-mail: r.bagnall@griffith.edu.au

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realities of human endeavour - enhancing sustainability through lifelong learning but also of modelling sustainability in its own activities: as sustainability in lifelong learning. Both lifelong learning and sustainability are, though, totalising normative philosophies of human development. As such, each encompasses a set of moral values directed to restraining human activity universally. While such universalising values are consistent with and responsive to the contemporary trend to the globalisation of cultural realities, a reform agenda of facilitating sustainability in and through lifelong learning by building on everyday knowledge raises three crucial questions: (1) the extent to which the value systems of sustainability and lifelong learning are mutually compatible, since both are totalising; (2) the extent to which each leaves space for everyday knowledge, since everyday knowledge has historically been, and largely continues to be, substantially culture-specific; and (3) what, then, may be made of the idea of regional perspectives on sustainability, since regional distinctiveness is dependent on either natural or cultural distinctiveness? Addressing those three questions, this paper argues: firstly, that there is a high degree of congruence in the moral value frameworks of lifelong learning and sustainability, indicating the appropriateness of using lifelong learning as a framework for offering programs of education for sustainability; secondly, that, although there is no space for everyday knowledge in either philosophy, there is generally ample space for it to be used in implementing both philosophies, allowing policies, programs, and actions flowing from both to be strongly grounded in everyday knowledge; and, thirdly, that transnational regional perspectives may be seen as providing another level of opportunity for negotiating the realisation of the universal moral imperatives of lifelong learning and sustainability philosophies in policy and practice, through the sensitivity and responsiveness offered by such regional perspectives to regional variations in the physical and cultural environments and the affordability of different programs and policies of lifelong learning and sustainable development.

The analysis here begins with an exploration of what it means for lifelong learning and sustainability to be totalising normative philosophies of human development. The place of lifelong learning and sustainability in the contemporary cultural context of pervasive globalised performativity is then examined, before turning to articulate the nature and place of everyday knowledge and regionalism in that context. From that analysis, conclusions are drawn out with respect to the potential utility of lifelong learning in enhancing sustainable practices through developing regional cultures of sustainability grounded in everyday knowledge.

10.2 Lifelong Learning and Sustainability as Totalising Normative Philosophies of Human Development

Both lifelong learning and sustainability may be seen as normative philosophies, in the sense that each gives a comprehensive moral account of what it is good to be, right to do, and how to interpret reality within its articulated scope (Wilson 2010).

The scope of lifelong learning philosophy is that of human learning, in persons of all ages and in all situations, including educational situations, but also including all other life engagements in which learning does or may occur (Wain 1987). Its scope is, thus, said to be learning 'lifelong' and 'life-wide' (Visser 2012). The scope of sustainability philosophy is that of the human impact on its and the broader natural (non-human) environment (Norton 2005). It includes the impact of the human consumption of resources of all sorts, the human production of waste, and the human impact on natural systems (including ecosystems) of all sorts (Ross 2009). In both philosophies, the object of central intention – learning on the one hand and sustainability on the other – is considered to be both process and outcome, for example, lifelong learning philosophy focuses on learning as an engagement and on the learning achieved through that engagement (Field 2001), and sustainability philosophy focuses on using sustainable development to achieve the ongoing state of sustainability (Sarkar 2012).

Within their respective scopes, the two normative philosophies articulate a set of moral imperatives defining what we, as intelligent, deliberative, and agentic beings, should value and how we should act (Bagnall 2007; Bosselmann and Engel 2010). They are, thus, moral in nature (Thiroux 1998) – philosophies directing human beings, individually and collectively, as to what they *should* do (Vincent 2007). In both philosophies, those moral imperatives are seen as applying not only to individuals but also to any social or political entity that may be seen as having any moral authority over its members within the respective philosophical scope, including entities such as communities, cities, organisations, countries, and humankind as a whole (the last, through, e.g. the UNESCO: Aspin and Chapman 2012; United Nations Conference on Environment and Development 1992).

Those moral imperatives entail a particular view of their world (i.e. that which is within their scope) – its ontology, in other words (Bagnall 1999). That ontology is defined, effectively, by a view of how the world should be interpreted and understood and of what counts as evidence of need, engagement, or outcomes within each philosophy – its epistemology, in other words (Laugier 2013).

The moral imperatives in both philosophies are drawn from the relationships between human or environmental wellbeing and flourishing and the other realities with which each is primarily concerned: in the case of lifelong learning, they are human learning and the provision of learning opportunities (including those deemed to be educational); in the case of sustainability, they are human consumption and the availability of resources. For example, moral imperatives in lifelong learning include that which requires responsible bodies to facilitate the public provision of and access to learning opportunities contributing to individual wellbeing (Delors 1996), and moral imperatives in sustainability include that which enjoins responsible bodies to minimise consumptive activities reducing the quality and accessibility of important resources available to future generations (Goodland and Daly 1996).

The moral imperatives in both philosophies may also be seen as being directed towards – as having a teleology of – *human development*: both in the sense of individual development and in the sense of societal or cultural development (Bagnall 2005; Ross 2009). Lifelong learning is directed to the progressive development of

individuals *as* persons, including their development as lifelong learners, through their learning engagements, and it is directed to the progressive development of human society for the greater good, including its development as lifelong learning culture, through learning engagements (Taylor 1986). Sustainability is directed to the progressive development of individuals and human society towards a state of sustainability in all their features: environmental, social, economic, and otherwise (Ross 2009; Scruton 2012).

Another feature shared by both lifelong learning and sustainability philosophies is that they are *universal* in their normativity (McDonald 2014): their moral imperatives are seen as applying generally, to all human beings and collectivities of human beings regardless of their situation or circumstances. In other words, the nature and force of what we should do do not vary with the context (although what we can, reasonably, do and the ways in which that may be done may well vary with the situation, to which I shall return later in this chapter). The two normative philosophies are, thus, totalising in that they demand universal - individual and collective adherence to their moral imperatives (Toulmin 1990). Thus, to carry forward the above examples, the lifelong learning moral imperative requiring responsible bodies to facilitate the provision of and access to learning opportunities contributing to individual wellbeing is not open to negotiation or modification. It flows from the philosophy. Similarly, the sustainability moral imperative enjoining responsible bodies to minimise consumptive activities reducing the quality and accessibility of important resources available to future generations is a feature of sustainability philosophy itself. It is not situation-specific.

The moral imperatives, though, are totalising at a highly general level. As such, they may be understood as *principles* governing human action (Taylor 1986), as has been done, for example, in the earth charter (Bosselman and Engel 2010) and the Rio Declaration (United Nations Conference on Environment and Development 1992), or as *virtues* defining human character and action (Oakley and Cocking 2001), which last may be articulated also as informed commitments to be a certain sort of person, society, or organisation and to do certain sorts things (Bagnall 2007). The ways in which the moral imperatives are operationalised - the ways in which they are used and evidenced in what persons do - will depend on the situation. Situational variability may be determined by features of the natural environment such as climate, geology, and geographical location - especially in action responding to the moral imperatives of sustainability philosophy (Weddell 2002). Most significantly, though, for my argument here, situational variability will be defined by cultural differences in the ways of doing things: expectations, metaphysical commitments, values, priorities, and such like (Agyeman 2005; Bagnall 1999). It is at this level of policy, politics, procedure, and action that we may expect to see variability in what is done in response to the (universal) moral imperatives of both lifelong learning and sustainability philosophies.

There may be (and demonstrably *is*) widespread disagreement about the articulation of the moral imperatives in both philosophies and about the standards that are set on the dimensions involved, with corresponding variability on these matters (Edwards et al. 2002; Farley and Smith 2014). Nevertheless, it is instructive for my argument here to have a sense of the territory covered by the moral imperatives in the two philosophies, since that will allow us compare the extent to which the two sets of imperatives are convergent or divergent and hence the extent to which they are more or less compatible.

In here listing those moral imperatives, then, I am using, for linguistic convenience, the notion of *informed commitments* governing one's character as a person and one's actions as an agentic being (Bagnall 2007). Informed commitments are essentially goods in themselves – qualities defining what it is to be a person, organisation, society, or other social entity of good character. It is through living one's life – taking action – on the basis of those commitments that one is and becomes recognisable as a good individual, society, or other entity. In thereby doing the right thing, one is acting morally. The commitments are *informed* in the sense that they are grounded in each philosophy's interpretation of empirical reality. In constraining human action and defining human character, the commitments should be understood holistically, meaning that the separating out of individual commitments is, to some extent, arbitrary. However, that degree of arbitrariness is diminished in the two sets of commitments here recognised by framing them within contemporarily emergent value emphases.

The informed commitments of lifelong learning have been argued elsewhere as being the following (Bagnall 2007), here presented slightly modified and in no particular order: (1) a commitment to constructive engagement in learning, (2) to persons and their cultural traditions, (3) to the human condition and its potential for progress, (4) to practical reason and its contribution to bettering the human condition, (5) to cultural change through education and learning, (6) to individual and collective autonomy and responsibility, (7) to social justice, and (8) to democratic governance and the non-violent resolution of conflict. Each of these may be briefly explained as follows:

- A commitment to constructive engagement in learning involves seeing each of life's events as a learning opportunity from which valued learning outcomes may be drawn and that may be manipulated to enhance the quality of those learning outcomes.
- 2. A commitment to persons and their cultural traditions involves accepting and respecting individuals (including oneself) and their cultures (including their languages, meanings, and values) as being valuable in and of themselves and not, or not merely, as opportunities to advance one's own interests and hence as being worth preserving, celebrating, and advancing.
- 3. A commitment to the human condition and its potential for progress involves seeing humanity and its nature, culture, context, limitations, and possibilities as worthwhile and worth advancing and enhancing and seeing it as possible to do so.
- 4. A commitment to practical reason and its contribution to bettering the human condition involves seeing instrumental thinking, based on empirical evidence and experience, as valuable in the project of human betterment.

- 5. A commitment to cultural change through education and learning involves seeing education and learning as a contributor to human progress and betterment.
- 6. A commitment to individual and collective autonomy and responsibility involves respecting and supporting social structures that give persons control over and responsibility for their own destinies.
- 7. A commitment to social justice involves valuing the fair distribution of cultural goods, particularly here, learning opportunities and resources.
- 8. A commitment to democratic governance and the non-violent resolution of conflict involves respecting and supporting democratic processes of decision-making in matters of public concern and working through differences in ways that avoid harm to others.

The informed commitments of sustainability, although not previously articulated, and here only provisionally so, may be seen as covering the following territory, with the same caveats, but here ordered with the more prominently featured commitments listed initially: (1) a commitment to sustainable consumption, (2) to the conservation of natural systems, (3) to cultural change for sustainable consumption and conservation, (4) to individual and collective ownership and responsibility, (5) to research that informs what is the case and what is possible, (6) to social and economic justice, (7) to human progress and perfectibility, (8) to democratic governance and the non-violent resolution of conflict, and (9) to education and learning in realising the other commitments. Each of these may be briefly explained as follows:

- 1. A commitment to sustainable consumption involves working to minimise both consumption that diminishes the available stock of any resources and the production of cumulative waste products from that consumption (Bischoff 2010), in other words, to working efficiently (Stuggins et al. 2013). It is what Porritt and Tang (2007) have termed the 'biological imperative' of sustainability.
- 2. A commitment to the conservation of natural systems involves working to ensure the preservation of natural systems and their component elements, including ecosystems and all species of organism, among which the human species is located (Norton 2005), and accepting responsibility for the stewardship of those natural systems (Wylie 2005).
- A commitment to cultural change for sustainable consumption and conservation involves working to change systems of belief, behaviour, and regulatory frameworks – legislation, policy, procedures, and guidelines – to advance the sustainability of consumption and the preservation of natural systems (United Nations Conference on Environment and Development 1992).
- 4. A commitment to individual and collective ownership and responsibility involves accepting and acting on one's freedom to choose, the responsibility for doing so, and the consequences of one's individual and collective actions (World Commission on Environment and Development 1987).
- 5. A commitment to research that informs what is the case and what is possible involves supporting and advocating for research, enquiry, and scholarship that advances the stock of human knowledge about natural or cultural systems and

the impact of different types or levels of human intervention in those systems (Weddell 2002).

- 6. A commitment to social and economic justice involves valuing the fair distribution of resources, both natural and cultural, and of access to them, by both present and future generations (Bosselmann and Engel 2010).
- A commitment to human progress and perfectibility involves the recognition that – through the proper use of its structures and processes for enquiry, deliberation, discussion, education, democratic governance, and the resolution of problems, issues, and conflicts – human society will advance and become more sustainable and humane over time (Ross 2009).
- A commitment to democratic governance and the non-violent resolution of conflict involves achieving and maintaining sustainability through appropriate frameworks of legislation, international agreements, and social action, informed by respect for persons and eschewing violence (Smith 2003).
- 9. A commitment to education and learning in realising the other commitments involves seeing deliberative and structured learning through experience and educational engagements as being an essential and important means to advancing the sustainability of human society (Robertson 2014).

These two sets of informed commitments may be compared by seeking to align those that are cognate in their content. This is attempted in Table 10.1, where the commitments of sustainability are aligned, where appropriate, with those of lifelong learning.

The tabulation indicates a high degree of alignment of the informed commitments across the two philosophies, in their common focus on individual and collective responsibility, social justice, due process, and the developmental improvability of the human condition through research, education, and change. It indicates also, though, some disjunction between the two sets of informed commitments: in the stronger humane focus of lifelong learning on respect for persons and cultural traditions and the focus of sustainability on human responsibility for custodianship of the natural environment and the preservation of that environment for the welfare of future generations. While the lifelong learning commitments focus on building and sustaining contemporary individual and collective wellbeing, those of sustainability focus on building and sustaining the possibility of future opportunities.

Such a disjunction between the two normative philosophies is important, because, as normative philosophies of human development, they have a dual role in directing human development and, in their own realisation or operationalisation, evidencing practice consistent with the normative requirements of the philosophy. Thus, policies directing lifelong learning and programs of lifelong learning provision, in themselves, should be directed (and expected) to conform to the normative imperatives of lifelong learning philosophy, just as policies directing the provision of sustainable practices and programs to facilitate such practices, in themselves, should be directed to conform to the moral imperatives of sustainability philosophy (Norton 2005).

Informed commitments	
Lifelong learning	Sustainability
1. To constructive engagement in learning	9. To education and learning in realising the other commitments
2. To persons and their cultural traditions	-
3. To the human condition and its potential for progress	7. To human progress and perfectibility
4. To practical reason and its contribution to bettering the human condition	5. To research that informs what is the case and what is possible
5. To cultural change through education and learning	3. To cultural change for sustainable consumption and conservation
6. To individual and collective autonomy and responsibility	4. To individual and collective ownership and responsibility
7. To social justice	6. To social and economic justice
8. To democratic governance and the non-violent resolution of conflict	8. To democratic governance and the non-violent resolution of conflict
-	1. To sustainable consumption
-	2. To the conservation of natural systems

 Table 10.1
 Content alignment of the informed commitments of lifelong learning and sustainability philosophies

Significantly for the present analysis, this duality of normative philosophies of human development extends to the facilitation of one through the other. Thus, the provision of education for sustainability through the application of lifelong learning philosophy should be directed (and expected) to conform to the sustainability moral imperatives (as well as those of lifelong learning). Lifelong learning as a vehicle for the development of sustainability should, in other words, evidence the application of the moral imperatives of sustainability *in* that delivery. In so doing, any disjunctions in and between the two sets of moral imperatives of the philosophies have the potential to create tensions in the forced choices of the moral imperatives of one philosophy over those of the other.

The point underlying this possible dilemma is that using lifelong learning philosophy as a framework for providing sustainability education requires not only the provision of sustainability education *through* the application of lifelong learning philosophy but also the realisation of the moral imperatives of sustainability philosophy *in* that provision itself and, conjointly, the realisation of the moral imperatives of lifelong learning in that same provision. To the extent that the lifelong learning policy and programs used to provide sustainability education do *not* conform to the moral imperatives of sustainability, to that extent the success of the educational provision may be threatened – through, at the very least, the provision being dismissed as a hollow sham. The point of concern, then, becomes that of the extent to which the disjunctions between the two sets of moral commitments are likely to, or do, create an irresolvable tension that has the potential to, or does evidently, threaten or reduce the extent to which lifelong learning may be used as a vehicle for providing education for sustainability.

Addressing that question, I suggest that what the disjunctions may be seen as amounting to is essentially, on the one hand, from a lifelong learning perspective, the need for sustainability philosophy to be extended to pay more attention to respect for persons and their cultural traditions, and, on the other hand, from a sustainability perspective, the need for lifelong learning philosophy to be extended to embrace commitment to sustainable consumption and the conservation of natural resources. Both these extensions are matters of contention and disagreement within sustainability and lifelong learning philosophies, respectively, as is evidenced, for example, by certain versions of both theories embracing the respective extensions. The conception of sustainability that has been articulated in the earth charter, for example, clearly seeks to embrace commitments to respect for persons and their cultural traditions (Bosselmann and Engel 2010), and the conception of lifelong learning articulated, for example, in the Fauré (1972) report, clearly seeks to embrace moral commitments to sustainable consumption and the conservation of natural systems. In practice, the disjunctions also seem not to create any irresolvable tensions, as is evidenced, for example, in the successful use of lifelong learning as a framework for community-based education for sustainable development in many parts of the world (Bagnall 2003).

The conclusion, then, to this first part of the analysis would seem to be that lifelong learning may be used as a suitable framework for learning and education for sustainability.

10.3 The Contemporary Cultural Context of Pervasive Globalisation

The realities, though, of political, economic, social, and cultural contexts in and through which lifelong learning and sustainability seek to gain moral traction and impact are strongly influenced by the contemporarily prevailing cultural context of globalising performativity. That influence raises the questions, firstly, of the extent to which lifelong learning and sustainability philosophies are compatible with such realities and, secondly, of the likely impact on them of any incompatibility. I address those questions in this section.

Globalisation is here understood as the process of the international integration and convergence of culture and cultural artefacts, including political, social, and economic systems (Giddens 1990). That contemporary globalisation is characterised by its cultural performativity is a point that has been made abundantly in a wealth of scholarship since Lyotard (1984/1979) first developed a coherent theory of performativity (Rizvi and Lingard 2010). The contemporary cultural pervasion of information technology has been argued to be driving the cultural dominance of performativity (Castells 1998), although the cultural context of performativity itself is grounded in the logically inevitable progression of the enlightenment project of critical rational empiricism to the point where it undermines the grounds for the traditional commitment to universal intrinsic values of progressive humanism (Bagnall 1999). It, thus, engenders a culture substantially lacking in nonarbitrary intrinsic value, in which human activity is strongly focused on instrumentally achieving outcomes drawn from a multiplicity of different domains of human engagement and systems of belief and in which the only constant common determining value is that of achieving competitive advantage: a culture of performativity (Dreyfus and Kelly 2011).

Both lifelong learning and sustainability philosophies have been developed strongly over the last half century: paralleling the progressive advance of performativity as the global cultural dominant (Bagnall 2004; Nicholls 2010). Both philosophies have been strongly shaped by performativity and have been developed, in part, in response to it (Bagnall 2004; Oosterveer and Sonnenfeld 2012). Although the detailing of evidence is beyond the capacity of this chapter, the following features of globalised performativity are, I suggest, correspondingly reflected strongly in both philosophies and in their operationalisation in policy and practice:

- 1. Performativity focuses on, or places a high value on, *action*: on doing, on performing, and on achieving (Ball 2000), expressed in both philosophies in their focus on action for human development.
- 2. In so doing, it focuses on *outcomes* on what is done or achieved in and through that action and on its *effectiveness* in doing so (Bauman 1992) expressed in the strongly teleological (goal-oriented) nature of both philosophies.
- 3. Such performativity is both grounded in and exhibits the *externalisation* of value from human engagements (Bauman 1995). Value is *extrinsic* to, rather than intrinsic in, those engagements expressed in the moral imperatives of the two philosophies driving action imperatives that are external to the situations in which they are applied.
- 4. In its focus on achieving desired performance outcomes of extrinsic value, performativity places a high value on the *efficiency* with which resources are used in achieving those outcomes, to the exclusion of other outcomes (Rizvi and Lingard 2010): expressed in sustainability philosophy, in its focus on sustainable consumption, but not, I believe, picked up in the moral imperatives of lifelong learning, although it is commonly evidenced in the lifelong learning programming and program assessment, for example, in public education programs and in programs of organisational development (Edwards 1997; Marginson 1997).
- 5. Such performativity therein promotes attention to the *comparative competitive advantage* of different types of engagements, processes, programs, policies, or organisational arrangements in achieving the desired outcomes (Bagnall 2004): evidenced, not in the moral imperatives of either philosophy, but rather through the *application* of each through particular technologies or forms of provision and engagement.
- 6. In so doing, it focuses on *technical, mechanistic*, or *programmatic* relationships between the desired outcomes and human actions, engagements, policies, and interventions: evidenced, again, not in the moral imperatives of either philosophy, but through their application (Ritzer 1996; Smith 2004).

- 7. It encourages the *contextualisation* of knowledge, value, and action to realms of practical outcomes, including those of an occupational, vocational, and professional nature: expressed in the contextualisation of both philosophies in their application through particular realms of human endeavour and engagement (Bagnall 2004; Rather 2004).
- 8. It also encourages the *privatisation* of risk, performance, and responsibility to individuals, institutions, organisations, jurisdictions, and other collectivities (Bauman 1998): expressed strongly in the policy initiatives and practical programs driven by both philosophies (Bagnall 2004; Porritt and Tang 2007).

The conclusion, then, that we may draw from this section of the analysis is that both lifelong learning and sustainability philosophies have developed strongly in recent decades under the influence of the prevailing globalised cultural context of pervasive performativity and that, in consequence, there is a high level of compatibility between the normative philosophies and that cultural context. That cultural context, then, is not likely to stand as barrier to the generation of policies and programs of sustainable development through lifelong learning.

10.4 Everyday Knowledge

Returning, now, to our question of the extent to which either lifelong learning or sustainability leaves space for everyday knowledge, it must be acknowledged at the outset that both of these normative philosophies only do so to the extent that their respective moral imperatives are accepted as universal givens. Lifelong learning and sustainability are both presented as totalising in their universal moral imperatives. They are both strongly paradigmatic and highly formal in nature. They both demand and command acceptance of their moral imperatives in any action that is taken in their name. Everyday knowledge, in contrast, I take to be the common knowledge that informs everyday life (Vanderschraaf and Sillari 2014) - common in the sense of its being shared, on the whole, by members of a community, culture, social class, or community of practice (Fagin et al. 1995). It is grounded in what is generally accepted as 'common sense' knowledge (Livi 2013). As such, it is significantly contextualised to local ways of life and being and to communities of practice (Mutemeri 2013). While it may selectively absorb elements of formal theory, when they impact significantly on everyday life, its major foundations and influences are historiographic and the knowledge that flows through contemporary mass and social media (Newman and Holzman 1997). It, thus, tends to be fragmented, open, shifting, partial, significantly tacit, experiential, and infused with emotion (Bagnall 1999), contrasting in all those qualities to the nature of formal normative philosophy. It tends to stand proudly aloof from formal knowledge (Peters and Marshall 1996) and hence to resist the imperatives of formal knowledge - unless, and to the extent that – they are compatible with or inform significant elements of everyday knowledge.

The moral imperatives of lifelong learning and sustainability may, variously, align with, be inconsequential to, or conflict with those of everyday knowledge, and to varying degrees. Where there is a high degree of *alignment* between the moral imperatives of lifelong learning and sustainability philosophies and the values of everyday knowledge, or where the differences are relatively inconsequential, the constraints may go relatively unnoticed - leaving the way open for sustainability to draw strongly on everyday knowledge in its realisation, including that undertaken through the application of lifelong learning philosophy. In such cases, the alignment of the values of everyday knowledge with those of lifelong learning and sustainability may, as a general matter, be expected to heighten the uptake of sustainability and the acceptance of lifelong learning as a framework for its development. Such cases may be seen, then, as models of effective sensitivity and responsiveness to regional knowledge differences, as well as models of the implementation of lifelong learning and sustainability. Conversely, where there is significant difference between the moral imperatives of the normative philosophies and those of everyday knowledge, the philosophies will face rejection. Such conflict may arise, when, for example, the lifelong learning commitment to constructive engagement in learning conflicts with an everyday knowledge tradition of learning as merely an engagement suitable for children, youth, and the intellectually disabled, as part of their maturation, and when the sustainability commitment to human progress and perfectibility conflicts with an everyday knowledge tradition of individual powerlessness and the inevitability of one's fate. In such cases, there is the risk that the formal moral imperatives will be dismissed, sidelined, or rejected as inadequate, illinformed, outdated, alien, or otherwise inappropriate from the perspective of everyday knowledge.

From the perspective of the universal normative philosophies of lifelong learning and sustainability, everyday knowledge is likely to be seen either as offering an appropriate element of local or situational sensitivity and responsiveness to facilitate the realisation of the moral imperatives of the universal normative philosophy or as mistaken to the extent that it cannot be so incorporated. If the philosophy is to be adopted, it is everyday knowledge that must change, through incorporating the conflicting moral imperatives of the formal philosophies. The rigidly formal moral imperatives of the philosophies are, essentially, non-negotiable.

Significantly, in this regard, though, the level of generality of the universal moral imperatives of lifelong learning and sustainability is such that irresolvable differences between them and the values embedded in everyday knowledge may be expected to be uncommon. On the whole, the moral imperatives of lifelong learning and sustainability may be expected to be open to being realised through policy, programs, and actions that may draw heavily on everyday knowledge at the more particular (and situated) levels of policy formulation, planning, program development, intervention, and evaluation. In other words, policy and programs directed to encouraging, enhancing, and facilitating lifelong learning and sustainability practices are substantially open to their incorporation of, indeed, to their grounding in, everyday knowledge. To this extent, it may be argued that the adaptive ecosystem management approach to the conceptualisation and implementation of

sustainability philosophy that has been advocated by Norton (2005) has purchase, although his argument against the overarching theorisation that I am here seeing as constituting sustainability philosophy may be expected to continue to struggle for acceptance. It is even arguable that the impact and effectiveness of all lifelong learning and sustainability policy and practice are dependent on such incorporation of everyday knowledge. Without it, both policy and programming are likely to be too alien to be recognised as appropriate in everyday practice (Rather 2004). In those instances where the moral imperatives of the philosophies do conflict with everyday knowledge - which is likely to occur at the more general or metaphysical levels of value in everyday knowledge – adoption of the conflicting values from the normative philosophies may occur progressively over time if policy and programs grounded in the more compatible imperatives of the philosophies are experienced as being successful and valuable. In other words, the initially partial implementation of the philosophies through the incorporation of everyday knowledge may facilitate the possibility of more thoroughgoing implementation in the longer run. Everyday knowledge, thus, may and, I suggest, demonstrably does on occasions change over time to incorporate initially conflicting moral imperatives of lifelong learning and sustainability.

From this section, then, we may conclude that everyday knowledge would normally serve as a substantively and methodologically supportive local or national cultural context through which the universal moral imperatives of the lifelong learning and sustainability philosophies may be brought to fruition in policies, programs, and individual and collective action. To the extent that such development *does* occur, there may be expected also a progressive convergence of everyday knowledge towards embracing any universal moral imperatives of the normative philosophies with which it was in conflict.

10.5 Regional Perspectives on Sustainability

Our final question, then, is that of what may be made of the idea of regional perspectives on sustainability. The notion of 'regional', here, I take as referring to transnational regionalism (Wunderlich 2007). Contemporary transnational regionalism may be seen as a form of globalisation (Telò 2014), or at least contemporary globalisation may be seen as creating opportunities for the development of regional orders (Solingen 2015). Nevertheless, because of its more particular focus, regionalism must come to terms with the forces of globalisation, as has been well argued, for example, by Rozman (2004), in his analysis of regionalism in Northeast Asian countries.

The general compatibility of lifelong learning and sustainability philosophies with the contemporary context of globalised performativity argued above may, thus, be seen as carrying over to regional orders. Regionalism, then, may be seen as presenting another political level of opportunity for policy-making, programming, and action through which to realise the moral imperatives of lifelong learning and sustainability. Regional perspectives may, thus, be seen as presenting the opportunity to respond to differences in the *physical environment* – differences such as climate, soils, environmental diversity, environmental degradation, resource availability, and population density – and to regional differences in *cultural traditions* and the *affordability* of alternative sustainability policies and practices. While the contemporary globalisation of performativity heightens the universalisation of efficiency and effectiveness as values, and hence the economisation of all value, it demonstratively does *not*, in itself, reduce differences in the affordability of different practices, even though it may focus international attention on such differences.

In other words, while regional perspectives – like those at national and local levels – may provide resistance to the universal moral imperatives of either or both lifelong learning and sustainability philosophies, they also provide opportunities through which differences may be negotiated, moderated, and refocused to facilitate sustainable development through lifelong learning. They provide the opportunity, for example, to moderate the popular conception of sustainable development as something generated by developed countries for their own benefit. And, they do so through the opportunity for sustainable development to be redefined from more culturally sensitive and responsive regional perspectives. Certainly, regional perspectives on both sustainable development and lifelong learning have been developed strongly through the European Union (Burns and Carter 2012; Federighi 2010), and other contributions to this volume provide evidence of the growing importance of regional perspectives to sustainable development in other parts of the world.

10.6 The Place of Everyday Knowledge and Regionalism in Sustainability in and through Lifelong Learning

Where, then, has this analysis taken us? I began by arguing that both lifelong learning and sustainability may be seen as *normative* philosophies of human development, in that they are essentially constituted in moral imperatives directing human action: values enjoining us to act in certain ways, towards particular individual and societal developmental ends, and values constraining what we *should* do and be in the pursuit of those ends. Importantly, the moral imperatives of both normative philosophies are constructed as applying, universally, to all pertinent human action, regardless of individual or collective situation. They are, in other words, *totalising* in their normativity. Recognising that the imperatives may be expressed either as principles or as virtues, I used the latter in the form of informed commitments to offer a tentative listing of them for both lifelong learning and sustainability.

Comparing the two sets of informed commitments, I argued that, although there is a high degree of alignment across the two sets, there is also a significant degree of difference, in the stronger humane focus of lifelong learning on respect for persons and cultural traditions and the focus of sustainability on human responsibility for custodianship of the natural environment and the preservation of that environment for the welfare of future generations. The extent and nature of that disjunction, I suggested, point to the a priori possibility of a disabling tension in attempts to facilitate sustainable development through lifelong learning. The tension is seen as being grounded in the nature of normative philosophies as both *directing* human development and, in their practice, as *evidencing* practice consistent with their normative requirements. That duality I argued requires that the provision of education for sustainability *through* lifelong learning be directed to conform to the moral imperatives of sustainability. Further analysis, though, suggested that the differences between the two sets of moral imperatives are, in fact, within a broader zone of arguable overlap between them, in that some versions of the two normative philosophies actually incorporate the respective differences, and that there is ample empirical evidence of the successful use of lifelong learning as a framework for education for sustainability: both points arguing against the initially flagged possibility of the differences being disabling.

I then sought to place the normative philosophies of lifelong learning and sustainability in the contemporary cultural context of globalising performativity. Arguing that their development has been strongly influenced by that context, resulting in philosophies that strongly reflect the values of the context: a quality that may be expected, in itself, to facilitate the contemporary application of both theories and sustainable development through lifelong learning.

I then argued that, in contrast to the universal, formal nature of the moral imperatives of lifelong learning and sustainability normative philosophies, the moral imperatives of everyday knowledge are essentially grounded in local, situated experience. From the perspective of the normative philosophies, everyday knowledge is likely to be seen as offering an appropriate element of situational sensitivity to facilitate the realisation of their moral imperatives. The universal moral imperatives of the normative philosophies are non-negotiable in the face of any conflicting imperatives in everyday knowledge. Any disjunction, then, between the universal imperatives and those of the everyday knowledge context must either be tolerated by the respective normative philosophy or the philosophy will face rejection. I argued, further, though, that disjunctions requiring rejection of lifelong learning or sustainability are likely to be uncommon, because the high level of generality of the universal moral imperatives leaves them open to being realised through policies and programs that draw heavily on everyday knowledge at the more particular and situated levels of policy formulation, planning, program development, interaction, and evaluation. Indeed, the successful implementation of the two normative philosophies may well depend on the extent to which the implementation draws on, or taps into, everyday knowledge. There is raised also the tendency for the value systems of everyday knowledge to change over time, in such a way as to progressively incorporate those universal moral imperatives of the normative philosophies with which they are in conflict, through at least the partial implementation of the normative philosophies at a local level.

Finally, I argued that transnational regional perspectives provide the opportunity for negotiating the realisation of the universal moral imperatives of both lifelong learning and sustainability philosophies at another level: through which there may be allowed greater sensitivity and responsiveness to regional differences in the natural and cultural environments and in the affordability of different policies, practices, and actions.

On the basis of that analysis, I would argue that lifelong learning may be seen as offering a suitable framework through which to provide education for sustainability at the local level. It points also to the necessity of both lifelong learning and sustainability being grounded strongly in everyday knowledge and values in their implementation. And, it points to the value of transnational regional perspectives in the translation of the universal moral imperatives of lifelong learning and sustainability philosophies into policies, practices, and actions.

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Chapter 11 Global Agendas Versus Local Needs in Educational Development: The Barefoot College's Solar Night Schools Program in India

Emilia Szekely and Mark Mason

Abstract India is currently undertaking at national level a process of substantial educational reform intended to guarantee the right to education for every child. Ironically, however, in many cases India's Right to Education Act (2009) may be depriving children of access to education. This chapter considers the response that a nonformal education project in India offers to balance this conflict between global and national interests on one hand and local needs on the other: the Barefoot College's Solar Night Schools Program. An investigation involving site visits, interviews, and bibliographical research identified the importance for education of drawing on local knowledge and resources, in the context of local conditions, in the pursuit of the act's goals of universal, equitable, and quality education for all.

Keywords Self-sustainability • Integrated service delivery • Ownership • Relevance • Education quality

11.1 Introduction

Three main principles tend to inform international education dialogue and policy around the world today: access (the latest figures indicate that 57 million children are still out of school [UNESCO 2014]), equity (dramatic inequities related to socio-economic status, gender, ethnicity, language, geographic location, and disability still permeate most education systems), and quality (although many more children than was the case in 2000 are now in school, questions about the quality of their learning persist). In this context, India enacted in 2009 the *Right of Children to Free and Compulsory Education Act* (RTE) to ensure that all children have access

E. Szekely (🖂) • M. Mason

e-mail: emiliaszekely@gmail.com; mmason@ied.edu.hk

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Centre for Lifelong Learning Research and Development, The Hong Kong Institute of Education, Tai Po, Hong Kong

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to education that is free, compulsory, and of high quality. The act has precipitated a profound and complex transformation in India's education landscape. In a country with 40 % of its population illiterate, and where eight million children were out of school at the time of the act's promulgation (UNICEF India 2014), the legislation intends to ensure the fundamental right to education that Article 21A of the Constitution gives to children in the 6–14 age group. That is to say that the country's efforts to universalize elementary education are not new: a great many policies and regulations have been promulgated in the past with the intention of increasing the number and quality of schooling opportunities. But, it was only with the enactment of RTE that this mandate became legally binding.

An important aspect of the act is the requirement that non-minority private schools assist in incorporating out-of-school and dropout children into the education system by reserving at least 25 % of their seats for students with socially, economically, or culturally disadvantaged backgrounds, with the understanding that the government will reimburse the former for expenses incurred. The act also forbids the charging of capitation fees (additional fees levied to cover expenses not included in the tuition fee) and screening procedures; prohibits the denial of admission to any child, including those with disabilities; and stipulates that no children can be forced to pass any board examination, held back from class, or expelled from school until the completion of his elementary education. Moreover, the act stipulates that schools establish School Management Committees whose members are proportionally equivalent to the number of children belonging to disadvantaged groups, with women constituting at least 50 % of their complement.

A further focus of the act is on ensuring quality, and for that purpose it sets minimum requirements on instructional hours, school infrastructure, teacher qualifications, teacher-pupil ratios, assessment, community participation, management, and supervision and curriculum, teaching, and learning materials (Ministry of Human Resource Development 2014). RTE's quality criteria are to be met by nongovernment schools in order to secure formal recognition. Establishing a school or operating a school without such recognition incurs financial penalties 'that may extend to one lakh [100,000] rupees [\$1,600] and in the case of continuing contraventions, to a fine of ten thousand rupees [\$160] for each day during which such contravention continues' (Right to Education Act 2009, 19[5]).

11.1.1 Improving the Public Education Sector Is Not RTE's Main Focus

According to India's government, more than 40,000 primary and 12,000 upper primary schools have been built (Ministry of Human Resource Development 2013), and more than 230 million children enrolled since April 2010, when RTE came into force (Press Trust of India 2013a). Moreover, the *Annual Status of Education Report* (ASER) calculates that compulsory education coverage has exceeded 96 % since 2009 (ASER Centre 2013). These are remarkable achievements. In reality, however, the criteria that the government has privileged in evaluating RTE have focused principally on enrolment rates and largely disregarded attendance, learning outcomes, and retention figures. While enrolment rates have increased significantly in recent years, children's attendance rates, and consequently their learning outcomes, have diminished, which in turn leads in many cases to their dropping out of school (ASER Centre 2013).

Most children are, in fact, at least 2 years behind where the curriculum expects them to be (Bhattacharjea 2013). In 2013, ASER India reported that fewer than half of the eighth-grade students in India felt comfortable solving a 3-digit by 1-digit division problem, and only three quarters of them felt comfortable reading a long paragraph of a second grade-level text (ASER Centre 2014). Learning outcomes reflect divisions along the axes of public/private schooling, gender, urban/rural location, and socio-economic status background.

RTE's prohibition from applying examinations that could result in a child's being held back or excluded from school is a measure designed to address the difficulties in retaining children within the system and avoiding their dropping out. Some consider, however, that access at the expense of learning is unsustainable, because education per se has little benefit for children enrolled in school unless they actually learn (Jamil et al. 2013). Others suggest that if minimum reading skills are not acquired, children cannot progress in other subjects (ASER Centre 2013) and they end up dropping out anyway. Recent learning outcomes have had an impact on education policy-makers in India, who have officially recognized the need to give this issue greater priority (ASER Centre 2013).

Still, financial barriers might complicate these good intentions. There is no official account of the total cost required to enable all schools in the country, both public and private, to comply with RTE quality norms. 'It is almost a black box', considers Professor P Jha, from Jawaharlal Nehru University (2014, personal communication, 18 April). However, he explains if all government schools in the country were to use the norms and consecutive budget of the Kendriya Vidyalaya Schools (central schools, which serve in the main the children of government employees), public expenditure would have to be 15-20 times higher than current government expenditure in (non-central) government schools.

The fact is that, in its current state, the public education sector is excluding, principally, the most disadvantaged children from free, compulsory, and quality education: girls, rural children, and children from the lower classes/castes - those for whom the act's entitlements have most urgency.

11.1.2 **RTE's Quality Norms and Sanctions Scheme Could** Leave Many of the Most Disadvantaged Children Without Any Schooling

The great achievements made so far in the universalization of compulsory education could not have happened without the support of India's private sector, which has been key in providing access to education for various children, even before the act was envisaged. While in 2006 only 19 % of net enrolment was in private schools, in 2013 this figure stood at 30 % nationally and was as high as 70 % in some states (ASER Centre 2013, 2014).

For one part of the for-profit education sector, RTE has provided niche growth markets. But India's private education sector is composed of many types of schools (religious, international, minority, elite, and informal schools), and for some of them, especially those serving the most disadvantaged children whom the public sector hasn't been able to attract or retain, RTE has meant a considerable challenge to their survival, which, ironically, threatens the ability of many disadvantaged children to access any schooling at all.

11.1.2.1 Most Private Schools Don't Have the Financial Capacity to Comply with RTE's Quality Standards to Avoid Being Sanctioned and/or Closed

Under the act, schools' pupil-teacher ratios should rank between 30 and 40 students per teacher for Classes I–V, with a maximum of 35 pupils per teacher in Classes VI–VIII. Buildings have to be suitable for all local weather conditions, with at least one classroom for every teacher and an office-cum-store-cum head teacher's room. They have to provide obstacle-free access, separate toilets for boys and girls, adequate and safe drinking facilities for all the children, a kitchen where midday meals are to be prepared, a library, a playground, and a boundary wall or fencing. Schools are mandated to provide, in each academic year, a minimum of 200 working days and 800 instructional hours for Classes I–V and at least 220 working days and 1,000 instructional hours for Classes VI–VIII. Parents, teachers, and local authorities are to participate in School Management Committees, constituted by the schools, to supervise their management and use of funds, and to prepare development plans (Right to Education Act 2009, Schedule).

With regard to teachers, the act defines the qualifications for their appointment and the terms and conditions of their service (Right to Education Act 2009, 23). The act gives a time frame of 5 years for teachers to get the necessary training to meet its standards and requires the government to provide them with the opportunities to do so. In a country where teacher absenteeism is a problem, the act emphasizes teachers' duties to be present punctually and to be effective in the delivery of the curriculum and forbids them to have a second job, including private teaching.

RTE quality norms can be easily met by some private schools; however, satisfying the infrastructural demands and providing qualified teachers with salaries determined by the act can be very costly for schools with limited financial capacity. Aiyar (2012) recently concluded that, 'if implemented, school fees will rise 560 % in low-cost schools and 173 % in higher-cost schools in Patna'. Similar issues arise with the implementation of RTE's rules for teacher-pupil ratios, which would require the hiring of a great number of new staff. The deadline for Indian private schools to comply with RTE quality norms and standards has already passed, and most of them haven't had the capacity to do so.

11.1.2.2 Many Private Schools Have Provided Access and Contributed to Equity by Offering an Education in Schools That Don't Always Meet RTE's Quality Criteria

RTE intends to ensure quality education by standardizing all education services – public and private – 'to maintain minimum quality and prevent dilution in educational outcomes by private interests coming in with the notion of minimum input and maximum capital gains' (D. Roy, 2014, personal communication, 19 April). But the act has, ironically, also become a financial burden for a number of private schools that have been contributing for some time to the provision of elementary education to India's least privileged children (who are usually the 'dropouts' and out-of-school children about whom RTE is most concerned).

For many of these schools, a shortage of funds is not the only impediment to their compliance with the act: reaching students from the most disadvantaged backgrounds and responding to their particular contexts and constraints frequently require them to challenge or go beyond RTE's quality norms and standards. Setting a fixed number of instructional hours, for example, might not be suitable for migrant children. The issue of teacher training is complicated since the institutions that train them are not always well regulated and cannot always ensure the quality of their preparation. The question whether 'officially qualified' teachers are a better option than teachers who received their training in local schools is a source of debate.

It is true that more concrete standards and quality norms are being set through states' implementation of the act. In most states in India, quality supervision bodies are being created within local education authorities, while in other states external agencies are being appointed (Uttar Pradesh and Gujarat). In general, they are expected to define quality assessment tools that clarify how outcomes are to be evaluated, remediated, and sanctioned. In some states, schools' evaluation results are to be published. In Uttarakhand, teachers are to be held responsible for students' learning outcomes, and in Assam, teachers' salaries are to be linked to their attendance, supervised by School Management Committees. Andhra Pradesh will not transfer the 25 % reservation reimbursement to those private schools that don't demonstrate good learning outcomes. Gujarat, like some other states, will support the recognition of schools according not only to their compliance with RTE norms but also to their overall improvement in quality outcomes – to be assessed by an independent body on a regular basis (Bhattacharya 2013).

The central government has acknowledged the need for implementing differentiated policies to reach children with particularly complicated contexts; and one of its main goals is to bridge gender and social category gaps. To achieve this, budgets have been allocated for both general and targeted interventions. Among them, school infrastructure is being developed in special focus districts; teaching and learning materials, scholarships, midday meals, and other incentives have been provided; and special training programs have been launched. These interventions, including the National Program for Education of Girls at Elementary Level, are based on the premise that flexibility is needed to better address the particular conditions of these children (Ministry of Human Resource Development 2013, pp. 24–26). However, their approach is mainly transitional and ultimately intends to mainstream children into the far less flexible public education system without really addressing, through any form of holistic intervention, the context that put these children in their difficult situations in the first place.

The next section reviews the experience of one interesting case that, having been cost-effective and successful in integrating into the education system a group of children whom the state has not been able to attract, suggests that *achieving RTE's primary objective of ensuring equal access to quality education for all children implies challenging many of its quality criteria.* The Barefoot College and its Solar Night Schools Program draws heavily on local knowledge and resources in its focus on a sustainable future for the communities served by the schools. This initiative, which provides educational opportunities for children who would otherwise be excluded from school, is, with the implementation of RTE, at risk of being shut down.

11.2 The Barefoot College's Solar Night Schools Program

The Social Work and Research Centre, also known as the Barefoot College, has been operating since 1972. Among its various development projects, the Solar Night Schools Program (SNSP) started in 1975 in Tilonia, a rural community in the district of Ajmer, in Rajasthan, India, where the head office of the organization is based. The chief purpose is to provide access to education to children who cannot attend the local public schools because they open only during the day, when more than 60 % of children in the region are expected to help with their families' subsistence activities.

Currently, over 7,500 children attend the approximately 150 night schools that are spread over 5 different states in India. Most of the schools operate in areas where agriculture and animal husbandry are the main economic activities. In this context, families are big (approximately five to six children): the bigger the number of children, the greater the help parents have to sustain the family. Families are constantly changing location with their cattle, so children frequently have to stay with their grandparents or join their parents in their journey, which makes it difficult for them to adjust to any formal schooling schedule. Children often work as goat herders or help their parents in the fields in the harvesting season.

In the area around the Barefoot College, more than 60 % of the population migrate to the cities to work. Despite families not needing to purchase dairy products because they own goats and buffalo, most of them need to buy produce in the market, since they either do not have fields or work for a landowner. Migrating to the cities to earn wages, which are difficult to secure in their rural communities is, thus, of particular importance. Older brothers are usually the ones sent to the cities to earn wages for the family. As a consequence, they don't normally get much education, while their younger siblings are responsible for taking care of the animals.

These are in most cases the children who attend the Solar Night Schools: poor, low caste, with illiterate parents. Approximately 75 % of the night school students

are girls. This is a fairly recent phenomenon, since with the increasing coverage of public schools, more boys are going to 'normal' schools, while girls are required to help with their families' economic activities. As a consequence, the SNSP offers the only education option for many girls in the region. Local tradition dictates that girls marry and leave their parents – to join their husband's family – when they turn 18. Boys are, therefore, usually considered, as one parent said, 'a better investment'. Although recent legislation forbids children marrying before this age, many girls are engaged when very young. On one of our field trips, we met four girls who were engaged when they were 9 years old. It is also possible that the majority of the girls attending the night schools are from the poorest families in the region. In one of our interviews, parents told us that they have five to six different castes in their village, but only upper caste girls go to day schools. That caste is the only one that has many educated generations; the rest tend to have none.

By November 2012, 75,000 children had attended the night schools since the program's inception; more than 4,000 of them, including 1,250 girls, have continued attending school in the formal mainstream education system (Social Work and Research Centre 2012).

Since 1988, the Barefoot College has reproduced its model in day schools (Siksha Niketan schools), which have their own governing body, but collaborate with the college to provide an alternative for children not, for whatever reason, in government or other private schools. The Barefoot College has also worked with the local government in pilot projects to adapt the night schools' model into the mainstream education system to help it attract dropouts and out-of-school children (Siksha Karmi schools), but these efforts were largely disrupted because of tensions with official teachers who feared they might be replaced by local personnel.

11.2.1 The Solar Night Schools Program Model

The success of the SNSP in preventing these children from being excluded from school depends mainly on its sensitivity to their particular socio-economic and cultural contexts and its adaptation of its model accordingly. It does that by: adapting its schedule to the children's constraints, integrating the schools within a network of other development programs that support the children and their families, decentralizing the program so that it can better respond to different contexts, and offering an intercultural education modality that makes education relevant not only in terms of the mainstream curriculum but also for the children and their families.

11.2.1.1 Adapting Its Schedule to the Children's Constraints

Schools operate at night (6-10 pm), after children have finished their household duties. This schedule is frequently adjusted according to the season and the agricultural cycles, some of which require that children help their families with the harvest or migrate to feed their cattle.

11.2.1.2 Integrating the Schools Within a Network of Development Programs

Besides receiving education, SNSP students benefit from health services, communication resources, toys, and learning materials provided by other development programs operated by the organization. This includes solar-powered lamps that allow the operation of the schools at night in areas in which there is frequently no electricity grid. Another aspect of the integrated development program sees to the building of rainwater harvesting tanks adjacent to each night school, which helps to ensure that families in semi-desert areas will still be provided with water by their children, even if they attend school during the hours they would otherwise spend collecting it from wells. The fact that the night schools are embedded in a mutually supportive network of initiatives grounded in the Barefoot College facilitates attention to the children's and their families' diverse and specific needs.

This comprehensive model also allows for the sharing of funds among different projects to support one another and for the shared provision of materials, personnel, training, and infrastructure across the different projects. Some examples of the benefits of this integration are the Field Research Centres' and Associate Partner Organizations' roles as meeting points for a Children's Parliament (a key project in this comprehensive model, which we will shortly introduce) and the fact that many night schools' alumni are incorporated into the Barefoot College's development projects. Alumni work as, for example, solar engineers, coordinators of craft workshops or of the local early childhood education centres, cooks for the Barefoot College community, or cultural workers in the community. Others extend the benefits of the SNSP into the mainstream education system at the Siksha Karmi and Siksha Niketa schools. Further examples of this integration among projects lie in the training offered to teachers by the Barefoot College's Health Centre to identify common health issues in their students and in the vocational training that the children receive.

11.2.1.3 Decentralizing the Program

An important feature of the SNSP is that it is monitored by a Children's Parliament. The children who are members of this forum, elected every 2 years by students attending the night schools, choose a Prime Minister, who works with a student cabinet monitoring the work of the teachers, the functionality of the solar lanterns, the availability of safe drinking water, and the provision of teaching and learning materials. They also encourage children who have dropped out to attend school. The Prime Minister organizes monthly meetings in which the ministers raise any problems in the schools, ask adults for explanations, and prompt solutions. The cabinet is empowered to hire and fire teachers and to expose cases of corruption. Some night school teachers occasionally do not turn up for class, but children in the parliament help to create awareness of the potential problem so that it doesn't happen very often. The forum clearly also serves to create awareness in the communities

about the children's points of view and needs. The general view is that although some problems might take some time to be solved, the system works. Moreover, 'the concept of the Children's Parliament is integral to the curriculum at the night schools. Children attending the night schools get to know more about political systems and structures by actually going through the learning process' (Social Work and Research Centre 2012).

The families of the SNSP's children contribute to the program with cash or with donations of teaching aids or learning materials. Parents pay 10 % of the cost of the health checkups provided to the children. These contributions from the families are made in spite of the fact that families need their children's contribution to the house-hold income and cannot easily afford to wait 10 years for their children to start earning.

At a community level, the families' contribution is even larger. The communities generally provide the buildings for the night schools and other activities (such as the Children's Parliament, fairs, workshops and meetings) and contribute voluntarily with cash, food, time, or work to the realization of the program. The supervision and management of the SNSP are largely done by Village Education Committees and the Children's Parliament, both volunteer organizations run by the community. Ultimately, almost the only expenses that are not covered by the community are the teachers' salaries and some costs for activities that they cannot bear.

The extent of this community involvement is also evident in the number of people associated with an extensively decentralized social structure that is integrated with the Barefoot College's initiatives in this domain: 150 full-time staff, 500 halftime staff, and around 5,000 honorary members. This is both important and unusual, given that policy-makers and policies are usually very far from implementation sites and beneficiaries.

The degree of ownership that the communities have of the program means that it already bears the hallmarks of sustainability, given that development interventions are generally successful to the extent that they are appropriated by and integrated into the communities where they are targeted. Such interventions are at greater risk of failure when project funding ceases or when external project advisers are withdrawn, probably because community 'take-up' or 'buy-in' has been limited, rendering the project unsustainable without such community investment and appropriation.

11.2.1.4 Offering an Intercultural Education Modality

The SNSP caters to Classes I–V in multigrade classrooms that host approximately 25 students each. Although age is not a barrier for attending the night schools, children's ages range between 6 and 14 years old. Classes follow the mainstream literacy curriculum and also incorporate the traditional knowledge of the community by bringing 'resource persons' to the school (people from the community who share with the children their knowledge about issues that are relevant to the community). The SNSP also takes children on day visits to their communities' local institutions

(post offices, banks, police stations, and land record offices) so they learn how they work. Sometimes they organize short trips to nearby cities, but relatively infrequently, not least because the schools operate at night. To complement the curriculum, the SNSP also provides some vocational training.

Residential bridging courses of a month's duration have been designed for children to enter the mainstream education system in Class VI after completing 3 or 4 years at the night schools. This requires a written test. These courses are offered to children: (1) who wish to transfer from night schools to day schools, (2) whose parents are migrant workers and move to the cities during the working season, and (3) who might earlier have dropped out of mainstream schools. Children in this last group are accepted into the bridging courses only so that the organization can motivate them to go back into mainstream schooling. The Barefoot College's policy is not to readily accept dropouts from mainstream schools.

Communities have asked the organization to build more night schools and to extend them to upper primary and even to secondary level, but the response has been that not only does the Barefoot College not have the budget for that but also, more importantly, it does not seek to encourage families to choose the night schools over other mainstream possibilities. SNSP teachers, in fact, encourage children to transition to mainstream schooling, but without much success. Private schools are generally regarded to be of poor quality and expensive, while government school teachers and supervisors are regarded as too informal and frequently violent with children. Moreover, the knowledge taught in mainstream schools is considered 'bookish' and largely irrelevant to their lives and needs, while students are apparently highly motivated by the night schools, their teachers, and what they learn there. Although the number of public schools in the region has increased, because of Education for All initiatives, the central government's policies, and the influence that the SNSP has had over the years, attending day schools remains a considerable challenge for these children.

On the other hand, the nightly schedule, although relevant to their needs, is difficult for children who have been working all day in the fields under a hot sun. The older children tend to have greater concentration capacities than the younger ones, although the latter will refuse to admit feeling sleepy. The school experience seems to be genuinely enjoyable for them. Children reported that they particularly enjoy what they learn, learning to read and write, reading letters for their parents, learning to count, exchanging ideas, singing, and painting. Some children who attend schools during the day also like attending the night schools because they like what they learn there. The same happens with some children who, after graduating from the night schools, continue to attend. These positive experiences also help to build remarkable degrees of self-confidence in the children.

One of the strengths of the SNSP lies in its teachers, who seem to be liked by the community and respected by parents and children, principally for two reasons: the manner in which they treat the children and the devotion with which they work. Night school teachers are local adults from different working backgrounds (post-masters, keepers of records, policemen, nurses, traditional midwives, extension workers), which helps them to make their teaching relevant for the community.

SNSP teachers earn approximately one tenth of a government school teacher's salary. Although they earn the same rate as other staff at the Barefoot College, effectively they teach only part time, so what they earn means that they amount to little more than volunteer teachers.

Teachers are prepared in a 10-day training program run annually during the off-season, and they meet monthly to discuss teaching methods and problems and to improve their teaching skills (Social Work and Research Centre 2012). Teachers are also taught to repair the solar lamps and, as mentioned earlier, to identify common health issues in their students.

The communities themselves prepare the teaching and learning materials. Among them, a workshop of disabled people prepares toys made of recyclable materials for the night schools, and a carpentry workshop provides them with science toys. Maps and posters displaying the alphabet hang on the walls of the schools. Children frequently need to share the learning materials that are available.

The mission of the Barefoot College's Communications team is worth noting here. Through puppetry, a traditional means in this cultural context of sharing messages with the community, the Barefoot College discusses in an interactive manner some of the problems faced by the night schools, such as the need for girls' attendance, the safety of the children, their relationship with their teachers, and so on. In related vein, the night schools hold the annual Balmela festival to provide feedback to their communities, to reinforce the value of education, and to thank them for their help and participation.

In summary, besides following the national curricula, the program puts a special emphasis on providing children with an education that is culturally and linguistically relevant for them and for their families, rather than a curriculum that would serve to encourage migration to the cities (and, possibly, a life in an urban slum).

11.3 Discussion: The Importance of the Solar Night Schools Program for Achieving India's Access, Equity, and Quality Goals

The long-term benefits for the SNSP's participants are clear. Many were firstgeneration learners who today have their children at school. Many children in the program indicate a wish to become teachers. By initiating a first generation of learners, the SNSP is contributing to educational sustainability in the sense of enhancing educational participation across generations. It is well established that educated mothers tend to seek ways to educate their children. This is particularly important in a region where the barriers to girls' attending schools are not only financial but also cultural. These rural, poor, lower caste girls constitute the most disadvantaged sector of the population. Through the SNSP, the Barefoot College is advancing a greater agenda of gender and caste equity, not least by the setting of an example: in addressing the particular needs of girls, in inviting individuals from the lower castes to work as night schools' teachers, in seating children from different castes together, and in defending the right of everyone to drink from the same water source. Although prejudices are being overcome, traditional attitudes remain a challenge, particularly beyond the school, where other sectors of the community continue to impose traditional practices in which caste and gender determine children's social relations and futures. Teachers deliberately hired from the lower castes by the Barefoot College are not easily accepted by all in the community. Because of this, the organization frequently has to hire men, given the additional prejudices against women. Nevertheless, because of their impact on the students, the teachers are, despite their caste background, increasingly valued and respected in the communities.

In contrast to the frequently punitive measures employed by local authorities to ensure school attendance (e.g. making an educational qualification a prerequisite for a driving licence), the Barefoot College, mindful of the causes that prevent families from accessing education, looks for the children in most need and adapts its program to their local socio-economic and cultural context. This is not only a key aspect of the SNSP's success in attracting these children into school but a primary source of its self-sustainability and of the quality and relevance of the education they provide.

The extent to which the Barefoot College's programs are integrated into the local communities provides another source of their self-sustainability and, more particularly, of the sustainability of the educational initiatives. The modality of integrated service delivery, from health care through education to the provision of potable water and solar lighting, enables both the mutual strengthening of the various components of the project network and the deep entrenching of these initiatives within the local communities. The degree of ownership felt by the communities of these projects enhances their trust of the Barefoot College and their confidence to send their children to the night schools. The opportunity costs of school attendance and community involvement in the projects are compensated by this sense of ownership, which is also a result of a widely decentralized budgeting process. The communities are deeply involved with the SNSP: they manage it, they contribute to it, and they benefit from it.

However, in spite of the Barefoot College's success in running this program with so little financial support, the challenges remain considerable. While the potential that the organization has to strengthen still further its model of integrated service delivery is great, major weaknesses in the current financial sustainability of the SNSP remain – in a lack of stability both in community contributions (due to the inevitable cycles in agricultural production at the subsistence level) and in external funding.

The threat of closure because of the Right to Education Act highlights the deep irony latent in the act. Since the deadline given by RTE to schools to meet its quality criteria passed in 2013, the survival of the Solar Night Schools Program is technically at risk, because despite having shown itself to be cost-effective, it fails to satisfy many of the norms and standards mandated by the act: its teachers receive training from the Barefoot College, but are not officially qualified; certificates cannot be given to the children on completion of their studies, because the schools are not officially recognized; the school buildings frequently lack a head teacher's office, toilets, a kitchen, a library, and, in many cases, fencing and boundary walls, all of which are stipulated by RTE as necessary. Moreover, since the schools operate only at night time and their schedule is subject to local agricultural cycles, children often miss classes and cannot comply with the act's minimum number of instructional hours per academic year. Consequently, the night schools do not qualify for government support or recognition, rendering themselves liable to be fined and even shut down. What is more, the act also prescribes that no new school can be established without such recognition, so the scalability of this model that has been so successful in filling gaps left by the mainstream education system is also open to question.

How many schools are there in this situation? To date, there is very little information about what is really happening to all the private education institutions in India that do not meet all of RTE's standards and, therefore, either lack the government's recognition needed to operate, or might lose it, if they ever managed to get it in the first place. There is in fact no official account available of what the results of RTE have been since 2010 (Chhakchhuak 2014), so it is difficult to get a clear picture of what is happening in general, let alone for this kind of initiative. Calculations vary quite radically. According to Central Square Foundation's CEO Ashish Dhawan (as quoted by the Press Trust of India 2013b), more than 300,000 private budget schools are currently facing the threat of closure because of their lack of compliance with RTE norms. However, according to the National Independent Schools Alliance (2014), the number is 5,907. This same organization estimates that 2,983 schools have been shut down as of March 2014.

According to Indus Action, a civil organization that promotes awareness of the contents of the act to support its smooth implementation, if schools wish to avoid being shut down:

...they will have to raise funds, to increase infrastructure to a level where they can get recognition. Even infrastructure in progress has been considered for provisional recognition, and that makes them eligible for economically weaker section (EWS) students' reimbursements. The other method is to buffer some load, by enrolling kids in the 3–6 age group in nearby private schools which are eligible for EWS reimbursements. The third option becomes open schooling through the National Institute for Open Schooling (D. Roy, 2014, personal communication, 19 April).

Private schools catering to EWS students can secure 100 % reservation under Section 12 of RTE. However, to be entitled to the government's reimbursement, they still need to comply with the infrastructural and other norms of the act (A. Doegar 2014 and D. Roy, personal communication, 19 April). That is, the options that these organizations appear to have to avoid being sanctioned are to channel their children to neighbouring public schools and to formalize their curricula, the profile of their teachers, and their school infrastructure to comply with RTE norms – all at the risk of losing the flexibility that makes them so successful in attracting these children. It is of course true that inputs like the preparation of teachers and the school's infrastructure are relevant and important. In fact, in the case of the SNSP, the availability of drinking water represents one of the major attractions for families when deciding to send their children to school – because they can use the time they would have spent collecting water from wells receiving education without compromising the provision of this essential family need (Rajasthan ranks among the bottom five Indian states as far as access to drinking water in rural areas is concerned [Sharma 2014]).

It is also true that infrastructural conditions in the night schools are relatively precarious. Students study on the floor, and although the solar lanterns are revolutionary in enabling the schools to operate after sunset in areas without electricity, there is little doubt that the light they provide is not ideal. Children certainly deserve much more and, especially since RTE has made education a fundamental right, it is the State's responsibility to ensure that children have positive access to it in at least reasonable conditions.

But there are other ways of allowing for contextual flexibility without compromising the rights of children or permitting 'private interests to come in with the notion of minimum input and maximum capital gain' (D. Roy 2014, personal communication, 19 April). The state of Gujarat argues that decent infrastructure and full compliance with RTE norms do not guarantee effective learning outcomes (Gujarat Education Department 2012). And what the SNSP case shows is that RTE cannot guarantee universal access either and nor equity, relevance for the community, or their ownership of the schools. In cases of private schools working with disadvantaged children, as the Barefoot College does, Gujarat requires infrastructural compliance with RTE but is flexible with regard to those schools that demonstrate improvement in learning outcomes over time. Gujarat's interpretation of RTE is, thus, more sensitive to the contribution that such organizations are making in realizing the intention behind the act and shows that there are ways to respond to such education initiatives other than purely punitive and based more on audited performance (Press Trust of India 2013b).

11.4 Conclusions

In this chapter, we have argued that RTE's quality standards and sanctioning scheme present a trap for the effective achievement of its objectives, mainly because of the narrowness of its approach and the lack of flexibility in its implementation. We have accordingly argued here that realizing RTE's primary objective of ensuring access to quality education for all children means challenging many of its contradictions, which implies a more flexible approach that allows for local customization of national policy in order to attract and retain the most disadvantaged children. We have built these claims on our research into the Barefoot College's Solar Night Schools Program by showing how drawing on the different local conditions, knowledge, and resources of the communities served by schools is critical to ensure equal access to quality education for all children, including the most disadvantaged.

The RTE Act addresses the overall quality of the educational system. There is certainly a noble intention behind it, one probably better than the approach used in many countries where governments tend to promote nonformal education in these areas instead of developing formal education for all. However, RTE's lack of sensitivity to the particular conditions of many of India's schools not only fails to address the causes that prevent the retention of a great number of the most marginalized children in the country but may even leave many children currently attending alternative schools like those in the SNSP without any schooling at all.

There are many ways in which the government could benefit in the pursuit of its aims by cooperating with private schools like those of the Barefoot College, supporting rather than punishing them. Consultancy firm Ernst & Young's survey (2012) made some suggestions in this regard: NGOs could share the particular knowledge they have of the communities with whom they work; they could help the State in training its teachers so that they might respond to the context in which they work; they could help in bridging children into the mainstream education system, do evidence-based advocacy, and support innovation in educational models. Further, their capacity for mobilizing communities could help in the effective implementation of school management committees; and they could contribute in the elaboration of teaching and learning materials and of assessments so that they reflect better the situation of the children.

The central and state governments are currently piloting public-private partnerships, which include the Rajasthan Education Initiative. But what the SNSP, as a model that is mainstreaming children to the formal education sector tells us, is that while it is crucial to find new means of cooperation with the private sector, it is not enough, because government schools are still the largest providers of education in the country. If India wishes to achieve universal access, equity, and quality in its compulsory education, the government will need to go beyond establishing transitional flexible interventions and design strategies that build flexibility into the system. What the Solar Night Schools Program shows is that making education accessible and relevant requires a holistic approach to the design and implementation of public policies that responds to the factors that prevent families from sending their children, boys and girls alike, to day schools and that enhances opportunities in children's futures, not only in the cities but also in rural contexts.

The relevance of the curriculum, the community's ownership of the schools, the cultural bond with the teachers, and the mutually supportive programs that constitute the ecosystem in which the schools are embedded are perhaps some of the reasons why parents, in spite of the availability of public schools in the region, still prefer to send their children to the night schools. Programs such as this ask critically important questions of the government: questions that suggest not only alternatives for dealing with the implementation challenges of RTE but also the importance of joining forces with, rather than punishing, those who are contributing to the sustainable provision of quality education for all children.

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Chapter 12 Developing Curriculum Leadership Among Teachers for School-Based Curriculum Innovations in Hong Kong: A Distributed and Problem-Solving Approach

Edmond Hau Fai Law, Maurice Galton, Kerry Kennedy, and John C.K. Lee

Abstract Hong Kong has been considered as one of the world's best performing school systems. Among the six factors attributing to the success of the educational system, three are related to decentralization of pedagogical decision-making and empowerment of school leadership and teachers. Teachers' voices and their wisdom in decision-making processes in schools has become a prominent topic among policy makers and educators. In the last 40 years, international literature suggests that teacher leadership practices in school-based curriculum development (SBCD) as a form of school capacity building enhances teachers' empowerment and their professional capabilities, which in turn may result in more effective student learning. This chapter reports a portion of the findings based on the interview data of a case study of school-based curriculum leadership in an elementary school in Hong Kong in 2007. The study adopted a design-based approach. Participating teachers engaged in cycles of planning the objectives of learning, experimenting on redesigning the lesson plans, and reflecting on practice lessons. Multiple data collection methods were adopted. Our findings show that a systematic approach in organizing curriculum development activities based on problem-solving approaches and a distributed leadership style among teachers can be effective in enhancing teacher learning in both curriculum leadership skills and powerful learning.

Keywords School-based curriculum development • Curriculum leadership • Distributed leadership • Located knowledge

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E.H.F. Law (🖂) • K. Kennedy • J.C.K. Lee

The Hong Kong Institute of Education, Tai Po, Hong Kong e-mail: elaw@ied.edu.hk

M. Galton University of Cambridge, Cambridge, UK

12.1 Context of Change

Adopting school-based curriculum development (SBCD) as a technique to initiate changes and innovations in schools and among teachers, instead of the traditional approach that relies on central agencies, has been a policy strategy in major Western countries since the 1970s (Bolstad 2004; Kennedy 1992; Marsh et al. 1990; Organisation on Economic Co-operation and Development (OECD) 1979; Westbury 2008). On the key issue of the reform movement in the last 40 years, Skilbeck stated the following:

I do not believe that any substantial reform movement for the school curriculum can proceed unless questions of curriculum review, planning, design, development, implementation, and innovation are placed quite centrally in the context of school life. (Skilbeck 1984 p. xii)

Various types of school-based innovations to bring about changes in the curriculum and pedagogy have been designed and implemented in many developed and Western countries around the world, and they are considered essential curriculum reform options in some key Asian countries (Kennedy 2010; Lee 2011). The features of these school-based approaches include 'problem-solving' orientation, engagement of teachers in curriculum development teams, integration between and among subjects, competence-based innovations, and redistribution of teacher roles and responsibilities (Craig and Ross 2008; Frost and Durrant 2002, 2003; Harris 2003; Hinden et al. 2007; Priestley et al. 2010; Shulman and Sherin 2004; Teo and Osborne 2010). The aim of these different improvement measures is to engage the stakeholders of school education, particularly the teachers, to work as a team or a learning community in the creative and innovatory deliberations of the curriculummaking process to enhance student learning and make teacher development more effective (Skilbeck 1998, p. 133).

Although there are prevailing views that teachers in Asian schools tend to follow centralized curriculum mandates and adopt traditional pedagogies, other scholars contend that teachers can be curriculum developers even in the context of centralized curriculum development, modifying or enacting the centralized curriculum to make it more meaningful to particular schools within the context of curriculum reform in the new century (Gopinathan and Deng 2006; Li 2006; Marsh 2010). However, there still seems to be no consensus on effective and professionally informed models, structures, or procedures of SBCD in implementing changes among teachers and schools (Dimmock and Lee 2000; Skilbeck 2005). The attraction of SBCD in carrying out changes and innovation is its appeal to the core values embedded in participatory democracy, distributed teacher professionalism, and progressive institutionalization of effective structures and procedures based on theoretically sound practices (Fullan 2008). Clearly, in Hong Kong, this approach is contrary to the sociocultural traditions in schools, which have a long history of prioritizing seniority and hierarchy and maintaining social harmony among members in the school community (Kennedy and Lee 2008). The policy orientation of involving teachers in curriculum development has gone through several phases of development in Hong Kong. In the early phase in the 1980s, teachers played a passive role of being the recipients of a centralized curriculum (Morris 1996). In the intermediate phase after the 1990s, while primary school principals tended to play a direct role in curriculum leadership and management (Lee et al. 2009), teachers were expected to play a more active role, adapting curriculum guides and teaching materials to their own subjects. A local study also found that primary school principals might need to strengthen distributed leadership and the building of collaborative structures for enhancing teachers' decision-making (Yu 2002). Finally, the latest phase finds teachers playing leadership roles in one or more aspects of the school curriculum (Law 2011; Llewellyn 1982). Teacher leadership in the latest phase is neither a positional one nor a heroic or delegated one. It is a distributed and shared model of teacher curriculum leadership in schools (Lambert 2002; Olson 2000; Spillane and Hunt 2010). However, the kind of SBCD structures or procedures likely to produce positive effects on teacher learning and, therefore, on student learning is still unclear to the schools and the teachers in Hong Kong or elsewhere, particularly in a context wherein priority is given to seniority and hierarchy (Eggleston 1980; Lam and Yeung 2010:61). The research question of the case study is to investigate how the potential of SBCD could be realized as both an effective policy strategy for innovation and change, as well as an efficient agency of engaging members of the school community in professional deliberation (Sabar et al. 1987).

12.2 Organization of the Case Study

The case study adopted a theory-laden approach and incorporated the following key features from the contemporary literature.

12.2.1 A Distributed Approach to Developing Teacher Curriculum Leadership

A team approach based on distributed leadership, rather than on delegated leadership, which provides sufficient opportunities for actualizing individual experimentation, has been adopted. It facilitates the development of curriculum leadership skills, such as 'adopting materials to suit student needs, selecting pedagogical strategies in accordance with learning objectives, setting pedagogical priority on motivation, trying out an alternative but risk-taking approach' (pp. 16–17) (Christpeels et al. 2000; Gronn 2000, 2002; MacBeath 2005; Spillane 2006; Spillane et al. 2001, 2004). This distributed approach, based on the rotation of the team leadership role, actively engages teachers in various types of curriculum decision-making processes, therefore enriching their practical experiences, enhancing ownership, and expanding the curriculum horizon (Hoban 2002; Hopkins 2007; Mehra et al. 2006; Papa and Papa 2011; Rogers 1996; Rogers and Horrocks 2010). Teachers teaching the same core subjects were chosen, and their experiences and hierarchical status varied to allow contrastive responses and experiences when these teachers were engaged in the curriculum development activities.

12.2.2 Problem-Solving Approaches

Learning becomes more focused and concrete when teacher activities are action oriented and when they reflect the practical experiences in the innovative pedagogical strategies that follow (Elliot 1991; Schön 1983, 1987; Stringer 2007). This problem-solving approach has been a key reform strategy in transforming the traditional work practice of schoolteachers in Hong Kong, reorienting the focus of actions based on problems identified by the teams of teachers (Elliott and Yu 2008; Lo et al. 2006). The case study is based on the assumption that teachers learn more effectively when they work in teams in school-based innovations. These innovations are contextualized in their own professional needs, and therefore, they become part of their shared cognition (Hulpia and Devos 2010). Preferably, teachers should work more effectively in subject departments at the initial stage before moving on to a more collaborative and integrative approach across subjects in the school curriculum (Borko and Putnam 1998; Shulman and Shulman 2004). Based on these principles, the project initially formed three subject-based teams which were the core subjects of every school in Hong Kong. The first phase of the project was completed in 2006 in a Hong Kong elementary school. The current project was repeated in 2007 in another elementary school. The principal of this school was selected because she was known to be innovative and active in bringing about changes and innovations to student learning.

12.2.3 Planning, Experimentation, and Reflection (PER)

The project adopted the PER model of change as a guiding structure for the project process. In accordance with the PER model, the team began by collaboratively reviewing, planning, and designing a lesson or a unit of learning in structured team meetings. The teachers then tried out the innovation lesson. Finally, in the last step, the team conducted a reflection meeting to examine the lesson and refine the curriculum based on collaborative analysis and discussion. This model of change was used in the first phase of the study and was replicated in this study in a spiral continuous process (Law et al. 2010a, b). This organization of the project implementation has several advantages. First, it creates opportunities for collaboration and teamwork. Second, it locates changes in pedagogy based on the teaching subject. Third, it adopts a problem-solving approach. Fourth, the teachers come to approach

the change as an open venture rather than a program designed by external agents for their implementation (Harris 2004; Macpherson et al. 1999).

12.3 Methodology and Data Collection

The case study adopted a design-based approach for organization curriculum development teams in the case school. This engaged teachers of mixed backgrounds in cycles of planning, experimenting, and reflecting upon curriculum and pedagogical innovations. Two curriculum teams were set up in this case study, one English subject and one general studies subject (McCormick et al. 2011). As each team comprised teachers of various backgrounds (e.g., experience, age, and gender), their interactions would recreate communal situations that could possibly create tension (or even conflicts) that enables for more problem-solving opportunities (Campbell and Groundwater-Smith 2010; Stein et al. 1999). As the team leadership was rotated and dispersed, the effects of status and seniority on meeting discourses could be observed in the ethnographic data in the planning and reflection meetings among members in each team (Engestrom 1999, 2001). In data collection, interviews, videotapes of lessons, lesson and meeting observations, and document analysis were gathered from three teachers in the English language subject team and four teachers in the general studies subject team before the planning stage, after the practice lesson, and after the reflection meetings. This allows the effects of the innovation to be understood from various perspectives and angles. The strategy of using a series of interviews in the course of the PER processes, as well as the various perspectives of different stakeholders in their participation, would enhance the effectiveness of internal triangulation among different sets of data (Cohen et al. 2000). Structured interviews were conducted before the tryout lessons and after the reflection meetings in order to elicit views and data from teams that experienced the tryout lessons. The key participants, which include the team leader, the panel head, and the tryout teachers in the two teams, were interviewed individually for privacy and confidentiality. The questions were also tailored to match their specific roles in the teams while revealing as many alternative understandings and experiences of the same innovation phenomenon as possible (Cohen et al. 2000). Four teachers of the same level (same grade) in each team were interviewed in the local language Cantonese for convenience. The questioning techniques employed the 'unfolding' function, which made the participants reveal as many layers of understanding and meanings of their experiences as much as possible. The questions focused on the following aspects of their experiences about the innovation:

- · Their understanding of the case study objectives, processes, and outcomes
- · Their experiences and observations on the tryout lessons
- Their evaluation of the innovation

As far as the data are concerned, a grounded approach was adopted to allow themes to emerge. Preliminary coding in the first round of analysis was conducted by the first author and then the themes that emerged from the codes were to compare with the previous studies. The second author conducted a similar coding and both codes were contrasted and compared. Discussions between the two researchers confirmed and finalized the 'themes'. This chapter reports the teacher interview data with the aim of providing empirical evidence on developing teacher curriculum leadership skills in school-based curriculum innovations. This research approach is grounded on data, with the intention to enable possibilities and conceptual categories to emerge and undergo refinement. However, the theoretical underpinnings in our design framework may have some influence on the ways we choose to analyse and understand data. This practice is normal in qualitative research (Tashakkori and Teddlie 2003, 2009).

12.4 Findings and Discussions

We organized our findings into three key aspects of our innovation project, namely, the effect of leadership styles, experiences in the processes of change in pedagogical strategies, and teacher belief, curriculum leadership skills, and forms of curriculum decision-making.

12.4.1 Changing Leadership Styles and Changing Teacher Roles and Experiences

The school principal is well established in the school and in the community in Hong Kong. She is considered an innovator and a reformist, using strong leadership patterns to bring about changes in her school. A hardworking professional, she holds an education doctorate. Her colleagues describe her as 'very experienced,' 'strong and professional leadership,' 'resourceful in solving problems,' and 'decisive.' Her leadership style shaped the space in which the teachers in the team move. She was quick to give answers, and discussions were considered unnecessary by the teachers (Teacher A interview, October 23, 2007). She was a resourceful person and allowed her subordinates to express their views (Teacher C interview, October 25, 2007). The interviewed teachers shared similar views about her leadership style (Teacher D interview, October 26, 2007). Clearly, the school principal shaped the direction of the development work and provided little opportunity for teacher autonomy and decision-making, although she was considered effective. The view of another teacher reveals the feelings toward the principal's leadership and its limitations succinctly:

In fact... we do not need a chair or a leader... casually, several teachers sit together... we talk together... we can achieve the same effect... but administratively speaking, a leader can mediate work effectively. (Teacher C interview, November 15, 2007)

In the second action cycle, leadership was shifted and placed on the panel head, with the school principal deliberately not involved to allow 'distributed' leadership to emerge. The leadership style of the panel head clearly differed drastically from that of the school principal. Instead of providing the overall direction to the team, the panel head was supportive in sharing work with her colleagues. After the second cycle, one teacher described the panel head in a much collegial manner as follows:

She prepared all materials... she helped us... if she wanted us to do something with the students, she would do it first for us... showed us how to do it... for example... preparing a lesson plan in great detail... it is usually tedious... but she started it and asked us to fill in the information... then we quickly finished it. (Teacher A interview, November 13, 2007)

She mediated her tone to maintain a neutral position about the effects of the leadership style of the school head, indicating that the function of the panel head and the school head was 'more or less' the same (Teacher A interview, November 13, 2007).

One teacher was explicit in her views about the restrictions when the school principal was involved in the decision-making process. After the reflection in the second cycle, Teacher D commented the following:

I feel more independent... when we do not have our school principal... feel like making more decisions... I can change my schedule according to my plan. (Teacher D interview, October 26, 2007)

She felt that communicating with the panel head was easier than with the school principal, which is possible to do when the Asian context of hierarchy in institutions prevails. School leadership asserts influence on the effective execution of the development project while limiting the scope of professional autonomy of teachers who consider it significant in curriculum deliberation. Data show the advantages and disadvantages of a leadership style in the case school basically couched in a Chinese culture.

Although the Chinese people are characterized generally as followers, interview data show the other aspect of communal life and the expectations of participating teachers in a team led by a dominating school head (Hofstede 2005). The teachers explicitly expressed their expectations of the team and its style of operation. They expected 'the collaboration... will allow views and opinions to be pooled together. Every participating teacher will benefit' (Teacher K interview, October 27, 2007).

12.4.2 Changing Pedagogical Strategies and Challenging Teacher Beliefs

The case study was deliberately designed to create SBCD structural situations and procedures, as described above, in which teachers experience contrastive practices to help new experiences bring in change, which would in turn challenge the traditional beliefs and practices deeply embedded in teacher cognition (Engestrom 2001; Putnam and Borko 2000).

Teacher K was aware that the participation had changed the teachers' professional experience. The lesson preparation she had before was a one-off. Conversely, the current project adopted a spiral approach, which ensures that the teachers' decision-making experiences are accumulative and continuously reflective, providing feedback to the following round of practice lesson (Teacher K interview, November 17, 2007). Teacher A is young and inexperienced. She is aware that her pedagogical style is still in the formative stage of her professional career. In the interview, Teacher A described the process of her engagement in the planning meeting. Her engagement had the typical features of decision-making processes, namely, reviewing the current practice and analyzing the decision dilemma based on the current educational theories and policies progressively oriented toward childcentered approaches in pedagogical strategies. She had to choose between the pedagogical strategy of following a teacher talk mode of orientation in teaching and that of following an activity approach mode to learning. The former is commonly considered more efficient in terms of time and class management among teachers in Hong Kong, whereas the latter is considered more effective in powerful learning. Her awareness of pedagogy was torn between two educational orientations. She pondered on how particular topics in textbooks or syllabi could be taught by alternative methods other than the traditional one, but she was also sensitive to the demotivating functions of teacher discussions on student learning (Teacher A interview, October 23, 2007). Experiencing contrasting approaches in pedagogy challenges the teachers' traditional perceptions about teaching and learning, causing a form of 'violence' to the cultural-historical practices rooted in their personal experiences of school pedagogies (Lave and Wenger 1991). The practical experiences in implementing contrasting pedagogical strategies extend the professional outlook of the participating teachers and widen their pedagogical possibilities. Experiencing contrastive pedagogical orientations in practice from the viewpoint of teachers is effecting changes in their beliefs.

Cognitive psychologists consider powerful learning as a powerful learning strategy that transforms personal beliefs and actions (Biggs 1989; Entwistle and Ramsden 1983; Hopkins et al. 2011). Powerful learning refers to metacognitive skills, such as considering thinking as a reflection, which are useful to generating new approaches and new concepts (Calderhead 1989; Schon 1983). Participation in curriculum deliberation does not confine teacher learning solely to professional concerns in pedagogy and instructional effectiveness. Participation opens more opportunities for development, such as enhancing sensitivity toward alternative pedagogical orientations, validating alternative but innovative practices in experimentation, adjusting personal beliefs in pedagogical evidence in practicing lessons, strengthening personal learning capacity, and taking the risk of departing from traditional practices. These generic reorientations, as part of development activities, are essential to teacher development, which in turn fosters the professional enhancement of participating teachers. In the interviews, Teacher A described her practical experiences in this project and reflected on using a different approach to organizing experiments for students. She compared her experiences with the two experiments and discovered the limitations of the first experiment on the respiratory system and the advantages of the second experiment in providing more learning opportunities about the functions of the digestive system and stomach to students. According to Teacher A, her experience in the second experiment expanded her understanding of learning, while organizing learning activities for students. Conducting the experiments using different approaches and apparatuses helped her realize the limitations of the methods in relation to the learning goals of the lessons. Based on the two examples she cited, Teacher A showed an increasing awareness of the importance of focusing on learning activities and disregarding how they could distract younger learners from the lessons. The experience in the practice lesson triggers more inquiry about the movement of the intestines and their functions. In the first example cited, the teacher discovered that the potential of the activities (i.e., biting food into smaller pieces) had yet to be explored for pedagogical purposes (i.e., the digestive function). The second example shows how experiencing the practice lesson leads to creative thinking, which enhances the effectiveness of the experiment (Teacher A, November 13, 2007).

12.4.3 Internalizing the Contrastive and Innovative Practices of Team Members

The change caused by innovation was not confirmed until Teacher A saw the effects from other participating teachers in their own practice lessons. The effects on Teacher A were concrete and immediate, indicating the collective effects of situated learning on individuals. Innovation and its effects serve as a form of recognition for individual change options and practices, reinforcing the direction of the change and enhancing the confidence of teachers who participated in the change process. The team asserts positive (or negative) and constructive effects on individual practices. This effect is a form of shared cognition in collectives that individual members contribute or take as their own sources of practices and models of actions. This shared cognition, now in the form of a team, serves as an important change agent (agential influences) in implementing learning among team members (Engestrom 2001). The following personal narrative from the interview data illustrates the collective effects of other practices on individual conceptions about the boundary and scope of the innovation.

I learned two things. First, I tried to ensure that the students participated. However, in the second lesson, I did not want them to participate again... in other words... I returned to my 'old practice'... I performed and they watched... this is simpler and saved time... but I watched other teachers how they did it in the second lesson... allowing children to do the experiment was far better... better for children's development... deeper learning... this will affect my teaching strategies in future... another thing is to use a teaching aid... a stomach. (Teacher A, October 27, 2007)

The concrete experience of conducting the experiment gave teachers solid and visual evidence on the effects of the new pedagogical strategy in contrast with those of the traditional practice of individual teachers. This practical experience raises

issues about the teachers' own beliefs embedded in their traditional classroom practices. These communal experiences serve two socio-educative functions in the change process (Lave and Wenger 1991). First, they confront teachers with new and contrastive experiences as well as their effects on student learning. At the planning stage, teachers can only visualize the operation of the innovative practice and its realization in classroom settings. However, at the experimentation stage, all the planned activities and their intended outcomes are realized through teacher actions and student activities. The contrast widens the teachers' horizon and moves them to another platform of possibility in pedagogy. Second, these experiences serve as evidence of possibilities. They become the life experiences of the participating teachers and part of their knowledge structure and consciousness. These visual experiences have the potential to become personalized and dynamic change agents in individual consciousness (Eraut 2000).

The deliberation of the project in adopting an alternative pedagogical approach to organizing learning activities for students creates a need for teachers to think, identify, and search for pedagogical reorientations that are new to them or that can be considered a departure from their traditional and deeply rooted practices. Deviating from personal practice to an innovative one is an arduous journey that requires communal and institutional support, as well as the professional commitment of individual teachers.

12.4.4 Expanding Experiences and Teachers' Curriculum Leadership Skills

The extension of teacher involvement in the curriculum decision-making processes from a curriculum user in a centralized curriculum to a curriculum developer expected to play a full professional role in planning, designing, and assessing curriculum objectives, contents, and activities is a challenge to most teachers in terms of skills and time (Day 2008; Moreno 2007). These curriculum skills include assessing student needs, determining learning goals, selecting contents of learning, organizing learning activities, and designing appropriate assessment formats and tasks. These skills are common to teacher educators in other educational systems in which decentralization is the norm rather than an exception. In a system that remains hierarchical and centralized, the acquisition of these curriculum leadership skills can encounter difficulties in terms of availability and accessibility, particularly in the school context. One argument of a school-based approach to curriculum development is the process and structure of teacher empowerment. The following are the curriculum skills acquired or required in the project's curriculum deliberations. They indicate the emergence of different types of teacher curriculum capabilities in making decisions about student learning in the project (Knight 1985: 43). They are also evidence of the influence of the school-based project on teacher learning. We deliberately used Teacher A's interview as an example in our illustrations because her narratives are vivid and greatly detailed.

12.4.4.1 Adopting Materials to Suit Student Needs

Awareness of the students' individual learning needs is considered an essential skill in designing appropriate learning materials and activities for the preparation of teachers. In particular, teachers should adopt available materials to the students' needs to enhance learning effectiveness. According to Teacher A, she did not follow the publishers' textbooks but adapted them to suit her students' needs (Teacher A interview, October 23, 2007).

12.4.4.2 Selecting Pedagogical Strategies in Accordance with Learning Objectives

Varying the teaching methods or using a wide range of pedagogical strategies is considered a necessary skill in contemporary educational practices in which education is open to all children with different abilities and social backgrounds. In the interview, Teacher A was well aware of the limitations of teacher talk. She adopted a diverse approach to using pedagogical strategies in her teaching (Teacher A, October 23, 2007).

12.4.4.3 Setting Pedagogical Priority on Motivation

Awareness of the needs of primary pupils and their propensities toward learning is important to teachers. In particular, in a modern open and inclusive education system with little streaming and segregation such as that of Hong Kong, the children's abilities in class can be huge and heterogeneous contrary to those in the traditional elitist system. Teacher A was sensitive to the individual needs of the children at this early phase of their education, and she deliberately switched to connecting school learning to daily experiences and real objects that children commonly encounter (Teacher A interview, October 23, 2007). The teacher told the interviewer about learning a new approach to teaching topics in general studies. The approach adopts an inquiry-based strategy in classroom interactions between the teacher and students. In the latter part of the interview, when Teacher A was asked about the pedagogical decision of the planning meeting, she told the interviewer that the approach was inquiry based and that it matched what she had learned.

12.4.4.4 Trying Out an Alternative but Risk-Taking Approach

Familiarity with the traditional practice is a major source of teacher resistance to innovative practices from outside the school (Giles 2007). Therefore, one of the change functions of the SBCD structures and procedures is to enhance the teachers' ability to face challenges and constant changes in their work-lives in schools. The current project has this aim in its design. Evidence from Teacher A's interview

shows that she adopted a risk-taking approach in her pedagogy, enabling her pupils to experience failure and compare it with the case of experiencing success. This approach is inquiry based and experimental, and not one teacher guaranteed that the learning outcome was what they predicted in the learning objectives. However, this approach encourages the pupils to experience an experimental learning task. According to the teachers' observations and their stated experiences, the pupils were able to speculate, analyse, interpret, hypothesize, and conclude. This process is exactly what an inquiry approach means in real-life situations (Teacher A, October 23, 2007).

Interview data were collected after the practice lesson. Data show how the pedagogical consciousness of Teacher A was extended and how she 'discovered' the inadequacy of the traditional approach, as well as the value of the alternative approach adopted in this innovation. This teacher tried a new approach and experienced its effects on her own traditional practice. The purpose of the practice lesson was to apply the teachers' planning and design in a real situation and ensure the realization of what they planned in classroom practices for reflection and consolidation.

12.5 Conclusions

SBCD has been a major policy direction for more than 30 years in many Western countries. Its influence on school improvements, teacher learning, and student learning has not been studied, despite the efforts of many school educators and government initiatives (Clandinin and Connelly 1992; Craig and Ross 2008; McClelland 1992). Its diversity in its conceptualizations, as well as in its flexible realizations in schools, is being questioned. On the one hand, its diversity and flexibility ensure that schools and ordinary teachers have professional autonomy in their deliberation to meet specific needs for their social cultural milieu. On the other hand, the lack of standardization in deliberation also questions the policy's efficiency and effectiveness in instigating innovations and changes in pedagogy and student learning (Bezzina 1991: 42). According to Kennedy (2010: 16), 'SBCD has great potential to empower teachers to deliver meaningful and relevant curriculum experiences for all students.' His implicit optimism about the potential of SBCD explicitly confirms the challenge in the diversity and flexibility of SBCD as a measure to improve school performance and as an instrument to enhance professionalism within the learning community. The case study and in particular this chapter aim to provide some answers to Kennedy's enquiry in a context very culturally different from the origin of SBCD. The design-based project reported in the current study aims to sort out an SBCD model theoretically founded on the theory of a distributed teacher leadership integrated with an action-oriented, problem-solving approach to schoolbased curriculum decision-making. The current case study explored initially the effects of these key elements on the current Western educational thoughts and theories in a different social and cultural milieu of Hong Kong under the influence of Chinese or Confucian Culture Heritage, which prioritizes the maintenance of social cohesion and harmony (McClelland 1992). The key findings are:

According to the teachers, distributed leadership with a rotation of team leadership allows more room for qualitative teacher participation. Supported by a collaborative leadership style, teachers in curriculum development teams took risks, made decisions, and changed their passive role in the curriculum and instructional deliberations to an active one (Law et al. 2007). Distributed leadership facilitates collaborative teamwork, which values shared responsibility, making teachers' voices an essential component in decision-making processes in schools. In this shared model, cognitive knowledge and skills enhance individual curriculum leadership skills (Meirink et al. 2010; Paavola and Hakkarainen 2005). The contrastive experiences recreated in the project challenge the teachers' deeply rooted beliefs and practices and made new learning possible (Engestrom 2001). The interview data also show that various types of curriculum development skills are well distributed and evident among teachers in the first case study (Law and Wan 2006), and in the current replication study, though some teachers learned more and differently than others in each team, we can argue that the structure and procedure (PER) of the case study are effective because they create situations in which problems arise, and solving these problems becomes apparent to the participating teachers. These situational needs give rise to the emergence of distributed leadership in creativity and problem-solving. Our design-based case study is based on well-received educational theories on action-oriented learning activities for teachers (i.e., action learning and knowledge creation) and powerful theories on teacher leadership (i.e., distributed leadership). These theories or principles of human learning and organizational learning have been neglected and underused in school improvement initiatives (Fullan 2008; Kennedy 2010). The current paper demonstrates the feasibility of translating these principles in a school setting and reveals the positive effect of SBCD on teacher learning in a context different from the West (Brundrett and Duncan 2011, p. 123). Learning encapsulates two essential aspects of teacher capabilities, as evidenced in our studies. On the one hand, teachers acquire professional skills in pedagogical and curricular deliberations. On the other hand, teachers enhance their human capacity for lifelong learning (Lieberman and Pointer Mace 2008; Paavola and Hakkarainen 2005). The former belongs to the professional development domain, whereas the latter belongs to the domain of enhancing greater human potential. Both have separate functions, and they are complementary to each other. The current report provides teacher educators, policy makers, and curriculum theorists with empirical evidence on the effects of a structural approach to SBCD on teacher learning. We argue that if SBCD is considered an effective approach to bringing changes and innovations in the context of Hong Kong schools, then it has to be preferably based on educationally defensible and well-established theories on human learning. A focus on the local school context enables the everyday experiences of learners to be considered in the decision making practices of teachers. More experimentation and school-based innovations along similar lines of thinking are called for in the Asian context.

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Chapter 13 Creating an Ecology of Affordances to Allow Australian Pre-service Teachers to Get to Know and Make Sense of China

Lesley Harbon and Catherine Smyth

Abstract This chapter reports the reflections of two Australian teacher educators, captured through their planning emails, as they accompanied a group of Australian pre-service teachers on a short-term international experience (STIE) in China in June 2014. The ten pre-service teachers would, among other things, encounter culturally embedded (many of them 'linguistic') differences as they 'got to know' and 'made sense of' China. The two teacher educators capture their own conceptualisation of pre-service teachers' processes of learning-to-know for framing of such student mobility programs in the future.

Keywords Ecology • Affordances • Pre-service teachers • China • Australia • Intercultural • Cross-cultural

13.1 Introduction

Studying abroad for intercultural learning is not a new phenomenon for young people these days (Busch 2009) and the benefits of an overseas study experience have been well documented for decades (Bachner and Zeutschel 2009; Paige et al. 2009; Thomlinson 1991). Some study abroad programs now involve shorter periods of participation overseas (Jackson 2009). The shorter option suits Australian preservice teacher education students, in particular (Harbon 2007; Harbon and Atmazaki 2002), for a number of reasons. One key reason is because there are increasing teacher registration requirements for Australian pre-service teachers to

L. Harbon (🖂)

C. Smyth Faculty of Education and Social Work, The University of Sydney, Sydney, Australia

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Honorary Associate Professor in Languages Education, Faculty of Education and Social Work, The University of Sydney, Sydney, Australia e-mail: lesley.harbon@sydney.edu.au

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undertake the majority of their professional experience practicum placements in Australian schools.

We are two teacher educators in Sydney, Australia. Our paper reports our reflections captured through planning emails (purposively documented, as we knew that we wanted to retain the email trail as part of our data), as we accompanied a group of Australian pre-service teachers on a short-term international experience (STIE) in China in June 2014. The ten pre-service teachers would, among other things, encounter culturally embedded (many of them 'linguistic') differences as they 'got to know' and 'made sense of' China. Our purpose here is not to report on the measurement of pre-service teachers' knowledge prior to and after the international experience. Rather we capture our own conceptualisation of pre-service teachers' processes of learning-to-know and for framing of such programs in the future.

In this chapter, we present and analyse our own reflections as data – that is, our initial ideas for finding a way to think about the kinds of mental resources preservice teachers draw on in their sense-making about China. As well, we present and analyse our thinking about how our pre-service teachers' knowledge is grounded in diverse social, cognitive, and metacognitive experiences when on short-term exchange.

We generate a new way of theorising the links between (a) experiential knowledge resources, which originate in specific activities and interactions, and (b) an integrated conceptual understanding that involves intercultural sense-making across diverse situations and contexts. We adopt Greeno and Nokes-Mallach's (2014) 'affordances' to conceptualise an ecology for both ourselves and our pre-service teachers and our ways of knowing, constructed intrapersonally and interpersonally.

13.2 Australia and Student International Mobility

At present, the Australian government's strategic regional mobility priorities sit in the Asian sphere. The National Asian Languages and Studies in Schools Program (NALSSP) policy is embedded in our school curriculum initiatives (Commonwealth of Australia 2009). As well, the AsiaBound and New Colombo Plan scholarships have seen a new wave of university undergraduates undertaking short-term study programs in countries in our region (Australian Education International 2013; Department of Foreign Affairs and Trade 2014).

The aims of the AsiaBound programs are to increase the overall number of Australian students with a first-hand study experience of Asia and to encourage more students to become Asia-literate. Students participate in short-term study in Asia and complete their internships or practicum and field studies. As teacher educators preparing pre-service teachers for local, national, and even global career opportunities, we planned, like other groups of pre-service teacher educators in the past (Hill et al. 1997; Walters et al. 2009), for our pre-service teachers to add a short-term international teaching experience to build their knowledge of self and other as well as 'own' and others' teaching skills.

We secured AsiaBound funding to take a small group of ten pre-service teachers for a STIE in China. The STIE comprised participation in a university-based lecture program, a teaching experience, and a cultural/local visit experience. Guiding the China STIE was the idea of these pre-service teachers 'making sense of China'. We knew that there exists a body of literature exploring how, in the process of reflecting, each of the participants would expand their language awareness and knowledge about language, teaching, and learning (see, e.g. Byram and Feng 2006; Driscoll et al. 2014). The wider question we posed to the participants was 'How will you make sense of China?'

13.3 Pre-service Teachers' 'Knowledge-in-Pieces'

This study builds on and complements the research about university students' thinking and learning and the development of graduate attributes such as intercultural understanding and internationalism (Barrie 2004, 2007). As such, our study provides additional insights into students' sense-making or how university students placed in 'other' contexts come to know others' ways of knowing and consequently, hopefully, themselves.

Four conceptualisations of sense-making/ways of knowing frame this study. First, sense-making is conceptualised as being situated in a physical and social context. Sense making (thinking, knowing, understanding China) is not simply an activity that occurs in the student's mind, but rather within a situation. Second, sense-making is 'situated in contexts of beliefs and understandings about cognition that differ between individuals and social groups, and fundamental properties of thinking and learning are determined by these contexts' (Greeno 1989, p. 135). Third is the notion of sense-making as conceptual competence. We assumed that the students had the capacity to conceive new ideas and to generate new knowledge. Sense making requires that students 'elaborate and reorganise' (Greeno 1989, p. 135) their knowledge and understanding, rather than simply 'applying and acquiring' new ideas. Fourth is the notion of sense-making as 'knowledge-in-pieces' (diSessa 1993, 2000; Philip 2011). Knowledge is not conceptualised in cohesive and 'theory-like' ways, but is in pieces, fragmented.

Our collaborations in working and researching together in teacher education programs for a number of years have shown us that to embed our STIE theoretically in what we do, we needed to combine conceptual ideas about knowledge fragmentation (the pre-service teachers, we presumed, would know varying amounts about China prior to participating in the STIE) with Greeno's (1989) ideas regarding 'thinking in an alternative perspective'. Our preparation for the China AsiaBound STIE program saw us advance two lines of theoretical argument. First, pre-service teachers' sense-making is better seen as contextualised and fragmented rather than as a systematic personal theory (diSessa 1993, 2000; Philip 2011). There are advantages to situating our understandings within a 'pedagogical 'knowledge-in-pieces' frame' – that is, the notion that a pre-service teacher is at the stage of having gathered knowledge-in-pieces through their training, but that knowledge is not yet whole – that can be activated and combined in different ways in interaction with various contexts. Second, cultural competence and ways of knowing that originate in one's personal experience ('intuitive pedagogy') (Johansson and Kroksmark 2004) can be a productive resource in teacher thinking, action, and professional learning. Our research is based on a view that professional learning in, and through, practice should be expanded from its traditional focus on social and material interactions to also include the consideration of simultaneous interactions within one's mind.

13.4 The Impact of a Short-Term International Experience: The Wider Literature

Research and evaluation studies on international mobility in teacher education programs have been forthcoming since the late 1990s: from teacher tours implemented by Australian higher education institutions program evaluations (Hill et al. 1997) to evaluations conducted on the Australian government's teacher study tours to Asia (Halse 1999). In New Zealand, commenting on Hong Kong students who were completing a short-term international experience in both Australia and New Zealand, Barkhuizen and Feryok (2006) produced findings about teacher gains from the STIE. Olmedo and Harbon (2010), Malewski et al. (2012) and Driscoll et al. (2014) all review a good number of related studies, indicating that investigations are continually being conducted regarding the impact of teachers' international mobility programs.

Specifically, regarding language teacher professional knowledge, research in Hong Kong (Bodycott and Crew 2000, 2001) and in Australia (Harbon 2007; Harbon and Atmazaki 2002) have indicated an important link between pre-service language teachers' developing knowledge-about-language, their cultural 'knowing' (Moran 2001) and their participation in a STIE.

13.5 Planning for Pre-service Teacher Learning About 'Self and Other' Through a China STIE

Knowing our conceptual frame and the research literature about the impact of STIE, we used Greeno and Nokes-Malach's (2014) analytical frame to help us plan our pre-service teachers' learning. Their frame had us consider the activity system involved in international learning, that is learning at a 'higher level' (Greeno and Nokes-Malach 2014). The 'community of practice' idea is embedded in the frame, because people are involved in an intense 'participation'. The frame has us examine 'framing' in itself: as Greeno and Nokes-Malach (2014) say, the 'what is going on here' aspect of a short-term international experience.

We then overlayed three other theoretical notions on the Greeno and Nokes-Malach (2014) ideas, to allow us to plan for pre-service teachers, to examine their

Greeno and Nokes-Malach (2014)			
Analytical frame – a consideration of:	Sandoval et al. (2000)	Moran (2001)	Heron and Reason (1997)
Activity system – we were two or more people working on higher level learning	'Epistemic practices'	'Culture knowing'	'Cooperative inquiry'
<i>Community of</i> <i>practice</i> – the people participating in the activity	Providing epistemic forms for students' expression of their thinking	Teachers guiding learners through the 'culture learning' process within language instruction	The two teacher educators and our pre-service teachers were 'co-researchers in designing, managing and drawing conclusions' as we made sense of China
Framing – examining the 'What's going on here?'	Articulating and evaluating one's knowledge; making sense of patterns of data	Four knowing's: (i) knowing how, (ii) knowing why (iii), knowing about, and (iv) knowing self	Participative knowing about 'what's going on in China' realised through: (i) propositional knowing, (ii) practical knowing, (iii) experiential knowing, and (iv) presentational knowing
Affordances – systems that support interactions and participation	We planned to mediate the development of their 'epistemic practices' through the close academic relationship with the partner university in Beijing who would host our STIE	We planned to mediate the development of their 'culture knowing' through pre-departure workshops, orientation workshops, visits, guest talks, and the setting of a negotiated project	We planned to mediate the development of their 'cooperative inquiry' by offering 'methodologies' for their propositional knowledge development, pairing them for their practical knowledge development, offering a variety of experiences for their encountering of differences in cultural ways of knowing in China, and offering freedom of choice for presenting knowledge

Table 13.1 Analytical frame in order to investigate pre-service teachers' 'participation' in a STIE

Greeno and Nokes-Malach's (2014) 'affordances' allowed us to consider in the frame the kinds of systems that support interaction and participation

personal and professional epistemology (Sandoval et al. 2000), to develop a 'culture knowing' stance (Moran 2001), and to complete the whole project within Heron and Reason's (1997) 'cooperative inquiry' orientation. We planned that the same frame would 'double' as an instrument by which we could later evaluate our program planning. Once the four theories were placed side-by-side (see Table 13.1), we could plan for the more practical realisations of offering a short-term international experience learning program.

13.6 Examining our Choices About Pre-service Teacher Learning During a STIE

This qualitative research project has been designed in two parts. Reported here are the data from the first of two parts of our study: our planning of pre-service teachers' learning opportunities comprising our email discussions and any reflections on the program we wrote online through email. The second part (in progress) involves the pre-service teachers' perceptions of the value of the experience in making sense of their STIE and any elaboration and/or reorganisation (Greeno 1989) of their knowl-edge of language and cultural difference, as a result of taking part in the short-term international experience.

We were two colleagues shaping our pre-service teachers' learning experiences about 'self and other'. This involved an iterative building of the task, refining the learning task over the 6-month pre-departure period. We conceptualise an ecology of 'affordances' (Greeno and Nokes-Malach 2014) for both ourselves and our pre-service teachers and our ways of knowing that we construct intrapersonally and interpersonally through our reasoning processes.

13.7 The Structure and Components of the China STIE

We planned that the STIE would comprise an academic program of learning at our partner university in Beijing and with that university's own partner schools in Beijing and in Hohhot, Inner Mongolia, as well as a cultural program including visits to other local places of interest, such as museums and places of national significance. The AsiaBound funding allowed our pre-service teachers to be accommodated in the equivalent of three star hotels in Beijing and Hohhot. Pairing our group with 'buddies' from our partner university ensured a very local flavour was added to the program, which we do not believe could otherwise have been achieved, even had our group engaged with the local community through homestay, as has been arranged for previously implemented STIE (Harbon 2007).

We planned with our partners in Beijing that the academic program would be reciprocal: that even though the impetus for the learning program came from the Australian pre-service teachers, we knew our Beijing partners would be interested in knowing the Australian context. Thus both groups of pre-service teachers and academic professors prepared information on their respective contexts: the education/schooling contexts of each country and the case for indigenous or minority groups in each country. The 'ground-up' nature of the information exchange, we planned, would be popular and engaging for all participants. At the time we first emailed the pre-service teacher groups advising interested students to apply to participate. We knew we would include a formal learning project as a required 'deliverable output' for their participation, even though none of the ten pre-service teachers were enrolled in credit-bearing units of study for this STIE. The 'givens' in the pre-service teacher learning project were always 'comparison' and 'China/ Australia', but initially there was no further focus.

After successfully securing AsiaBound funds for each pre-service teacher, the two of us met or emailed at least once a fortnight throughout the 6 month predeparture period. We planned that we would keep a record of our thinking through our email exchanges: these would serve as a diary-of-sorts, as each of our emails showed the developmental process of the pre-departure, during program, and onreturn aspects of the China STIE program.

After an analysis of our email exchanges, it became clear that we could classify the data into three categories for the purposes of reducing the data and deducing meaning from it. Those categories are:

- 1. Early: emails sent prior to establishing a focus for the project
- 2. In-country: focused emails, which we wrote in-country
- 3. Upon return: post-program emails, written after the formal conclusion to the program

The emails were easily coded by date into these categories. Sections about the administration and logistics of coordinating the STIE, plus comments we made when addressing the pre-service teachers' many questions, were immediately omitted from our data. The data that remained were our gradually-focusing ideas for the formal learning project, the 'deliverable output'. We undertook a content analysis inasmuch as the themes of the content of our email correspondence were identified as 'early', 'in-country', or 'upon-return'. We also examined the tone of the kinds of comments we made at each stage in order to comment on the 'tone' or 'tenor' of the discourse. Comments reported below are from Lesley (LH) or Kate (KS).

13.8 Teacher Educators Planning for Pre-service Teachers to Make Sense of China

13.8.1 'Early' Planning Ideas for the Learning Projects

In the first month, after selecting the final successful list of participants, our emails reflected our sense of wanting our students to complete 'some kind of reflection task about China' (LH). Lesley's specialisation in working with pre-service language teachers was embedded in an 'intercultural' (LH) orientation to knowing, thus, her comment to Catherine (Kate) about it being 'important for the students to make realisations as much about themselves as about China' (LH).

We had met our academic partners at the university in Beijing only once face-toface. However, over a series of emails we came to understand that they would support us in all our planning for our group's learning. One of our Chinese colleagues was appointed to coordinate the program, and we relaxed further when we knew 'she has studied in Australia before, so she'll know a bit about Australians and Australian students' (LH). This was important to us, as Kate pointed out: 'we will need to have a good seminar room, and hopefully they'll organise buddies for our students, so that we can really get our teeth into things in the short time we'll be there' (KS).

Six months prior, at our first pre-departure meeting with the group, we co-wrote the text for a series of information PPT slides, which advised the group to 'think about [their] presentations at the introductory seminar, to gather resources and to read up on [China]' (KS). At that early stage, we had done nothing more than mention the learning project to them. By the next pre-departure meeting 3 months prior to departure, we had focused our ideas about the formal learning project to 'reflecting on our learning' (LH/KS PPT). Two months prior to departure, our emails showed us describing the learning project to the Dean of the Chinese university faculty as 'joint presentations' (LH), indicating our thinking that the 'buddies' would be instrumental in our pre-service teachers' reflective learning. One month prior to departure, we created a document which would outline to the pre-service teacher group the exact roles that we would fill, including 'Conduct weekly housekeeping and program reflection meetings to enhance participants' in-country experience by discussing opportunities for transfer of in-country study program experience and possible resource development for use back in the Australian classroom' (LH/KS). By the departure date, the formal learning project had begun to take shape, but was not yet in its final form.

The inclement weather for the group flying in to Beijing on the first day, plus delayed flight arrival of eight hours, meant 'plenty of time to be thinking of a focus for the reflective task' (LH).

13.8.2 'In-country' Ideas for the Learning Projects

The shape of the formal learning project was not finalised until the group had been in China for 3 days. In those first 3 days, the two of us continued to refine our ideas, late at night via email to each other's hotel rooms. Lesley's comments to Kate after the group's activities on day two show the beginnings of a further refinement of ideas for the learning project. It was as if we needed to see our pre-service teachers engaging with China before the idea became more concrete. Lesley wrote to Kate:

They were so wide-eyed to see the buildings resources etc at the school. Clearly they have preconceived ideas about China. I guess it's hard not to. Three of the girls DO have Chinese heritage and E has Korean heritage and K is Singaporean. They'll be up for whatever we require them to do, I just don't know how one task can be flexible enough to capture the learning of such a disparate group of students.

Kate had been 'reading about epistemic practices' (KS) for her doctoral research and 'how Sandoval framed these notions by examining goals, practices and design principles' (KS). Kate responded: Your email got me thinking about the task and the relationship between personal and social knowledge. I've been reading an article about situated cognition (Seely Brown, Collins and Duguid 1989) that explores what it means to 'construct knowledge' as a member of a community of practice. They conceptualise knowledge as:

- situated, part of a product of the activity context and culture in which it is developed and used
- constructed construction of new knowledge using the knowledge that one's culture makes available.

These ideas fit with another article I'm reading by Morrison and Collins (1995) which emphasises the numerous ways of constructing knowledge. Often in sociocultural literature, the social aspects of knowledge, but the role individuals play needs to be better understood.

After the third day, a weekend day was planned for sightseeing. Lesley again shared her thinking with Kate:

So big day today ... got to know the students a lot better. The [Great] Wall [at Badaling] was a huge experience, so many stories, they are really a great group but so different and really observant too. Can't believe their amazing talents. So funny at the dress-up photos at Olympic Park. Can't believe they love dress up!!!! So much personal stuff too with each other – like the camera lens was on them. Got me thinking about how different they are. I reckon the only way we can do a reflective task is to individualise it for them. Let's talk to them about doing their tasks with an individual focus. What do you think?

Kate clipped some of her other reading into an email:

I love the idea of individualising the tasks for the students and looking at the relationship between the personal and social context of STIE. Although the students share an interest in language teaching (and dressing up!!), we've got some who are passionate about drama, a couple of mathematicians and there's at least one history buff. After talking to some of the students today, they not only have different ideas about China but they appear to hold and use different ways of knowing as well. It's not the students' content knowledge we want to focus on here but rather the mental frameworks like the stuff I've been reading about in Philip (2011) ... the ideas students hold and use to make sense of China. A mental framework includes the language, the concepts, beliefs and ways of doing things the students use across different con-texts. One reference I've got, by Gottlieb and Wineburg in 2012, argues these beliefs and ideas are attributed to both individual and social contexts.

The Great Wall trip was awesome. We are going to share some amazing experiences like this over the next couple of weeks and I've been reflecting on how we will all make sense of those experiences. For example, some might be realists who perceive the world, or things in themselves through senses. What is seen of felt is how the world is. Some might be storytellers, that is, they know the world as a series of narratives. We might have students whose personal epistemology is through participation or a direct encounter. Others might be known in philosophy as constructivists, that is, they construct a reality based on experiences and interactions with environment.

The task needs to have a space for reflection and conversation (like in the Goodyear and Zenios article from 2010). Our conversations with the students provide the opportunity to ask more questions and bounce ideas around. We could base our framing of their learning experience on social constructivist principles.

Lesley replied by saying:

We should meet each student 1-1 and ask them to think how they will make sense of China and what might be their topic. Like what about W, she is always into food so she could

focus on food for her presentation research. But we've got to get her to think more deeply about 'signs' in food and meanings of types of food and language and food and how food impacts on your physical ability to be ready to learn.

Kate agreed:

We could ask students to focus on a particular topic of interest to them through which they would make sense of China. From our point of view, we can try to make sense of the students making sense! Greeno's theory is pretty useful coz it gives us a way to think about how different students engage in their inquiry to build knowledge within a context. He uses the notion of formal concepts and functional concepts (which are a bit like Vygotsky's notion of scientific concepts). Greeno (2012) describes formal concepts (or the formal use of a concept), as the ideas that exist at a decontextualized level and are situated within coherent knowledge systems (Brown, Collins and Duguid, 1989). So, 'what do the student have in mind when they think of China?' is about the formal concepts (or the functional use of a concept). These are the ideas that have meaning in an activity... like functional concepts are the practical ideas that people have that allow them to engage in an inquiry, organise their understanding and build knowledge. We could focus on how the students use functional concepts in their sense making of China.

We had made our decision. We would meet our pre-service teachers one-to-one, talk to them about their individual expertise and interests, remind them how their 'making sense of China' would probably be a 'decoding' of the cultural (including linguistic) signs (not literally 'signs', but whole environment), and let them plan a formal learning task with as creative an output as they wished.

13.8.3 'Upon Return' Comments on the Learning Projects

On the final day of the program in Beijing, our ten pre-service teachers delivered a variety of presentations and artefacts, to explain the sense they had made of China. It is not the focus of this chapter to deconstruct or report on those formal learning task demonstrations. A separate paper is being prepared to report this aspect of the research. Instead, we remain focused on our input into the pre-service teacher learning. We were both moved by the serious, professional way that our pre-service teachers engaged with the self-negotiated task we set them; Lesley reported back to the Faculty in Sydney stating 'They [presentations] were amazing! Brought us to tears' (LH).

Lesley noted to Kate after she returned home how 'unbelievable' the presentations of their formal learning were: 'These kids weren't even getting assessed for this project! So interesting to see the way they make sense of it all' (LH).

We were so convinced that their personal and professional learning had been so profound that Kate set aside a guest spot in one of her lectures for the returnees to share their learning projects with classmates from other year groups. She wrote, replying to the returnee group's plan for the lecture to another class:

I love the structure that you have suggested below.

I am happy to give you the whole lecture if you would like it!

I've also included Lesley who may have some ideas. Should we add something Lesley? Thank you all so much. I am very excited. The 2nd year students will be so interested.

Lesley commented:

I can't be there, but their presentations will be just as fabulous as the ones we saw in Beijing. Didn't they think deeply about the task we set them? Didn't they run with the challenge? Now it'll be a case of whether they engage your 2nd years and challenge them in the same way!

Our conviction that they could take their 'knowledge-in-pieces' and make sense of China in the ecology we helped create confirmed we had set up the context to ensure they could make sense of China in a very meaningful manner.

13.9 The Ecology as Viewed Through the Greeno and Malach (2014) Frame

Greeno and Malach's (2014) activity system refers to the higher learning system in a group. We were an Australian group, comprising two teacher educators and ten pre-service teachers, and we had 'decentred' to work for a period of time with our China partners in Beijing and Inner Mongolia. We visited schools and our pre-service teachers worked with teachers and students in those schools. Viewed as a higher learning system (Greeno and Nokes-Malach 2014), we consider that the system itself allowed all participants to engage in epistemic practices (Sandoval et al. 2000), allowed 'cultural knowing' (Moran 2001), and allowed 'cooperative inquiry' (Heron and Reason 1997).

The whole project became a community of practice (Greeno and Nokes-Malach 2014; Lave and Wenger 1991), where we were able to bring together 'people who know how to participate' in this higher learning: in our case, a 'sense-making' of China. Teacher educators from Beijing and Sydney (i) provided the Australian preservice teachers with the epistemic forms for expressing their thinking, (ii) guided the Australian pre-service teachers through the 'culture learning' (Moran 2001) process, and (iii) joined them as 'co-researchers'.

Our assumption here is that knowledge is not purely about acquiring new ideas, but rather involves the reorganisation and elaboration (Greeno 1989) of what individuals already know. Our 'early' email exchanges are characterised by our statements about what 'hopefully' and 'could' and 'should' assist their sense-making in China. These comments appear tentative and tenuous, and yet we believe they reflect what the role of the accompanying lecturers should be: that is, assisting participants in hypothesising and posing questions through enquiry, rather than setting definitive boundaries for their learning. Our progressive email exchange, through 'in-country' to 'upon-return', displays more of our conviction (phrases such as 'let's talk to them' and 'I reckon') and conveys what we believe is an openness to all possibilities of us guiding the pre-service teachers' learning. Our 'upon-return' comments were even more conclusive, but perhaps also predictive. On the one hand, that is natural, our program had finished, and we made conclusions. However, there is a clear note of prediction that setting this kind of task will lead to more such tasks.

Our belief in looking back through our email exchanges is that the international experience has brought pre-service teachers' 'fragmented' knowledge – their 'knowledge-in-pieces' – to the fore, and subsequently those pre-service teachers may now have a new elaborated and reorganised (Greeno 1989) sense of what China is and may even, we believe, be transferred in other learning situations to other students. We intended that the short-term international experience would allow a framing of the pre-service teachers' learning. Bringing all elements together, we hoped to frame the learning project so that the Australian pre-service teachers were able to articulate and evaluate the ways they got to know China, through participation in their propositional knowing, practical knowing, experiential knowing, and presentational knowing (Heron and Reason 1997).

We planned that affordances would include the support of their interactions to allow participation. The self-negotiated learning task, we planned, would provide them the opportunity to engage in face-to-face conversations with a range of players in a range of contexts. (In 1995, Morrison and Collins asked the question: What does it mean to construct knowledge in the midst of conversations?) The task created a context for self and context (Seely Brown et al. 1989). The ecology created through the STIE, we concluded, provides sufficient 'affordances' (Greeno and Nokes-Malach 2014) that play a 'stabilising role' for the intended sense-making and a supporting role for the 'elaborating and reorganising' (Greeno 1989) of their cultural 'knowing' (Moran 2001).

13.10 Next Steps

We are convinced that our tracking of our processes in setting a reflective learning task for our pre-service teachers has been a beneficial one and are now preparing to analyse the pre-service teachers' own perceptions regarding their sense-making. We believe these initial ideas will frame our future work in ensuring that valuable learning takes place as a result of pre-service teachers' participation in short-term international experiences. Framing the learning around these in-country experiences in this way will be realised through more of our professional discussions, because the focus discussion has a central place in knowledge building in general.

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Chapter 14 Post-carbon Futures for Geography Education?

John Morgan

Abstract The era of 'Carboniferous capitalism' is coming to an end. The future will be a 'post-carbon' one. This will require the development of ways of thinking and acting that recognise environmental limits. These ideas are barely acknowledged in current forms of education, where the formal curriculum developed from and remains based on the assumption of continued economic growth and expansion. This chapter outlines the features of post-carbon social theory before focusing on one subject – geography – to explore how far the recent statement in the *Australian Curriculum* acknowledges and recognises these issues.

Keywords Post-carbon social theory • Geography • Australian Curriculum • Society nature

14.1 Introduction

The era of 'Carboniferous capitalism', in which economic growth was dependent on the discovery, extraction and consumption of fossil fuels, is coming to an end. The future will still be capitalist, but 'climate capitalism' will require forms of economic growth that are 'decoupled' from carbon-based energy sources. This is a great transformation, one that will not be easily realised. Much of the culture of Carboniferous capitalism represents and promotes ways of thinking and acting that encourage individuals to consume the planet to excess. New intellectual resources will be required to describe and explain the changes required, and social theory – which based its assumptions on continued carbon-based forms of development – will need to shift to post-carbon modes. The first half of this chapter explores these themes, before moving on to examine how one subject –geography – whose content is explicitly concerned with the relationship between society and nature – handles these issues.

J. Morgan (🖂)

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Faculty of Education, University of Auckland, Auckland, New Zealand e-mail: john.morgan@auckland.ac.nz

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The chapter concludes with an analysis of the new 'Australian Curriculum for Geography', which, despite representing a bold attempt to realign teaching and learning to consider ideas about environmental change, human activity and sustainability, falls short of presenting students with a realistic understanding of the forces that shape the contemporary world.

A word on how this chapter relates to the title of this book, *Everyday Life*, *Education, and Sustainable Futures*: in this chapter I argue that 'everyday life' in advanced Western economies has been based on the assumption of high levels of consumption and personal mobility facilitated by a reliance on the availability of energy derived from fossil fuels. A moment's reflection will confirm this. Schooling is a preparation for life in 'carbon capitalism', and the subjects of the curriculum are based on ideas and concepts that accept (or at least ignore) this fact.

The focus on 'everyday life' is part of a broader interest in the 'ordinary' within social and cultural theory, of which 'education' is a part. There is little space to examine the emergence of the turn to 'everyday life', though Bennett and Watson (2005) suggest it relates to three developments: changing meanings of the 'public' which mean that what is counted as worthy of interest or study has changed over time; the growth of a 'disciplinary' society that takes more interest in individuals' attitudes and behaviours; and the growth of new social movements (e.g. feminism or postcolonialism) that has shifted focus onto how life is experienced by particular groups.

In terms of education, this heightened focus on everyday life is increasingly linked to the argument that formal schooling and the knowledge transmitted through the curriculum are abstracted and removed from the lived realities and concerns of many students and citizens and that there is a need to realign educational practices so that they engage with people's identities and subjectivities. This argument is increasingly made in relation to sustainability, where a distinction is drawn between 'top-down' and 'bottom-up' sustainability (Caradonna 2014). All this is underpinned by ideas about the social construction of reality with its associated metaphors of performing and 'making'. Whilst I am attracted to these ideas, in this chapter I take a different tack, one that makes a nod to recent work in the sociology of education and curriculum studies based on ideas about social realism (e.g. Young 2008). This chapter argues that any sustainable future will be a 'post-carbon' future, and this will have significant implications for everyday life. The formal curriculum - because it is written by adults for young people - represents a message to and about the future. It reflects themes and concerns that are considered worthy of transmission to the next generation. Of course there is no guarantee that the messages of the curriculum will be 'received' or 'accepted', but an examination of the formal written curriculum is the starting point for serious conversation with young people in schools about the future.

14.2 From Carboniferous Capitalism to Climate Capitalism

The dominant force that shapes the contemporary world is capitalism (Harvey 2014). What this means is that it is the relationship between capital and labour that creates economic value. This is achieved through the transformation of nature into products or commodities that are then sold on the market. The difference between the labour time required to produce commodities and their value on the market is the profit or surplus value. In capitalist societies, the issue of how to distribute the surplus reflects the separation between the owners of the means of production and the workers who labour to produce goods and services. This is the split between owners and non-owners and means that profits or surplus value is owned by the capitalists. Capitalists cannot afford to sit still or rest on their laurels. They must re-invest some of the surplus into production or they will lose out to competitors. Capitalist societies are driven by the incessant need to realise profits from capital invested (Kovel 2007; Magdoff and Bellamy Foster 2012). This means that capitalism is a dynamic system. It transforms landscapes and places and people. There is a historical geography to it all. However, capitalism is also prone to crisis. Over the long term, there is a tendency for the average rate of profits to fall. This means that there is less incentive to invest and overall output declines. At this point, there is a need to overcome the crisis of accumulation through various means, including the use of new technologies.

It is capitalism's power to utilise resources to increase production to new levels that has led it to become the dominant economic form. The nature of these resources invariably shapes the nature of economic development, and the capitalist society in which we now live was shaped first by the discovery of reserves of coal that could be used to drive machinery that led to the development of heating and then oil and natural gas which allowed for technological developments in transportation which in turned allowed for more rapid turnover time of production and consumption. Though modern capitalism had its roots in particular places – the coalfields and industrial towns of northern Britain, the motor vehicle centres of Detroit and the meat-packing factories of Chicago – it has spread out to embrace and incorporate much of the globe. The expansion of capitalism since the industrial revolution has been based on fossil fuels, derived from organic deposits laid down during the Carboniferous geological period. This has led to the period of capitalist development since 1750 to the present being termed that of 'Carboniferous capitalism'.

There is a complex geography to these developments. As a child, learning geography at school in the 1970s and early 1980s, I learned to recognise the map of coal reserves in Britain which had given rise to a distinctive culture of male-dominated labour. It was a map dominated by King Coal and formed the basis of industrial development. It was therefore significant when King Coal was threatened. The argument was that Britain had been reliant on North Sea Oil, which brought an economic boom to the northeast of Scotland. Looking back to the 1970s, there were worries about dependency on fossil fuels, and the arguments were made for diversification, controversially around nuclear energy and the role of renewable energy. Of course, the pollution associated with coal-based industrialisation was an issue. But fossil fuels had become the basis for a whole way of life, particularly in the developed (some would say 'overdeveloped') world. Cars – based on a petroleumsteel complex – allowed for mobility and travel and the jet age developed in the post-war period; electricity generation brought heating and lighting to homes.

During the era of Carboniferous capitalism, economic development was closely related to energy use, with more and more countries seeking to adopt Western-style economies and lifestyles. However, there are signs that the age of Carboniferous capitalism is coming to an end. There are two elements to this claim. One is the realisation that the age of 'easy oil' has passed. What is meant by this is that, although there are plenty of recoverable reserves and with advances in technology it will be technically feasible to extract oil, these reserves are getting harder and more expensive to obtain. Many experts suggest that we have reached the point of 'peak oil', and this means that societies are on a slow but inexorable shift to 'low-carbon' futures. This, of course, is hotly debated and contested, but there are serious arguments about the 'end of growth' (e.g. Heinberg 2011). The 1973–1974 energy crisis threatened the smooth continuation of this narrative of economic progress, and struggles over the control of oil resources continue to this day.

The second, and related, element to the claim that Carboniferous capitalism is coming to an end is linked to a growing understanding of the changes to the Earth's atmosphere as a result of the consumption of fossil fuels. What has become increasingly apparent is that the use of this fossilised sunlight has altered the chemical composition of the atmosphere. As early as 1827, it was ascertained that atmospheric carbon dioxide was a determinant of climate, and in 1896 Swedish scientists argued that burning coal and oil would increase the atmospheric concentration of carbon dioxide. By 1963 evidences from test sites in Hawaii in the Pacific started in 1958 were revealing a year-by-year increase in atmospheric emissions.

So it is possible to see 1963, the date when Charles Keeling established that human-induced global warming was taking place, as the starting point of a new era of post-carbon capitalism or 'climate capitalism'. For Newell and Paterson (2010), climate capitalism is characterised by a recognition of the need to 'de-carbonise the economy' or the 'process of taking the carbon out of the energy we use to run the economy'. They are in little doubt as to the scale of the challenge:

Never before has humanity as whole embarked on a project to radically transform the way its societies work. (p. 1)

There have certainly been grand projects and even revolutions but, according to Newell and Paterson, what is required to shift to climate capitalism is 'a model which squares capitalism's need for continual economic growth with substantial shifts away from carbon-based industrial development' (p. 1).

Given the scale of the transformation required, then it is easy to understand 'why we disagree about climate change' (Hulme 2009). The United Nations' IPPC was established in 1988, and its first report was published in 1990. That report did not see scientific consensus. Some glaciers were not melting, and glacier research became a political issue. By the mid-1990s, opinions were still divided over the fact

or the causes of global warming. However, there is a growing consensus about the presence of human-induced (anthropogenic) climate change. Whilst the IPPC report of 2001 was ambiguous, by 2007 it argued beyond reasonable scientific doubt that human activity was leading to global warming, and in 2013 Australia's Climate Commission noted that extreme weather events were increasing in frequency and intensity as the result of human-induced climate change. These events and developments have come to be part of the lived cultures of everyday life with Al Gore's film *An Inconvenient Truth*, blockbuster Hollywood movies such as *The Day After Tomorrow*, self-help books with titles such as *Crap at the Environment* and the incorporation of climate talk into everyday conversations.

Bridge and Le Billon (2013) provide an in-depth and provocative account of the changing geo-economics and geopolitics of oil. They describe oil's new reality as 'the problem of how societies that have developed around and through fossil fuels must now find ways to ensure affordable and reliable sources of energy whilst also reducing the emission of carbon dioxide and improving the developmental impact of oil for producing countries' (p. 180). There is a need for better oil – in the sense that the process of extraction and use should be improved but also, in the long run, a need to look to develop beyond oil.

14.3 Post-carbon Social Theory and Education

The previous section highlights that there is a whole series of arguments and debates about the shift to climate capitalism in which economic growth (which, remember, is central to capitalism as a system) is decoupled from carbon-based development. Those of us who have grown up and live in Carboniferous capitalism have become used to the comforts that it brings, to the extent that we tend to forget the conditions in which the majority of human history has been lived (this point is developed in Jared Diamond's (2012) The World Until Yesterday). We are not inclined to think that all this may be temporary. We have got used to assuming that we should measure the health of our economic systems in terms of growth; that at the flick of a switch we can access to heat, power and information; that we live in settlements that allow the separation of home from work and the spread of suburbs enabled by carbased transportation; and that holidays and travel (mass tourism) are reliant on huge resources of fuel. In other words, we have become accustomed to consuming the planet to excess (Urry 2010a). It has been, until recently, part of the 'mindset' that we are encouraged to develop by advertisers, the mass media and the culture industries. Even our education systems are predicated on the assumption that educational success allows individuals to obtain access to the 'good life', and, over the past three decades, the idea that education is something we consume in order to maximise our earning power - to become human capitalists - has driven educational expansion (see Trainer 2012).

The very subjects that we study in schools and universities, by dint of their genesis within the 'shock of modernity' as societies underwent the shift from 'traditional' (agrarian) to 'modern' (industrial), tend to reflect the assumptions of Carboniferous capitalism. Thus, attempts to think about the operations and parameters of a 'low-carbon' or 'post-carbon' society represent an intellectual challenge – what John Urry describes as post-carbon social theory. Elliott and Urry (2010) argue that social theory is a product of the rise of Carboniferous capitalism. Political economy, for example, in the writings of its founders Adam Smith, David Ricardo and Karl Marx, was concerned with questions of production, whilst sociologists such as Emile Durkheim and Max Weber were involved in describing and explaining the responses to societies as they shifted from agrarian to industrial, from traditional to modern.

Urry (2010b) describes how the 'social sciences mostly operate on the clear separation between nature and society, between what is natural and what is social and hence studied by the social sciences' (p. 16). Although sociology was a product of the drive to a carbon-based industrial society, 'it took for granted the success of modern societies in their overcoming of nature' (p. 16). It described and explained the institutions of those societies based upon industries that relied upon the release of energy. This is reflected in the classic themes of sociology curricula – the family, organisations, deviance and education. It was not until the 1980s that a 'New Ecological Paradigm' for the subject was proposed, leading to the field of environmental sociology, which in turn was accompanied by a growing understanding of the nature of 'modernity'.

Economics is even less inclined to engage with questions about the natural resources and systems upon which the capitalism it seeks to describe and explain relies. Economics is dominated by one school - that of neoclassical marginal economics. In From Political Economy to Economics, Milonakis and Fine (2009) relay the story of a political economy approach that sought to see economies as linked to resources was replaced by one that focused on the rational economics of price and value and relegated any social or environmental costs to the status of 'externalities'. Neill (2000) states that between 1935 and 1960 economic theory 'crystallized as a bloodless abstraction in which nature figured, if at all, as a storehouse of resources waiting to be used' (p. 335). In 1974 the Nobel Prize winning economist Robert Solow stated that, 'the world can, in effect, get along without natural resources'. Economists who challenged the fundamental goal of growth were seen as heretics and remained outside the mainstream of the profession. There is a growing literature in the field of 'ecological economics' or 'green economics', much of which can help to resituate economic theory. It might be thought that growing awareness of human-induced climate change, coupled with the financial crash of 2007-2008, which exposed the limits of the dominant economic models, may have led to a reevaluation of economic theory. However, all the signs are that 'Zombie Economic Theories' continue to stalk the intellectual landscape (Quiggin 2010).

Historians, too, have largely ignored questions of the environment. The teleological view of progress associated with humanity's ability to colonise and utilise nature tended to focus on achievements such as increasing agricultural production, draining wetlands, building cities and harnessing the power of water. These Promethean tasks pointed to the power of humans to control and dominate the natural world. It is only recently that there has been a focus on what some call 'big history' or environmental history which threaten to 'disturb the 200-year dominance of national narratives' and involve integrating factors such as population movements, economic fluctuations, climatic changes and the transfers of technology. Neill's (2000) *Something New Under the Sun* takes its title from a verse in Ecclesiastes and sets out to show that, with the development of human economic growth over the past 500 years, there is indeed something new under the sun. Starting with Charles Dickens' depiction of Coke Town in *Hard Times* and the development of Motown in Detroit, a petroleum-driven urbanisation has spread out to the rest of the planet. Dams, oil fields, CFCs, the green revolution, deforestation, urbanisation and other environmental changes are woven into the narrative. These all add up to massive transformation. Neill (2000) argues that human activity is changing the biosphere as a result of its economic activity. Global environment histories are beginning to appear, such as Penna's *The Human Footprint* (2010), which concludes with the observation that:

The affluence attributed to affordable consumer goods, low food prices, and plentiful oil may be coming to an end as the world's demand exceeds its current supply... Until recently, humans have viewed the atmosphere as a 'commons' to which everyone has access but no one is responsible for its health and safety...our hard-path dependency on fossil fuels may be coming to an end. (p. 305)

Mention of Charles Dickens serves to remind us that much of the literary and artistic culture that thrived in the past 150 years has rested on carbon-based economic growth. The classic English novels of the Victorian period described the complex shifts in social relations as society underwent the great shift to industrial organisation. The liberal humanist criticism of texts that tended to dominate the fields of criticism was challenged in the 1970s and 1980s by what became known as 'literary theory'. According to these arguments, texts should be read in terms of what they said or didn't say about society. Thus readings were made of classic text that situated them in relation to questions of gender, ethnicity or postcolonialism. This was seen as an advance. However, in the 1990s literary scholars began to explore how criticism had tended to be human centred and downplayed the ways in which literary texts drew upon or reflected and represented aspects of the natural world. There is a striking discussion in Jonathan Bate's (2000) Song of the Earth of Lord Byron's poem Darkness. Bate argues that the darkness described in the poem may be read as a response to an actual geophysical event - the eruption of the Tambora volcano in 1816 whose dust led to reduced sunlight and poor harvests. The field of 'ecocriticism explores the relationship between literature and other forms of culture and the natural world, often combining this with a commitment to raising awareness about environmental issues' (Moran 2003, p. 171).

Education has been relatively unconcerned with questions of the environment. It is a practical activity geared towards the administration of populations. It has been an arm of social policy and clearly linked to the idea of modernity as a means of individual and societal enhancement. For much of the time it has been geared towards expansion and the growth of human capital and in the past 30 years has been linked to improving the quality of output (teaching and learning) or studying the unequal outcomes of processes of educational transmission. Underpinning educational studies is the assumption that society is based on progress and mobility. There are signs that this is beginning to change. As early as the 1960s, radical educators such as Ivan Illich were discussing the way in which schooling was a preparation for life in a consumer society, and those involved in Futures Education drew upon a variety of alternative philosophies to challenge the materialistic growth 'mindset' associated with Western schooling. Though still relatively marginal to dominant forms of schooling, there are signs that schools could become sites where other ways of thinking about and living in society are developed.

In all of the areas of 'social theory' discussed here, there has been a tendency to bracket the natural world as something beyond society. The focus is on describing and explaining aspects of human society as distinct, and separate, from nature. As Neill (2000) states, 'from about 1880 to 1970 the intellectual world was aligned to deny the massive environmental changes afoot' (p. 181). In the light of these discussions, it is likely that the coming decades will see attempts to realign social theory so as to address questions associated with climate change and the shift to low-carbon or post-carbon societies.

14.4 Geography, Society and Nature

To recap the argument so far, I have suggested that the world economy is in the process of a significant shift from carbon-based capitalism to climate capitalism. Under Carboniferous capitalism, economic growth was linked to carbon use; under climate capitalism, economic activity will be 'decoupled' from carbon use. This is a profound transformation, one that will require very different 'mental structure' to support it. The social theories that will help us to make sense of these changes will be different from those that developed in the era of carbon-based capitalism. Disciplines such as education, sociology, economics, history and literature which tended to assume that nature was a separate sphere will increasingly need to take account of the natural world or, more precisely, will see society and nature as inextricably connected.

The remainder of this chapter explores how these arguments relate to the school curriculum through a discussion of school geography. In this section, I present some general ideas about the development of geography in its academic and school versions, showing how the subject has dealt with the relation between people and environment or society and nature. My argument is that school geography has tended to operate with an a-political and a-historical view of the relationship between society and nature. In doing so it has tended to promote ideological views of society-nature relations. This requires an analysis of the types of knowledge that are offered by the discipline.

We are used to the idea that knowledge of the physical and social worlds are shaped by the dominant perspectives on society and that, over time, disciplinary perspectives and approaches change. Geography as a subject emerged in the context of imperial and colonial projects. Its early debates were framed by arguments about the role of the environment in shaping human societies, and the methods were largely descriptive and ideographic. However, the advent of a 'modern' geography came after the Second World War when geography underwent a shift towards being a quantitative and spatial science. This meant the subject could play its part as an applied science and provided geographers with increased status. The adaptation of the so-called new geography to schools had important implications for schools where educational expansion and the place of human capital meant that school curricula were being realigned to meet science and technological goals. This was the main period of innovation in the theory and practice of geography education, and the subject was imbued with rational curriculum theory and pedagogic methods. This 'geography for the space age' was strongly linked to positivism and the management of the natural and social worlds. The idea was the geography could be an applied science or 'problem-solving' subject, and this was closely linked to the idea that geography was a good basis for particular careers. At the same time, these new developments were contested as many geographers rejected the ideas and methods of the new geography, drawing upon humanistic approaches which paid attention to the meanings and interpretations held of the environment by individuals and groups and structuralist approaches which sought to understand the 'real' forces that shaped the physical and human worlds.

In the 1970s and 1980s, as many of the long-standing assumptions about postwar geographical landscapes unravelled, 'radical geographers' began to undertake a series of 'ideology critiques' of the knowledge found in school geography curricula and textbooks. For instance, in the light of growing awareness of environmental issues, David Pepper (1986) posed the question 'why teach physical geography?' This of course was an ironic question, because it is clear that we need an understanding of the physical processes that shape the world. However, Pepper was making a point about the way that dominant approaches to teaching about physical geography tended to offer a fragmented view of the natural world and excluded a consideration of the human uses of the natural environment.

Similar criticisms were made of how ideas about the social use of nature were taught in school geography. Although human geography was strongly influenced by currents of wider social theory in the 1980s, developments in school geography did not reflect this so that, as Huckle (1988) argued:

The ideas taught in schools are generally based on an unquestioning view of social change and economic forces. Lessons on environmental problems tend to blame purely natural causes, or regard them as global or universal problems attributable to such causes as overpopulation, resource scarcity, in appropriate technology, overconsumption or overproduction. (p. 64)

The separation or fragmentation of the subject continues, but there is also a growing area of what has been termed environmental geography which seeks to operate on the boundaries and integrate ideas about society and nature (Castree 2005, 2013). It is in this nexus of environmental geography that we can locate the new 'Australian Curriculum: Geography'.

14.5 The Australian Curriculum: Towards a Post-carbon School Geography?

The production of a new curriculum is a significant event. This is because it represents a statement about what society thinks it is important for younger generations to formally learn at schools (Yates and Grumet 2011). It is therefore important to analyse and evaluate the representations of the world that are offered to students through the school curriculum.

In this section I want to focus on the geographical perspective which underpins the recently published 'Australian Curriculum for Geography' (all references are based on www.acara.edu.au). I will focus on the senior subject, as this represents the most developed version of the school subject. Whilst I recognise that the curriculum is a text that is capable of being interpreted and read in various ways, in practice there are limits in how they are read. Curriculum statements have to be written in ways that satisfy a variety of audiences and in particular be both visionary – in the sense that they set out a new direction for the subject – and ensure enough continuity for teachers to recognise within the text their own existing practices.

First are a few general observations: in line with international developments within the subject, there is a move away from the long list of concepts and content that was associated with the systematic geography that emerged in the 1970s and 1980s. One of the criticisms of that approach was that it tended to leave students with a fragmented understanding of geographical content, and there was little attempt to provide an integrated approach. The trend is also towards avoiding the demand for studying specific examples or case studies. Instead, teachers are encouraged to provide their own interpretations. In this case, the curriculum is to comprise of two units for study in each of the 2 years. The units in the second year are supposed to require greater conceptual understanding. In what follows I argue that is hard to see how students can develop a coherent understanding of the forces shaping the world from this curriculum.

The curriculum units offer a strong focus on people and the environment. As suggested in the previous section, the question of how these two spheres – society and nature – are related is a central 'problematic' of the discipline. In the Australian curriculum, people and environment are often seen as separate realms, with one having the potential to impact on the other. However, a difficulty arises because whereas 'nature' or 'the environment' is portrayed as varied and complex, 'society' as a term is treated as monolithic and thus unexamined. For example, whilst unit one on hazards and risks disaggregates the physical environment into atmospheric, hydrological and geomorphic hazards and further lists examples such as storms,

cyclones, tornadoes, frosts, droughts, bushfires, flooding, earthquakes, volcanoes and landslides, there is no similar attempt to demarcate the diversity of human society. This issue recurs throughout the curriculum and acts as a barrier to students' understanding of the relationships between nature and society.

At those points in the unit on hazards and risks where there is a focus on human action, it is framed within a problem-solving or management perspective, with a focus on risk management, prevention, mitigation and preparedness. Society is something to be modelled and described (thus, 'students will learn about the distribution, location and potential effects of hazards and about using and applying geographical inquiry, tools such as spatial technologies and skills, to model, assess and forecast risk'), but there is little in the description of this unit which suggests that students will be in a position to answer significant questions about the nature of risk. This is because of the separation of the natural from the social. There is also no sense of a temporal dimension, which might allow students to explore the idea that certain types of society are becoming increasingly prone to risks associated with natural and ecological hazards and how this might be explained.

An understanding of the social basis for risk is important because it allows geographers to examine which people – a vague and unhelpful term – are most likely to be affected by these 'events'. The aftermath of New Orlean's Hurricane Katrina demonstrate that there is 'no such thing as a natural disaster', and indeed, as the masterful HBO TV series *Treme* demonstrated, there are complex economic, political, social and psychological processes involved in responding to natural hazards. Since O'Keefe et al.'s (1976) seminal paper on 'taking the natural out of natural disasters', it has become impossible to think about hazards without some understanding of how the social is constructed.

In the second year of their study, students do get the opportunity to examine the idea that human activity may itself be exacerbating and shaping some of the hazards and risks that they studied in unit 1. The statement is very clear:

This unit focuses on the changing biophysical cover of the earth's surface, its impact on global climate and biodiversity, and the creation of anthropogenic biomes. In doing so, it examines the processes causing change in the earth's land cover. These processes may include: deforestation, the expansion and intensification of agriculture, rangeland modification, land and soil degradation, irrigation, land drainage, land reclamation, urban expansion and mining...The scale at which these processes now occur is so extensive that there no longer exist any truly 'natural' environments. All environments are, to a greater or lesser extent, modified by human activity.

Here we have the subject as closely concerned with the central insight of political ecology – which is that in order to understand the processes involved in any of these changes, we need to have perspectives about the relationship between society and nature. The unit comes close to the definition of geography proffered by Peet (1998) that geography:

looks at how society shapes, alters and increasingly transforms the natural environment, creating humanized forms from stretches of pristine nature, and then sedimenting layers of socialization one within the other, one on top of the other, until a complex natural-social landscape results. (p. 1)

Having stated that nature is a social construction, then it surely requires the curriculum – if it is concerned with explanation rather than description – to focus on these processes. There are a wide variety of approaches used by geographers (Robbins et al. (2010) discuss seven distinctive frameworks relating to the link between society and nature), though the dominant ones that have been found in school geography until now have been apolitical ecologies, and there is little in the unit that suggests which frameworks might be used.

It might be thought that an analytical understanding of 'society and space' would be found in the 'human geography' units of the curriculum. However, unit 2 on sustainable places seems to suggest the role of the geographer as a problem solver – helping to find solutions to problems that have already occurred - a series of urban problems. There is little sense that these issues may result from processes (economic, political and social) that are generated elsewhere. Places are seen as discrete, whereas geographers have pointed out that places are linked to global flows and stretched out social relations. The one place where this idea might be considered is in unit 4 which focuses on the idea of global transformation. Globalisation is perhaps the one example of a 'key concept' found in the curriculum statement and has the potential to become the central and defining part of any contemporary geographical education. It represents a significant shift in the scale of geographical study, from the national scale to the global scale. This 'scalar shift' was itself linked to the growing awareness of the responses of capital to the crisis of the 1970s, when the search for a new mode of capital accumulation led to the intensification of trade and activity. Thus in many ways the definition of economic geography offered in the curriculum is a limited one and it is more realistic to state that:

we can say that the task of modern economic geography is to provide a reasoned description of the spatial organization of the economy and, in particular, to elucidate the ways in which geography influences the economic performance of capitalism. (Benko and Scott 2004, p. 47)

This is in line with Castree et al.'s (2003) argument that the term global capitalism is a better one than globalisation, since it highlights the processes (capitalist accumulation) that drive the process of globalisation. Without naming these economic processes, geography lessons risk offering a teleological view of human development, and indeed this is the case when it is asserted that globalisation is driven by transportation and technology.

So how do we begin to evaluate the 'geographical imagination' that is provided by the 'Australian Curriculum for Geography'? I have suggested that there are two key elements in the approach taken. The first is the adoption of a broad peopleenvironment and/or 'society-nature' perspective. There is also an important acknowledgement that the geography we study is that of how human activity, in the past and present, has constructed places, landscapes and environments. The implication of this is that we cannot view society and nature as conceptually distinct. In addition, the final two units draw attention to an important 'scalar shift' towards the global. It is recognised that the society-nature processes shaping geographical space act at a global scale. However, the curriculum is not able to develop its arguments in this area because it does not have a series of concepts and perspectives to describe and explain the workings of society. It is not all 'people' who interact with nature, and 'social groups' seems a vague term to describe collective activity. We might stretch the term society to include powerful corporations, regional blocs, nation states, state apparatus, social classes, ethnic groups, gender as well as individuals. In this way we would see society as characterised by a variety of interests and actors, and we might get to the idea power matters in the shaping of geography.

There is a strong focus on how the problems created by humanity are now acting back on humans. The curriculum suggests that there is a diversity of responses, so that the world is a mosaic of places. The geographer is one who manages the environment. There is a 'common sense' treatment of concepts which do not need too much interrogation – instead the focus is on exemplification. The emphasis is on observing, measuring and describing. This 'scientific' view means that although there may be a focus on what people think, understanding the values that individuals hold as socially produced ideologies is not considered.

The 'Australian Curriculum for Geography' is influenced by significant shifts in geographical and educational thought. As a statement of what society thinks it is important for young people to learn, the curriculum is informed by a growing concern about the direction of economic progress and modern societies. It focuses on the relationship between society and nature and points to the signs that nature is increasingly 'acting back' on human activities. It makes clear statement about the global scale and historical significance of these changes – associated with the idea of the Anthropocene – and correctly identifies important shifts such as the growing urbanisation of the planet and the dominance of a global economy. However, the curriculum remains wedded to an empiricist/positivist view of geographical knowledge, fails to place the subject in relation to related social sciences and remains in thrall to methods of geographical enquiry that prevent the development of a conceptual understanding of the forces that shape society.

14.6 Conclusion

There is clearly a need to avoid 'catastrophism' – the sense that the world is about to end – in discussions of the shift to 'climate capitalism'. However, there is an urgent need for educators to find ways to offer students a robust and realistic understanding of the forces and processes that shape our world. The curriculum is central to this – we might say that 'Blessed are the curriculum writers, for they shall interpret the Earth'. This chapter has provided a discussion of the current 'limits to school geography' in providing students with a structured representation of reality in the hope that the debate about the school curriculum will be sustained.

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Chapter 15 The Stuff That Matters to Me: An Exploration of Melbourne's Peri-urban Fringe from the Perspectives of Young People

Mary A. Burston

Abstract In an era of change and redevelopment of urban and rural spaces, notions of belonging, community and attachment are submitted to continual redefinitions and alignments between human actors and their geographies. An analysis of the spaces and places that matter to young people located in a peri-urban residential growth corridor to the north of the Australian city of Melbourne reveals how young people interpret their needs and expectations about places and spaces in which they live and socialise. This chapter contributes to emerging knowledge about Melbourne's northern peri-urban region in giving situated voice to those who are rarely heard in the process.

Keywords Peri-urban Whittlesea • Places • Spaces • Young people • Situated identity

15.1 Introduction

The increasing expansion of the Melbourne metropolis into greenfield semi agricultural land on the outer fringes of the city contextualises the case study presented in this chapter. Globally, peri-urban interfaces are being transformed with significant effects on amenity, natural ecologies, quality of life and the environment (Burton et al. 2013; Huang et al. 2009; Simon 2008). Conceptually, the peri-urban interface represents a fluid space, neither rural, nor urban nor city, but an aggregation of economic, social and population needs (McGregor et al. 2006; Ravetz 2000, 2013; Ravetz et al. 2011). In lifestyle terms, the peri-urban interface affords semirural or more 'open' country-like lifestyles within reach of the city (Buxton et al. 2006; Buxton and Scheurer 2007; Moss 2006). The peri-urban interface presents an opportunity to afford the dream of home ownership, a pillar of Australian lifestyle

M.A. Burston (🖂)

School of Education, College of Arts, Social Sciences and Commerce, La Trobe University, Bundoora, Australia

e-mail: m.burston@latrobe.edu.au

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ideology. Home affordability in inner-city Melbourne has become less achievable, thereby compelling people to move to outer urban perimeters although compromised by distance and lack of amenities (Allen 2003; Australian Productivity Commission 2004; Banks 2006; Ronald 2008; Thorns 2012).

The question asked in this chapter is: What it is like to be a young person living and being in this peri-urban interface? There is consensus in research literature that geographic location can affect life outcomes and health, social, economic and community well-being (Abbott-Chapman 2011; Kilpatrick and Abbott-Chapman 2007).

The case study location in Whittlesea rates at the lower scales of socio-economic disadvantage in statewide comparisons (Kellock 2012; Molaeb 2010). There is, however, a research gap about the lives, opinions and experiences of young people living in this constantly changing social and urban environment. In following Edwards and Usher's views (2008), the 'stuff' that matters to young people is critical for understanding *their* sense of connection, needs and expectations about spaces and places in which they live and socialise.

Not only is the epistemological silence of young people's voices and contributions to urban and environmental designs problematic, there needs to be convergence between the appropriate research methodology and philosophical perspective. Hegel's sociological understanding of life, existence, subjectivity and identity may seem far removed from contemporary issues. Two key ideas resonate as having relevance in the context of the peri-urban case study and the core purpose of understanding how everyday knowledge constitutes young people's perceptions and relations with the places they live in. First is the idea that 'being', 'living' and 'becoming' are fluid, flexible and transitory states that are 'constituted reflexively and... dependent on the actions of others' (Douzinis 2002, p. 383). The second is that resolving 'being' at one with oneself and 'living' is a balancing act in order to feel at home in the social world (Hardimon 1994, p. 116). This process is characteristically 'muddy' in terms of frictions, tensions and contradictions but is also paradoxically productive in developing a sense of individual uniqueness and capacity to differentiate one's self from others (Bamford et al. 2014; Inwood 2013; Trudeau 2006). Extreme disconnection can compromise this process where individuals can feel subjectively and objectively alienated when 'the social world is a home but not a home' (Hardimon 1994, p. 121).

Everyday knowledge is epistemologically valuable in the ways that individuals shape 'social, affective, aesthetic, technological and sensate' relations within their spatial environments (Boscagli 2014, pp. 12–13). Boscagli emphasises that every-day 'stuff' represents 'vital matter... [as it is articulated] ...from the perspective of what is common...[in order that researchers and theorists can]...imagine its potential for praxis' (pp. 12–13). Such philosophical positions articulate agency and autonomy and offer the possibility of contributing to knowledge about young people's lives that socio-economic and educational data may not fully capture.

Determining which research design would elicit new understanding about how young Whittlesea residents map out their lives was critical because participants were attendees at a local Youth Support Centre. As participants' ages ranged between 12 and 20 years, with some attending school and others not, and with a mix

City or Town	2013	Increase	%
South Morang ^a	51,000	5700	12.6
Melbourne	29,300	5400	22.7
Point Cook	40,500	3200	8.7
Craigieburn–Mickleham	41,500	3200	8.4
Epping ^a	33,200	2800	9.1

 Table 15.1
 Estimated population growth in Melbourne and outer suburbs (ABS 2013)

^aCase study locations

of gender identities, the research design had to be flexible so that all stakeholders could express their views. It followed from Robertson and Tani's (2013) methodology which utilised the Delphi consensus approach. The Delphi method emphasises the importance of feedback and collaboration in order that important themes, issues and ideas emerge. The consensus perspective also enabled the team of researchers from La Trobe University (including the author of this chapter) to engage with and collaborate with youth workers responsible for the participants in the case study. The Delphi method facilitated minimal interference in narrations of space, place, being and living articulated in respective young people's views. This chapter reports on this aspect of the research.

Having contextualised the topic and problem, the following section describes designs for living at the Whittlesea peri-urban interface. A selection of young people's views is then explored, analysed and discussed in terms of emergent themes that evolved from discussions, comments and personal experiences of 'being' and living in Whittlesea.

15.2 Designs for Living

With pressures to increase Melbourne's population in conjunction with a trend towards inner-city apartment living, social demographer Bernard Salt declared that Melbourne has moved away from its historically suburban character to a global city (Martin 2014). In a somewhat grandiose projection, Melbourne is likely to 'become Australia's biggest capital city with a population of eight million in 2053'. Being bigger is perceived as a positive assignation but it disguises sustainability problems of private car use into the city and the lack of a critical public transport infrastructure in urban growth areas (Lucas 2014). The policy challenge is to accommodate increased population growth in Melbourne city and outer Melbourne suburbs. The case study is located in one of the fastest growth regions in urban Melbourne (see Table 15.1, Reference ABS 2013).

To Melbourne's north, the City of Whittlesea encompasses an area of 489 km² with a population of 179,261 at a density average of 3.66 people per hectare. Forty percent of residents live and work in the region and are highly dependent on private

car use. In colloquial Australian parlance, it is a 'blue collar' area in comparison to the predominantly professional status of metropolitan inner Melbourne. Whittlesea represents a community in the making in respect of intakes of new arrivals, new housing stock, new streetscapes, shopping centres and civic and community spaces. It has a younger demographic of pre-school to tertiary age dependents and a workforce age of between 22 and 34 years. One third lives in four bedroom houses, and two thirds have broadband Internet connection and drive two or more cars. Average weekly household earnings are \$1500–\$2499 with monthly mortgage costs peaking at \$2000 and \$2199 (City of Whittlesea 2014a).

By 2030, it is anticipated there will be 40,000 residents living in the Whittlesea regionwith a significant number aged between 10 and 25 years. Population demands will place pressure on council services and programs from school through adulthood, as well as access to services and use of public spaces and natural environments (City of Whittlesea 2007).

Within the region are public use sports fields, sports clubs, swimming pools and leisure centres, athletics, basketball and netball stadiums, tennis courts, BMX track and skate parks (City of Whittlesea 2014b). The built environment follows 'best practice' architectural planning in reflecting the need to provide places for physical activity, economic hubs, socialising and connecting with other community members, including young people. The Plenty Ranges Arts and Convention Centre (PRACC) is an architecturally innovative and multipurpose meeting place that caters for a diversity of cultural and social events such as theatre, the arts, business conventions and community meetings and proudly brands its image as 'stylish, modern and amazing' (PRACC 2014).

North of the suburban development areas is the historical township of Whittlesea whose history is commensurate with European colonial settlements. Previously, indigenous Wurundjeri people occupied lands on which there was an extensive range of flora, fauna, trees and grass habitat. Colonial settlers progressively acquired large acreages for farming which subsequently were subdivided after the First and Second World Wars, 1950s post-war migration and subsequent urban expansion (Honman et al. 2013a, b). The first post office was built in 1864, the Whittlesea Primary School in 1878 and the railway in 1889. With centenary status in Australian settlement history, the township represents the historical rural hinterland while the peri-urban interface represents contemporary urban expansion and the interface of new and old communities.

In providing visual references of what life is perceived to represent, a random selection of online photos makes up a collage of possibilities to imagine how social, human and environmental needs appear to harmonise nature and the built environment (Fig. 15.1).

The sunset image refers to the Lakes Reserve Park in South Morang. The 'typical' contemporary house design represents the home affordability ideal. Below is an urban planning design with roads, houses and mixed use facilities with carefully planted trees interspersed with car parks. These representations draw together symbolic, geospatial, architectural and historical images within the local environment together with the contemporaneous present in projecting the ultimate idealisation of urban planned living and lifestyles offered at the peri-urban interface (City of



Fig. 15.1 Images of Whittlesea: social, human and environmental needs

Whittlesea 2014c). The following section now turns to young people's views of life and living in such an idealised location.

15.3 Living and 'Being' in This Place: Young People's Perspectives

The author and co-researchers from La Trobe University (Victoria) conducted a small pilot study in late 2013 with six to eight young people between 12 and 20 years of age who lived in the Whittlesea region (Robertson et al. 2014). A selection of comments and affective responses to places and spaces is presented, analysed and discussed. Findings are tabled (see Table 15.2 for reading convenience).

Haley best described what peri-urban development meant to her sense of being in the Whittlesea region. Greenfields and rural views disappeared daily. Increased development was literally 'eating up nature'. Kangaroos and wildlife were culled and very old gum trees cut down to make way for commercial and residential use.

Although nominated as a preferred natural space for socialising and recreating, the 'gorge' itself was degraded with rubbish. The 'lake' and creek were dangerous for swimming due to pollution. Haley lived near the gorge in an estate bordering this natural reserve. She no longer used it because of fears about her personal safety and the threat of bushfires that she experienced in 2009. The built environment added another hazard due to the design of one-way entrance and exit roads making it difficult for residents to escape from bushfire at the gorge.

Increasing urbanization	Public amenities (1)	Public amenities (2)	Preferred spaces
Rapidity and intensity of development with houses 'creeping up the hill', blocking rural amenity and destroying natural landscape. Smaller house blocks, increased pollution, losing green spaces and places to roam freely	Skate park: Filthy, littered with broken glass, drugs and graffiti Train stations: A key place for socialisation and mobility. Safety concerns about other young people from neighbouring suburbs. Security systems, lights and patrol officers afforded some security. Problematic interactions with patrol officers at particular railway stations	Swimming pools: Favourite in summer depending on the types of young people from other suburbs using them. Not favourite places for adolescent girls 'Play' parks: Mostly designed for school-age or younger children Recreation reserves: Designed for formal sports such as football, tennis and cricket Public transport: Inadequate, not timely, difficult to access, irregular bus timetables	Bedrooms/own home Preference for most-safe and secure; had everything that was needed including entertainment and technology Shopping mall: Entertainment, social interaction, shopping, food and amenities 'The Gorge' The Plenty Gorge 'bush' corridor reserve which was excluded from development and retained as a natural 'bush' space for walks and barbeques. It includes the Darebin Creek and a water-filled quarry hole known as the 'lake'

 Table 15.2
 Consensus views from Whittlesea young people

How local places and spaces made young people feel is reported in Table 15.3.

15.4 Discussion: 'Being' in the Whittlesea Peri-urban Space

Visual references (see Fig. 15.2) bring together environments that contextualise young people's living experiences within the Whittlesea region. The top left image is a 'typical' view of the Whittlesea train route and the design of suburban railway stations that retain open platforms and minimum travel comforts and amenities (Victorian Railway Stations 2014). An aerial image of urban growth patterns in metropolitan Melbourne is similarly reflected in aerial photographs of peri-urban development in the Whittlesea region (Honman et al. 2013a, pp. 84, 89, 97). The bottom left image refers to the smoke haze emanating from the disastrous bushfires of 2009 that threatened the Whittlesea region (Boyd 2009). Shimmering in the distance is the city of Melbourne with the red roofs of suburban housing filling the space between the city and green open farmlands (The Age 2014).

Affect	Places	Reasons
Нарру	JB Hi-Fi, food court	So much cool stuff to look at
Safe	Youth centre	It's just safe
Fun	Food court, youth centre	Everyone likes to have a laugh
Scary	Shopping entrance, information desk	It's the entrance to the railway station, asking for help
Uncool	Wherever I am	I'm uncool
Friendly	Youth centre, food court	People, fun talks and jokes, everyone's friendly
Meeting place	Shopping entrance, food court	It's the entrance to the railway station
Threatening	Shopping entrance, outside food court	Other urban kids, fights, smokers
Dark	Outside pathways	Night time, no light and no food, the 'park' kids
Harsh		People judging others
Vibrant	Food court	It's a social hub
Other		Older people's views of young people, everyone blames beyond those responsible

 Table 15.3
 Affective responses to places and reasons from Whittlesea young people



Fig. 15.2 Images of the Whittlesea peri-urban region

The backgrounding of Melbourne in the distance appears to give an impression of a cityscape ringed by green space. On the other hand, it represents a distant object when viewed from the green belt area. This collage of photographs helps to locate geographies of living relevant to the changing peri-urban context of Whittlesea.



Fig. 15.3 Images of two railway stations on the South Morang line

Being in the peri-urban interface generated greater dependency on others, such as parents, family members and friends to call on for transport. Although Haley had a car licence as she was over 18 years of age, she felt very uncomfortable driving on her own in her local neighbourhood regardless of whether it was day or night. Haley had the opportunity to 'escape' the constraints of her geographic location but chose to travel by bus, use others for meeting up with friends or remain at home to 'chat' on social media and mobile phone.

Travelling to Melbourne also represented other challenges as to get to the city meant dealing with a gamut of security and personal safety issues that centred on railway stations and public train transport in general. Regardless of gender and age, the majority perception of risk and danger remained foremost and was heightened when interacting with rival youth in adjacent suburbs and with protection officers on trains. Having transit police on public transport provided some assurance against assault but some officers were overly hostile and aggressive.

The visual appearance and respective ages of railway stations (see Fig. 15.3) generated opinions about aesthetic and physical amenity. Older, historical stations were associated with physical discomfort (hated walking up stairs), misaligned with contemporary travellers' needs (needs to be updated) or lacking in visual aesthetic (more lights and security).

The contrasting photographs represent a meeting of 'new' railway design (Epping railway station) and the 'old' minimalist function of (Merri) railway station closer to Melbourne. Both stations formed part of the South Morang transport link originally built in 1899 (Victorian Railway Stations 2014). The architectural structures, respectively, characterised dislikes and likes: each informing perceptions of 'being' in harmony or disharmony with such spaces and places. Importantly, these temporal objects contextualised extant themes of progress and modernity which are symbolically, culturally and materially embedded into the futures oriented dream and image of Australia. Contemporaneity, aesthetics and amenity constituted stuff that mattered.

Old railway stations were associated with risk, danger or harm but were also places for socialising and afforded engagement with sensate experiences of edginess and unpredictability missing in a highly designed, urban planned environment of newness. On the other hand, the 'new' aesthetic symbolised by urban contemporaneity elicited feelings of well-being and comfort. Designed recreation spaces were less sensate-rich because these were designed to reduce risk or injury and mostly appropriate for pre-school and school-age children. Urban designers are encouraged to include 'child-friendly' spaces for playing and socialising but may lag behind in designing for the needs of young people whose social and recreational needs have outgrown childhood (Moore-Cherry 2014; Robertson 2012; Robertson and Tani 2013; Whitzman et al. 2010; Woolcock et al. 2010). These young people were 'too old' to play on miniature equipment, although they could use some recreation/fitness parks and outdoor gymnasium equipment designed for adults. Public recreation spaces such as the skate park, swimming pools and sports clubs had less useability appeal.

Urban shopping malls within the local or adjacent suburbs held greater attraction as meeting places and for socialising. These catered for lifestyle consumption with fast food, entertainment and safety and materialised in consumer brand wants and desires, social needs and gratification under one roof (Matthews et al. 2000; Shepherd et al. 2006; Staeheli and Mitchell 2006; Vanderbeck and Johnson 2000). Shopping malls also came with a risk if security guards saw them as 'gangs' or as criminal threat or antisocial in any way (loud, laughing, jostling each other) resulting in exclusion or being banned from entering.

The natural 'bush' environment also signified danger and threat. In the Boyd photograph, suburbia is directly threatened by the uncontrollable forces of fire smoke encroaching on the residential perimeter during the 'Black Saturday' bush-fires of 2009. Fire encircled Whittlesea and nearby Murrindindi and Nillumbik shires with tragic losses of lives, animals and properties (Teague 2009). Living in proximity with the Australian 'bush' is not without hazard and represents a significant risk factor associated with peri-urban expansion (Buxton et al. 2011). The vulnerability of the peri-urban interface in such situations is known to be made more problematic by continual inflows of new residents seeking a 'bush' lifestyle. Lack of knowledge about protective factors built up through long-time residence and familiarity with local conditions exemplifies the critical importance of community memory in such situations (Handmer and Haynes 2008).

The brand image that cosmopolitan Melbourne exemplifies in international rankings is protection of its 'liveability' status. What represents 'liveability' is the central problem of this chapter. Young people's perceptions of peri-urban 'liveability' are associated with obstacles, constraints on movement, reduction of natural spaces and places, issues of safety and social censure. More critically, the spaces where they feel more at home in are in shopping malls, fast-food restaurants, shopping, buying electronic/digital items, playing computer games or simply being in their own bedrooms at home.

The by-products of contemporary lifestyle consumption are reduced physical activity and preference for indoor recreation, socialisation and leisure. Contemporary urban designs place the home as the centre of social life with family entertainment areas, theatres and digitally controlled conveniences. Exponentially, as home sizes increase, a corresponding decline in exposure to and interaction with outside environments is observed (Farr 2012). This phenomenon is also observed in Australia in increasing rates of child and adult obesity. While Farr is critical of

contemporary housing designs and the health consequences for American populations, he is less optimistic that planning policy can shift consumer mindsets from 'bigness' to 'smallness' and 'convenience' to 'inconvenience' and accept discomfort as a sustainability practice. Therein lies the problematic accommodation of 'being' and 'living' that characterises the 'liveability' status of peri-urbanism in Whittlesea and the structures of social activities offered to contemporary adolescents.

Adolescent and youth socialisation conjures up a mostly negative register of dysfunction or deficit (Cunneen and White 2011; Nilan et al. 2007). Viewed from a dysfunctional perspective, youth socialisation, consumption patterns and lifestyle preferences symptomatically are assumed to be in need of remediation and monitoring notwithstanding serious effects of disengagement from education, criminal offence and extreme social alienation (Boese and Scutella 2006; Nicholls 2010; White and Mason 2006). As Kingsley and Townsend (2006) note: 'Bridging and bonding are complex concepts, difficult to measure and often hard to identify due to factors associated with environmental location, organisational orientation and composition of membership' (p. 526).

We need to acknowledge that desires for liveability lifestyles have a cost and that urban designs for compressed and compact living may solve one problem but add to others yet to emerge, including the continual invisibility of young people as spatial stakeholders and consumers.

Accelerated peri-urban expansion and an increasing population of young people within peri-urban Whittlesea contextualise a local phenomenon that presents challenges to young people entering a very different social future. Equally long-time residents from near rural communities face the effects of disappearing environments, communities, economies and lifestyles. In signifying and explaining reasons why their sense of 'being' and 'living', these young people were rationalising how they see themselves when negotiating everyday experiences and knowledge about 'being' and 'living' in their social world. According to Hegel, being able to rationalise (knowing yourself and your relationship to your social world) and having the ability to identify, reflect and *act* on elements that cause disharmony represent agency and autonomy. Young people's experiences of contemporary peri-urban life are measures by which we can better understand the criticality of their conditions of life.

In Mumford's terms: 'People are attached to place as they are attached to family and friends. When these loyalties come together, one has the most tenacious cement possible to human society' (1961, p. 287). The place where young people felt a greater sense of connection was the local youth centre. It offered security, structure, safety, peer socialisation and recreation free from external threats perceived to exist with existing public amenities and natural, social and built environments.

The peri-urban space has its challenges in terms of the 'stuff' that matters about the effects of increasing populations. Young people in this case study valued order, safety, well-being and security, particularly where adults (youth support workers) provided mentoring guidance and supervision. In this context, it would appear that these young people desired order and structure as well as having the freedom to escape from regulated social spaces. While the limitations of a small sample of responses are acknowledged, they are critical for seeing of a world in flux and change through young people's perspectives as it happens. We are all located in a rapidly changing world in which our present identities are subjected to new ways of seeing work, family structures, social traditions and values that once may have represented the idealisation of social community, citizenship and social harmony.

15.5 Conclusion

Changing world and local contexts of 'being' and 'becoming' challenge researchers to move away from orthodox approaches to the everyday lives of young people. Hegel's notions of fluidity and flexibility and rationalised autonomy, Boscagli's (2014) invitation for serious consideration of the importance of the 'stuff' of the everyday and the need to develop new research praxis, and, particularly, Robertson's (Robertson and Tani 2013) continual advocacy for young people to be included in designs for their lives offer such opportunities. We need to know more about the 'stuff' that matters in young people's everyday experiences to challenge assumptions and judgments made about their lives.

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Chapter 16 Everyday Political Knowledge and the Construction of Regional Identity: The East Asian Experience

Vic Yu Wai Li

Abstract East Asian is at the crossroads of economic realignments. Exponential growth of cross-border mobility of goods and capital since the 1990s has been accompanied by booming economic multilateralism, exemplified by the spurring number of free trade agreements and regional economic and financial architectures. Regional organizations like the Association of Southeast Asian Nations (ASEAN) and its member states have sought to promote a regional identity through successive community building endeavors. This, however, has failed to gain traction. In large part, advances in economic integration are shadowed by economic pragmatism that defines the relationality between the region's economies. This manifests in the persistence of interstate power plays and the lack of institutional deepening at the regional groups originally top-down, detaching from civil society groups would be critical to building up a regional identity. As such, the national recognitions persist even though the region has experienced dramatic economic transformations on every front.

Keywords Political knowledge • East Asia • ASEAN • Regionalism • Regional identity

16.1 Introduction

While the history of East Asian regionalism can be traced back to the establishment of the Association of Southeast Asian Nations (ASEAN) in 1967, how such a geoeconomic process has been accompanied by the emergence of an everyday political knowledge has largely been missing from the literature. By 'everyday political knowledge,' this chapter refers to the norms, values, and expectations of political

V.Y.W. Li (🖂)

Department of Social Sciences, The Hong Institute of Education, Tai Po, Hong Kong e-mail: vicliyw@ied.edu.hk

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'others.' It is acquired through everyday political interaction and facilitates cooperation. Everyday political knowledge creates a geography of identity in that it creates a new relationality between members who share a common set of political languages and expectations.

How everyday political knowledge has been developed amidst the historicalpolitical trajectory of the integration of East Asia is the focus of this chapter. East Asia is at the crossroads of an economic realignment. In the last two dozen years, the established regional political economic order, crafted by the USA and perpetuated by the region's states authorities in the Cold War era, has been challenged. Since the 1990s, economic reforms and the opening of China and other regional economies have unleashed exponential growth in cross-border mobility of goods and capital. This has also been accompanied by a booming economic multilateralism—exemplified by the number of free trade agreements and regional economic architectures like the Asian Pacific Economic Cooperation (APEC) organization. Simultaneously, the region has witnessed identity-building endeavors championed by regional organizations and governments, notably the efforts led by the Association of Southeast Asian Nations (ASEAN) and its member states.

I argue that economic pragmatism has contributed to the emergence of a set of everyday political knowledge which in turn has laid the foundation for various endeavors to build East Asia regional identity. Because of the primacy of such everyday political knowledge, although economic integration has prompted successive identity-building initiatives, there is still a long way to go before an East Asiawide identity can be formed and consolidated. In large part, power plays have persisted among the region's economies as they have reaped the gains from economic integration. This has been compounded by surging nationalist sentiments in key powers like China and Japan and a lack of institutional depth and inclusiveness to the regional institutional platforms. As a result, instead of a strengthening East Asian regional identity, national identities and recognitions continue to loom large in the region.

First is a brief review of the key trends in the regional economy during the Cold War era. This provides a context to understand the turn toward economic multilateralism and financial regionalism from the 1990s onward. An analysis of the regional identity and community building endeavors of regional groups and governments follows. Finally, a critical examination of the prospects of these elite-driven initiatives is given together with a discussion of the implications of the connections between everyday political knowledge and the formation of a geography of identity.

16.2 The Regional Economy in the Cold War

An account of economic integration of East Asia is incomplete without reference to Japan and the underlying preferential treatment by the USA during the Cold War era. This not only made possible the emergence of post-war Japan as the world's economic powerhouse; it also transformed the development of the entire region from the 1990s onward.

The San Francisco system, codified in the treaty process of 1950–1951 between the USA and its Pacific allies, created a system of trade bilateralism that was enmeshed with the hub-and-spoke security arrangements across the Pacific Rim (Calder 2004). In order to ensure that Japan would recover economically after the war, Japan was given precedence in the regional economy—evidenced mainly by the preferential treatment it enjoyed when exporting to the US market. This fundamentally shifted the economic pattern of the region from one with extensive intraregional trade before the war to one with asymmetrical trade interdependence with the US economy from the 1950s onward. The USA not only provided the security guarantee to Japan in the form of heavy military presence on its soil; it also constituted the leading export market for Japan's manufactured goods.

As Japan became the leading driver of regional economic takeoff, other Asian states benefited from the export-oriented industrialization growth of Japan. Through extensive networks of trading firms and subsidiaries, Japan drove much of its capital investment to other Asian economies as its manufacturing sector at home matured with better technology and rising labor costs. This prompted the relocation of production activities offshore to the then Newly Industrializing Economies (NIE), which included Hong Kong, Singapore, South Korea, and Taiwan, bringing massive investment and technologies to bear in a regional process of catch-up industrialization. As these economies grew, another round of 'succession' followed, with capital and technologies spreading to less developed ASEAN states, like Indonesia, Malaysia, the Philippines, and Thailand. This pattern of development, with Japan and the NIEs at the head of a hierarchy of regional production, has been described as the 'flying geese' model—with Japan being the leading goose guiding the development of the NIEs and others in turn (Kaur 2014).

On the domestic front, the NIE governments also played critical roles in enabling the post-war economic takeoff. They were characterized by a meritocratic and coherent bureaucracy, of which members were linked closely with each other through informal networks. This maintained a high level of autonomy from the short-term interests of the private sector while embedding the bureaucracy in the market context (Evans 1992, p. 153). Such 'embedded autonomy' was crucial to soliciting cooperation from private firms and shifting the economies to a more outward-looking path while at the same time preventing the states from becoming the captives of private interests (Evans 1992, 1995). This was best manifested in some of the economic decision-making bodies of the NIE group that were largely insulated from political and economic pressure groups – like the Ministry of International Trade and Industry of Japan and the Economic Planning Board in Korea.

Beyond these regional and national political bases of growth, regional economic connectedness was contributed to by the ethnic Chinese network that introduced an enormous amount of trade and investment to the region. Overseas Chinese in Southeast Asia in particular invested substantially in China, Taiwan, and Hong Kong and the domestic economies. When China initiated the economic reforms of the late 1970s, Taiwan and Hong Kong companies became major sources of FDI in China – bringing in capital and technology and supporting the employment of hundreds of thousands in coastal cities (Olds and Yeung 1999; Weidenbaum and Hughes 1996).

These market players operated alongside one another, forming an interweaving web of trade, production, and investment within and without the region, and transformed the entire political economic terrain of East Asia – laying the base for the multilateral endeavors that emerged in the post-Cold War era.

16.3 Booming Economic Multilateralism

As the Cold War ended and China opened wide for investment and integrated with the global economy in the 1990s, the whole of East Asia experienced dramatic growth. China recorded double-digit growth rates for eight consecutive years in the decade, surpassing Japan as the world's second largest economy in 2011. Other economies remained strong thanks to the seemingly endless inflows of capital investment and export demands. This was best evidenced by the volume of intraregional trade. Although growing at a slower pace than inter-regional trade flows (i.e., between East Asia to North America or Europe), the growth was faster than similar metrics showed among NAFTA states (Canada, the USA, and Mexico) and European Union members.

Intra-ASEAN trade as a percentage of the total of international trade went up from 17.0 to 24.6 % between 1990 and 2012. In the same period, trade shares increased from 28.6 to 38.0 % between ASEAN, China, Japan, and South Korea. On a global scale, Asia's contribution to global trade was significant. In 2012, the region made US\$5,240 of exports and US\$4,839 billion of imports. This made up for around one-third of the global trade in goods and services, more than the USA and the EU alone (Asia Regional Integration Center n.d.). In terms of FDI inflows, from the mid-1980s Asia was an attractive destination for foreign capital. Region-wide the figure jumped exponentially from less than US\$10 billion to over US\$219 billion in 2013—nearly a quarter of global total FDI inflows. But no country could match China and Hong Kong as the top FDI destination. They accounted for more than 12 % of the global total in 2012. Increasingly, the region was also becoming an 'exporter' of capital. It exported more than US\$293 billion of outbound FDI in 2013, up from around US\$120 billion in 2006 (United Nations Conference on Trade and Development 2013, 2014).

The extensive regional economic relations, especially the dense trade and investment ties, were driven both by market forces and state actors. Besides the 'spaghetti bowl' of free trade agreements (FTAs) contracted between governments, regional organizations like APEC were founded to promote trade and investment liberalization and capital mobility.

As the threat of superpower rivalry receded in the late 1980s, the region's leaders recognized the increasing importance of economic affairs to maintain their long-

term competitiveness. In January 1989, Australian Prime Minister Hawke suggested a meeting of Asia-Pacific states to discuss the future economic relations in the region. This found support from leaders of ASEAN-6 (Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand), New Zealand, the USA, Canada, Japan, and South Korea. They convened the inaugural ministerial meeting in Canberra and agreed to establish the APEC as a platform for regional economic integration.

In APEC's third ministerial meeting in 1991, 15 economies, including China, Hong Kong, and Taiwan, released the Seoul Declaration, which delineated the group's mandates, structure, and operation. APEC was formed to 'sustain the growth and development of the region' and 'strengthen the open multilateral trading system in the interest of Asia-Pacific and all other economies [through reducing] barriers to trade in goods and services and investment among participants in a manner consistent with GATT principles' (Ravenhill 2001, pp. 1–2). This was followed by the 1994 APEC Economic Leaders' Declaration of Common Resolve, also known as the Bogor Declaration, which spelt out a specific timeframe for achieving regional trade liberalization. Industrialized economies were slated to achieve the goal of free trade and investment by 2010 and developing economies were given another decade to attain the goals. Since 2006, APEC has also backed the idea of a Free Trade Area of the Asia-Pacific (FTAAP) that would significantly expand the scope and depth of previous commitments.

Notwithstanding APEC's steering role in driving regional economic integration, it has been under constant challenge. The early days saw competing regionalist outlooks between founding members. While Australia pushed for a more inclusive platform, Malaysia preferred to keep the group largely exclusively confined to East Asian economies and attempted to sidetrack APEC with a proposed East Asian Economic Caucus that would exclude all Western powers. With strong opposition from Japan and the US, the idea was discredited and APEC was brought a higher political standing after the first APEC Economic Leader's Meeting was convened in 1993 (Krauss 2000). APEC grew and, as of the time of writing, has 21 member economies along the Pacific Rim, which together represent 40 % of the global population and 54 % of the world's GDP.

In addition to its expansive membership, and like other regional groups such as ASEAN, APEC has adhered to a soft approach of institutional development. It was deliberately structured to be short of the formal and institutionalized qualities common in Europe-wide institutions. These included the emphases on consensus building and dialogue-based interactions and an aversion to binding decisions that might impose obligations on its members. Further, APEC was only administered by a small secretariat in Singapore, with most of its agenda and operations carried out by member states (Ravenhill 2001).

This deprived APEC of the 'institutional teeth' to ensure compliance and implementation. APEC has been faulted for failing to deliver its ambitious trade and investment liberalizations promises. The diversity of member economies also complicated consensus building, meaning what measures were agreed and made public often reflected a lowest common denominator. Many member economies were not fully committed to meeting the goals of the Bogor Declaration and were driven by domestic policy priorities like industry competitiveness at home and abroad. As a result, despite its inclusiveness of regional economies, there has recently been a sense of diminishing relevance, as the organization faces challenges and competition from other regional groups that seek to promote economic integration at a smaller scale (Ravenhill 2001).

An important facet of such development featured the proliferation of FTAs between economies. These bilateral or plurilateral (i.e., between a limited number of parties) agreements did not necessitate involving all regional economies on platforms like APEC. As a result, they were well-received by leaders with limited economic goals in mind and found economic complementarities with other economies. In 1990, there were very few FTAs among East Asian economies. By 2004, 15 had been initiated and 6 concluded; in 2008, 19 had been initiated and 15 concluded. Across the Pacific Rim, the growth of FTAs was even more remarkable, with 68 FTA negotiations initiated and 31 concluded in 2004 and 86 proposals negotiated and 60 concluded in 2008. The cross-cutting network of FTAs, often with overlapping memberships, further connected the Asian economies with their Western counterparts like Australia, Canada, New Zealand, and the USA.

In fact, the initial attempts at FTA building in the 1990s were largely confined to North America and selected economies in East Asia. These included the Mexico-Japan and Mexico-Singapore FTAs. Within East Asia, ASEAN took the lead in building FTA connections within Southeast Asia and with neighboring economies from the 1990s onward as a concrete measure to foster intra-ASEAN economic cooperation and maintain regional competitiveness (Nesadurai 2003; Stubb 2000). In 1992, ASEAN-6 states formed the ASEAN Free Trade Area (AFTA) that reduced tariffs to between 0 and 5 % by 2002 and entirely phased out all trade barriers by 2010. The less developed nations of Cambodia, Laos, Myanmar, and Vietnam (CLMV), who joined ASEAN in the 1990s, were brought into the agreement and given the leeway to achieve the AFTA goals by 2015. These efforts paved the way for the Bali Concord of 2003, in which ASEAN states strived to construct an ASEAN Economic Community with a single market and production base for Southeast Asia by 2020, alongside an ASEAN Security and Socio-Cultural Community (Nesadurai 2003). From the 2000s onward, ASEAN also extended its outreach to China, Japan, South Korea, and India and concluded several FTAs, including the ASEAN-Japan Comprehensive Economic Partnership (signed in 2008 April), the ASEAN-Korea FTA, and the ASEAN-China FTA (in effect since 2010 January). These extensive connections resulted in what some analysts have called a 'spaghetti bowl' of FTAs in the region (Baldwin 2008). Between 2010 and the time of writing, there were 170 bilateral and 51 plurilateral treaties in various stages of negotiation.

Among these agreements, the ASEAN-China FTA was especially notable and took 8 years of negotiations to conclude from its inception in 2002. Its conclusion not only marked the success of ASEAN in creating the world's largest free trade zone in population terms; it also signified an important turn by the Chinese authorities who began to attend to foreign economic interests through FTA building. By making concessions to smaller ASEAN economies—like reducing tariffs on

domestically important sectors like agriculture—China was able to ensure that negotiations proceeded as smoothly as possible and win the reputation and credibility of a rising power in the region (Chin and Stubb 2011). Tariffs between the ASEAN states and China were reduced gradually in the early stages of implementation and were followed by investment facilitation arrangements. And, just as with AFTA, schedules for market openings were made flexible for each ASEAN state in their trade with China. This resulted in significant increases of trade volume—from US\$113 billion to US\$350 billion between 2005 and 2013—making the region the third largest trading zone behind the European Union (EU) and NAFTA states.

Apart from the economic gains, China also emerged as an active player in building a regional and global FTA network. As of 2014, it had 29 FTAs in various stages of negotiation, outranked only by Singapore and South Korea. After 2011, it has also backed the East Asia-wide Regional Comprehensive Economic Partnership (RCEP) involving only the ASEAN+3 states, Australia, India, and New Zealand. This potentially sets it at odds with the US-led Trans-Pacific Partnership (TPP) initiative in which China has not signaled an intent to participate. The competition for members among different FTA proposals was even more evident in the 2014 Beijing APEC Summit, where China pushed for accelerating the FTAAP process in order to counteract the US TPP.

In addition to this politics behind FTA negotiations and regional institutions like APEC and ASEAN, the region's economic integration was also contributed to by several sub-regional economic networks and agreements. Often they appeared as 'clusters' within the larger region, forming growth triangles across neighboring economies, and were situated within the border regional framework. These included the Greater Mekong Subregion and the overland trade corridor between Guangxi/ Yunnan and north Vietnam/Hanoi, both sponsored by ASEAN and China as integral parts of the regional economic network.

16.4 Financial Regionalism at the Century's Turn

Aside from the extensive trade and networks of FTAs, East Asia witnessed a breakthrough in regional financial integration from the late 1990s. A large part, however, came into existence with the traumatic lessons of the Asian financial crisis that brought havoc to many economies (Krueger 2014). Early efforts, like the Japanese proposal to create an Asian Monetary Fund (AMF) in 1997, met strong resistance from the USA, who were concerned about its challenge to US predominance and that it would enable a sidestepping of the rescue efforts of the International Monetary Fund afforded to crisis-afflicted economies. The Chinese officials also suspected that Japan was seeking regional financial dominance through crafting its own institution (Lipscy 2003). While the precocious AMF proposal was shelved, it provided some basis to the deliberations of post-crisis regional financial cooperation.

Two years after the crisis started, the leaders of ASEAN states China, Japan, and South Korea, the ASEAN+3 states as they would be called, met at the Manila Summit of November 1999. In the Joint Statement on East Asia Cooperation, the leaders agreed to enhance 'self-help and support mechanisms in East Asia' in economic, financial, and monetary areas by consolidating the ASEAN+3 framework.

One immediate measure addressed the liquidity problems that had resulted in extensive capital flight and financial volatility during the crisis. Finance ministers from ASEAN+3 states met in May 2000 and agreed to create the Chiang Mai Initiative (CMI), a regional network of bilateral swap agreements (BSA). Through contributions made by ASEAN+3 states, the CMI would provide short-term capital (less than 90 days) to economies experiencing shortfalls as a result of currency speculation and balance-of-payment problems. To foster local financial market development, they also introduced the Asian Bond Markets Initiative (ABMI) in 2003, which encouraged companies to borrow money in the local markets. The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), the central bankers' group, founded a similar Asian Bond Fund to complement the ABMI. Moreover, a policy coordination mechanism, ASEAN Surveillance Process, was put in place, so that states might share timely market and policy information and build up concerted responses in the event of another crisis. Discussion about a regional currency and forms of monetary cooperation also emerged, led by think tanks and the Asian Development Bank Institute (Grimes 2014).

All of this proved critical to ensuring regional financial stability during the 2008 global financial crisis. The CMI, for example, served as an important source of capital supports to affected economies. Japan expanded the amount of BSA with South Korea from US\$3 billion to US\$20 billion; similarly, China signed with US\$28 billion BSA with South Korea in December 2008, supplementing the previous agreement with access to 4 billion yuan for up to 3 years.

Shortly after the crisis, ASEAN+3 states agreed to 'multilateralize' the CMI with a pool of funds under a single regional agreement. Instead of multiple swap arrangements between two parties, a multilateral CMI would truly offer a pool of funds available to any contracting parties. The resulting Chiang Mai Initiative Multilateralization Agreement (CMIM) was concluded in December 2009 and came into effect in March 2010. The 15th ASEAN+3 finance ministers meeting in 2012 doubled the fund to US\$240 billion, making it one of the largest multilateral currency swaps in the world.

16.5 Elites' Quests for a Regional Identity in the 1990s

The remarkable advances in regional economic and financial integration and their associated institutional development heightened hopes among East Asian leaders that the region was set to mirror the European experience of the birth of a pan-European identity which followed the expanding scope of economic integration among European economies. A quest for such a regional identity harkens backs to the 1960s, when the founding ASEAN states sought to transform the region into a zone of peace and prosperity during the peak of the confrontation between superpowers in the region. The 'long peace' the region subsequently experienced arguably attests to their success and, as a result, the conclusion of the Cold War has brought a shared sense of euphoria among the region's elites.

A prominent example of such was the idea that the Pacific Century was in the making – with the region, especially East Asian states, due to become the leading engine of global economic growth. This sentiment was marked by the fanfare given to the 'East Asian miracle,' a term made popular by a 1993 World Bank report (Word Bank 1993). This stirred extensive debate about the distinctive sources that had driven the region's high-speed economic growth for decades. States like Singapore, Malaysia, South Korea, and Taiwan stood out as the poster children of economic growth – in defiance of the economic orthodoxy prescribed by Western economists and financial institutions for developing economies. One school of thought at the time argued that the region's unique cultural and social contexts, including so-called 'Asian values,' were what underlay the spectacular growth. Specifically, the 'Asian values' stressed notions of collectivism (which places community's interests and the social and economic well-being of groups ahead of individual freedoms and rights), respect for authority, and the overarching quest for a harmonious, stable social order and harmony.

This appealed to some Asian ruling elites, who were eager to define themselves differently from the West and help legitimize their somewhat illiberal practices at home. Former Prime Ministers Lee Kwan-Yew of Singapore and Mahathir Mohamad of Malaysia both ascribed Asian values to the success of East Asian economy and well-maintained social orders. Their defense of 'Asian values' was instrumental to countering Western critics of the region's lag in implementing political reforms along the lines of liberal democratic traditions and institutions, which were grossly incompatible with the region in their view. The rhetoric helped promote political unity between the region's authoritarian regimes, large and small, and was considered a cohesive force for regional integration. Mahathir's proposal for an East Asian Economic Caucus, for example, was advanced in the early 1990s as an Asian-only bloc in reaction to the inclusive and open economic regional architecture of APEC discussed earlier. Even though Mahathir had high hopes that Japan might assume a leading role in his initiative, because it was opposed by Western powers, Japan reacted coolly and the idea never took off in the 1990s.

Other than the political complications of crafting an exclusive body, the intellectual basis of 'Asian values' was also untenable. Political economy specialists challenged the idea of a cultural foundation of Asian growth, contending that it simply provides a loose account and ignores the many inherently complex factors at work, including strong bureaucracies and the business-government relations underlying the developmental states (Evans 1995; Wade 2004). Critics also pointed out that the region's diversity could not be overlooked. The sheer historical and cultural differences between states implied that the substance of 'Asian values' was inherently arbitrary, was based on selective and partial interpretations of the regions' history, and had been manipulated by its advocates' with very pragmatic political motivations to keep the 'imagined community of developmental dictatorships' alive (Subramaniam 2000; Thompson 2004). Indeed, it did not take too long for the 'Asian values' rhetoric to lose sway. The Asian financial crisis brutally exposed the shaky foundations of the economic miracle and many of the institutional deficits of the regimes. Their haphazard responses also invited Western pressure to reform, making room for alternative rhetoric like 'good governance' in the region (MacIntyre et al. 2008; Thompson 2004).

16.6 From the ASEAN Community to East Asian Community

Notwithstanding the loss of legitimacy and currency to 'Asian values' after the financial crisis wrecked the region in the late 1990s, efforts to define the region and impart it with a distinctive identity were reinvigorated in the post-crisis context (Thompson 2004). ASEAN took up that mission and assimilated ingredients of the previous discussion into its region-building projects that would eventually extend beyond Southeast Asia.

Ruling elites and policymakers began to frequently speak of the 'Asia-Pacific Way,' the 'ASEAN Way,' or the 'ASEAN Norm,' all of which were built on the assumption that certain values, norms, or practices are characteristic to East Asia (or Asia-Pacific) (Archaya 1997; Smith and Jones 1997). When former Indonesian Vice-President, Jusuf Kalla, for example, related the idea of 'East Asian values' to the proposed East Asian Free Trade Agreement and East Asia Community, it was still a loose idea but gained much political attention following the first East Asia Summit of the ASEAN+3 states and other regional powers in December 2005. It echoed the sentiment of analysts like Wu Jianmin (2005), President of China Foreign Affairs University, who wrote that 'the East Asian cooperation has lasted for years on, and its identity is coming into being. There appear to be common values in the developing process of the cooperation among the East Asian nations.' In his view, the regional 'common values' included consultation, consensus, cooperation and comfort level, closeness, and openness.

This line of reasoning fell squarely within the identity and constructivist perspective of international relations, which provided much of the intellectual justification for policymakers' quests for a regional identity. Simply put, it conceived the process of regional community building to be not dissimilar from socialization in schooling contexts. As states interacted economically through trade and politically through regional platforms, some shared perceptions and understandings of issues, and a sense of 'togetherness' and 'self-other distinction' would gradually emerge (Tereda 2003). This would help define states as parts of a group different from the wider world. With repeated interactions, a higher level of economic and social integration would result, which would not only improve relationships between states but also contribute to long-term and enduring expectations of peace and stability within the group.

For example, Acharya (1997, 2013, 2014) argues that the Javanese/Malay community traditions influenced the way the regional organization was formed, designed, and operated in Southeast Asia and that these, in turn, shaped the trajectory of East Asian institutional development. In particular, the region (and its elites) displayed a strong preference to informality, stuck to consensus-building/seeking practices in decision making, and was disinclined to accept the level of institutionalization and legalization associated with the European experience-the so-called ASEAN Way. This suggests that ASEAN and its offspring, like the ASEAN Regional Forum (ARF), the regional security dialogue platform spearheaded by ASEAN in 1994, ASEAN+3, and East Asian Summit have come to share a set of common features, with designs and practices underpinned by the ASEAN norms and values (ibid; Nabers 2003; Terada 2003). Haccke (2003) also traces how the ASEAN 'diplomatic and security culture' significantly shaped the ways member states managed their relations and contributed to the 'long peace' or the absence of interstate war experienced by its members since ASEAN's creation. Katsumata (2006) similarly contends that ASEAN norms have subtly shaped the behavior of bigger powers, most importantly the USA and China, in the region. In his view, the ARF is in effect a 'norm brewery' for the entire Asia-Pacific. Some, like Caballero-Anthony (2005), have even gone so far as to argue that they had taken root in East Asian societies, forming the normative foundation of common identity and community building.

These promising portrayals of the region's future, however, have met challenges from both the conceptual and empirical fronts. Researchers with a focus on national interests and power plays have countered what they see as the unduly optimistic assessment of the role of ASEAN platforms in regional norm and identity building. In the same vein as the early analyses of Leifer (1996), who unequivocally saw the creation of ARF by small Southeast Asian states motivated exclusively by self-survival and having their voices heard by the great powers, Kawasaki (2006) has pointed to the self-serving nature of the institution building endeavor and that the various regional platforms had been created by ASEAN in order to ensure that the bigger powers would be committed to maintaining regional peace and stability. Heller (2005) saw a convergence of interests among the external big powers as the fundamental cause for the apparent success of ASEAN regional platforms, whereas Terada (2006) has described the continuing competition between China and Japan in the ASEAN+3—each trying to project its influence and shape the agenda and course of regional platforms in its own favor.

Besides the competing rivalrous interpretations that appear to be a matter of theoretical controversy, the real world track record of community building an East Asian identity has also raised skepticism as to the relevance of ASEAN-led institutions and the possible end states of their regionalist quests. In large part, the emphasis on ASEAN norms, especially the seemingly inviolable noninterference doctrine, enabled the ruling elites to keep the institutional status quo intact and eased pressure on some states with regard to politically sensitive issues like human rights (Hund 2002). The insistence on consensus decision making also rendered the much-needed cooperation on transboundary issues ineffective and precluded the meaningful participation of civil society groups in regional affairs. This was most evident in the regional responses to periodic regional hazes and long-range air pollution, when affected states like Singapore often could not come to terms with Indonesia regarding enforcement, let-alone sanction, and mechanisms; local communities also had very limited inputs into the regional environmental governance (Elliott 2012; Narine 2002).

Similarly, despite the extensive outreach of the much-touted ARF, its seemingly perfect scorecard in managing security challenges belied the many instances in which challenges were 'bypassed' to other diplomatic venues or deliberately frozen and delayed. The former included the North Korean nuclear crisis and the latter included the maritime territorial disputes over islands in the South China Sea involving China and multiple ASEAN claimants (Fravel 2008). In an ostensible effort to prevent the divisive issue from compromising the political unity of ASEAN states and their ties with China, the ARF and ASEAN+3 refrained from taking up any role in dispute resolution between claimants other than issuing repeated calls for peaceful resolution of the disputes, leaving options open for claimants to diffuse the tension through bilateral channels or to seek support from Western powers.

While such 'evasive' approaches ensured the apparent cohesion of Asian regional institutions, the extent they drove the region toward a mature community is increasingly questioned. Indeed, as ASEAN avoided controversial issues for the sake of adhering to its norms and values, it ran the risk of losing relevance in important regional matters and creating fault lines among member states. Jones (2008) astutely observed that the aversion of Asia regional platforms to take bold and concrete actions in political security affairs, including an explicit commitment to the development of rule governance between and within states, would only draw nondemocratic ASEAN states closer to the political embrace of China and alienate Japan and other democracies.

Already such tension had surfaced between the ASEAN+3 and East Asia Summit within their articulations of the roadmaps of future regional integration. China, Malaysia, and less developed ASEAN states have tended to favor ASEAN+3 to assume the leading role, whereas Japan, Singapore, Thailand, and Western powers that are involved only in the summit process expect otherwise. This ironically undermines the identity-building efforts initiated by ASEAN as divergent perceptions of the regional future take root.

16.7 Enduring Challenges of Regional Identity and Community Building

In addition to the power play and superficial successes of ASEAN platforms earlier examined, its regional identity and building projects suffered from the inherent organizational deficits that led to a failure to address the social pressure, inputs, and persistence of nationalist sentiments in the region. First and foremost, the advances in regional community building in East Asia were introduced top-down by the ruling elites. In large part they remained state-driven initiatives with government officials setting the agendas and defining the terms of integration, a critical constraint hampering integration among societies (Caballero-Anthony 2014). Indeed, despite the optimism of some analysts that the diffusion of information and telecommunication technologies would help foster a stronger regional identity and bring closer the regional sociocultural community envisioned by ASEAN (Lallana 2012), states like China and Singapore formed strong partnerships with media conglomerates for mediating and filtering information; others also stepped up their controls over mass media, while online social spaces proliferated (Atkins 2003; Stockmann and Gallagher 2011). Even the ASEAN Socio-Cultural Community and ASEAN People's Forum (APF), the 'people-oriented' ventures of ASEAN, were led by the regional body and complicated by the surges of local nationalist sentiments together with the deficit in legitimacy and a lack of capacity to respond to pressures from the nations' societies.

As previously noted, the adherence to a sovereign non-intervention doctrine precluded the possibility of prying open the ASEAN platforms and engaging civil society organizations and their involvement in regional social cultural affairs. Recent attempts to bring the activists and NGOs under the ASEAN platform through the APF yielded mixed outcomes. Other than the dialogue and networking opportunities with their counterparts and officials, they were neither able to put forward any new agenda nor bring about any substantive changes in the ASEAN system. In fact, some member states were hesitant to go beyond the state-centered institutions and tended to shun activists' involvements as they were not deemed to be acting in the best interest of the region (Nesadurai 2012). Their calls for human rights protections, for example, repeatedly irritated Myanmar and were consequently downplayed. ASEAN continued to tolerate human right violations in some of its members despite the organization's apparent commitments and promulgation of the ASEAN Charter of 2007, which strove to protect human rights and fundamental freedoms and enhance good governance (Dosch 2008). As Narine (2012) and Davis (2013) have argued, such an 'action gap' simply reflected the organization's efforts to resuscitate its international reputation and underlay its resistance to bringing about value change in the interest of its people.

On the other hand, growing economic interconnectedness did not do away with nationalist sentiments. National economic growth fueled 'techno-nationalism' in Japan and China; the latter even manipulated a sense of patriotism and national pride within China to consolidate its reign at home and advance its foreign policy interests (Segal 2005; Weiss 2014). The expanding overseas reach of Korean popular culture also spurred the 'pop nationalism' among the nation's younger generation (Joo 2011). Even among the most vocal protagonists of regional integration, like Malaysia and Indonesia, rhetoric of common regional identity does very little to dilute the national and ethnicity-based political identities forged by regimes over decades (Reid 2010). Moreover, the two leading powers, China and Japan, jostled in the cultural sphere, flexing their soft power by exporting their cultural goods and

industries in order to shape the ideational terrain and win the hearts and minds of the region's public (Heng 2010; Katsumata 2012; Otmazgin 2008).

The failure to engage civil society actors in the ASEAN platforms, the anchor of most regionalist projects in East Asia, and the contesting ideational terrain divided by national tensions does not portend well for a more inclusive and participatory form of wider regionalism (Collins 2014; Nesadurai 2012). With the lack of similar initiatives from other regional bodies like APEC, the status quo is simply perpetuated. Discourses about regional identities remain integral to the elites' rhetoric, while nationalist sentiments stay strong among the public and national authorities.

16.8 Conclusion

To conclude, it has been argued that economic pragmatism has become an everyday political knowledge in facilitating the community building of East Asia. I have suggested that the region's rapid economic takeoff since WWII has dramatically transformed the fates of every man and woman in the region. The forces of economic globalization—whether in the form of export-oriented growth, multinational production, and capital investment—had governments of the whole East Asia and Asia-Pacific mindful of the importance of development at home. The post-Cold War years saw booming multilateralism in regional trade and finance that drew the regional economies closer than ever. This happened alongside with the integration of China into the regional and global economy.

Together with the community building initiatives of regional groups like ASEAN, these economic dynamics appear to have made East Asia a fertile soil for the emergence of a regional identity. Yet, as the foregoing discussion demonstrates, much of reality has defied their expectations. First, integration on the economic front has not been accompanied by a corresponding institutional development at the regional level that might facilitate the construction of an East Asia-based identity. The regional platforms driving the progress lack the much-needed capacities to ensure compliance from member economies and keep track of the pace of integration the multilateral groups have promised. While such deficit might be a political expediency to hold members together, this has ironically meant that national interests and considerations have continued to prevail even in face of the regional identitybuilding initiatives.

Second, as these ventures have been initiated and backed by the regional groups and governments, invariably they have become detached from the civil society groups whose involvements might have been critical to building up a regional identity recognized by the region's public and not simply remaining the rhetoric of the region's elites. Finally, there was a surging nationalist sentiment mobilized to consolidate the respective political regimes of East Asia even as the region's very regimes were buoyed by the economic forces at play.

Hence East Asia remains a perennial puzzle—while open regionalism has opened up the space of the economic terrain, the same resurgence in consumer forces has also made its citizens increasingly more demanding and often given to comparing one developed state with another. Governments unable to live up to the expectations of this demanding citizenry more often than not resort to nationalism to keep the public mobilized and agitated. Taken together with the shallow regional mechanisms and the national interest calculus of the region's decision makers, these factors countervail the identity-building initiatives the elites have promoted and suggest a rather gloomy outlook for an East Asia-wide identity in the future.

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Chapter 17 The Everyday Dynamic in Space and Place

Po Keung Eric Tsang and Margaret Robertson

Abstract Global changes of the past decade have signaled a process of reordering of our social structures with associated ecological transitions from traditional spaces and places to evolving landscapes. The new landscapes are simultaneously local and global. Citizens are using technologies that connect with powerful data bases which provide them with unprecedented powers. Used wisely these new found powers can bring about significant improvements to the lives of people living in local communities. Health, education, and work opportunities are recognized indicators of enhanced well-being. The missing element not considered is the narrative needed to facilitate sustainable outcomes. Renewed focus on the everyday lived lives of people locally helps build capacity for the futures we face.

Keywords Global change • Digital technologies • Personal power • Well-being • Futures

17.1 Overview

The preceding 16 chapters represent a transdisciplinary overview of localized research, theoretical conceptualizations, and applied principles all within the parameters of everyday knowledge. They highlight the complexity of the problem as well as evidenced-based support for the construct. This dilemma is well illustrated in Chap. 3 which records a conversation on the theme by John von Sturmer, Yassir Morsi, and Phillip Darby. Respectively representing the voices of Indigenous Australians, the Muslim community, and postcolonial theory these three scholars attempted to find pathways through the landscapes of the local and global

P. Tsang (🖂)

M. Robertson School of Education, La Trobe University, Melbourne, Australia e-mail: M.Robertson@latrobe.edu.au

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The Hong Kong Institute of Education, Tai Po, New Territories, Hong Kong e-mail: etsang@ied.edu.hk

knowledge systems. Their public conversation remains a work in progress and begs one of several questions related to the world and region within which we live. Can there ever be understanding of the other voice? Indeed why do we need to seek this understanding?

The need for a new narrative to guide our lifestyles is posited as a necessary goal for the age in which we live. Consumerism remains a driving force in our respective economies within the Asia-Pacific region. As societies shift from agrarian economies towards urban-based activities, the expanding demand for commodities on demand is making citizens increasingly vulnerable to top-down decision making by major corporations and governments. The incessant demand for housing to keep up with the movement from rural lifestyles to cityscapes means new residential landscapes are being built on the basis of perceived citizen needs. The World Bank figures suggest a kind of identity poverty¹ where identity is a fluid rather than stable condition (p. 82). A type of social engineering is taking place in our lived times. The real time to develop a sense of belonging and a shared history with cultural connectedness for support seems artificial. However, the demand continues and the building of 'concrete' landscapes to provide housing, roads, shopping centers, schools, factories, etc., rushes on. Recognizing the downside of this contemporary pattern or social and economic mobility, some researchers identify one outcome as spatial alienation (Buchecker 2009). Without adequate community support, the effects can be disturbing. Indicators include rising criminality, family and substance abuse, corruption, and loss of engagement in mainstream activities including education and work. Arguably, elements of all these unpleasant dimensions of human existence have always been present in communities. However, the spiraling pattern of constant change primarily afforded by digital technologies has irrevocably changed the ways in which we live our lives.

We would argue that countering this rather bleak view of the world in which we live within the Asia-Pacific region is the power of local knowledge. All of the chapters in this book are illustrative of the contemporary processes at work within local communities. Each provides evidence of efforts to marry indigenous and local cultural beliefs within the frameworks afforded by global knowledge. To stand the test of sustainable outcomes, there needs to be consideration of how well our environment – both physical and social – is responding.

That humanity must shape its own destiny seems clichéd in one sense. At the same time, our lived existences on a daily basis are within located communities, alongside families and others seeking to make their way with the resources that are within their grasp. This book strives to bring the emphasis back to the person and their relationships with others, the land, their cultures, and meaning making. That we are concerned with *people* may seem least in need of definition. Yet, many conceptions of the person sever the individual from the environment without recognizing the extent to which humans come into being and live inextricably connected to places, people, and their material and cultural histories and geographies. This way

¹See http://www.worldbank.org/content/dam/Worldbank/Publications/WDR/WDR%202015/ WDR-2015-Full-Report.pdf.

of understanding people, as connected to each other and their environment, allows for a reassessment of the meaning of place and space in everyday life.

Space and place have several meanings related to them. Indeed, these terms are often used because of the diverse possibilities of their application. *Place* is usually bounded and specific to a location; a realization of the social, cognitive, and the affective domain of a person's attributes towards the space, be it local or global. *Space* tends to be understood as abstract, unlimited, universalizing, and continuous. Places are often more grounded; they serve as reference points in our lives and have distinct qualities that give people a sense of belonging. The ways people, place, and space work together to form one another are complex, varied, and dynamic. Consider, for example, the Indigenous Maori people of Aotearoa New Zealand. In Chap. 5, Hēmi Whaanga and Rangi Matamua tell the story of the revival of traditional customs related to navigation and astronomy. Relinking with past traditions in the present contributes to tolerance and acceptance of the richness for daily living that can be found in understanding diversity. In a different way, diasporas such as the Chinese in Australia, as reported in Michael Mu's research (see Chap. 4), are making a significant contribution to a nation's self-image. Traditions and customs need not be suppressed but can be reinterpreted in both place and space.

17.2 Layered Dynamics

Our argument is that the forces at work in a person's experiences and understanding/ knowledge of the everyday world are located in the interaction between the individual and the place where the action occurs. Accordingly, there are three layers within which this interaction can primarily occur (Gabrielle 2013): the first one being when the person subjectively meets the world, the second being with others, and the third living locally and translocally. Understanding translocal geographies (Brickell and Datta 2011) is a means of accessing an understanding of the impact of both external and internally driven changes in communities. The previous 16 chapters appear to include one or more of these layers. They show the complexity of living locally. While we gain a sense of the intricacies involved in human interactions, at best, only part solutions and answers are offered. Why? Perhaps because moments in time can never really be fully captured. In Chap. 10, for instance, Richard Bagnall expertly traverses the theory and practice arguments. He concludes that lifelong learning is a 'suitable framework' for understanding education and sustainability issues at the local level. However, both are 'grounded strongly in everyday knowledge and values in their implementation'. Reflecting on this evaluation, Chap. 7 provides a valuable assessment of such layers. Batchuluun Yembuu's research and analysis of Mongolia demonstrates well the layer within which the person meets the world. Environmental challenges of a harsh landscape are confronting for humans and require adaptive behaviors, such as those developed by the Mongolian herders over centuries. Now with modern amenities, the lives of herders are being transformed locally and translocally within and between local communities.

17.3 Final Comment

To share a moment or to find some common ground for conversation with a fellow human being from a land far away can be transformative for our own learning. Travelers and explorers down through the centuries learned this long ago. By sharing customs and ways of living with others, we gain a better understanding of ourselves and what we value and cherish in our lives. Fast tracking to the world of now, some time to pause and revalue our local knowledge seems fundamental for sustainable futures. Finding our shared or common ground should not be limited to political borders. Our Asia and Pacific region covers a vast array of extraordinarily adaptive lifestyles – all with very different stories to keep on telling. The many authors in this book help show that diversity is a strength, and transdisciplinary approaches offer the scope to share knowledge, reduce prejudice, and enhance harmony.

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Biographies

Richard G. Bagnall is a Professor of Education at Griffith University. His scholarly work is in the social philosophy of lifelong learning, focusing on the ethics of educational theory, advocacy and policy. He has published over 100 papers and books, supervised many research doctoral studies and worked in lifelong learning and sustainability consultancies.

Mary A. Burston is an adjunct lecturer in graduate teacher education at La Trobe University, Melbourne. Her interest in the confluences and complexities of local knowledge, transfer of ideas, imaging and imagining identity, self and others emerges from an academic background in the social sciences, global media, technology and communications.

George N. Curry is a Professor of Geography at Curtin University. His research and teaching interests are in sustainability in the broad area of rural development in the developing world. Most of his recent research has been in Papua New Guinea examining sociocultural and economic change associated with the transition to a market economy through the adoption of export cash crops.

Phillip Darby is co-founder with Michael Dutton and director of the independent Institute of Postcolonial Studies in Melbourne. He is also a principal fellow in the School of Social and Political Sciences at the University of Melbourne.

Emmanuel Germis leads the socio-economic section at the PNG Oil Palm Research Association in West New Britain Province, Papua New Guinea. He has a background in agriculture, rural development and agricultural extension. He works with village and migrant oil palm farmers, local landowning groups, extension organisations and other industry stakeholders. He is currently working on a collaborative research project with Curtin and James Cook universities examining the status of food security among oil palm farmers in PNG. **Maurice Galton** is currently an Associate Director of Research in the Faculty of Education at the University of Cambridge and a former Dean of Education at the University of Leicester. He is best known for his observational research of classrooms. Since 2004 he has overseen the Hong Kong Small Class Teaching (SCT) initiative.

Lesley Harbon is Professor and Head of School of International Studies position at University of Technology Sydney. She has coordinated, led and researched shortterm international experiences at three Australian universities since 1986. Her research focuses on the impact and perceived value of short-term international experiences (STIE) on language teachers' knowledge about language (KAL).

Lai Hang Dennis Hui is a lecturer at the Department of Social Sciences of the Hong Kong Institute of Education. His research interests include urban development of Asian cities and disaster management. His recent work appears in *China*: *An International Journal*.

Kerry Kennedy is Research Chair Professor of Curriculum Studies and Director of the Centre for Governance and Citizenship at the Hong Kong Institute of Education where he has worked since 2001. He is Series Editor of Routledge's *Schools and Schooling in Asia* and the *Asia-Europe Education Dialogue Series*.

Gina Koczberski is a Senior Research Fellow at Curtin University. Her research interests are in sustainability in the areas of migrant and smallholder livelihood practices, socio-economic change and rural development in PNG. She is involved in several research projects examining socio-economic change in smallholder oil palm and cocoa production with an emphasis on how changing demographic, economic and social circumstances influence household relations of production and strategies of commodity crop production.

Merolyn Koia is employed by the PNG Oil Palm Research Association in Northern Province, Papua New Guinea. She is involved in agronomic and socio-economic research and works closely with smallholder oil palm growers. She has been working on the agronomic aspects of oil palm and food crops and is currently working on a collaborative research project with Curtin and James Cook universities examining the status of food security among oil palm farmers in PNG.

Edmond Hau Fai Law is Professor at the Department of Curriculum and Instruction Hong Kong Institute of Education. His research interests include distributed curriculum leadership, curriculum studies, activity theory in curriculum research and language in education. He is now writing a book on distributed curriculum leadership for Routledge and editing a book on pedagogical innovations in ten Asian countries for UNESCO.

John Chi-Kin Lee is the Vice-President (Academic) and Chair Professor of Curriculum and Instruction at the Hong Kong Institute of Education. He has served as the Co-Director of the Centre for Education in Environmental Sustainability. He has been awarded as Changjiang Chair Professor to serve at Southwest University, China. John Lee's research interests focus on curriculum and instruction, geographical and environmental education as well as school improvement.

Vic Yu Wai Li is an Assistant Professor at the Department of Social Sciences of the Hong Kong Institute of Education. His research interests include international political economy, with focus on political economy of finance and financial regulation. His works appear in *China Quarterly* and *Journal of Contemporary Asia*.

Mark Mason is a Senior Program Specialist at UNESCO's International Bureau of Education in Geneva and Professor at the Hong Kong Institute of Education. He is the former Editor of the *International Journal of Educational Development* (Elsevier) and of the *CERC Studies in Comparative Education Series* (CERC and Springer). He was formerly President of the Comparative Education Society of Hong Kong and Director of the Comparative Education Research Centre at the University of Hong Kong.

Rangi Matamua of Tūhoe is an Associate Professor based in Te Pua Wānanga ki te Ao at the University of Waikato. He has undertaken significant research in the areas of Māori language revitalisation, Māori culture, Māori astronomy and broadcasting. Dr Matamua has produced a number of publications in his specialist areas and sits on a number of related boards including Society for Māori Astronomy Research and Traditions (SMART).

John Morgan is Professor of Education at the University of Auckland, where he specialises in curriculum studies. Before that he held posts at the University of Bristol and Institute of Education (London). He worked as a geography teacher in schools and trains new geography teachers. He has written a number of books on geography education, the latest being *Teaching Geography as if the Planet Matters* (2012 Routledge).

Yassir Morsi has a PhD from the University of Melbourne in Political Science and Islamic studies. His main interest is how contemporary liberal thought deals with the 'Muslim Question'. His research covers a broad range of post-colonial and critical race theorists. Yassir is currently a post-doc at the International Centre for Muslim and non-Muslim Understanding at the University of South Australia.

Guanglun Michael Mu is a sociologist of education. He is interested in diversity and inclusivity. He is concerned with children and youth from diverse backgrounds and with special needs. His own cultural history promoted him to speculate diasporic Chineseness through subtle, multilayered identity constructions and nuanced, inter-nested language practices.

Margaret Robertson is Professor of Education at La Trobe University. Teaching interests in geographical education and innovative pedagogy are reflected in long-standing research interests in youth studies and cross-cultural differences. Outreach interests include membership of the Steering Committee for the International Year of Global Understanding project which is an initiative of the International Geographical Union.

Sean Ryan is a Research Assistant at Curtin University. His research area is rural development in Papua New Guinea, looking at sociocultural constraints on agricultural productivity and ways of building more sustainable livelihoods for smallholder farmers.

Naomi Simmonds is of Raukawa, Ngāti Huri descent. She holds a PhD from the University of Waikato which looks at experiences of birth for Māori women in Aotearoa, New Zealand. Naomi is currently a lecturer in the Geography and Environmental Planning Program at the University of Waikato.

Catherine Smyth is Associate Lecturer in HSIE K-6 Education at the University of Sydney. She has had significant international experience, having lived and taught in the Middle East and Solomon Islands. Catherine is involved in the Asia Bound programs for both China and Indonesia. Her research focuses on pre-service teacher epistemology.

Emilia Szekely is a political scientist from the National Autonomous University of Mexico. She received her master's degree from Tsinghua University in China in International Development and is currently pursuing her PhD in Educational Development at the Hong Kong Institute of Education. She participated in research projects with the Center for Chinese-Mexican Studies and for the Barefoot College in India with the Hong Kong Institute of Education.

Po Keung Eric Tsang is an environmental scientist specialising in feasibility studies and environmental impact assessment studies. Within the Institute he is an Associate Professor in the Department of Science and Environmental Studies, Associate Director of the UNESCO UNEVOC Centre (HK) and Chairman of the Communicable Disease Prevention committee. Dr Tsang is a panel member of the International Year of Global Understanding, initiated by the International Geographical Union.

John von Sturmer has had a long engagement in Aboriginal affairs principally in Northern and Central Australia. In 1970 he was appointed the first Lecturer in Aboriginal Studies at the University of Queensland. From 1978 to 1994 he was Director of the Project to Monitor the Social Impact of Uranium Mining on the Aborigines of the Northern Territory. In 1994 he returned to teaching at the University of New South Wales. Currently, he is affiliated with the Institute of Post Colonial Studies and remains active as an adviser, arts practitioner, writer and critic.

Dr Hēmi Whaanga is a senior research officer in Te Pua Wānanga ki te Ao at the University of Waikato. Hēmi has been involved, in various capacities as a project leader, writer and researcher, in a range of linguistic, indigenous Māori knowledge and curriculum projects. His tribal affiliations are Ngāti Kahungunu, Ngāi Tahu, Ngāti Mamoe and Waitaha.

Batchuluun Yembuu is Professor of Department of Geography, Mongolian State University of Education. Since 1979 she is working at the university, specialising in physical geography and geography education. She has a strong commitment to curriculum, standards and textbook development on geography. She is Executive Director of Geographical Education Society of Mongolia.

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