

BABIES' BOTTOMS FOR A BETTER WORLD

HYGIENE, MODERNITIES AND SOCIAL
CHANGE IN NORTHWEST CHINA AND
AUSTRALASIA

KELLY FRANCES DOMBROSKI

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For the regulars on ec8ANZ — virtual friends who kept it real.

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STATEMENT OF AUTHENTICATION

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution.

Signed by the candidate, Kelly Dombroski

on the day of 2012.

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ABBREVIATIONS USED

AusAID	Australian Agency for International Development
CEC	Community Economies Collective
DH	Darling Husband (in online forums)
DD	Darling Daughter (in online forums)
DD#	Darling Daughter, where # is the age in years (in online forums)
DS	Darling Son (in online forums)
DS#	Darling Son, where # is the age in years (in online forums)
EC	Elimination Communication
ECer	Someone who uses the toileting method of elimination communication with their baby
#mo	Month-old, where # is the age in months (in online forums)
NGO	Non-governmental organisation
OT	Off topic (in online forums)
PRC	People's Republic of China
TCM	Traditional Chinese Medicine (official version)
TT	Toilet-trained/toilet-training (in OzNappyfree online forums)
WHO	World Health Organisation
#yo	Year-old, where # is the age in years (in online forums)

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ABSTRACT

This is a thesis about social change for a climate-changed world. I argue that in order to think more creatively about much-needed social change, we must explore the multiple possibilities for future worlds *already present* in experimental form. This thesis offers insight into the ways in which hybrid, experimental practices of infant care are developed and performed by mothers and others in their everyday lives. I take a place-based approach that draws on rich ethnographies and interviews with mothers and others in two field sites: the city of Xining and surrounding areas in the northwestern Chinese province of Qinghai, and a ‘virtual’ group of mothers from Australia and New Zealand. What results is effectively an ethnography of social change, where I describe how mothers and others respond to — and also contribute to — global changes through appropriating, resisting, and hybridising various mothering and caregiving practices. Through embodied ethnographic engagement, I explore the Chinese infant-toileting practice of *baniao*, and the hybrid infant-toileting practice of ‘elimination communication’. Through a collective process of knowledge production, I work with other mothers in experimenting with hybrid infant-toileting hygienes that are less about ‘killing germs’ and more about ‘guarding life’. This thesis thus takes the important step of exploring and understanding experimental social change through hybrid and collective research practices *outside* the academy, where people are already responding intelligently and creatively to environmental crisis.

INTRODUCTION

A NEW EARTH ERA

There is no doubt among environmental scientists that we need widespread social change in order to avoid further environmental crisis. Resource depletion, solid waste disposal problems, loss of biodiversity, climate change, and unequal access to the necessities and pleasures for human and non-human life alike are all directly related to changes in the production and consumption of ‘stuff’. The effects of a rapid increase in production and consumption — known variously as industrialisation, development, and modernisation — have been so widespread and intense that some scientists are pushing for the announcement of a new geological era (Zalasiewicz *et al.* 2010). It is to be named the ‘Anthropocene’ because the effect of human activity is apparently on a geological scale.

Where do I, as a geographer, ethnographer, mother-of-two come in? Just knowing about and studying the environmental *effects* of human social change in the Anthropocene is not the same as thinking about and *effecting* future social change. The formidable skills of environmental scientists, geologists,

biologists, and ecologists must be supported by those of us who specialise in the social sciences. It is our job to help rethink all this human activity and its material effects, to rethink social change for a climate-changed world.

Certainly the materiality or the ‘stuff’ of everyday life in many modern societies is so embedded, embodied, and habituated that it is difficult to imagine alternative ways of being together in the world that are less resource-consuming and waste-producing. Yet I will attempt it here. For at the dawn of this new Earth era marked by human-induced change in both climate and geology, the time is clearly ripe to uncover and imagine other ways in which much-needed change might take place. As Val Plumwood puts it:

If our species does not survive the ecological crisis, it will probably be due to our failure to imagine and work out new ways to live with the earth, to rework ourselves and our high energy, high-consumption, and hyper-instrumental societies adaptively... We will go onwards in a different mode of humanity, or not at all (Plumwood 2007: 1).

THINGS CAN BE DIFFERENT

How might we think more creatively about social change? An important starting point is to insist that the future can be different. This involves rejecting the assumption that the path of modernisation taken by the industrialised Western world is universal and inevitable. The evidence for this is relatively solid. For years, astute observers in the disciplines of anthropology and geography have traced ‘other modernities’ — that is, the differential ways in which people and places have both resisted and accommodated supposedly inevitable universalising forces (see for example Escobar 2001, Gibson-Graham 1996, Gibson-Graham 2006, Jameson and Miyoshi 1998, Liu 2009, Massey 2005, Moore 1996, Tsing 2005, Yang 2000). These other ‘modernities’ may not at all look like what is often meant by the term ‘modernity’. Whether they are in out-of-the-way places such as rainforest Indonesia (Tsing 1993) or Tibetan hospitals (Chertow 2003), or higher profile places such as the East Asian ‘tiger’ nations or southern industrialised cities of China (Liu 2002), they have

interacted differently with various global trajectories and processes, resulting in different *contemporaneous* realities. I deliberately emphasise ‘contemporaneous’ because, like Massey (2005), I refuse to organise people and places into some kind of historical queue, where some are ‘behind’ but still destined to follow the same problematic path of industrialisation and modernisation as those who are ‘ahead’. The so-called behind or backward places are just as much the result of global interactions and interconnections. Their different economies and societies are not in the past; they are in the present, contemporaneous. They are differently modern, but in this line of thinking, modern nonetheless.

It is relatively easy to garner acceptance for the idea of ‘other modernities’.¹ It is less common to read these ‘other modernities’ as sources of hope and the possibility of different Earth futures. Yet post-development writers from the Global South have been arguing this exact point for some time now. For example, Escobar wonders at the ‘tremendous inability on the part of Eurocentric thinkers to imagine a world without and beyond modernity’, arguing that in this world of multiple modernities, it is not acceptable to think of a Western modernity as ‘the Great Singularity’ (Escobar 2004: 255). Escobar’s work has been focused on ‘translocalisms’ where trajectories of modernity are multiple and located, and can lead to multiple future local and global states (2001, 2004). Likewise Santos rejects the ‘monoculture’ of modernity, and tries to make visible an ‘ecology’ of economic and social practices, or other modernities. He asks us to focus on ‘emergences’, to inquire into those alternatives that are already emerging, already on the ‘horizon of concrete possibilities’ (2004: 241).

Building on this compelling imagery, I argue that moving away from a monoculture of one-possible-modernity to ‘ecologies’ or multiplicities of contemporaneous modernities allows for the flourishing of unexpected hybrid

¹ In fact, Thomassen calls it ‘the multiple modernities paradigm’, considering it to be ‘an extremely influential approach in anthropology today’ (Thomassen 2012: 160).

varieties. This thesis will explore an ecology of inter-related hygiene modernities, as well as the emergence of an unexpected hybrid variety of infant hygiene.

HYGIENE MODERNITIES IN CHINA

Hygiene is often closely connected with ideas of modernity. In early twentieth-century China, after the fall of the Qing dynasty and the conception of the Republican era, Chinese scholars and reformers struggled with imagining a 'Chinese modernity'. They became acutely conscious of some of China's 'deficiencies' through travel and education in Europe, America, and Japan. Back home, they looked in dismay at the fall of the Qing dynasty, the collapse into warlordism and semi-colonialism, the epidemics of tuberculosis and cholera that Chinese medicine could not stall, and the rather more successful public health strategies of foreign concessions within China's borders as compared to those of the weak Republican government. They mostly saw these circumstances as illustrating China's weakness, its position as the 'sick man of Asia' (Hong 1997) in desperate need of treatment. Likewise, the 'Chinaman' or citizen of China literally personified this 'sick man of Asia' in his very body: unhygienic, sickly, weak, and undisciplined (Hong 1997, Lei 2010a).

The emphasis of many historical studies looking at this period has been on changes in state-led public health strategies. The reason for this is because a working public health system is understood as the epitome of hygiene, or 'hygienic modernity' (Furth 2010, Rogaski 2004). However, alternative readings of these hygiene studies, as well as others in Chinese medicine, sport history, and health, reveal that the hygienic *body* was central to a project of cultivating oneself as a 'modern' Chinese citizen (Anderson 2010, Hong 1997, Lei 2009, 2010a, 2010b, Rogaski 2010).

Hygienic bodies for a modern China were thus cultivated, produced, and reproduced in homes and family spaces (Lei 2010a), as well as being

increasingly disciplined in public health spaces such as hospitals, streets, clinics (Rogaski 2004) and schools (Lei 2010a, Hong 1997). Yet these embodied hygienes were not established coherently or without alternative. In the work of Sean Hsiang-lin Lei in particular, we can see traces of multiple hygienes, multiple hygienic subjects, and multiple possible hygienic modernities in Republican-era China. Lei uncovers multiple and alternative hygienes in the historical writings of several concerned citizen-scholars who critiqued the emerging hygiene practices on the grounds that they displayed excessive individualism and were economically unrealistic for the majority of Chinese citizens (Lei 2009). I return to this theme later in the thesis, but for now, my point is that multiple hygiene modernities exist at any time in history. The problem is not so much establishing the existence of these other modernities, although that is not easy. The problem is grasping and describing them in a non-teleological way, allowing for an openness in their trajectories — even in the face of hegemonic historical and contemporary discourses that assume global movement toward one-possible-(hygiene)-modernity.² This problem of ‘thinking multiplicity’, which I develop in more detail in the chapter by the same name, calls us to a different sort of engagement with hygiene than what has taken place so far in hygiene studies.

The field I am calling hygiene studies is not a recognised discipline as such. However, there does exist a disparate collection of publications by scholars from the fields of science studies, history, development studies, gender studies, and medical anthropology who have taken it upon themselves to link projects of hygiene with issues of power, colonialism, development, and modernity in a critical way. My engagement with these scholars has mostly cohered around a research cluster of scholars linked directly and indirectly with the Taiwanese university Academia Sinica,³ since they deal directly with hygiene in East Asia.

² Hygiene historian Virginia Smith has discussed this problem as one of time and the ‘myth of progress’ (Smith 2007: 5).

³ I think here of the work of Warwick Anderson, Charlotte Furth, Sean Hsiang-lin Lei, Angela Leung, Ruth Rogaski, Wu Chia-ling, and Yu Xinzhong, who are not all scholars of Academia Sinica but have multiple connections there with hygiene research, most recently through a conference leading to the production of the volume *Health and Hygiene in Chinese East Asia* (Leung and Furth 2010).

Outside of East Asia, other major publications in the field include a 'global' history of hygiene (Smith 2007), an anthropological study of concepts of purity and taboo (Douglas 2003), explorations of the biological aspects of hygiene and disgust (Curtis and Biran 2001, Curtis *et al.* 2009), various books on the body and its fluids (Grosz 1994, Longhurst 2001), and a number of articles and chapters that deal directly with the *concept* of hygiene (Jewitt 2011, Puaksom 2007, Takeda 2005). There is also an extremely large, but less helpful, body of medical, health, and development studies literature that takes hygiene as its object. Yet it does so in a non-reflexive, uncritical way, assuming that hygiene is a 'great singularity' being progressively revealed to the world as science and biomedicine advance in understanding and practice along the one-true-hygienic-path.

HYGIENE ASSEMBLAGES

My contribution to hygiene studies and the problem of hygiene multiplicity is to conceptualise hygiene as an assemblage. As I go on to discuss in the thesis, an 'assemblage' is a gathering of practices, materialities, socialities, spatialities, and subjectivities (Law 2004). The ways in which the configurations of hygiene assemblages unevenly ebb and flow and reorganise over time, both intentionally and unintentionally, provides insight into the processes and possibilities in hygiene, sanitation, and related subjectivities. But my contribution does not stop here. I contend that insight into hygiene assemblages and their changing configurations gives insight into processes and possibilities for broader creative social change for a better, more sustainable and just world.

The hygiene assemblages I study are those gathered around domestic practices of infant hygiene. I am interested in the ways in which infant hygiene assemblages contribute to the making and remaking of different sorts of hygienic bodies (in mothers, infants, and others), and thus different (contemporary and future) hygienic modernities. I start by examining infant

hygienes in the northwest Chinese province of Qinghai, showing how they have been produced by various trajectories of hygiene, health, and modernity, both global and local. Scholars have found it relatively easy to show that peripheral places have differentially resisted and accommodated global modernising forces, including hygienes. It would be all too easy for critics to label studies of hygienic modernities in out-of-the-way China as some sort of peripheral anomaly, where hygienic modernisation is somehow incomplete. In this thesis I am keen to explore the ways in which global forces are themselves comprised of local/global interactions, and the ways in which the so-called 'peripheries' can influence the so-called 'centres' of modernity. With this in mind, I deliberately examine a hygiene assemblage that does just this: a group of 400 mothers in an Australasian⁴ online forum experimenting with changes in infant toilet hygiene.⁵ Here it is rather more clear that challenges to a monolithic hygienic modernity are not just limited to apparently peripheral spaces of the world, but are happening right now in apparent strongholds of hygienic modernity via long-distance engagements with other hygiene modernities such as those of northwest China.

Imagining hygiene as an assemblage allows me to draw in the 'big picture' stories of public health regimes, global health strategies, multinational marketing campaigns, and changes in economic and environmental policy. But I am not limited to these trajectories, nor required to think of them as necessarily causal. Using the concept of a hygiene assemblage allows me to also bring domestic, place-based, personal and family trajectories into the mix, showing how hygiene modernities are overdetermined by any number of trajectories and contingencies. These domestic and situated hygiene practices

⁴ I use the term 'Australasian' and 'Australasia' throughout this thesis, fully aware that it can indicate a wider region than just Australia and New Zealand. I do so mostly as it is less cumbersome than using 'Australia and New Zealand' when comparing with northwest China, and gives an indication of a wider cohort than just 'Australia'. It is common to use the term for joint Australian and New Zealand sporting teams or societies. I resist using Antipodes or Antipodean because it centres the United Kingdom as the point of reference. Australians often just refer to 'Australia' and include New Zealand less specifically, a solution I was somewhat resistant to as a New Zealander. In not wanting to obscure the significant number of New Zealand-based contributors to the webforum, I have settled with Australasia. Yet I am aware that in doing so I am using a problematic geopolitical term that is less-than-ideal for my purposes.

⁵ Here, I follow a similar strategy to (Katz 1994, 2004), when she deliberately 'displaces' her research from Howa, Sudan to Harlem, New York — showing how processes of modernisation operate in the lives of children in both contexts.

have turned out to be far more important than I first imagined, and not just because of the lack of research on such matters currently available. Viewing hygiene as a collected assemblage has brought a number of things to light in terms of understanding the day-to-day practices and performances of broader social change, not least of which is the tendency to accept our own hygiene practices as entirely normal and universal.

SITUATING HYGIENE PRACTICES

Situating particular domestic hygiene practices within broader assemblages of knowledge, society, economy, culture, health, and place is important in understanding how these strands are constituted and woven through with multiple lived experiences. In one sense, domestic hygiene practices reflect and are influenced by the broader discursive and material trends thus assembled as 'hygiene'. But in another, important, sense they also hold the potential to influence and change, tweak, and twist the broader assemblage in ways we might not fully appreciate.

Studying hygiene with a view to domestic and personal practices is still somewhat unusual (see the discussion in Longhurst 2001), despite the role of personal hygiene in the important fields of embodied geography and geographies of the body (Longhurst 1997, 2001, Rose 1993, 1997). Some of this reluctance to delve into domestic hygiene practices is probably due to 'the great distaste' academics (and others!) exhibit for the details of sanitation (Black and Fawcett 2008, Jewitt 2011, Smith 2007), a masculinist distaste that extends to the abject, leaky, messy bodies represented in domestic spaces of hygiene (Grosz 1994, Kristeva 1982, Longhurst 2001). Perhaps also it is the relative mundaneness of personal and family hygiene that has obscured it from academic study for so long: historical records of state health interventions are far more common than those dealing with the day-to-day management of personal hygiene. Finally, our own practices of personal hygiene have been habituated (Lei 2010a) and embodied so as to become almost invisible and

certainly unquestionable.

There are dangers to this lack of reflexivity or awareness of hygiene differences. This was brought home to me first in an interview with an observant health and development worker in Qinghai province, northwest China. Dr Marion Torrance-Foggin, a community paediatrician of Scottish origins, told me of the many cases of ‘cold damage’ she saw in her ten years of maternal and child health work in rural Tibetan Qinghai. Nomadic and rural women presented her their bent and stiff fingers, damaged by frost-bite, frost-nip, or other non-freezing cold injuries. Although cases of cold damage are obviously not unknown in this high-altitude harsh environment, the relative frequency of cold damage on women’s hands was attributed by Dr Torrance-Foggin to an astonishing source: the seemingly innocuous practice of handwashing. A staple of health education projects on the plateau, recent decades have seen the promotion of frequent handwashing and its subsequent adoption by many nomadic and settled Tibetan communities. Despite the apparent increase in cases of cold damage, this is generally celebrated as a health achievement.

Handwashing practices on the plateau are an important example of the necessary *situatedness* of hygiene practices. Using this particular case, I introduce my understanding of the importance of place and culture in hygiene.

UNSITUATED HYGIENES OF HANDWASHING

Keeping hygiene through handwashing after every toilet stop and animal-related task is a given for health experts in both China and the industrialised Western world. It is assumed to be a universal truth of hygiene rather than a practice that has developed within particular contexts of health-keeping and disease transmission. The conflation of all non-industrialised nations into ‘developing countries’ or some such category belies the variety of disease vectors within what is more likely an unrelated collection of disparate places. A typical statement runs as follows:

The two biggest killers of children in the developing world today are diarrheal disease and respiratory tract infections. The simple act of washing hands with soap can cut

diarrhea risk by almost half, and respiratory tract infection by a third. This makes handwashing a better option for disease prevention than any single vaccine. If developing countries are to achieve their 2015 millenium development targets for reductions in child mortality, this unfinished agenda of the 20th Century must be completed. Not only must water and sanitation become universal, but so must the habit of handwashing with soap (Global Public-Private Partnership for Handwashing (PPPHW) 2011: 5).

From this starting point, the thinking of development, health, and government workers often goes as follows: Qinghai is not a wealthy or developed place, and certainly has high child mortality.⁶ Therefore the statement applies, and the best solution is to run a handwashing promotion program. Teaching the apparently ignorant Tibetan women to wash their hands with water and soap is assumed to be key in improving health outcomes in the region.

Yet the barren and cold high-altitude plateau is a place with its own specific health dangers: water on the hands in temperatures of minus thirty degrees Celsius is *not* a hygienic practice, if we take the standard dictionary definition of hygiene as ‘practices or conditions conducive to keeping health’ (Oxford English Dictionary 2012). This fact is even recognised with regards to health advice for Western travellers to the plateau, who are warned to use alternative sanitary measures (see for example the patient education advice issued by Crawford 2012).

For much of recorded history, handwashing has been a common practice prior to food consumption all over the world (Ashenburg 2007), including in nomadic Tibet where the hands are used for eating traditional foods. However, the scientific ‘truth’ of frequent handwashing as a means for disease prevention is based on the disease transmission vectors (especially between animals and humans) in settled societies. Historically, it is the sedentary,

⁶This is despite the fact that diarrhoea and respiratory tract infections are *not* the biggest killers of children in Qinghai (Rudan *et al.* 2010). According to Rudan *et al.*, causes of death for Qinghai children under five, in order of importance, are as follows: ‘other’; birth asphyxia; pneumonia; preterm birth complications; accidents; congenital abnormality; sudden infant death syndrome; diarrhoea; neonatal infant sepsis. Pneumonia (a respiratory tract infection) is certainly significant, but since it is also related to exposure, handwashing for plateau dwellers may not have the preventative effect it has been shown to have elsewhere.

agriculturalist societies with more crowded living conditions, altered ecosystems, and more intensive agricultural practices that have witnessed the development of animal-to-human infectious diseases (Xu *et al.* 2008). New diseases — many of which were unknown to indigenous hunter-gatherer, nomadic, or more isolated societies all over the world — have tended to originate in these places, such as the heartland of Chinese civilisation and vast areas of Europe (as have the solutions).⁷ Although Tibetan communities have a variety of agricultural practices that could also contribute to these sorts of diseases, my point is that hygiene practices develop in particular settings in response to particular disease trajectories and particular health risks.

Hygiene practices such as handwashing are, then, a particular set of practices and understandings that are situated within an assemblage of ‘hygiene’. This assemblage includes economic, environmental, social, medical, cultural, political, and other trajectories. It includes the material conditions currently present or manifestly absent including water, oil, soap, bacteria, worms, microbes, dirt, blood, faeces, animals, doctors, snow, wind, ice, jackets, fire, stoves, fuel. And it includes the meanings assigned to all of these things. Assembling handwashing in this way works to make visible the often-overlooked linkages, to make present that which was previously absent and silent.

The hygiene practice of frequent handwashing, in fact, is less situated in the historical trajectory of disease development and more in the historical trajectory of obstetric intervention in the West (Kedgely 1996, Smith 2007). Due to a convergence of a variety of historical and economic trajectories, women began birthing in hospitals in increasing numbers during the late nineteenth century. There, they faced the increased risk of cross-contamination of puerperal or childbirth fever due to vaginal examinations by obstetricians moving between patients and even from autopsies to patients,

⁷ Think also of the devastating interactions between colonists and indigenous populations in the Americas, Australia, New Zealand and the Pacific, where previously unknown diseases decimated populations after contact.

transferring infection as they went (Kedgely 1996). The immediate health risks of a particular cohort (birthing women) in a particular space (the hospital obstetric ward) at a particular time (mid-1800s) gave rise to a hygiene practice that responded directly to these risks, as well as having far-reaching implications for other diseases. But the health risks on the Qinghai-Tibet plateau include those of a quite different sort to that of China's heartland, or indeed nineteenth century hospitals. Here, the development of hygiene practices have been situated firmly in the context of coping with the often harsh and cold climate, especially for nomads. For example, historically nomads on the plateau have avoided washing with water, and have used butter oil to protect their skin against the drying effects of the wind, sun, and cold.

RE-ASSEMBLING A SITUATED HYGIENE

Times change, diseases change, health priorities change, and societies interact with others for better or worse. In the case of handwashing on the plateau, there is no doubt that it is now one important strategy in preventing the ingestion of the potentially fatal hydatid worm, especially for people who interact frequently with dogs and sheep.⁸ But still, from the perspective of someone living on the plateau, the longer-term threat of hydatids must play off with the shorter-term realities of cold damage — and for many it is logical to avoid cold damage first. This logical decision is sometimes interpreted by the authorities as another example of the backward thinking of the Tibetan people, or their preference for dirtiness, and by academics as a presumed lack of knowledge (see for example Li *et al.* 2010).

The point here is that hygiene is situated in place and time, and its particular practices are likewise situated within quite broad assemblages which do not have direct causal paths. Although we can trace the practice of handwashing back to hospitals and obstetric developments, it is not a necessary path, because we can likewise trace back Tibetan hygiene practices to particular

⁸ The hydatid worm is ingested accidentally after contact with dog faeces, causing cysts in the internal organs of its host, which are very difficult to remove and can cause death.

historical and environmental trajectories and situations. Studying the ways in which these different hygiene practices and understandings develop, clash, interact, and are gathered anew reveals to us the situatedness of our own embodied and habituated hygiènes. We may thus begin to ‘see’ the assemblage that makes certain practices appear ‘common sense’ and others ‘non-sense’. What is nonsense may in fact contain more sense as we struggle to rework and gather new assemblages of hygiene that respond to changing environments, economies, and communities.

In the case of handwashing on the Tibet-Qinghai plateau, it is doubtful whether these handwashing projects have helped at all, since Bai *et al.* (2002) found that the contraction of hydatids was in fact not related to education level or even necessarily just dog ownership, but to sheep ownership and hunting. If would-be ‘modernisers’ on the plateau could leave aside their feelings of disgust or dismay that less-regular handwashing regimes may provoke, they might come to facilitate other solutions that protect the hands of Tibetan women from cold damage and the livers of their families from hydatid-induced cysts. Facilitating community discussions around the life cycle of the hydatid worm, and the broader hygiene assemblage the worm is part of, may lead to more appropriate strategies than mere ‘health education’ projects. In light of Bai *et al.*’s (2002) research into plateau hydatids, it is possible that these strategies may be more focused on the dog and sheep actors within the plateau hygiene assemblage, since these animals are even more important than humans in the life cycle of hydatids. Handwashing appears beautiful in its simplicity and cost-effectiveness. But we must be sure that strategies of change are situated appropriately within the assemblage of materialities, beliefs, knowledges, and relationships that constitute ‘health’ and ‘hygiene’.

HYGIENE FUTURES

Despite stories of cold damage and other similar stuff-ups globally, there is

nothing *necessarily* problematic in trying to effect positive change. Like Jewitt (2011), I see the area of sanitation and ‘geographies of shit’ as one desperately needing more research and better strategies for change. But how do we think this change in a way that is humble and open, aware of the specificities of people and place?

As we have seen in the story of handwashing on the plateau, this must come through making visible the assemblages (here of hygiene) that are already in place, and already working to keep health in some way. We must at least *begin* with this. But the ‘geographies of shit’ that we commonly think of as problematic are those in the developing world, where better hygiene would work to, for example, stop diarrhoea and reduce child mortality or prevent the horrors of the hydatid worm accidentally and perhaps fatally infecting a human host with its larvae. One of the major assumptions made in this thesis is that the hygiene practices of the developed world are *also* in need of rethinking. Just as an effective plateau hygiene of the future must be tailored to its unique environment, so too must the environmentally inappropriate hygienes of the developed world be made visible, then reassembled in a more environmentally responsive way.

This is why I insist on treating the hygienes of out-of-the-way places as other modernities. These hygiene assemblages that currently work to keep health in some situated way are contemporary workable alternatives, and they will not necessarily homogenise into one global hygiene practice reliant on disposable sanitary products, chemical cleaning products, and copious supplies of water flowing into a public sewerage system. We — as a species — need to listen and respond to our environment, to ‘learn to be affected’ (Latour 2004a: 210) by the world around and rework our practices of health-keeping, economy, and domesticity appropriately. We need new hygienes, and new modernities. We need to learn how to live better with each other and with the ‘more-than-

human' world.⁹ We need social change, and we need to know how this can happen.

Although I start with the hygiene assemblages of 'other modernities', this thesis is more than an ethnography of hygiene in an out-of-the-way place. For I believe that in understanding some of these shifting hygiene assemblages in out-of-the-way places, we can learn something about enacting social change for a climate-changed world. I have come to think of this thesis as the beginning of a *post-development* project of hygiene, where good change is not something dished out from the 'developed' to the 'developing' (or the 'modern' to the 'backward'). Here, we can see good change that is collectively, tentatively, and experimentally developed in multiple places, travelling and hybridising and problematising those old development dichotomies.

RESEARCH QUESTIONS AND APPROACH

This thesis seeks to make visible some of the deeply embodied habits and beliefs with regards to keeping babies healthy, and to explore how these are changing and travelling. Within the context of two different modernities — in plateau Qinghai and urban Australasia — I examine hygiene assemblages through the following research questions: What kinds of infant hygienes are out there? How do changes in domestic infant hygiene practices come about? Why does it appear that some new practices are unproblematically absorbed and normalised into local mothering lore, while others are resisted, transformed, or reworked? What kinds of practices are travelling, and where? Finally, I ask the ethical and political question that could form the basis of a post-development project of hygiene: how can all of this contribute to a better, more sustainable and just world, to some sort of 'good change'?

⁹ In this argument I am influenced particularly by Jenny Cameron, Katherine Gibson, JK Gibson-Graham, Ann Hill, and Gerda Roelvink in various recent work including (Cameron *et al.* 2012, Cameron *et al.* 2011, Gibson-Graham 2011, Gibson-Graham and Roelvink 2009).

THESIS OVERVIEW

In this introduction I have discussed the main themes of this thesis — social and environmental change, bodies, hygiene, and modernities. I have also introduced some of the key concepts that underpin these themes: place, assemblages, multiplicity, diversity, possibility. I now turn to the overall thesis argument and outline, offering a guide to help the reader navigate the chapters to come.

This thesis has developed out of a paper I wrote and presented in late 2009, titled *Poor Mothers and Not Poor Mothers* (Dombroski 2009; see also, 2010a, 2010b). This paper argues that mothering practices in northwest China are not ‘backward’ as many in the medical and development worlds appear to assume. First, I make this argument theoretically; then I situate a number of specific practices in their place-based logic. I go on to show how a group of Australian and New Zealand mothers have tried to learn the practice of nappy-free hygiene, which is common practice in Qinghai. I workshopped this paper with the Communities Economies Collective (CEC)¹⁰ because I was having trouble cutting the length to submit to *Gender, Place and Culture*. With the help of CEC-Sydney, I realised that each section of that paper was making a slightly different argument, and each argument could be expanded into a paper of its own — or a thesis chapter.

I mention this because each of the six chapters of this thesis has been conceived of as an individual piece, and each piece has been published or presented as such (please see references as I discuss each chapter). Each piece was later expanded into its own thesis chapter, fitting within the overall research aims of this thesis. Each chapter therefore features a specific argument and draws on literature and fieldwork appropriate to its focus. Although each chapter can mostly stand alone, I have arranged them in such a way that they build on each other progressively.

¹⁰ A Collective of academics, activists and students who work on Community Economies (CEC), drawing on the work of JK Gibson-Graham. CEC-Sydney meets monthly to workshop papers of colleagues from Australia and elsewhere around the globe. See www.communityeconomies.org for more details.

I begin with the concept of multiple modernities in the chapter *Thinking Multiplicity: Undoing Teleologies of Mothering and Modernity*. With some of the lowest income levels in the country, the name ‘Qinghai’ is almost synonymous with *luohou* or ‘backwardness’ to people throughout the People’s Republic of China (PRC). Rural Qinghai is the target of a significant number of development projects and economic development policies. Government-led development strategies are often focused on improving large-scale infrastructure such as roads, railways, water supplies and so on. Foreign and domestic non-governmental organisations have variously run income generation and community development projects targeted at nomadic communities, isolated villages of Hui and Tibetan ethnicity, county officials, schools, doctors, and health professionals, among others. Hygiene and health-related projects include well-drilling, vegetable cultivation, and the training of rural health professionals. All of these aim at improving the health and hygiene of the population; yet as we have seen earlier in this introduction this is sometimes poorly situated within the local environment, and may indeed be based on unexamined assumptions. One of these assumptions is that place-based differences in China (or even internationally) are primarily due to the level of economic development. Places such as Qinghai are ‘behind’ or ‘backward’ and it is assumed that they will eventually follow along the same development path that the ‘developed’ countries or regions have already travelled.

The first task of this thesis is to undo this assumption. In *Thinking Multiplicity* I argue for a non-teleological view of spatial differences, where differences are *contemporaneous*, not organised in some sort of ‘historical queue’ (Massey 2005). To do this I first disaggregate practices of economy and practices of mothering, arguing that the two should not be conflated in Qinghai and other out-of-the-way (Tsing 1993) parts of the globe. I go on to show that economic difference cannot be assumed to equate to economic backwardness and that multiple modernities exist contemporaneously. Likewise I suggest that mothering and infant care differences cannot be assumed to be ‘backward’ or

less effective than those of the so-called developed parts of the world. Maternities and mothering modernities are also multiple and cannot be organised into some sort of historical queue where the normative practices of the white, middle-class, stay-at-home mother become the standard care practices for the globe. I finish by setting up a theoretical framework of weak theory (Sedgwick 2003, Gibson-Graham 2006) and travelling practices that help me to think through the particularities of social change in Qinghai in a non-teleological way, appreciative of the multiplicity of mothering and economic modernities present.

In the second chapter, *Seeing Diversity: Vulnerability, Possibility, and Embodied Ethnography*, I develop my ethnographic method for seeing and describing multiple mothering modernities. Making hygiene practices visible is the next step in this post-development project of hygiene. One way in which our deeply habituated and embodied hygiene practices and beliefs become visible is when they are challenged by something quite different. When we move across space and culture and become embedded in landscapes of hygiene different from our place of origin, we might be able to 'see' our own hygienes and other hygienes side by side. Yet many people travel cross-culturally and do not 'see' their own hygienes or the logic of other hygienes: instead they resort to labelling the Other as backward, dirty, uneducated, or poor. There is a second requirement, then, for seeing hygiene, and this is the matter of stance. A reflective stance is open to the possible wisdom of others, both in one's own context and that of the Other. An open, reflective stance may therefore allow us both to see and to appreciate different hygiene assemblages, and to imagine alternatives.

I tackle the question of multiple and intersecting domestic hygiene practices through a cross-cultural method of reflective awkward engagement (Tsing 2005). Through story and analysis I develop a method for mapping infant care assemblages which utilises the feelings of amazement, resistance, awkwardness, and even disgust in my own body. This bodily awareness and attentiveness to affect allow me to gain insight into the particular spaces and practices of domestic infant hygiene observable in the two sites in Qinghai and

Australasia. In both spaces, I double as researcher and mother, often trying out the hygiene techniques with my own babies. This chapter thus traces a genealogy of my method development, through a collection of stories gathered during and after my fieldwork.

Unhomogenising Milk: Global Changes and Epistemologies of Bodies explores a changing hygiene practice in northwest China that has received its share of media attention in recent years: the practice of feeding infants with manufactured formula milk instead of (or in addition to) breastmilk. For many mothers in northwest China, the 2008 infant formula contamination scandal produced panic and terror as babies became ill and more and more companies were revealed to be supplying contaminated formula. Yet formula feeding has continued as a preferred practice over breastfeeding for many in the region, and not just among those who are unable to breastfeed due to biological, psycho-social, or employment-related reasons. Alternative conceptions of infant, mother, and family health clearly exist alongside and interact with those universals of biomedicine and traditional Chinese medicine. And all of these conceptions of health awkwardly interact with the demands of employers and norms of employment, and the availability and marketing of breastmilk substitutes, producing multiple infant feeding practices. In this chapter I first set up an approach to studying infant feeding practices based on recognising the very different epistemological practices of knowing bodies in traditional Chinese medicine and in Western biomedicine. I then explore a series of ‘gaps’ produced by awkward engagements between embodied universals, and how these have provided traction for the practice of formula feeding to gain ascendancy. The situation is much more complicated than a case of ‘Westernisation’/homogenisation, and it would be overly simplistic to see the changes in feeding practices as resulting from multinational formula companies destroying local traditions of extended breastfeeding through their clever marketing practices.

In *Holding Out: Infant Bodies and Spaces of Hygiene in Xining* I turn to another practice of infant health and hygiene that has not received as much

international or even domestic media attention. This traditional practice, referred to only as ‘holding out’ or *baniao*, is alive and well in northwest China. It is so ordinary that it is seen as not worth commenting on by locals. ‘Holding out’ refers to the action of literally holding out a small baby in a squat-like position over an appropriate toileting place as required — an alternative to using nappies to catch and contain the necessary eliminations of the body. I show how, despite huge efforts on the part of disposable nappy companies to market their products, many in northwest China prefer to continue holding out their babies alongside or instead of using nappies. Not only is *baniao* surviving this marketing onslaught, the practice is spreading and has been adopted by a growing contingent of intrepid and environmentally aware families in Australia, New Zealand and elsewhere in the Western world. Here we have an entry point to studying the ways in which domestic hygiene practices may undergo change, and the ongoing global effects of these small-scale domestic changes.

Travelling Practices: Hybrid Hygienes in Australasia introduces the virtual site of OzNappyfree, an online forum and discussion group aimed at Australians and New Zealanders. I focus particularly on baby toileting hygiene in the form of elimination communication (EC, a nappy-optional infant toilet hygiene practice echoing Chinese practices of *baniao*). The hygiene assemblages of EC become visible in comparison to both ‘mainstream’ hygiene practices in Australasia and the hygiene I have mapped out in Xining, Qinghai. In both sites, changes in domestic hygiene practices are happening in contingent and specific ways. Detailing these practices and changes highlights the multiple and shifting hygienic modernities of two quite different places, an important step in thinking and performing alternative hygiene futures.

In *Guarding Life: Rethinking Hygiene for a Better World*, I use the literal translation of the Chinese word *weisheng* or ‘hygiene’ to describe what appears to be a new form of hygienic modernity with global connections. I use the concept of a hybrid research collective (Roelvink 2008) to analyse what is happening in the online environment of OzNappyfree and its related forums. I

argue that a hybrid research collective has formed, drawing on the hygiene assemblages of the mothers, their infants and families, the technologies of the internet, and researchers such as myself. This hybrid research collective begins with parents learning to be affected (Roelvink 2010, Latour 2004b) by the unspoken communications and elimination needs of their infant, a process which ultimately opens them to possibilities and experimentations for different sorts of hygienes to be assembled in areas outside of EC. I detail some of these changes in hygiene, and use them to argue that social change can occur through experimentation and knowledge production in hybrid research collectives outside the academy.

Changes in hygiene at the domestic level may not seem like an important factor in the global scheme of things. This thesis, however, argues that domestic hygiene is a globally interactive site of social change, with real material consequences. Moreover, hybrid research collectives experimenting with and developing new hygienes not only draw on global practices but also contribute to global and local changes. The ‘fringe’ status of *baniao* and EC in the developed world is rapidly changing: the Manly City Council Waste Committee (in Sydney, Australia) recommended EC as a method for reducing the volume of disposable nappies ending up in Australian landfills (Manly Council Waste Committee 2011), despite the topic being largely ignored by academics and staunchly denied as even possible by much of the medical community. Other ‘fringe’ practices of hygiene being developed by hybrid research collectives may also contribute to different hygiene futures.



This thesis is not the thesis I set out to write. But tracing the knowledges of Qinghai women through to urban Australia and New Zealand impressed on me the importance of thinking hygiene for a different sort of future. If babies’ bottoms and the coverings we choose to put on them have the potential to create havoc with landfills, they also have the potential to show us ways forward in rethinking our deeply-held hygiene and childcare assumptions. The

sparkling effects of changing one or two hygiene practices include rethinking hygiene assumptions on multiple levels within the home and broader community. It is the presence of these multiple hygienic modernities, multiple possible might-have-been and could-be histories and futures, that allow a politics of real social, economic, and environmental change to change to flourish. This is what Gibson-Graham refer to as a 'politics of possibilities' (2006), an uncertain, hopeful, experimental post-development agenda that challenges us to imagine and practise 'development' and 'hygiene' differently. It is with this in mind that I have somewhat 'cheekily', but not altogether in jest, named this project 'Babies' Bottoms for a Better World'.

I

THINKING MULTIPLICITY

Undoing Teleologies of Mothering Modernity

What does it mean to be a developing country? Among other things it means that the future is to become developed. We are on our way toward development, and we assume that's a great thing, but let's stop to consider for a minute whether developed countries are something we want to turn into. Are people in developed countries happier or healthier? Do they live a better life? Do they have a better understanding of nature and live in a better equilibrium with the environment? Do they live in peace?

We have been focusing our energy and resources on trying to solve our Developing World problems to become more like the First World. But perhaps it is time that we, the so-called Third World minds, focused our energy and creativity on solving some of the First World problems. We will have a brighter future to look forward to, and perhaps this can help us rethink and approach our current problems from a different perspective (Carolina Vallejo, www.designforthefirstworld.com).

When Colombian national Carolina Vallejo set up Design for the First World, she proclaimed 2010 the International Year for the First World in Need. She invited thinkers who were both born and currently residing in a developing

country to submit design solutions for a range of First World problems: food production and eating disorders, aging populations and low birth rates, immigration and integration into society, sustainability and overconsumption. As a design student at New York University, she was annoyed by an assignment where they were required to design something to solve a problem for ‘the Third World’ — in a week. A throwaway sarcastic comment about the multiple problems of New York developed into the fully-fledged competition she called Design for the First World where ‘the rest’ save ‘the West’. Vallejo insists:

Design for the First World shouldn’t be funny. The phrase ‘Third World minds designing for First World Problems’ provokes smiles in many including myself. But why is it funny? Why do we assume that Third World minds shouldn’t be involved in the problems of the First World? ... I believe there is a need to re-educate ourselves as developing countries and gain agency (www.designforthefirstworld.com).

Tracing discussion of the competition on Twitter in 2010, a few people were wondering whether it was meant as a joke. But many more grasped onto the idea as one long overdue, and while ironic and even funny, by no means unhelpful. One entry from Bangladesh was for an Ayurvedic appetite-reducing herb to be distributed in sachets at fast food outlets for people to sprinkle on their fries, addressing overconsumption. Another entry from Brazil was for simple colour-coded clip-ons for iPod headphones that would indicate whether the wearer is available for ‘Real Time Chat’ while out and about on public transport, addressing social isolation for immigrants and others.

A similar project is the Ghana Think Tank. It begins its creative process by collecting problems in high-income nations (using a roadside caravan marked ‘Ghana Think Tank: Developing the First World’). The problems are then submitted to think tanks in places like Ghana, Iran, Mexico, and Serbia. In response to complaints that pesticides on residential and public lawns were causing cancer in Karlsruhe, Germany, for example, a Mexican think tank suggested that locals ‘learn to love dandelions’ through a dandelion restoration project. The point is not only to try to solve these problems, but also to

highlight issues of cross-cultural 'development'. The organisers write:

Some of these actions have produced workable solutions, but others have created intensely awkward situations, as we play out different cultures' assumptions about each other. It's become a way to explore the friction caused by solutions that are generated in one context and applied elsewhere, while revealing the hidden assumptions that govern cross-cultural interactions (www.ghanathinktank.org).

This friction was more obvious in a Gaza think tank response to submissions collected in New York. In response to New Yorkers' difficulties with maintaining personal connection in an increasingly digital world, the Gaza think tank pointed out that power blackouts often compel personal intimacy. This idea was then implemented through a staged blackout during a PowerPoint-supported presentation in a New York conference. But instead of producing the intimacy the Gaza think tank had intended, many of the people simply walked out in annoyance, unwilling to engage in the alternative interactive learning activities provided during the blackout.

Both Ghana Think Tank and Design for the First World use design, art installations and mini-projects to both challenge assumptions of First World superiority and highlight the multiplicity of social and economic realities globally. Post-development writers do similar things in their academic work, trying to break down the distinctions between 'developed' and 'developing', and to highlight the potential fruitfulness of multiple interactions between different groups or places. Katharine McKinnon's recent book (2011), for example, turns the ethnographic eye away from the much-studied northern Thailand hill-tribes and toward the development professionals working there. In contrast to classic studies of emerging 'modern subjects' of the (Thai) nation-state, she studies the ways in which 'doing development' in a specific, complex, messy place produces particular 'development professional subjects'. Refusing the temptation to write them and their projects as failures (although they are certainly seen that way by some), she elaborates a politics of hope that works in and between the messy geopolitical realities of northern Thailand. Likewise, the work done in Australia and the Phillipines by members of the

Community Economies Collective consistently refuses to partition economic activities and places into the problematic and normative categories of ‘developed’ and ‘developing’. Instead, this work explores the ways in which community surpluses can be used for ‘good change’ in communities in both the Latrobe Valley, Victoria, Australia and the municipality of Jagna, Bohol Province, Phillipines (see for example Cameron *et al.* 2012, Community Economies Collective and Gibson 2009, Gibson-Graham 2005, 2006, Gibson *et al.* 2010).

In their various ways, these writers, designers, and artists refuse to accept that the future is necessarily mapped out by the march of globalisation and large-scale knowledge and technology transfer from high-to-low average income places. They showcase a politics of social change where the present is multiple and the future is open. They also demonstrate that the results of these long-distance, cross-cultural interactions are *unpredictable*.

While China is no longer considered a ‘Third World’ country, there are certainly parts of China that are assumed to be needy and backward, and to have nothing to offer. In this chapter, I work with a similar purpose to those designers, writers and artists above. My aim is to undo the assumption that positive social change is necessarily equivalent to ‘economic development’. Drawing on the work of feminist geographers, anthropologists, and child psychologists, I argue that the multiplicity of practices of economy and mothering in places such as Qinghai cannot and should not be equated with ‘backwardness’. I also lay out a theoretical and epistemological ‘space’ for this thesis — one where the direction of social change is left open and not forced into a grand narrative, and where the practices of mothers and others in out-of-the-way places can be examined with an eye for the possibility of wider social change. In doing so, I bring to light the *mutual* exchange of ideas and practices between multiple places.

OUT-OF-THE-WAY CHINA: DIFFERENCE OR BACKWARDNESS?

And if you point to differences around the globe, Mozambique or Mali or Nicaragua, they will tell you such countries are just 'behind'; that eventually they will follow the path along which the capitalist West has led... (Massey 2005: 5).

Popular discourse on globalisation and development often falls into the trap of turning 'geography into history, space into time' (Massey 2005: 5). Places are somehow organised into an imagined 'historical queue' in a way that not only explains difference poorly, but is unable to recognise the transformative potential of different/other ways of being in the world. In making this argument, Massey shows that what is essentially difference in (contemporaneous) *space* comes to be explained and organised in *temporal* terms, where some places are just further along than others on some sort of inevitable historical path.

Even the rise of economic giants such as China is often explained in terms of 'them' moving along the inevitable path to becoming more like 'us'. The more I become familiar with the peculiarity of China's political and economic trajectory, the more it astounds me that even within China this teleology of inevitability is widely accepted. I label this view as teleological because the idea is that 'the end' of development is a world where China has once and for all 'surpassed England and caught up with America'¹¹ by playing the same economic game. This perspective is common among a new outward-gazing generation of government officials where the 'charm of the modern Other' is their fundamental reference point (Liu 2009: 173). For this generation the modern Other (which Liu identifies as mostly referring to urban North America) is thought of as a 'contemporaneous' yet somehow more 'advanced existence in space' (2009: 173). Referring always to this 'Other', official and popular discourse explains economic, ethnic, and mothering differences within and between China's provinces by assuming that some places are '...merely at

¹¹ 超英赶美 *chao ying gan mei* 'surpass England, catch America'. This was a political slogan in China during the Great Leap Forward (1958–1961). The slogan was Mao Zedong's response to USSR leader Nikita Khrushchev's 'catch up with America' slogan.

an earlier stage of the one and only narrative possible to tell' (Massey 2005: 5).

Much of this thesis is set in Xining, the capital city of Qinghai Province. One of China's least industrialised provinces, Qinghai is an example of a place where the long arm of modernity does not fully dominate. It is commonly categorised as a 'backward' place in the 'one and only narrative' of modern development. Yet the landscape of Xining is a fascinating multiplicity of historical trajectories: rapid economic and infrastructural changes in the last twenty years build on a wave of migrations from eastern China during the turbulent years of the Cultural Revolution (1966–1976), combined with a thousand-year-old history as a meeting place for at least three distinct cultural groups (Tibetan, Han Chinese, and Hui Muslims). On top of this, Xining is now home to rural migrant small-business owners and labourers from all over the province of Qinghai and much further afield. Some rural migrants are attracted from as far away as Shandong in China's northeast, ostensibly because of Xining's relatively low living costs, clean air, growing population and growing demand for consumer products. More recently, Arab influences in the city can be seen, with Saudi Arabian-funded (and hence styled) mosque renovations visually dominating the landscape, and Hui women increasingly adopting the style of *hijab* (Arabic 'veil') or *gaitou* (Chinese 'headcovering') worn by Muslim women from Middle Eastern backgrounds. This long and continuing history of multiplicity makes Xining an ideal setting in which to examine multiple modernities, as a place where different groups have resided alongside each other, interacting, conflicting and changing without necessarily homogenising or acculturating.

In this section I discuss the various 'differences' relevant to Qinghai. I also examine how ethnic, economic, and mothering differences have been officially and popularly incorporated into a teleological development story.

ETHNIC DIFFERENCE

Difference within the borders of the PRC is inevitable. Think of the sheer size of the nation, the geographical variance within, the thousands of years of

continuous cohabitation of all sorts of cultures and societies, not to mention an equally long history of trade throughout Asia and beyond. In terms of ethnic difference, historically the empire of the Middle Kingdom has been imagined to consist of five basic ethnic groupings: the Han, the Mongols, the Hui or Uyghurs, the Manchus, and the Tibetans. Of course there were many more ethnic groups that were differentially linked to the central powers of the empire. Some of these groups were even governed through their own systems of power. Prior to nationalisation in 1911, ethnicity was never a barrier to being 'Chinese' (Olson 1998). In fact China was first unified under the Qin¹² dynasty in 221 BC, and 'Chineseness' was generally judged by cultural accomplishments and adherence to a set of social norms exemplified by the empire 'centre' (Iredale *et al.* 2001). This view began to change around the time of the early twentieth century, as the empire weakened and fell into warlordism.

At this time, social reformers began to look to the West and Japan for alternative and possibly superior ways of organising society. A significant number of Chinese intellectuals came to imagine themselves as an inferior race and culture, and as the 'only ... race [that] competes with the white race' (Dikotter 1992: 163). Revolutionaries began to imagine China as a potential nation-state along Western lines, with non-fluid borders where all that was contained within should be Chinese (Shih 2002). Although explicitly racist discourse was no longer used by the time of the Communist revolution of 1949, difference between ethnic groupings had come to be imagined as difference along a linear path to civilisation (Dikotter 1992, Gillette 2000, Ong 1996, Yang 1996). This teleological view drew on a Marxist understanding of national identity, where ethnic identification was seen as a result of economic inequalities which, once removed, would cause 'a natural withering of ethnic differences' (Shakya 1999). Ethnic difference, while perhaps not openly talked about like this in China today, is still seen in much the same way. It is not uncommon to hear people from minority ethnic groups refer to their own

¹² Pronounced something like 'cheen' — some scholars believe this is where the English word 'China' originates.

traditions and customs as ‘feudal’ — implying that their particular ‘nationality’¹³ was ‘behind’ in the advancement toward modernity (as exemplified by the state and modern ‘Others’ such as Han Chinese or foreign nations).

ECONOMIC DIFFERENCE

It is not only ethnic difference that comes to be explained by a determinist teleology, but also regional and individual differences in economic practices. Whatever the variety of modernity — and this has certainly changed in recent decades in China — those people or places seen to deviate in some way from the ideal are classified as *luohou* (‘backward’). Under both Maoist modernisation ideologies and post-1978 ‘socialist market economy’ ideologies, the building of China’s production force is seen as central to development (Knight 2003). And development under both these ideologies is seen primarily as a means of enabling China to claim its place as a prominent protagonist on the world stage (Guldin 2001), thus shaking off its historical reputation as the ‘sick man of Asia’ (Hong 1997) and honouring 5,000 years of civilisation. This discourse of backwardness and lack came to characterise intellectual and political discussions about the condition and future of China in the early twentieth century — not just in terms of economic and political practices, but also social practices, such as those associated with health and hygiene (Lei 2009, Rogaski 2004), foot-binding and women’s mobility (Hong 1997), access to and style of education (Hong 1997, Iredale *et al.* 2001), and mothering. While place identity in China has always been maintained through connections with various internal ‘Others’ (Oakes 1993), it was the interaction between Chinese intellectuals and various contemporaneous foreign Others during the twentieth century that brought into play the ‘historical queue’ discourse of explaining difference.

¹³ Ethnic groups in China are referred to as *minzu*, a word imported from Japanese, where *min* is ‘people’ and *zu* is something like ‘people group’ or even ‘tribe’ or ‘clan’. It is most likely a translation of the German *das volk* that was so influential in the development of the idea of the nation-state (Gillette 2000). *Minzu* is probably most correctly translated as race — not race in terms of physiognomy necessarily but in terms of common ancestry. However, because it is used in much the same way ‘nationality’ was used by Stalin, it is officially translated as ‘nationality’.

Part of the attraction of the historical queue discourse for Chinese intellectuals and politicians during the Republican era was that it classified China as more advanced than many other non-European colonies and civilisations; and, after the official adoption of a Marxist-Leninist model for state-building in development, it became an essential prop for theorising and performing China's projected path through revolution to an ultimate socialist utopia. In China the historical queue is theorised using Henry Morgan's model of progressive stages of social evolution.¹⁴ The concept of a single evolutionary path to China's glorious future has obvious attractions, and in fact even in recent times criticism of Morgan's model in China has not been received well (Yang 1996). China's long history was thus officially remapped in terms of stages through primitive communism, slavery, feudalism, and so on.¹⁵

The favoured methods of propelling China through these various stages of social, political, and economic evolution have changed with time. From the time of the Communist revolution in 1949, Mao Zedong saw people's communes and worker-led industrialisation as the main mechanism for reaching the end goal of socialist utopia. Deng Xiaoping redefined socialism as economic development (Knight 2003), and insisted 'that the worth of all policies be judged entirely by their economic results' (Meisner 1996: 478). The current understanding is that uneven development is a key mechanism propelling the People's Republic through the final stages of this teleology. The idea is that unevenness in economic development is meant to lead to a better balance between political maturity and authoritarianism. Unevenness represents the freedom of the market, a sort of stand-in for individual political freedom until a certain (unspecified) level of economic development is achieved. This is exemplified in the current official discourse of 'harmonious

¹⁴ Morgan's work was expanded by Engels and applied by Stalin in governing the Soviet Union, thereby affecting the way in which it has been interpreted by Chinese Socialists. See Mayfair Mei-Hui Yang's discussion of this (Yang 1996).

¹⁵ Mayfair MeiHui Yang (1996) pulls out some of the ironies in this attempt at rewriting history as per Morgan and Marx's analysis of European history. For example, the Qin state's centralised control of China in 221 BC was recast as the beginning of 'feudalism' — a system which in the European context was associated with relative autonomy and *decentralisation*. If one were to follow such a teleological framing, China would in fact have been further along the path of socialism in 221 BC than Europe was in the time of Morgan and Marx.

society', seeking balance between these elements. The position of many Chinese intellectuals is that China needs to '...go through a four-phase development of "economic growth → individual freedom → social justice → political democracy" as both logical process and chronological order' (Gong 2010: 75).

We have also seen a shift in the subject of governance. Mao governed 'the masses' through ideals, whereas Deng and colleagues since 1978 govern 'the average man' through statistics (Liu 2009). Individualising the subject of governance has allowed for *individuals* to now be inserted into the historical queue schema, as can be seen in the official discourse on *suzhi* or 'personal quality'. People with lower *suzhi*, that is, little education or economic success, are seen to be more 'backward' or 'feudal' than people with high *suzhi* (Jacka 2009).

Whatever one thinks about China's economic success, within the PRC it is generally accepted today that to develop economically one must follow the universal path:

Hardly anyone in today's China would doubt that there is a universal law of development, or that the modernist and materialist path should be the only route to follow, or that the vast province of the People's Republic has for the first time embarked on the right train of modernity. While it is acknowledged that there may be incorrect conceptions about those laws of economy and society, the laws themselves are deemed valid (Liu 2009: 58-59).

The teleology of one-true-modernity is thus alive and well in China, and it is applied to economic differences between regions, ethnic groups, and even individuals.

It is only in the last decade that the western border regions such as Qinghai have been targeted for modernisation through investment, infrastructure, and policy developments. This delay shows how the imagining of the eastern, urban regions of China as progressive and the western and rural regions as backward has played itself out materially. During the long wait for central

government attention and development, it has become natural to assume that *all* practices in the western regions are backward, marked for future modernisation. This is not only the case for economic practices, but also for other social, cultural, and domestic practices such as mothering.

MOTHERING DIFFERENCE

In both academic and popular discourse in the Western world mothers are judged through the cultural standard of the wealthy or middle class and divided into ‘good’ and ‘bad’ mothers (Goodwin and Huppatz 2010). In northwest China, I never came across the terms ‘good’ or ‘bad’ mother, but there were certainly analogous concepts. I mostly talked to women — mothers in particular. Whether I was conducting more formal interviews or just chatting with friends, I consistently found women — whatever their background — positioning themselves and other women into two broadly defined groups. The words they used were not always the same, and they did not always agree on who should be put where, but I discerned that their views were framed by a simplified version of the historical queue explanation of difference. In this version of the queue there were really only two places one could be: ‘backward’ or ‘modern’.

Figure 1 offers a simple visual representation of how the comments of these women and my impressions of their views ‘lined women up’ into these two quite clear camps. Mothering practices in particular were also imagined to line up in similar ways, as I have portrayed visually in Figure 2. ‘Backward’ mothers — mostly from ‘backward’ areas (*luohou diqu*) such as Qinghai, Tibet, Gansu, Inner Mongolia, Yunnan and the rural areas of eastern provinces — had a series of accusations levelled against them. Not only were they guilty of all the ordinary presumed backwardnesses of poverty as listed in the previous section, they were also guilty of a host of mother-specific backward behaviours. Backward mothers prefer boy children and let their mothers-in-law interfere or take over child-rearing, which inevitably involves spoiling them and/or compromising their education. Backward mothers wean using traditional

methods and foods, use traditional nappy-free baby hygiene methods, overdress the children, breastfeed too long and too frequently, or use poor-quality milk powder or untreated whole milk. Backward mothers are also thought to pedantically keep the thirty-to-one-hundred day *yuezi* ‘confinement’ tradition in all its apparent superstition,¹⁶ and to be subject to their husband’s family in most things child-related. In sum, they are ‘unscientific’, susceptible, and behind the times.

FIGURE 1: THE ‘LINING UP’ OF WOMEN IN NORTHWEST CHINA¹⁷

Poor	‘Changing for the better’
Selfless	Educated
Undeveloped	‘Higher status’
‘Feudal’	‘Cultured’
Backward	Modern
Restrictive	Attentive
Ignorant	Wealthy
‘Hasn’t changed’	‘Decision-making’
‘Uncultured’	Rational
Dirty	‘Options’
‘Bitter’	Hygienic
‘Low status’	Developed
‘Superstitious’	Equality

Source: Fieldnotes and Interview Transcriptions 2007–2009.

Words in quotation marks are direct quotes from interviews.

¹⁶ The *yuezi* tradition necessitates confinement for a ritual month after childbirth (30 to 100 days). There are many rules women must follow about washing and eating, among other things. These will be discussed in later sections. For now, the point of interest is that *yuezi* is considered superstitious by ‘modern’ mothers, and it is therefore assumed that ‘backward’ mothers practice it. In actuality, minority groups often have quite different practices around childbirth and do not have as strict a confinement as Han women, and poor Han women are unable to keep the ritual if they have to return to work earlier than customary, or cannot afford special foods. So whether the so-called ‘backward’ women keep the confinement or not, their actions are explained with reference to feudalism or backwardness.

¹⁷ Although most of my time was spent in Qinghai, I refer to northwest China because of additional time I spent in Sichuan and Gansu. Some of the discussions about ‘modern’ mothering were much clearer and more strongly developed amongst women in Chengdu, Sichuan (Tibetan and Han) who were consciously choosing to investigate ‘Western’ theories of child-raising.

Modern mothers only selectively follow *yuezi* confinement traditions, have read books about child-rearing from both Chinese and Western authors, and use modern products such as imported formula, baby rice porridge and milk biscuits, nappies, cots, strollers, potties, highchairs, and so on. They look after their own health through controlled feeding schedules for the baby and their own consumption of formulas for pregnant/lactating mothers, vitamins, and herbal remedies. They buy toys and books for their children, and have them booked into the best kindergartens and schools they can afford — they even begin educating them in the womb with special educational products. They embrace the new, modern ‘science’ of child-raising, and have the material means to practise it.

FIGURE 2: THE 'LINING UP' OF MOTHERING PRACTICES IN NORTHWEST CHINA

Dirty /unhygienic practices	Put babies down to sleep
Preference for boys	Selective <i>yuezi</i>
Mother-in-law childcare	Read books about child-rearing
Spoiling	Modern products
Unable to educate children	Imported products
'Jig' babies to sleep	Nappies used at night and some outings
Backward	Modern
Traditional weaning methods	Pregnant/lactating woman health products
Overdressing of children	Ultrahygienic
Traditional nappyfree toileting	Toys and books
Breastfeed too long and too often	Best formal education from Kindergarten onwards
Poor-quality milk or untreated milk	<i>Baomu</i> /nanny childcare
<i>Yuezi</i> superstitions	<i>Taipan jiaoyu</i> 'foetal education'
Daughter-in-law in extended family	Nuclear family

Source: Fieldnotes and Interview Transcriptions 2007–2009

Like many of the economists and intellectuals discussed earlier, mothers express regional, class, and ethnic differences of other mothers using a historical queue typology. In the discourse employed by northwestern mothers, this lining up of practices into a modern/backward dichotomy is more of a pattern or groove than a fully-fledged philosophy as developed by intellectuals and the state. In both discourses, however, dissonances and resistances are brushed over or ignored, and once places or peoples are classified within a hierarchy or dichotomy of economic stages, it seems natural that everything else appears to line up too. I illustrate this in Figure 3.

FIGURE 3: THE ‘MONOLITH OF THINGS LINING UP’¹⁸

Developing economies	Industrialised economies
Backward	Modern
All practices in ‘developing’ regions	Mainstream urban Han or Western practices
All mothering practices in ‘developing’ regions	Mainstream urban Han or Western mothering practices

Tautologically, the very fact of difference and inequality within China is taken as *support* for the historical queue typology (and its assumption of universal laws of development), as it shows how ‘far’ China has come through ‘opening up’ and the ‘let some get rich first’ policy.¹⁹ The assumption of universal laws of development combined with reference to China’s economic changes as ‘opening up’ seems to imply that development is inevitable, simply requiring

¹⁸ This ‘line-up’ title takes inspiration from Sedgwick’s ‘Christmas effect’. She notes that a multiplicity of things — religion, state, capital, ideology, domesticity, discourses of power and legitimacy — ‘line up with each other so neatly once a year’ at Christmas time (1994). She compares this with the way in which gender, sex, and sexuality are ‘lined up’ to erase diversity and the ‘queer’. Gibson-Graham draw on this to think about the ways in which aspects of the economy are lined up to signify capitalism (Gibson-Graham 1996), and it inspires their project of ‘queering’ the economy.

¹⁹ ‘Let some get rich first’ is one of Deng Xiaoping’s famous slogans. Others include ‘To get rich is glorious’, and ‘It doesn’t matter whether the cat is black or white as long as it catches the mouse’.

an openness to outside (capitalist, modern, scientific) influences. Differences, it is assumed, will be smoothed out as groups move along the historical queue. Yet the Deng government had to go to extraordinary efforts to create market economies and a ‘capitalist’ class of entrepreneurs,²⁰ just as marketing teams must go to extraordinary lengths to change traditional mothering practices in order to sell their products (see Chapter 4). Despite the supposed ‘universality’ and ‘inevitability’ of these development laws, in practice governments and corporations must *perform* particular ‘laws’ of development.

This awkward friction, where the discourses of inevitability clash with the need for deliberate performance of development and social change, is not one limited to the PRC alone. Theorists and activists from all over the world have argued that development is not inevitable, and that ‘opening up’ to the ‘universal’ laws of the ‘global marketplace’ can work to actively *underdevelop* places. Resources are extracted from places by foreign companies, and the net wealth always flows *out* rather than *in*.²¹

This argument has also been made with regards to China’s uneven development too, where some suggest that the marginalisation of mineral-rich ethnic minority areas such as the northwest (Qinghai, Xinjiang) fuel the growth of the east (Lai 2002, Meisner 1996), as does the deliberate control of the agricultural sector through the setting of prices and the limiting of the (legal) mobility of rural-registered families (see Gong 2010 for a recent example).²² The travesty is that if development is indeed reliant on these concomitant processes of marginalisation, stating the ‘inevitability’ of

²⁰ Meisner argues that the deliberate creation of a protected entrepreneurial class came about through the selling off of state enterprises to cadres and party members, and thus the nature of capitalist enterprise in China is very different from what is assumed to be normal entrepreneurship in Western nations — where business and government are seen to be quite separate things (Meisner 1996). Meisner’s argument stands in contrast to the Confucian capitalist literature where the state is imagined as controlling the natural excesses of capitalism through authoritarian regimes, rather than necessarily promoting it.

²¹ See the classic arguments of Frank (1966), Leys (1976), Wallerstein (1974), and work building on these theories in more complex ways, e.g. Crush (1995), Escobar (1995, 2004), Sachs (1992).

²² I refer here to the *hukou* system of household registration, whereby rural-registered families cannot easily have their registration shifted to urban areas, and thus migrate as second-class citizens. They can perform informal work in the urban centres, but cannot gain access to any of the benefits of being a resident there such as education for their children, access to work units or formal employment, and access to pensions on retirement.

development is damaging in more ways than one. According to Massey, this discourse of inevitability works by the ‘convening of contemporaneous geographical differences into temporal sequence ... turning it into a story of “catching up”’ (2005: 82). If this ‘inevitable development’ is indeed as widespread as this discourse appears to assume, then its most damaging effect is not only that it ‘occludes present day relations and practices and their relentless *production* ... of increasing inequality’ (Massey 2005: 83), but that it obscures the possibility of seeing alternative futures which may be more equitable or desirable for both the so-called developing *and* the so-called developed.

The very existence of this awkward juxtaposition of the supposed inevitability and yet deliberate performance of development does, however, provide us with an opening for thinking about alternative futures or ways of being in the economy. It provides an opportunity to reject the discourse of inevitability and deliberately perform something else. It is my contention that these ‘awkward engagements’ (Tsing 2005) can actually produce something new, or at least provide some ‘glimmers of possibility’ (Gibson-Graham 2006) for future social change. The discursive manoeuvre that I want to make is to deliberately seek out and describe these glimmers of different futures that are *already* present in the multiplicity of trajectories that converge (sometimes awkwardly) on any one economic or geographical space. This requires thinking about how we understand and represent differences in the economies of so-called marginalised places. In the following sections, I do this by arguing for a spatial rather than a temporal understanding of difference, and through arguing that we need to separate out diverse mothering practices from a static ‘motherhood’.

PUTTING THE ECONOMY IN ITS SPACE

The conflation of modernity or development with a set of economic practices called ‘late capitalism’ has meant that it is extremely difficult for us to imagine

other types of modernity, or other ways of economic being, that do not fit the modernisation story. There is also a tendency to overlook the extent of social problems in the so-called 'developed' world, as has been highlighted by the work of groups such as the Ghana Think Tank and Design for the First World discussed earlier. These groups reject the notion that developed nations have all the answers. Challenging that notion is a step toward accepting that other peoples, places, and cultures have trajectories of their own, their own particular histories, and 'the potential for their own, perhaps different, futures' (Massey 2005: 5). For Massey, this all comes down to the way we view space. In this section, I continue to draw on Massey's work on space and her critiques of the 'historical view' narrative. I then put Massey in conversation with J.K. Gibson-Graham's work on economies to consider the links between space, economies, and other modernities.

When Massey evokes 'space', it is as a simultaneity or multiplicity of historical trajectories. She does not ignore the role of history, but she does celebrate the 'radical contemporaneity' of space, which holds possibility in its 'happenstance juxtaposition of previously unrelated trajectories' (2005: 94). This radical contemporaneity is a feature of space which is particularly important for this thesis, as it is through these happenstance juxtapositions (or, in Tsing's terms, 'awkward engagements') that something truly new can happen. In refusing to force spatial differences into a historical queue or temporal typology, we can explore the mess and mesh of practices brought together in different places with an eye for the future. This is relatively easy to grasp with regards to specific *places*: we can trace specific trajectories such as those discussed earlier in the three sections on difference. The histories of ethnic policy and economic policy and the particularities of the environment or the political system in northwest China produce particular places with their particular ethnic, economic, and gendered characteristics. But Massey pushes us to consider not only *place*, but *space* as *also* being the product of relations, of actual practices, of material engagement (2005: 61). We often consider place to be concrete and space as rather more abstract (see for example first year texts on geography

such as Daniels *et al.* 2008). Massey's view of space as material relations, processes, and actual practices leaves us with a much bigger mess — what she calls contemporaneous processual coexistence. If we accept this understanding of space, we refuse an understanding of the world in terms of one dominant story (such as 'modernisation'), even if that means not being able to represent everything.²³

Massey's project of rethinking space resonates with J.K. Gibson-Graham's project of rethinking the economy. Gibson-Graham aim to 'disarm and dislocate the naturalized dominance of the capitalist economy and make a *space* for new economic becomings' (Gibson-Graham 1996: xi, my emphasis). Although in this sense they are referring to opening up a discursive space, they do this through empirical and place-based research into economic practices that challenge the discursive dominance of capitalism. They begin with an inventory of a diverse economy in place, which reveals the diversity of economic practices, many of which are non- (or at least alternative) capitalist. This includes diverse transactions and ways of negotiating (in)commensurability, diverse forms of labour and ways of compensating it, diverse economic enterprises and ways of producing, appropriating and distributing surplus (Gibson-Graham 2006). Figure 4: The Diverse Economy illustrates some of the types of transactions, labour and enterprises that might be included in such an inventory according to Gibson-Graham.

For example, Gibson-Graham use their framework to inventory a diversity of traditional and more recent economic exchange practices in Jagna, a municipality in the island province of Bohol, Phillipines (2005). They include traditional reciprocity practices that still provide volunteer labour in exchange for future volunteer labour, and also more recent practices such as indentured migrant domestic workers sending remittances from Hong Kong. They are interested in whatever economic practices are going on right now, without

²³ Massey questions whether we were ever truly able to have complete representation anyway, when we simply choose not to deal with 'all this confusing coevalness' (2005: 78).

organising them into a normative temporal sequence. The diverse economies approach takes on the challenge of multiplicity through mapping a whole bundle of that simultaneity of trajectories that make up economic space. Although this bundle must still be somewhat selective — in this case focusing on economic practices in a particular place — it nonetheless allows a vision of the space of the economy as both heterogeneous and *contemporaneous*.²⁴

FIGURE 4: THE DIVERSE ECONOMY

TRANSACTIONS	LABOUR	ENTERPRISE
<i>MARKET</i>	<i>WAGE</i>	<i>CAPITALIST</i>
<i>ALTERNATIVE MARKET</i> Sale of public goods Ethical 'fair-trade' markets Local trading systems Alternative currencies Underground market Co-op exchange Informal markets Barter	<i>ALTERNATIVE PAID</i> Cooperative Self-employed Reciprocal labour In-kind Work for welfare Indentured	<i>ALTERNATIVE CAPITALIST</i> Nonprofit State enterprise Green capitalist Socially responsible firm
<i>NONMARKET</i> Household flows Gift-giving State allocations State appropriations Gleaning Hunting, fishing, gathering Theft/poaching Indigenous exchange	<i>UNPAID</i> Housework Family care Neighbourhood work Self-provisioning labour Volunteer Slave labour	<i>NONCAPITALIST</i> Communal Feudal Independent Slave

Source: Gibson-Graham (2006: 71)

The discursive space of the economy is one which can therefore be represented as multiple — at any one time, multiple economic practices are occurring. This multiplicity 'provokes terror' in some (as the reassuring solidity of a singular world dissolves)²⁵ and distaste in others. But recognising terrifying or distasteful practices as part of a diverse economy does not mean one would

²⁴ It is worth noting that Gibson-Graham's work spans both developing and developed contexts. (See Gibson-Graham 1996, 2006: for Australian and North-American based work.)

²⁵ Massey discusses the terror that multiplicity provokes for some in more detail in *For Space* (2005: 79).

'blithely condone all nonmarket transactions (including theft) or celebrate non-capitalist forms of exploitation (like indentured servitude, a form of slavery)' (Gibson-Graham 2006: xxxii). Rather, it is taking seriously the multiplicity of the space we call 'the economy'. Allowing these practices and all their contemporaneous others to be manifestly present in the diverse economy framework enables a different vision of reality.

Every representation of 'reality' through research involves making some things present while simultaneously making others absent (Law 2004). Law claims that representation is a practice of crafting and enacting boundaries between presence, manifest absence and Otherness (since Othering cannot be avoided). If the spaces we research are a multiplicity of trajectories, then our research practices must pay careful attention to the crafting and enacting of boundaries, always being aware of what is being made absent and why. Law calls this 'slow method', which he proposes as an alternative to normative method. In slow method, we craft and enact the spaces of multiplicity through attendance to *non-coherence* (Law 2004: 85). In representing the space of the economy, then, it is not that we must engage in a 'patently vain attempt' to 'enumerate each and every one of those [multiple] trajectories' present (Massey 2005: 80), but that we refuse to represent as a single coherent story that which is fragmented, multiple and non-coherent. We must be aware of what is contemporaneously present in space, and — as best we can — what we are making absent in our representations.

Gibson-Graham give us a way of representing a whole multiplicity of contemporaneous economic trajectories, capitalist and non-capitalist, 'backward' and 'modern', without assuming they will one day all become 'modern' or 'capitalist'. One of their key strategies in developing this representation is that of cultivating a beginner's mind, a practice that resonates with the practices of others taking up the challenge of thinking multiplicity (Gibson-Graham 2006). Cultivating a beginner's mind is a kind of quiet and generous — or slow — method (Law 2004), a kind of weak theory (Sedgwick 2003), a kind of 'leap' into space (Massey 2005). It is the cultivation

of a subjectivity that is ‘outwardlooking in its perspectives and in the awareness of its own relational constitution’ (Massey 2005: 80), that takes a deliberate stance of not-knowing in order to ‘craft, sensitise us to, and apprehend the indefinite or the non-coherent’ (Law 2004: 82). This open beginner’s stance is taken so as not to foreclose possibilities that would be foreclosed in approaching the subject matter as an expert. Cultivating this subjectivity both enables and is enabled by the project of making visible a whole bundle of contemporaneous economic trajectories ‘reflecting actual practices of relationality’ (Massey 2005: 80) or ‘messy actualities’ (Bargh and Otter 2009: 154).

In this thesis, these actual practices of economic relationality are made present through a deliberate stance of openness to diversity, a not-knowing, a rejection of the categorical closure of a strong teleological theory of progress. This section has ‘put economy in its space’, through conversation with Massey’s vision of space as multiplicity and Gibson-Graham’s vision of the economy as diverse. This is an important step in resisting the historical queue story and thinking about difference in economic practices in out-of-the-way (and not so out-of-the-way) places.

PUTTING MOTHERHOOD IN ITS PLACE

The multiplicity of economic trajectories that make up space are, of course, simultaneously present alongside a multiplicity of other types of trajectories: cultural, historical, social, geographical and more. The actual practices of relationality that make up these other trajectories are dispersed messily, connected contingently, and most of all do not necessarily reflect the *economic* categorisation of the space at hand. That is, just because a place is labelled as poor or undeveloped in economic terms, it does not mean that its social and cultural (or even economic) practices are somehow deficient. When it comes to thinking about mothers, motherhood, and mothering practices in the space of northwest China, I definitely want to avoid the monolith-of-things-lining-

up approach I have already critiqued. I thus ask, along with Sedgwick:

What if instead there were a practice of valuing the ways in which meanings and institutions can be at loose ends with each other? What if the richest junctures weren't the ones where *everything means the same thing*? (Sedgwick 1994: 6, her emphasis).

What if? What if we could let mothering practices stand alone, or loosely connect, without forcing them all to line up or mean the same thing? Why does a particular type of economic modernity have to be translated into necessarily 'better' mothering? What if the mess and mesh of practices in out-of-the-way or economically marginalised places did *not* have to be co-opted into a story about the development queue? And *how* might one do this? How do we think about mothering practices in northwest China without assuming they line up with a particular temporality? How can we explore the practices and possibilities of mothering in northwest China *and* Australasia without falling into temporal comparison?

The first step in doing this is to move away from the static, fixed concept of 'motherhood' and to begin exploring the diversity of mothering practices. In thinking about mothers in out-of-the-way places I deliberately avoid the term 'motherhood' which seems to suggest some kind of coherence and necessary universality in the experience of being a mother.²⁶ I focus on the lives of mothers using the terms *maternities* and *mothering*. 'Maternities' refers to the diverse embodied *experiences* of being a mother (see the use of the term by Longhurst 2008, also Ram and Jolly 1998, Underhill-Sem 2001). 'Mothering' refers to an activity, a set of practices that mothers engage in. It brings into focus 'women's experiences of mothering that are female-defined and centered and potentially empowering to women' (O'Reilly 2008: 3), rather than a fixed state of being or an institution as the more static term 'motherhood' implies. While O'Reilly (2008) and Rich (1977) see mothering as being exclusively the domain of women and females, philosopher Sara Ruddick (1989) uses the term

²⁶ Adrienne Rich, in her classic work *Of Woman Born* (1977), sees motherhood as the patriarchal institution of mothering that includes all the gendered stereotypes and expectations of a society.

‘mothering’ to refer to child-nurturing practices engaged in by people of any gender, because it has quite different connotations of care compared with the terms ‘fathering’ or ‘parenting’.²⁷ While I appreciate Ruddick’s argument that practices of mothering and nurturing can give rise to a specific form of concrete, engaged, non-violent thinking in the nurturer (what she calls maternal thinking), this definition does not easily fit with the mothers who feature in this thesis. This is because the caring work of mothers in China is often one of *economic provision* — what is known in English as ‘breadwinning’. Mothers of working age (pre-retirement) are generally expected to work full-time and this may take them away from their children for long periods of time. After giving birth and a period of maternity leave,²⁸ they may not be involved in much nurturing until they have grandchildren. I prefer therefore to use ‘mothering’ to refer to the caring practices of women who consider themselves mothers, whether they are directly involved in nurturing or not.

In Chinese, two terms are of relevance here. *Bao haizi* refers to the physical action of ‘holding a child’, comparable to some uses of the English word ‘nurse’, but is also a shorthand way of referring to the primary carer of a pre-kindergarten toddler (up to age two). Other parents would ask me with regards to my toddler-daughter, ‘*Ni ziji bao ta ma?*’ or ‘Do you ‘hold’ her yourself?’ The equivalent question in Australian and New Zealand society would probably be, ‘Are you at home with her?’ A nanny is referred to as a *baomu* — literally, ‘holding mother’. The other term of importance is *fuyang haizi* (child-raising), which is commonly used to refer to the nurturing practices of mothers and others in the extended family. *Fuyang* is a similar word to cultivating or growing plants or raising livestock. Besides these, there

²⁷ This highlights the difficulty of the histories and connotations of all these words. Ruddick notes that ‘fathering’ generally refers to just the fact of being a biological father, where to ‘father’ a child is to contribute the semen only! Parenting refers less to nurturing and more to guiding and disciplining children — think ‘parenting classes’ or ‘parenting forums’ which focus on these aspects.

²⁸ This can be as short as six weeks in some government jobs and as long as three years for those running small farms.

are no equivalent Chinese terms for mothering or parenting.²⁹

Despite the gender neutrality of these terms, the day-to-day nurturing practices of child-raising in northwest China are primarily carried out by women, although the labour was often shared between ‘other-mothers’:³⁰ grandmothers, mothers, female family members, and *baomu*, sometimes alongside unemployed or retired male family members.³¹ I therefore use the term ‘mothering’ to refer to the specific practices of mothers and grandmothers, and ‘child-raising’ in reference to the nurturing, educational, disciplinary and other childcare practices of families in northwest China, as appropriate. In fieldwork, I chose to use neither of these terms in direct conversation, but to focus on the specific practices and tasks that mothers were engaged in.

The terms used in both English and Chinese are important here because it is all too common for researchers to take for granted the relationships between child-raising, mothering, motherhood, parenting and so on — relationships that are embedded in culture and often rife with invisible assumptions. This is especially prevalent in psychological literature, where ‘parenting’ is the object of research, but on closer examination, all participants are mothers. This leads to the ‘mother-blaming’ that feminist and other authors complain of, where research into the relationship between child development and parenting focuses only on mothers and ignores the role of other parents and family members in nurturing and child-raising. For example, the classic study *Mothers of Six Cultures: Antecedents of Child Rearing* by Minturn and Lambert

²⁹ Other interesting terms include *muyi*, the paragon of mother(ing/hood), and *mudao*, the way of mother(ing/hood). Neither of these terms were used by research participants, and neither can be used as verbs (hence they retain more essentialist connotations). I use the Wenlin electronic dictionary for these references (Wenlin Software for Learning Chinese 2002).

³⁰ ‘Other mothering’ is the practice of women rearing and caring for children, families, and/or kin who are not biologically related to them (Wilson 2010).

³¹ My husband, who took time out from his studies to carry out primary care of our daughter while I undertook fieldwork in 2007 and 2009, was sometimes referred to by other men with the phrase *chi ruan fan*, or literally ‘eating soft rice’. This referred not so much to the nature of the work or care practices (generally acknowledged by parents and non-parents alike to be *hen lei* — very tiring), but to the assumption that he was being financially supported by his wife or wife’s family and not ‘rice-winning’. We were often asked why we didn’t just leave our daughter with his mother, as child-raising was thought to be her duty.

(1964) features an amazing breadth of fieldsites, covering mothering practices in the United States, Mexico, the Philippines, Japan, India and Kenya. Yet even in its title it conflates ‘mothers’ with ‘child-rearing’ and continues to do so throughout, despite much of the data indicating that ‘other-mothers’ play important roles in child-rearing in many of the places. This is no doubt due to a failure to imagine different mothering trajectories on the part of the researchers, trajectories which take child-rearing far beyond the confines of a nuclear family.

The main reason I pay attention to the ‘terms’ of mothering, however, is that thinking of mothering as a set of practices allows a more nuanced account of difference between mothers in different places. Paying attention to these nuances works to disperse the ‘historical queue’ typology, where economically poor mothers are thought of as qualitatively poor mothers purely because of their economic status.

One author who pays close attention to these nuances in a cross-cultural comparison of mothering and child-raising practices is Barbara Rogoff. In her book *The Cultural Nature of Human Development* (2003), Rogoff reviews an impressive range of ethnographical and psychological research with the aim of questioning the universality of psychological child development stages. She takes the perspective that differences in mothering and child-raising practices across cultures and places are due to the different types of adults that are the end goal of these efforts. Each cultural group is attempting to socialise their young into particular behavioural and thought patterns that make them ‘mature’ in their particular setting. She gives the example of young toddlers in a forest community in the Congo that are able to forage and prepare themselves food from an early age, illustrated rather effectively by a photo of an eleven-month-old toddler masterfully wielding a large machete over a melon-type fruit. The children are socialised, by mothers and others, into survival strategies for forest living — which is neither backward nor forward, just appropriate for their lifestyles.

Likewise different standards of social maturity result in different expectations of child behaviour: for example, Navajo children in the studies reviewed by Rogoff are expected to avoid eye contact with adults and respond to address with respectful silence showing they have mastered self-control. Rogoff provides hundreds of examples of different types of maturity, intelligence, and socially and environmentally appropriate behaviour from a large range of published studies, as well as different child-raising methods for cultivating these. Her conceptualisation of difference in child-raising practices refuses to force all differences into the teleology of modernisation, and validates many practices (that would perhaps be seen as backward by outsiders) by explaining the cultural rationale behind them.

Yet because Rogoff's primary aim is to challenge the applicability of Western child development timelines to other cultures, she has an interest in presenting different child-rearing practices as somehow fixedly coherent and logical within their cultural context. While Rogoff does devote one chapter to the topic of cultural change and relations among seemingly internally coherent cultural communities, her cultural relativism does not make it easy for her to theorise change both across and within cultures. Her work does not appear to appreciate what Massey calls the 'throwntogetherness' of place (2005), where many different cultural trajectories may be *simultaneously* present, forming complex hybrids. In the case of mothers in Qinghai and even more so in Xining, the multicultural trajectories converging in space do not easily allow for each 'cultural practice' to be considered separately.

For example, as I discuss in Chapter Two, I initially focused on the mothering and economic practices of Hui mothers, yet I found these to be intricately connected to the practices of other ethnic groups in the city — as well as being connected to the imagined Other of the modern Western mother. Making sense of 'Hui' practices of mothering without referring to the 'outside' of this group would be almost nonsensical, since the discourses of state and education systems, the spaces of health intervention, the regulations of employment, the advertising practices of international and national products,

'mum-lit' and magazines, the casual chats with non-Hui friends and relatives all play a part in Hui maternities and influence the practices of mothering. In sum, 'cultures' cannot be separated from space, and of course, cannot be imagined as static in time.

Rogoff's cultural relativism also does not provide much of a platform on which to discuss the ethics of various practices, since each is rooted logically and validly in culture.³² For example, in her discussion of certain mothering practices in the United States that promote early independence and separation from mothers, she links these practices to the types of adult behaviour valued by 'Americans'. Yet there is plenty of American parenting literature and there are plenty of American parents (of a variety of cultural backgrounds) who condemn these same practices as ethically and morally reprehensible: for implicitly promoting violence and even environmental harm, or as borderline abusive (see for example Liedloff 1986, Kohn 2005, Sears and Sears 2001; also in Australian literature, see Buckley 2005 and Grille 2008, referring to the same practices prevalent in Australian mainstream society). In focusing on the coherence and logic of different cultural parenting practices, Rogoff silences ethical debates that reveal the messiness, inconsistency, and power relations — the 'other' trajectories — present in any culture. In a sense, this is another kind of lining up, where all child-raising practices are imagined to make sense culturally.

TRAVELLING PRACTICES

While Rogoff's work helps us to think about mothering practices in a way that accommodates difference across space, time and societies (by refusing to 'line up' practices into good and bad, or modern and backward), her approach does not easily enable us to think about the ways beliefs about and practices of

³² To be fair, this is clearly because her audience is educators and psychologists who believe in a universal path of human development, and she is trying to show to what extent their beliefs are culturally situated and not necessarily relevant to students or clients from other cultural backgrounds. Her comments on cultural change are mostly cases of assimilation through the education of migrants or indigenous children.

child-raising *travel* across space and time. Cultural change in Rogoff's work refers to situations where the marginalised become more like the mainstream, or the non-Western become more like the Western. In thinking about the way these practices travel, can we avoid assuming inevitable globalisation or Westernisation, where the direction of change globally is always the periphery becoming increasingly like the centres of power? Clearly practices *do* change, and some of these are a result of that contingent and overdetermined process sometimes characterised as 'Westernisation'. Yet it would be simplistic and patronising to assume this is the only process at play. My interest in this question is not merely academic but ethical: describing and theorising only the processes of Westernisation serves to perform and re-inscribe them to an even greater degree. What I am interested in is the details of change, slow or weak theories of change that look at the day-to-day practices of mothers and not the static, prescriptive, trope of motherhood. It is in these details that I expect to find awkward and unexpected moments of dissonance or exception, the subplots where something different from the 'big story' happens.

In thinking through strategies by which to approach travelling mothering practices, I have found the work of anthropologist Anna Tsing helpful. Tsing is committed to the anthropological tradition of ethnography, which is a research method dependent on *in situ* fieldwork where the focus is on 'the ethnographer's surprises rather than on a pre-formulated research plan' (2005: x). Like many other post-colonial anthropologists, she is also committed to exploring the topography of power in any particular place without reading onto it Western theories of economy, power and culture. Yet she is also wary of unproblematically celebrating 'southern' cultural autonomy as 'capable of absorbing and transforming every imperial mandate' (2005: 5). Tsing mentions the long history of interaction between various cultural groups, where:

With new evidence of these histories entering the academy from every direction, it has become possible for scholars to accept the idea that powerless minorities have accommodated themselves to global forces. But to turn that statement around to argue that global forces are themselves congeries of local/global interaction has been

rather more challenging (2005: 3).

Tsing holds that not only are the indigenous inhabitants of Indonesia's rainforests and the student nature-lovers who protest the rainforests' destruction affected by globalising/travelling universals of capitalism, human rights and environmental rights but that these groups *actually affect these universals too*. By adopting and using these universals in their struggles they contribute to the ways in which the 'universals' of human rights or nature are conceived globally. In this way, Tsing offers an ethnographic account of change and global connection that recognises the *bidirectionality* of knowledge flows, and the possibility of engagement where the centre and the out-of-the-way place can *both affect one another*.

While it is not her focus, Tsing helps us to think about travelling practices. She theorises 'universals' as being the road or bridge along which particular knowledge and beliefs travel across localities and cultures. For example, she traces the various connections converging on the rainforest of Kalimantan, Indonesia, and uses the metaphor of 'friction' to explain the ways in which the 'universals' of prosperity, knowledge and freedom gain local purchase and are thus implicated in the transformation of the landscape through the logging industry. What she calls 'friction' appears to be the simultaneity of historical trajectories (Massey 2005) — some of which are universals — that come together to 'make' place, for example:

Industrial rubber is made possible by the savagery of European conquest, the competitive passions of colonial botany, the resistance strategies of peasants, the confusion of war and technoscience, the struggle over industrial goals and hierarchies, and much more that would not be evident from a teleology of industrial progress. It is these vicissitudes I am calling friction. Friction makes global connection powerful and effective. Meanwhile, without even trying, friction gets in the way of the smooth operation of global power. Difference can disrupt, causing everyday malfunctions as well as unexpected cataclysms. Friction refuses the lie that global power operates as a well-oiled machine (2005: 6).

Tsing's imagery is compelling. She provides a language to talk about social and

cultural change that can be applied in efforts to avoid teleological versions of maternity and modernity. The stories told using the language of friction and travelling allow for *complex* (and unexpected, unstable) interactions with ‘the global’ and other places and spaces. Thinking about change in these terms also helps to steer clear of the Eurocentric assumption that studies of these issues in peripheral places can only ever be ‘a scrap of data... [which] can never shape the shared space’ of the global (Tsing 2005: 3).

CONCLUSION: MOTHERING AND MULTIPLICITY IN OUT-OF-THE-WAY CHINA

Research on economic issues in China can hardly be seen as a scrap of data from the periphery in these China-obsessed times. We are saturated with commentaries on the ways in which China affects and is likely to affect the global economy. But these commentaries still persist in assigning a peripheral role to Chinese intellectuals and Chinese experiences in terms of affecting *what we mean by ‘the economy’*. In this sense China is often seen as a (very large) scrap of data — data to fuel the theorising of *Western* intellectuals and sinologists (see Connell 2007 for a discussion of this problem in Western academia). This is a problem that the thinkers behind ‘New Sinology’ hope to address, through taking seriously Chinese understandings of the world, and the ways in which ‘China’s presence as a country and a civilisation confronts us and causes us to interrogate our own understanding of the world, our principles, our values, our intellectual trajectory’ (Barmé 2011: 1). This thesis goes beyond New Sinology’s aim, and seeks to take seriously the understanding and experiences not just of ‘China’, but of the more marginalised peoples and places of China’s multi-ethnic west, those who rarely get to speak into even ‘Chinese understandings of the world’ let alone the intellectual trajectory of Western academia (Dombroski 2011c).

I take some lessons here from Chinese ethnographer Liu Xin. He absolutely refuses to wear the ‘scrap-of-data-from-the-margins’ label, and unashamedly

states that 'the world of China... is not [only] the Chinese world; it is a symptomatic moment of our world at the present time' (Liu 2009: viii). Liu Xin argues that China is a product of the era of globalisation, yet has also played, and continues to play, a part in forming it. He demonstrates this through an ethnography tracing the travelling practices of statistics and notions of objectivity that have contributed to China's socio-historical trajectory and led to the contemporary characteristics of the state. Yet his book *The Mirage of China* does not situate this as a special China case study, but is also undoubtedly a book of theory, meant to be read by those outside Chinese studies and sinology. In this case, Liu Xin's theoretical argument is that globalisation 'as both a discursive and material force is historically produced, differently so in different social worlds' and that 'histories of different social worlds are globally made in and of specific places' (2009: viii), and therefore highlights contemporary China's irreducible specificity *and* its global linkages.

The messy actualities of modernity in China are thus made in close conversation with other modernities both within and outside China. Commonly authors in the field of 'other modernities' would cite the development of an East Asian Confucian modernity (see for example the work of Ong 1996 and Yao 2002) and Japanese modernity as being key to understanding contemporary China. Yet this work is focused on the powerful nation-state of China, envisioned as populated by a multitude of Han Chinese subjects, embedded in a history of Confucianism and socialism. I contend however that 'contemporary China' is a *multiplicity* of modernities, made up of interactions with these foreign Others but also through interactions with China's internal Others in the multi-ethnic western regions.

The multiplicity of modernities that makes up contemporary China therefore includes the modernity of the city of Xining. Xining itself is a site of multiplicity, as I illustrated earlier in this chapter. Interactions with Arab and Tibetan modernities have produced a distinct cultural and material landscape. Mothering practices and maternities in Xining are thus diverse and changing, contradictory and multiple. In this thesis I approach these changes via the

concept of travelling practices, detailing the ways in which various universals of mothering and the body awkwardly engage to produce new (and multiple) mothering practices and maternities in contemporary Xining.

Even very nuanced studies of maternities and mothering practices in out-of-the-way places (see for example the collection edited by Ram and Jolly 1998) tend to focus on the ways in which practices of maternity and modernity have spread from more powerful centres to the peripheries, emphasising the contingent and differential ways this has happened, yet still in a sense replaying the old stories of colonialism. The remainder of this thesis seeks to highlight and grasp travelling practices affecting not just the maternities and modernities of Xining, but to be open and aware of the long-distance and cross-cultural interactions through which these practices travel *elsewhere*. Using the 'travelling practices' approach to studying multiplicity, I avoid both the tired 'inevitable emergence of a global era' and 'culturally relative scraps of data' versions of contemporary Xining. Neither of those tropes allow for hopefulness or change. In contrast, detailing travelling practices provides insight into social change where the unexpected and surprising may emerge. This is a 'slow method' (Law 2004) and a 'weak theory' (Sedgwick 2003, Gibson-Graham 2006) approach to thinking about mothers and mothering practices in out-of-the-way places.

In an era of global climate change that threatens the human species and our non-human Earth-others, an analysis reinscribing the inevitability of our current path is neither helpful nor welcome (Roelvink and Gibson-Graham 2009). The reason I am so interested in emphasising the bidirectionality of knowledge flows is that, like Carolina Vallejo with her Design for the First World project, I believe there are knowledges and practices in out-of-the-way places that have much to offer the so-called developed centres of the world, *and that these are already travelling*. In our focus on and celebration of material progress and development, we easily lose sight of the other problems that have arisen alongside these developments. Yet there are openings and glimmers where practices that have globe-changing potential are already being

sought out (from all kinds of out-of-the-way places) and reworked (in all kinds of 'modern' places) in a bid to make a difference from the ground up. It is these practices that this thesis focuses on. In the next chapter I discuss the methodology I have pursued in coming to understand these place-based mothering practices, a methodology drawn from my commitment to thinking multiplicity, and my own embodied experiences of living and mothering in the city of Xining.

INTERLUDE:

A WALK DOWN BAYI ROAD

For most of the year 2007, my immediate neighbourhood is the central part of Bayi (Eight-one) Road, known as Bayi Zhong Lu (Eight-one central road). Not so long ago, prior to the building of an expressway, this road had been one of the major routes out the eastern side of the city used by the military — in fact the name *Bayi* indicates its relationship to the military. It is still a thriving route for all manner of vehicles wishing to avoid the expressway — including buses, motorbikes, hand-pulled or donkey-drawn carts, and tricycles. Our section of the street is normally host to numerous students walking between the two campuses of the Qinghai Nationalities Institute, or eating at any of the number of cheap, somewhat temporary, restaurants that line this route.

This area of town, the east side, is not thought of as particularly economically active — the major national and multinational companies of the city are all based west of the old city walls. According to government statistics, many of the people milling on Bayi Zhong Lu are ‘unemployed’, in the sense that they are not registered with a formal job or *danwei* ‘work group’. Yet it is hard to take this seriously even in the

most superficial encounters with Bayi Zhong Lu.

We live almost opposite a medium-sized open-air wet market. The market has a large open-sided roof under which the vegetable-sellers and butchers set up their stalls of trestles and boxes. It has sections of permanent buildings for clothing and dry goods shops, a section of semi-permanent stalls with live fish crowding tanks and live chickens crowding cages. There is also a large open-air section where less-regular farmers and traders camp out with their seasonal produce, sleeping in or on large truckloads of watermelons or pumpkins. The market is always full of people buying and selling, from when it opens early in the morning to closing time late in the evening, when many people bed down in small shops or backrooms or even on the back of trucks within the marketplace.

The miscellany of small businesses or *getihu* in the area have presumably been attracted by the cluster of semi-gated residential housing compounds and several large institutions in Bayi Zhong Lu — the Police Headquarters, the Customs Building, the university campuses and schools. Excepting the university and its nearby schools and residences which date back to the 1960s, most of the housing units and large buildings are less than five years old — although many look much older than this already. University retirees reside in simple two-storey brick buildings arranged in rows with bicycle sheds between. Some make a bit of extra money by opening dark shops in their living rooms, selling stationery and junk food to the student population. These small businesses are advertised in white painted characters on the side of the rickety buildings, buildings that are already marked with the ubiquitous 拆 (*chai*) — to be demolished.

Across the road from the university, the skeletons of three high-rise apartment buildings are slowly emerging from the piles of rubble. Rural migrant workers in camouflage army-style clothing direct cranes by means of whistles and flags. Many of these workers will be here ‘informally’ — their households and thus identification cards are

registered as rural and they can only find informal cash labour in the cities. Thousands of them migrate into Xining temporarily or permanently despite being excluded from formal urban registration and thus employment. They must leave their families behind — their children are not entitled to education here. They work for a low wage, and are provided with accommodation in the form of shells of half-demolished buildings on the site, improved with tarpaulin roofing and long-drop toilets. It is ironic that the high-rise apartments or *loufang* are seen as the ultimate symbol of Xining's capitalist development (ask any taxi driver). They may be funded by the capital of eastern Chinese business investors, but the actual construction is carried out through a mish-mash of alternative and non-capitalist transactions, labour and enterprises.

Further down the road towards the centre of the city, some women in high heels and dirty suits with shawls wrapped around their heads and faces use straw brooms to sweep up clouds of dust from the by-way every morning. These women, too, are normally migrants who speak only country dialects — they giggle and shake their heads if I try to speak to them in Mandarin. I am told they come into the cities during the farming off-seasons to earn some money road-sweeping. The off-seasons must be fairly extensive, as it appears to me that there are road-sweepers here all year round.

In the early morning and late afternoon, other people sell hot *baozi* buns, corn on the cob or roast sweet potato from the back of their tricycles. An old lady occasionally squats along here, slowly turning the handle of a traditional iron pop-corn maker and selling plastic bags of popped grains sprinkled with sugar. Another elderly lady sits here daily, beside a blanket laid out with a variety of machine-sewn insoles for shoes of various sizes — she makes them herself, she tells me, as she cuts a pair down to fit my boots, throwing in a free pair for my “too-cute” daughter. A group of not-as-old ladies sit on their portable stools next to a motley collection of houseplants grown from cuttings in small

yoghurt pots, and an old man walks down here every few days with a pole hung with decorative trinkets for cellphones.

The restaurants along Bayi Zhong Lu change every year or so. I befriend an entire Hui family by virtue of their speciality mashed-potato-filled *baozi*. I eat in — dipping my steaming hot *baozi* in a dish of chilli oil and vinegar as I chat to the family members working there. This restaurant is owned by two women, sisters-in-law. I assume they are fairly poor, mostly from the sad state of the restaurant — paint peeling, concrete floors, no heating except the home-made charcoal cooking range where noodles are boiled and vegetables stir-fried in a huge pot and equally huge wok. The women are dressed in shapeless pinnies and headscarves; the elderly parents sit on makeshift stools peeling spring onion onto the pavement. Their kids and nieces and nephews visit from the school down the road for lunch, dressed in scruffy school tracksuits.

When I start seeing the family socially, outside of the restaurant, the women in their smart clothes and with hair uncovered, I realise they merely have tailored their business to the population at hand — cash-strapped students who don't care about the state of the restaurant as long as the food is cheap, halal, and fairly filling.

Down the road restaurants of varying quality stand out with green or red-and-gold signs — green for halal (the colour of Islam) and red and gold for non-halal (traditional Chinese colours of happiness and good luck). Despite most looking newer and more upmarket, I don't think any of them are as good as my friends' restaurant.

My friends close down their place halfway through my fieldwork, taking a few months' break before reinvesting in a classy teahouse. We begin to frequent a Salar-nationality halal noodle house. This noodle house opened up after the previous Hui-owned business closed down. They re-tiled the floors, re-painted the walls, and bought new tables and a flashy neon sign. The kitchen is still black with soot, but the food quality is vastly improved.

The trendy and educated Salar couple who own it also buy a convenience shop a few doors down, and the tills seem to be interchangeable: the husband runs the convenience shop while the wife runs the noodle house. After a few months of successful business they disappear, leaving the noodle house to an older female relative and the convenience store to a brother — I could never quite work out whether they still owned them, or whether the relatives bought the businesses — perhaps some sort of arrangement was still being made while the entrepreneurial couple moved on to set up new businesses.

Other businesses line the street — small pharmacies, hardware shops, convenience stores, dry goods stores with huge bags of flour and rice delivered for free by flour-covered boys on bicycles. Private doctors' rooms with attached pharmaceutical counters deal with the more common illnesses of the population. Many patients end their visit with a couple of bottles of vitamin solution or antibiotics which they absorb via an IV line, spending a few hours in the hospital-like beds in the upstairs room. A couple of sub-branches of local and national banks offer minimal services to jostling queues of bank-book-waving elderly men. Fruit sellers set up their carts in spare spaces on the sidewalk, offering taste tests of all their fruit to interested passer-bys. Nearby, a Kia sales team sets off a line of deafening firecrackers to celebrate the sale of a new car, the grinning driver waving enthusiastically as he drives his new status symbol off the footpath and on to the street. Everyone stops and holds their ears for a few minutes, before resuming business as usual.

The security guards of the nearest gated complex shout instructions to each other over the gate, as they check the registration of cars coming in and out of their residential complex or *xiaoqu*. The apartments are arranged in six-storey blocks with four stairwells or *danyuan* per block (accessing 12 apartments) — social networks thus stretch vertically rather than horizontally between neighbours, and we get used to meeting the family members of our *danyuan* on the stairs.

The apartments are sold as a bare concrete shell with only the bathroom fittings in place, so residents can fit them as suits their family needs.

One large apartment has been fitted out as a 'house' church, complete with rows of seating, a meeting room and paper-cut crosses pasted on the windows. Other owners and tenants live in various states of retrofit — I visit one family who all but camp out in a concrete shell littered with DIY equipment; and later, another that have fully fitted out their apartment with all the modern conveniences and at the height of fashion.

It is summer, and I see vegetables set out to dry on trays in residents' enclosed balconies or *yangtai*, taking advantage of the summer prices and dry heat to stockpile dried vegetables for the winter. Out in the courtyard, a number of families are in the process of making *paocai* — a kimchi-style pickle of salted cabbage and carrot. They chop the vegetables outdoors, and layer them in large waist-height pottery jars which will be stored in basement storage rooms until well-fermented.

Another resident lays out a large tarpaulin, carefully arranging hundreds of red chilli peppers in the sunshine to dry for her winter stockpile. She arranges a table and chair nearby under a community-built makeshift awning, next to her solar kettle-boiler: the grandmothers will come out in the warmth of the morning to drink endless cups of tea and bet over mah jong or cards — redistributing the wealth of their families amongst themselves (much to the annoyance of their adult children). Some of them are watching toddlers for the day, some of them raising grandchildren who are at school or toddling around the courtyard in small gangs.

Then there is me, also present on Bayi Road. I roam up and down these streets, in these apartments, around the university. I note the economic activities of all these others with whom I come in contact with, paid and unpaid, formal and informal, provisioning and

caregiving. I am observed by others too. My presence as a mother, student, researcher, customer, patron, community member, and foreigner is just one more part of Bayi Road's contemporaneity. My bodily presence inspires connections and provokes annoyance, and it allows me to taste, sense and see the diversity of ways of being — both in this place and my own place of origin.



II

SEEING DIVERSITY

VULNERABILITY, POSSIBILITY, AND EMBODIED ETHNOGRAPHY

On the eastern side of the city of Xining lies Bayi Road. It runs parallel to the Huang Shui river, a tributary of the famed Yellow River. The fast-flowing murky waters are no doubt responsible for the formation of the long narrow valley, where Xining sits under a haze of dust, framed by bare brown hills. The apartment we borrowed in 2007 was on the third storey of a back block in a Bayi Road complex, with a view of the river and bare hillsides from my desk. Despite my best intentions and most strenuous exertions to go elsewhere, Bayi Road became my world for the better part of nine months.

I did not know how to do ethnographic research in a city, a multi-cultural city where people rushed by on their way to wherever, with no time to speak to a tired PhD student with a baby on her hip. I

dreamed of some idyllic rural village, where local women would invite me into their warm kitchens, feed my daughter home-grown vegetable soup and reveal to me their mothering and economic wisdom passed down through the ages. My dreams were pared down as opportunities were crushed by the grinding bureaucracies of research permissions in China, and all my struggles to organise something, *anything* in the face of illnesses and mishaps and broken promises and despair. Eventually I would have been happy with just *any* village, anywhere with some sort of bounded community of *any* culture, just as long as I could work out *who exactly was the subject of my research*.

Because how could one do ethnographic and action research in a patchworked city of strangers? I had successfully managed to pull off an ethnographic study in a Tibetan village in a national reserve in Sichuan province a mere three years earlier (admittedly without a baby in tow). In the intervening years, I had participated in research projects, wrote reports, made phone calls, put together databases, interviewed ethnic Others and been hired as the Culturally Sensitive *Pakeha* Ethnographer at a research centre for indigenous governance and development in New Zealand. I was — or at least I thought I was — well-prepared for all that fieldwork could throw at me. Until I got stuck in this city. For seven out of nine months I persisted along the perverse path of Getting Out There, until I finally broke and gave up and started looking around me.

Starting with what I had.

So what did I have? I had the use of an apartment on Bayi Road, which came complete with a twice-a-week migrant cleaner. I had a very beautiful blonde and blue-eyed baby, who obligingly spoke a smattering of Mandarin in perfectly-cute-and-correct tones. I had a marketplace across the road, bursting with economic activity and a shared courtyard home to several hundred people, many of whom took an interest in advising me on matters mothering-in-Xining. I had various contacts at the local university, and various contacts among foreigners in the city. I

had a little money. I had a husband who cooked, preserved, made cheese and yoghurt and bread and other Precious Commodities for Foreign Residents. And despite my frustration and despair and the blows to my confidence, it seemed I did still have a knack for getting alongside people, finding out about their lives and what made them tick, the skill of interesting conversations.



This chapter is both story and analysis. Here I lay out and unpick my research methods and approach, and the way in which these are deeply intertwined with my life stage and the particularities of the city of Xining. In one sense this is a very personal and very situated story. But in another sense this same story can be told by many researchers and in many places: the story of doing research in difficult places and in difficult situations. In the particularities and specificities of a researching mother in Xining, I address some of the questions of knowledge-making we all face as researchers in the field: how do we cope with vulnerability and massive changes to our research plans and objectives? What role does the researcher play in research, and in particular how is research embodied? How do we co-construct knowledge with our research ‘participants’? What effect does our research and fieldwork have on our participants and the wider community? How do we define ‘the field’? And most importantly, how do we get beyond our own embodied resistances, embedded habits, and invisible blindspots to start seeing the diverse and messy actualities ‘out there’?

This chapter works through these questions with reference to the idea of ‘seeing diversity’. In the previous chapter, I already noted that we cannot enumerate each and every one of the trajectories present in the assemblages we attempt to make visible (see page 42). What am I doing then, when I attempt to make visible the assemblages — in this case of hygiene — that I am studying? I am mostly attempting to sketch a representation of these messy

and multiple interconnected materialities, spatialities, and socialities. But as I do so I am attempting to become more aware of the things made present and absent in this representation, and to craft the boundaries between presence and absence slowly and deliberately (Law 2004). I do this because, as we saw in the story of handwashing on the Tibetan plateau (see page 9), invisible or unexamined assumptions about what is ‘just common sense’ can have ongoing harmful reverberations.

How can I become aware of these absent assumptions, which we all have? In the previous chapter I began this process through making visible the ways in which assumptions of a teleology of modernisation underpin (among other things) mothering discourses in northwest China. In this chapter I undertake a similar task through telling the story of how the assumptions underpinning my research process became visible in a time of fieldwork crisis.

In my story, fieldwork crisis came about partly through the limits imposed through my embodied connection to my then infant daughter. Yet these apparent bodily limitations also worked to open up my awareness to what my body actually knows. This awareness developed into a deliberate practice, which I harnessed to transform my ethnography. Through paying attention to embodied knowledges, especially as they are made visible in times of conflict, crisis, or awkwardness, I was able to start crafting representations of the two hygiene assemblages in which I moved and mothered.

Looking back on my research and fieldwork experience, I probably would not have started out if I had known the difficulties I would face. I think no one really *wants* to learn through crisis and vulnerability. But still, looking back, this project would have been a much less profound experience without the involuntary confinement to Xining that served to challenge my assumptions about knowledge, research, and mothering. The choice to start with what I had, to use my body, my mothering and my vulnerability in my research, is a choice we all have. In my case this choice gave me the space to look around me, begin again, and thus see the diversity of contemporary Xining in terms of economy,

caring, and hygiene. This choice also provoked me to take up the challenge of embodied knowledge theoretically and empirically, and to thus start making visible the dynamic and changing assemblages of hygiene.

EMBODYING RESEARCH

Bodies — maternal ones especially — are sometimes considered to be messy, leaky, unbounded, problematic. They pose some dilemmas when they impose too obviously on one's research. They mess it up! It is almost unhygienic, letting bodies into the white-sparkly-tiled world of Objective Observer of Cerebral Magnificence. Erasing bodies from research is a common pastime of academics, even now. Although flabby tummies, hunched shoulders, and patched elbows on tweed jackets have symbolised the embodiment of cerebral superiority for much of the history of the university, we certainly do not allow these bodies to be present in our research outputs. Instead, the clean, twelve point font, double-spaced on white paper, erases the researcher's body in the face of 'the facts' (cold and hard, like we wish our abdominal muscles were). But if social reality is messy and complicated it follows that our methods of comprehending it are likely to be too, no matter how much we dislike it. Our methods might even include the 'messiness' of maternal bodies, and this could even be a good thing.

With this in mind, I hereby introduce the reader to the body through which this thesis was conceived, grown, nurtured, and typed. This body, my body, birthed a daughter some few months before delivering a thesis fieldwork proposal. This feisty new human being certainly had her own will, whims, and wishes, but also a tiny dependent body that did not seem to recognise itself as separate from mine. And I (as far as I can understand what 'I' refers to anymore) also began to have difficulty separating these bodies in any significant way.

After two such babies and twice as many fieldwork trips,³³ I am no longer surprised that bodies are not cold, hard and separate, or that fieldwork is not sequential, organised and tidy. I have not quite come to embrace chaos as yet. But I have reworked my understanding of the role of the body — its vulnerabilities and possibilities — in fieldwork, especially fieldwork *by* and *with* mothers. This section explores the limits of the body, and the knowledges of the body, in order to answer the question: what does the body know? And what does this mean for fieldwork and knowledge production in a thesis about hygiene and other modernities?

Before proceeding further, it is worth clarifying that I did not come to ask these questions or explore these limits through reading inspiring literature or through logically thinking through the role of the body in fieldwork. Rather, I came to think through the role of the body *because* of my embodied experiences in the field and as a mother. This section therefore explores these limits and answers these questions primarily through exploring the story of *this* body. I deliberately engage in this story-telling method, because stories such as these disrupt homogeneity and generalisation, and provoke new thinking. They are much more than just case studies that ‘illustrate’ theoretical points (Tsing 1993). Much of this section has been published previously in the *Graduate Journal of Asia-Pacific Studies* (see Dombroski 201b).

THE LIMITS OF THE BODY

According to some thinkers, it is in fully experiencing our own bodily vulnerability that we are able to become aware of and connect with ‘the Other’ — whether this Other is our own failing or sick body (Naess 1995), the natural and material world (Plumwood 1993) or the social Other (Gronda 2010). These ideas have proved important as I explore my embodied experience of fieldwork in northwest China, in particular my obvious embodiment as the mother of a

³³ See Appendix One for a timeline of fieldwork, babies, and other milestones that help clarify the chronology of events related in stories throughout the thesis.

young baby. I am interested not only in the way in which I began to understand and experience the *limitations* of my maternal body, but also how surrendering to this new vulnerability released new ethnographic *possibilities*. It is now my firm belief that these possibilities include not just potential for greater social and environmental awareness (as the above-cited authors would perhaps agree), but possibilities for a certain kind of knowledge production that draws on this awareness. Embodied vulnerability and limitation pushed me to re-think, re-theorise, and re-work my ethnography in ways which ultimately contributed to my practice of cross-cultural fieldwork.

Most field researchers would have no trouble agreeing that the fieldwork experience is meant to be as embodied as it is cerebral — or even that this is the whole point of fieldwork. Yet as we negotiate our research planning, funding, ethics procedures, objectives and so on, it is easy to forget that our fieldwork is dependent as much on our body as on our mind (to invoke that somewhat tired Cartesian dualism). Feminist writers have worked hard to bring the body and affect into the academy (my list of influences here includes Gibson-Graham 2006, Gibson-Graham and Roelvink 2010, Grosz 1994, Longhurst 2001 and 2008, Rose 1993, and Sedgwick 2003), and qualitative researchers in particular hold on to the researching body as the *sine qua non* of research methods (Crang 2003; see also Tuhiwai Smith 1999). Still, in writing about fieldwork, the body is often a taken-for-granted ‘absent presence’ (Law 2004). Beyond the standard ‘positionality’ statement regularly trotted out, it does not always seem to be accorded the centrality or the materiality it warrants (Crang 2003, Longhurst 1997, 2001, Longhurst 2008, Underhill-Sem 2001). Just how dependent fieldwork is on one’s body was brought home to me in the fieldwork for this thesis while living in the city of Xining. It was the limitations of the body — mine and others — that led up to crisis point in my fieldwork, a crisis which led to significant revisions in my fieldwork philosophy and practice.

FIELDWORK PLANS AND OTHER BODIES

I carried out three fieldtrips to Xining, Qinghai province between 2006 and 2009, the longest of these being a nine-month stint in 2007. I was planning a study mixing ethnographic methods and interview methods, based mostly on my previous experience doing ethnography and interviews in smaller communities in western China (Dombroski 2005, 2008b). My fieldwork plan included conducting semi-structured interviews and focus groups, which were to be carried out once I had a local research assistant and some months of ethnographic experience behind me.

My husband Travis and my eldest daughter Imogen accompanied me for these trips: Imogen was barely four months old for the first, and turned three during the last. Thus my particular embodiment as the mother of a baby and then young child was always quite central in both planning and carrying out fieldwork.

My fieldwork was also influenced by other bodies, those of friends, contacts, teachers and their families, and the relationships of these bodies with the institutional 'bodies' which worked to govern them. The most important bodies that came to influence my fieldwork were the members of an international Christian non-government organisation that I initially set out to work closely with.

Before ever conceiving Imogen or applying for a PhD scholarship, I was in contact with this non-government organisation (NGO), discussing possible PhD topics that would work alongside their projects and social enterprises in Qinghai in some way. I have chosen not to name the organisation because since this time the provincial government of Qinghai has undergone a sort of purge of most foreign organisations (achieved over a period of about two years through refusing to renew resident visas). Suffice to say, this NGO is no longer openly involved in development work in the area, although a number of members continue to run social enterprises and small socially responsible businesses in their own names, while others live on in Xining working for local

schools or universities.

In September 2006, my family and I travelled to Xining to meet with NGO representatives, and to get a better idea of what sort of research would be helpful to them, as well as possible for me to do. This was the first piece of work I had set myself on returning from maternity leave, and my husband and I quickly discovered that our plans of equally shared parenting duties had been formulated without the consent or input of our daughter. Understandably, she retained a preference for the parent who had carried her in the womb and still nurtured her with breastmilk. While she was happy to have Travis nurture her on her own terms, we were completely unable to convince her of the benefits of a bottle of expressed milk while in the unfamiliar environment of Qinghai. This seemed on the one hand catastrophic to my feminist sensibilities, but on the other hand absolutely reasonable as I began to sense and trust a more embodied approach to knowing. With little difficulty, Imogen managed to communicate her requirement for large amounts of time attached to my breast (around 40 minutes out of every two hours), and her extreme displeasure with other poor substitutions.

In between these times, I managed to pull together a number of interviews and meetings with various contacts in Xining, both within and outside of the NGO I planned to partner with. My discussions focused around the county of Hualong, a Muslim-majority county known for its illegal gun production industry, and the lives of women in villages there. I planned to conduct in-situ ethnographic research in one of these villages (or at least relocate to the county administrative seat also known as Hualong) in my next major fieldtrip, scheduled for 2007. I was interested in the particular role of mothers in village-level economies, including provisioning activities generally considered outside 'the economy'. I was unable to actually visit these villages because they were above the NGO's recommended altitude limit for non-native babies. Obviously the two-hour turnaround between breastfeeds was not quite enough to make the trip alone, and the experience would be potentially fatal for a small baby if altitude sickness were to strike.

We returned to Xining in 2007, Imogen then eight months old, having stretched out her feeds to three- to four-hour gaps and happy to take a bottle of expressed milk if I was not around. According to the NGO's medical policy, she was still too young to take to any significant altitude (Xining itself is 2,200 metres above sea level), but I had confidence that after my three months of full-time language study, we would manage something — perhaps she would wean, or we could get an apartment in the county seat and I could do day trips or overnight trips to the villages concerned.³⁴

I enrolled in classes at Qinghai Nationalities Institute (now Qinghai Nationalities University), in a four-month Mandarin Chinese booster class. In addition to the demands of full-time language study (which I somehow managed to complete in less-than-full-time hours), I spent much of this time attempting to plan and prepare for my later fieldwork. This mostly took the form of numerous meetings with contacts in the hope of finding a research assistant with connections to a village in Hualong, day trips out to potential fieldsites of acceptable altitude, and a number of pilot interviews with women in Xining.

Planning fieldwork in western China is a process best conducted face-to-face, unless one has very good connections with a governing body of some sort. In previous fieldwork I had done this via friends of friends using the Chinese social institution of *guanxi* or 'connections'. Some of these friends felt indebted to me during their time living in New Zealand, some saw potential benefits of helping me in order to secure future favours from me, and some were very close friends who desired to help me in any way they could whether future benefit or past favours merited it or not. The process involved being hosted by friends' parents and friends in Sichuan, and having the research process opened up to me through the intervention of a number of powerful or well-placed individuals who owed favours to someone in my *guanxi* network.

³⁴ Since this time, I have found that international consensus is that children from one year old can be taken to altitudes of 3,000 metres and above, as long as they are carefully monitored (Pollard *et al.* 2001). It seems the NGO erred on the side of caution in recommending we wait a further year, probably due to difficulties in monitoring and unreliable transport if we were required to descend quickly.

This had created some ethical discomfort for me because of my cultural conceptions of doing things 'the right way' (that is, by application to some sort of objective institution who approved my research solely on its merits).

I wanted to connect with the experiences of ordinary people, the kind that might not have good connections or an international *guanxi* network. My discomfort with relying on the good will of powerful others in championing my cause during my master's fieldwork had been a primary motivator in connecting with a foreign NGO for my PhD fieldwork. I believed that they would be more likely to connect me with the less powerful, since that was their stated aim of being in Qinghai. I also believed that they would be interested in what I had to offer, and presumably would be motivated to help me to achieve research success because the research was valuable. I assumed that my association with this NGO would provide the much-needed face-to-face and on-the-ground research connections through their own *guanxi* networks. I quickly discovered, however, that this NGO's discomfort with the practice of *guanxi* ran even deeper than mine, and I was pretty much on my own in establishing vital research connections.

I now realise that entering a community via a research assistant from a Qinghai university is quite different from entering a *guanxi* network through Chinese university students who have been in New Zealand. This is not just because these are more powerful members of their own community, although in some significant cases this is true. It is because these students had relied on my goodwill when we were classmates in New Zealand, and were thus connected enough to me to ask quite big favours of their parents and networks back in China. In Qinghai, with no proper *guanxi* connections, I was the foreign student reliant on the goodwill of busy others.

Despite being somewhat out-of-the-way in China, and initially fairly relaxed about research permissions and visa requirements, Qinghai is also a relatively politically unstable area. People were reluctant to speak to a foreign researcher without some sign of official approval or at least reliable *guanxi* relationships

vouching my good behaviour.³⁵

Eventually, through the help of a microenterprise investor associated with the NGO — who was a foreigner from a Chinese cultural background — I managed to begin developing a *guanxi* network of minuscule proportions. Without the strong ties of friendship, forced to rely on the less-powerful ties of money, I somehow managed to secure two student research assistants. They agreed to take me to their respective homes during their summer break to spend some time researching economic practices with their friends and family. I could not just walk into villages or county towns without a connection to help me get permissions and introduce me to local people.

With the promise of summer success, I renewed my concentration in my studies. I prepared questionnaires, memorised vocabulary, and practised Chinese with the migrant housekeeper who came to clean the apartment we were house-sitting for an Australian on home-leave. At this stage I was unaware that this woman, whom I will call Xiao Shi, would help me through the looming fieldwork crisis, and thus come to have a major influence on my research direction and subsequent fieldwork.

FIELDWORK CRISIS

The particular restrictions of my embodiment as a breastfeeding mother³⁶ contributed to my vulnerability and sense of frustration for the entirety of my fieldwork, especially in terms of being restricted (with my daughter) to a lower altitude on the advice of the NGO's medical advisors. As my language study period drew to a close and the time for concentrated fieldwork loomed, it

³⁵ See Mayfair Mei-Hui Yang's book *Gift, Favors and Banquets: The art of social relationships in China* (Yang 1994).

³⁶ I am not sure whether I would have made the same decisions had I not been breastfeeding. It is easy to pinpoint breastfeeding as the reason because it is a nutritional as well as emotional connection with one's baby. Many babies the same age as my daughter (then around 11 months) were in fact weaned, and each mother-baby relationship has different tolerances for separation. Many bottle-feeding mothers also report a bodily connection with their children, physically feeling any separation as a sort of embodied emptiness. Both breastfeeding and bottle-feeding mothers have carried and birthed babies, and connect to them frequently through smell, touch, eye contact and intuition. Had I been unable to breastfeed, would my embodied connection to my daughter have had similar research outcomes? I am unsure since breastfeeding is such an important part of my early relationships with both my daughters. I therefore continue to think of breastfeeding as the main component of our embodied connection. I attempt to do this without negating the embodied experiences of non-breastfeeding mothers.

became increasingly clear that neither Imogen or I were ready to push the weaning process. While I was committed to continue meeting her needs in this way, and more than happy to keep the embodied connection and increased immune support going in this difficult environment, there was still a considerable amount of ambivalence as I came to realise the consequences of this for my doctoral studies. In retrospect I am happy with this decision, given the formula milk contamination scandal of the following year, and Imogen's unrelated gastric illness where hospitalisation was avoided because of her willingness to take breastmilk.

Even with the limitations of continued breastfeeding, village-based fieldwork could still have been manageable if my agreement with the two student research assistants had manifested. Unfortunately, close to the timeframe in which we were to begin field trips, they both pulled out — most likely because our mutual friend returned to her home nation and our *guanxi* ties effectively broke. I was unable to follow up any part of my research plan as the NGO's limited contacts were in a high-altitude village three hours' walk from the nearest road. I also began to suspect that members of the NGO were doubtful about taking a baby into a village situation of any altitude, and this sense added to my increasing uncertainty about the wisdom of my plans.

My decision to stay close to Imogen at this time left me stranded in Xining, three months into my fieldwork, without a solid thesis topic that I felt I could pursue. I continued to follow up contacts, and push people to help me. These people had bodily limits too: my main NGO contact left before I even arrived due to an illness in his family, passing me on to another who only had contacts in a high-altitude village; my other main contact broke her leg while on holiday in her nation of origin and never made it back to Xining during my time there. I kept pushing, however, trying to find a way to get my family and myself out into an appropriate lower-altitude research 'site' where I could do my ethnographic thing.

Eventually my research plans hit crisis point a few weeks after a planned

fieldtrip with a local academic colleague fell through due to a 'political thought' conference she was required to attend as a Communist Party member. Seeing my frustration at what I viewed as my constant failure, my husband suggested a holiday break. At this stage we were six months into the nine month fieldtrip. We packed up and headed out to the province of Xinjiang for a three-week backpacking holiday in a place that felt more Middle-Eastern than Chinese. Backpacking around Xinjiang was just what we needed as a family to reconnect and relax and refresh ourselves after our difficulties in Xining. But in the last week of our three-week trip, things took a turn for the worst. In the city of Kashgar, near the border of Pakistan, Travis and I fell ill with severe food poisoning. Although Imogen was protected by breastmilk antibodies and experienced little more than mild discomfort, Travis and I were subject to astonishingly violent bouts of vomiting and diarrhoea that kept us holed up in a hot, cheap hotel overlooking a noisy construction site for close to a week. Even weeks after returning home, we were haunted by recurring episodes of weird burps, gas, diarrhoea and general lethargy. Yet we were extremely reluctant to submit to the harsh intravenous antibiotics preferred in the Chinese hospital system which caused equally horrendous clean-outs of the gut (a fear based on actual experience from earlier in the fieldwork trip, where the cure for my mild sinus infection had been worse than the illness itself).

Winter began to set in, with rain, cold, damp, wind and an increased reluctance to venture outdoors. The change of weather and the intense stress I felt at trying to somehow get fieldwork done in all this no doubt contributed to the general lack of wellness in our family situation.

While coping with all this, in a brief moment of joyful play Imogen's elbow was dislocated. After a number of misdiagnoses and a lot of tears, it was eventually reset. But she subsequently contracted another round of gastroenteritis from the hospital where we had taken her for x-rays, this time almost as violent as our food poisoning. She was unable to keep anything down. The paediatrician recommended I breastfeed her as much as possible in order to avoid the potentially traumatic experience of hospitalisation and intravenous tubes.

It was at this point that I completely despaired of ever completing any fieldwork, and felt almost relieved to spend two weeks propped up on the couch watching DVDs and breastfeeding a rather large and severely sick toddler.

The limits of the body I describe have been mostly of two kinds. The first is the limits of illness in the case of myself, my family, and my research contacts. The second bodily limit was the embodied connection between mother and child, especially within the breastfeeding relationship. These themes of illness and embodied connection returned again and again in my research, and became central to the understandings of infant hygiene I discuss later. But for now, the point I want to get across is that due to the limits placed on my own body (and others) through connection and illness, I was forced into a place of vulnerability and despair with regards to my research and particularly my fieldwork. It was in this time of extreme vulnerability, after weeks of illness and now couch-bound and literally attached to a toddler, that I first started to rethink my research approach and my stance toward knowledge production.

VULNERABILITY AND SURRENDER

Being pushed into a position of extreme vulnerability followed by a conscious surrender and a decision to Be Still, wait it out, and see where it goes was not an entirely new experience for me. What I had already learned through surrendering to the bodily limitations induced by pregnancy, birth, and breastfeeding is that they opened up new, previously inconceivable possibilities. Surrendering to the limitations of the pregnant body slowed down my research schedule and gave me time to think, read, and plan my thesis. Surrendering to the pain and knowledge of the birthing body allowed me to experience the absolute joy and bliss of an empowered birth and all the cocktail of hormones that rushed through me to enable that. And surrendering to the tasks of mothering, of sharing my body with another's will, allowed me to experience a completely different language of communication that has had ongoing effects in my ethnographic practice and, of course, in my other

relationships.

The whole mothering experience has been intensely embodied for me, relying on the interpretation of subtle physical cues from a small being and from my own body: milk letdowns, facial expressions, body language, a new sensitivity to particular verbalisations and even breathing patterns. Not only that, but the everyday tasks of caring for a small baby are intensely physical — carrying around, rocking, burping, picking up and putting down, feeding, dressing, toileting and nappy changing. This was quite a change from my ordinary desk-bound body and led to a whole different way of thinking and interacting.

What I am getting at here is that my embodiment as a mother of a small baby and my work as an ethnographer in a difficult situation were intricately connected in ways that cannot be expressed in a two-paragraph statement of my ‘positionality’, typical of other theses I have read. And more than this: the practice of surrendering to and fully experiencing the vulnerabilities and possibilities of an embodied connection to a child has been key in recognising the need to surrender and fully experience the vulnerability of being a researcher in the field. Even when the possibilities of this surrender were not immediately evident, I was forced to take a leap of faith and surrender to my apparent failure to secure a research site.

So how then did I manage the process of surrendering to *this* vulnerability in *this* particular circumstance, that of being ‘stuck’ in Xining, with no research site or subject of research? I began by rethinking my stance.

THE POSSIBILITIES OF THE BODY

As we all started to physically recover from a tough couple of months in our vulnerable bodies, I began to look around me and consider what to do with the apparent ruins of my fieldwork trip. I put my thesis proposal and fieldwork plan to one side — those carefully drafted research questions and objectives and took some time (generally while breastfeeding on the couch or in the dark

at night) to think back to some of the ideas that had been inspirational to me in starting my thesis.

One of the main ideas that had inspired me was this concept of ‘starting where you are’ — a concept key to the environmental movement (‘think global, act local’), second- and third-wave feminism (Harcourt and Escobar 2002), theologies of Liberation (Romero 2007 [1977]) and Quietism (Guyon 1975 [1685]), and also in the work of J.K. Gibson-Graham in transforming the economy (Gibson-Graham 1996, Gibson-Graham 2005, 2006). I realised, on uncomfortable reflection, that although it is perhaps admirable not to give up on my research, pushing people around me to adapt themselves to my desire for a particular type of research was not exactly ‘starting where I was’ or changing the world for the better. I realised that I would have to give up on my research proposal entirely, and start again, in Xining, as a true beginner open to multiple possibilities.

OPEN STANCE

Gibson-Graham cite Zen master Shunryu Suzuki to remind us that ‘[i]n the beginner’s mind there are many possibilities, in the expert’s mind there are few’. In their work rethinking the economy, Gibson-Graham take a deliberate decision to act as beginners, ‘refusing to know too much, allowing success to inspire and failure to educate’ (2006: 8). As both a student and a foreigner, there was little doubt in my mind that I was indeed a beginner in thinking about the economic landscape in Xining. Gibson-Graham, experts in political economy, had to *teach* themselves to think like a beginner. My task was much more simple: as an obvious beginner I merely had to *allow* myself to be a beginner. I had to allow my preconceived plans and ideas to take a back seat and begin ethnographic practice in the place where I found myself. Among the first ideas to put aside were my preconceived rationalisations of how mothering should work, and the timetable by which a child should become more independent or more dependent on others. I had to allow the knowledges I had come to value as a mother — the knowledge of the body, the

awareness of vulnerability, connection, surrender — to take over and help me produce a rich, embodied ethnography of the place in which I (already) moved and lived and mothered.

Once I began to look around me and notice the economic and mothering activities going on in my very courtyard, in the market across the road, and on my street, the possibilities for a fantastic research project opened up around me. It began to seem strange to me that I had ever thought I needed to go elsewhere for a field site, if my interest was in mothering and economic activities. The ubiquity of these activities meant that even my own street and my own home were places of possibility.

I spent the remaining two months of my time in Xining walking and observing, writing pieces like the previous Interlude, 'A Walk Down Bayi Road' (see page 57). I spent time meeting with women of any ethnicity, any place of residence, and with any type of job or care arrangement. I chatted around issues of mothering and childcare with anyone who cared to chat, sharing stories about our children (and in some cases, grandchildren) and our experiences as mothers. I spent time wandering the street, taking pictures, walking with my young daughter around the markets, and conversing with people outdoors. I had little clear idea of what I was doing, but it turned out to be conversations that later provided the basis for my second fieldwork trip.

At the end of the two months of openness to possibility, I began to feel somewhat overwhelmed by the wealth of options for future research, and still unclear and insecure about my role as a researcher and the subject of my research. Repositioning myself in the stance of the beginner was certainly rewarding in terms of possibilities, but at this stage, less rewarding in terms of decision-making. The amazing diversity of economic activity on Bayi Road alone was stress-inducing — what should I pick out as a topic for a thesis? It was like being *drowned* in possibility and indecision. The feeling of drowning was emotional, but also physical — a tightness in the chest, waking at night to the thudding of my heart, a rising sense of panic as the end of my fieldtrip

loomed and 'data' seemed to be ever elusive. A rush of sudden tears was followed by a feeling of release and momentary calm before the panic began rising again the following day.

We could not extend our trip any longer. But we could not easily return 'home' either as house prices were rising rapidly out of our income range in Canberra, and landlords were said to be enforcing a rule limiting the number of people that could stay in one rented house (we generally rented one room for the three of us!). This, combined with the sense of failure over my fieldwork, resulted in a difficult decision: to give up on the thesis, at least for the moment, and return home to New Zealand. Again, surrendering to 'failure' was almost a relief. I began to relax, and just let things happen.

The relief turned out to be momentary. As we travelled from west to east, I noticed a curious change in the tempo and rhythms of life and mothering. I somehow *physically* experienced the changes as we travelled from Xining, to Chengdu, to Bangkok, to Canberra, to Sydney, to Wellington, then finally settling down for the year with my husband's family in Palmerston North, New Zealand. The *feel* of each of these places was quite specific, as was the context within which mothering could take place.

In the less-wealthy part of Xining in which I lived, the rhythm of the day was heavily influenced by the rhythms of babies' sleeping and eating, underpinned by shared work and conversation. Even mothers who worked with their children alongside them in the marketplace did not seem to try and achieve too much in one day, and certainly very few mothers cared for their children alone in their home. As we travelled slowly east, I began to feel the pressures of industrialisation and the rationalisation of time management come to bear on myself and my family. The rhythms of life became more attuned to the ongoing clock of the workplace rather than the seasonal and contingent rhythms developed around children in Xining. Stopping in Chengdu to catch up with friends for a few weeks, we adapted to the busy routine of a friend who managed her life as a divorced working mum with the help of her own

childhood nanny and full-time commercial daycare for her two-year-old. Her daughter ate three meals a day at daycare, was picked up by others, and often did not return home to her mother until after eight o'clock in the evening because of her mother's busy work schedule.

I picked up this feeling of pressure in fast-paced Bangkok where our flight stopped over, and more intensely in our return to Canberra to manage our packing up and suspension procedures. Canberra was facing a housing crisis with prices of houses and rental costs skyrocketing as the city faced increasing population pressure. The parks were empty of children and the workplaces full of mothers and fathers trying to stretch themselves between the demands of home, work and rent payments without the support of nannies, family friends, or daycare that provided meals or extended hours. All the families we knew were stretched, strained, even exhausted, and I certainly did not meet any of them just hanging out on the street or in a park with their loved ones. We had to schedule in visits within already-full days, and this feeling of pressure and stress and over-commitment contrasted strongly with the slower-paced, more flexible lifestyle we had lived in Xining.

By the time we returned to New Zealand and settled in with my husband's parents, I had become finely attuned to the difference that place and space made in my experience of mothering. I started to wonder about the possibilities of autoethnographic work and comparative writing that explored the way I came to know about life in Xining, and life elsewhere. I wanted to somehow pull apart and analyse the things I was sensing and embodying as I moved across provinces, continents and cultures. I began to explore the possibilities of a research project that was embedded and interwoven with my mothering experiences in both China and elsewhere.

WHAT THE BODY KNOWS

As I lived and mothered in New Zealand, listening to the knowledges and feelings in the way I had in my travel to our current home from Xining via Chengdu and Canberra, a whole different set of embodied mothering and

infant care practices became evident without much conscious thought. It seemed that finally surrendering to the limitations of my maternal body and pottering away on my thesis in a low-pressure way enabled me to explore a more embodied strategy of ethnography. I spent time pushing swings and wandering around public libraries in Palmerston North with my almost-two-year-old, allowing myself to be aware of the social and physical spaces of my mothering in New Zealand. This brought into relief my time mothering in China. Part of my ‘starting where you are’ experiment, my open stance, was to stop trying to separate out ‘mothering’ and ‘work’ time, and to attempt to work within and around the rhythms of childcare as my daughter grew and changed and became more independent.

As I practised listening to my feelings and sensations and bodily responses to place, I became more aware of the dualistic nature of women’s ‘emancipation’. Second-wave feminists fought hard for equality for the female body in the workplace, which is now welcomed as long as it keeps to the ‘traditional’ practices, rules, and hours of the workday — practices, rules and hours I had studiously adhered to since beginning primary school twenty years earlier. My experiences as a mother made it increasingly clear that the traditions these work practices are built on work to exclude the obviously *maternal* body for the workplace — which, through its potential leakiness, messiness, and ‘distractedness’ and the unclear boundaries between infant and mother, awkwardly challenges the masculinist imagination of normal bodies as clean, hard, and bounded (Longhurst 2001). I began noticing the ‘silences’ around maternal bodies (Underhill-Sem 2001) in my circle of acquaintances, as mothers tried to erase the traces of maternity in the workplace and the workplace in their homes through various strategies of separation.

I wrote further notes and reflections, bringing my embodied awareness into conscious analysis. Since I initially spent large parts of my day mothering, I did this through exploring the differences in mothering environments, spaces, and practices between Xining, Australia, and New Zealand. These were differences I first began to act out unconsciously rather than cognitively. For example, if I

wanted to get something done in the office or in a public space, I might put my eighteen-month-old down on the floor with a pile of books or toys. Others with babies would also place them on the floor when trying to get something done, especially in the home, but also using the floor in certain spaces like the library, the office, the long-distance bus terminal, or the doctor's rooms. In Xining, however, it just felt wrong to put your baby down on the floor, even in the home. If I needed to get a task done, I would give the baby to someone else to hold. She was carried around almost constantly. On reflection, I realised I had *never* seen a baby on the floor in Xining, and that babies were held until they could walk unaided. I also realised I had never seen a child sitting alone with a pile of books or toys, because they were discouraged from sitting on the floor, and were in any case mostly in constant interaction with others or at least sitting quietly on someone's lap.

In New Zealand, it seemed appropriate to allow a young toddler to urinate on the grass if caught short at the park — presumably because it was quickly absorbed into the ground and was not obvious. In Xining, however, one would always hold the toddler out over a concreted area, presumably so that the urine *was* obvious and other people could see and avoid it. In Xining, it was common while out and about for toddlers and children to share out little snacks with each other and I encouraged my daughter to do the same. Yet in New Zealand, I found myself discouraging this same behaviour and asking for permission from caregivers before sharing. In New Zealand, children's food is closely monitored and sharing with others indiscriminately is not appropriate. None of these examples illustrate rational acts of mothering I had consciously decided upon after careful objective observation. Rather, they were embodied adaptations I made to the local environment without even thinking — just sensing it was 'right' or 'wrong' in the particular place in which I found myself.

Surrendering to my situation and then opening myself to an awareness of these small things helped to bring into perspective all kinds of spatial and social differences I had come to embody in the field (rather than merely observe). Most of my useful fieldwork notes were therefore written *after* I

returned from my first fieldtrip and began to consider mothering practices and spaces as a topic for my thesis. This type of knowledge was quite different from what I had seen as fieldwork or ethnography before, and I began seriously researching and developing my methodology, as discussed in the next section.

I have told this story of my break from doctoral research because it played such a significant role in the development of my subsequent approach to fieldwork. This break was brought about through the limitations and vulnerabilities of my maternal body, yet during this break I came to consider how my supposedly vulnerable and limited maternal body also presented an opportunity and possibility for a different type of aware research. Illness and disability can force people to become aware of their bodies and recognise their vulnerability in a way that allows a greater awareness of their environment, and of that which is Other (Gronda 2010). Likewise, the awareness that I cultivated through 'starting where I was' with the open stance of a beginner allowed me to become aware of 'other' spaces and practice — the ones I had started writing about as I reflected back on my time in Xining. I slowly became aware of a second important possibility: the possibility of a fieldwork site that is perhaps not a bounded community like those villages I failed to get out to, but the 'site' of my own maternal body and its interactions with the spaces in which I found myself.

THEORISING MY ETHNOGRAPHIC PRACTICE

The first thing I did when I came back to the thesis was to spend six months reading and researching others' experiences of ethnography and fieldwork, bodies and maternities, while continuing to develop an ongoing practice of reflexive writing that helped articulate some of the knowledges I had to come to value as a mother — the knowledge of the body, the awareness of vulnerability, connection, and surrender mentioned earlier. I was influenced by the work of autoethnographers such as Heewon Chang (2008, see also Anderson 2006, Besio and Butz 2004, Ellis and Bochner 2006), methodologists

such as John Law (2004: see also, Moses and Knutsen 2007), and non-traditional ethnographers such as Anna Tsing (1993, 2005) and Marjorie Wolf (1992, see also Fife 2005, McKinnon 2004). I wrote a graduate study guide on methodology for Massey University's MPhil Development Studies students and thus reviewed a huge range of methodological literature that enabled me to reflect on my experiences. I presented a seminar subtitled 'What To Do with a Little Data and a Lot of Experience' (Dombroski 2008a) and developed it into a paper and published it (Dombroski 2011b). I started a support and reading group for doctoral student-ethnographers at Massey University where we discussed our similar ethnographic projects and ways to theorise them (see Farrelly 2009, Gibson 2011, McLennan 2012, Stupples 2011). Eventually, I developed a second fieldwork proposal based around my embodied ethnographic methods, and scheduled a trip for 2009.

In theorising my ethnographic practice, I found the work of four key authors helpful. Doreen Massey's work on space helped me rethink my understanding of what counted as a 'site', in this case a 'site' of fieldwork (particularly Massey 2005). Anna Tsing's work on ethnography of global connections helped me pinpoint what exactly I could be focusing on in trying to do ethnography in non-bounded or non-traditional communities (Tsing 1993, 2005). Robyn Longhurst's work on the 'fluid boundaries' of bodies helped me come to terms with the exclusion of the maternal body (and later, hygiene) from 'normal' academic work (Longhurst 1997, 2001, 2008). Finally Heewon Chang's work on autoethnography and cross-cultural reflections pushed me to consider my embodied role as an 'edgewalker' between the norms and spaces of mothering in Xining and those in Australia and New Zealand (Chang 2008). I will briefly discuss each of these in reverse order.

AUTOETHNOGRAPHIES OF EDGEWALKING

The rise of the use of reflexive autoethnography alongside traditional ethnography has been received with relief by some (who see it as honestly including the role of the ethnographer in producing knowledge) and reserve

by others (who see it as narcissistic and inimical to the production of useful knowledge). Irrespective of the usefulness of pure autoethnography,

[c]ritical reflection on our practices would suggest that there are compelling moral and ethical reasons for trying to develop a modern range of anthropologies which do actually take account of the complexities and techniques of knowledge production within and between societies, groups and regions (Moore 1996: 14).

With respect to my ethnographic work in Xining, I came to reflect not only on the complexities of the production of local mothering knowledges, but also on the fact that my very presence as a maternal body had been an aid and catalyst to this complex knowledge production. It became clear as I reviewed my Xining notes and interviews (on a variety of topics) that the bodily presence of 'Other' (foreign) mothers such as myself in the city was enough to spark thought and discussion on child-raising knowledge and practice among local mothers and grandmothers. This was particularly highlighted by the hours of discussion I had with Xiao Shi, mentioned previously as the migrant *baomu* (nanny) who cleaned the house we were house-sitting on occasion.

Xiao Shi shared with me the 'shocking' practices of other foreign mothers she and her friends worked for. These practices included putting babies in separate rooms to sleep, letting them cry alone without attempting to comfort them, forcing children to finish their meals and more. She seemed to feel she could share these shocking stories with me because of the apparent 'Chineseness' (her words) of my parenting style: my husband and I seemed to do most things in the way she approved, including having our baby in our bed, practicing Chinese-style infant toileting, carrying her around, preventing rather than responding to distress and a number of other practices. My presence was what Chang (2008, drawing on Krebs 1999) terms an 'edgewalker': in this case, one who was not quite Other in terms of child-raising because of my supposed 'Chinese' way of parenting, yet at the same time familiar with the (Western) Other and a sort of conduit to that Other.

My bodily presence in Xining had sparked numerous such interesting

encounters that served to highlight the normal spatialities of mothering practices for local mothers. Examples include the oft-asked question, ‘Why did you bring your baby with you? Couldn’t you leave her with your mother-in-law now that she is a year old?’, and the usual comments about the way foreigners held their babies.³⁷ These interactions were essentially sparked by some sort of conflict — either a conflict I embodied literally, such as having my one-year-old with me while working and not having a mother-in-law available to ‘do her duty’, or one I represented through embodying the unexpected as a foreigner embodying an edgewalking or ‘Chinese’ practice of mothering, such as carrying the baby ‘like us’.

ETHNOGRAPHIES OF GLOBAL CONNECTION

It seemed to me that these sparks of conflict or awkwardness were important for doing cross-cultural ethnography. Theorising my ethnographic practice through autoethnography was not enough, since these autoethnographic moments were revealing of both me *and* the person I was interacting with. Although I was not researching a bounded community of mothers, I was still interacting with other mothers and learning about them as well as myself. I was learning through cross-cultural, even global, moments of interconnection.

These ideas of awkwardness and friction have also been explored by ethnographer Anna Tsing in her work on global connections and the Kalimantan rainforests of Indonesia, in which she asks:

How does one do an ethnography of global connections? Because ethnography was originally designed for small communities, this question has puzzled social scientists for some time. My answer has been to focus on zones of awkward engagement... These zones of cultural friction are transient; they arise out of encounters and interactions. They reappear in new places with changing events (Tsing 2005: xi).

If one is to follow Tsing’s example, the ethnographer can thus become less

³⁷ Low down straddled over one hip rather than up high, legs closed, sitting on the carer’s arm. This was sparked by the fact that we carried our baby in the local way, partly because I have rather narrow hips that do not support a baby easily, and also because our baby wore the local split-crotch pants which expose a lot of flesh to the cold air if the legs are not held together.

concerned with delineating boundaries of communities upon which to practise ethnography, and more concerned with noting moments of friction and interactions of interest. These ‘zones of awkward engagement’ tell us something about the types of universalist beliefs that are present and engaging — and Tsing emphasises along with Pheng Cheah (2001) that ‘universals’ are not only the domain of Western cultures (see also Liu 2009). Tsing uses these awkward engagements to examine the ways in which a number of ‘universals’ play out in the messy actualities of the Kalimantan rainforest; her book is a story of ‘how some universals work out in particular times and places, through friction’ (2005: 10). The friction of engaging universals sparks potential change: sometimes unwelcome, as when the universal of ‘prosperity’ worked to increase the degradation of the rainforest. But at other times these universals spark awkward friction that leads to the moments of unlikely success. Studying these zones of friction — paying attention to the universals at play in moments of conflict or unexpected connection — allows the ethnographer to gain insight into *global connections*, in the grounded and non-prescriptive way that comprises the strength of the ethnographic method.

I have experimented with applying Tsing’s language and concepts to myself: theorising my own body as a point of friction, a zone of awkward engagement between mothering ‘universals’ of Xining and Australia/New Zealand. The imagined Western mother was partially embodied in me through virtue of my nationality (New Zealand), my residency (Australia) and my ethnicity (Pakeha Anglo-Celtic origin); many Xining mothers spoke to her through me. Yet because of the partial ‘Chineseness’ of my mothering practices, the women I talked to were able to address the deficiencies (and less often, the benefits) of ‘Western mothering practices’ in terms of their own mothering universals, without fear of me being personally offended. This in turn allowed me to see certain universals they subscribed to, universals which only became visible through discussion of the strange and shocking practices of the (Western) Other.

An example of how this worked in my ethnographic practice is my interactions

with Xiao Shi and her fellow *baomu*: although they interacted with many foreigners and their child-raising practices through their various *baomu* or nanny jobs, they did not really *engage* with foreign beliefs about child-raising or mothering in an environment where they were employed to carry out instructions. They might find it strange for an employer to insist that they not allow their charge to eat between meals, but it would be labelled as a ‘strange Western practice’ to be either obeyed or surreptitiously ignored (but not discussed or challenged). Their resources for thinking and analysing these practices were primarily their own experiences of child-raising and their own beliefs concerning the universal needs of children, mothers, and their families. Thus ‘friction’ was not created, as the beliefs of *baomu* and their employers slid past each other without ever directly engaging or conflicting. Meeting a mother/foreigner such as myself, who reaffirmed to some degree their beliefs and experiences as mothers and caregivers, provided a more productive moment of friction that allowed us to explore the relationship between conflicting caring practices, the Other’s social environments, and the Other’s beliefs about children and mothers. This friction also contributed to experiment and further change in Xining and in Australasia, as I will discuss in Chapter 6, *Guarding Life*.

In my fieldwork plan for 2009, I aimed to deliberately open my awareness to such moments and interactions with Xining mothers made possible through my presence. But thinking of my bodily presence as enabling ‘awkward engagement’ was just the first part of reworking my ethnographic practice. It led me to rethinking my ‘site’ of fieldwork too. The crisis of finding a ‘site’ for my fieldwork in my 2007 trip to Xining was partly to do with my assumption that a site has to be a physical or cultural space delimited by particular research boundaries such as a specific ethnicity or geographical location. In the next section I explore how my ethnographic practice led to a reworking of the site of ethnography.

'SITE' AS A SIMULTANEITY OF MULTIPLE MESSY TRAJECTORIES

In this thesis, I envision my site of ethnography as a relational space centred around the moving trajectory of my mother-body. The maternal body, although in part socially constructed, has undeniable materiality and fluidity that should not be ignored (Longhurst 2001). The maternal body is not really well-bounded or delineated. It has fuzzy boundaries, is leaky and soft and changing, and it is unclear where the mother ends and the baby begins for quite some time. Theorising my own maternal body as a site of research transgresses the masculinist imagining of the body as cold, hard, and bounded (Longhurst 2001), and also transgresses the traditional imagining of the site of ethnography as bounded and delineated. Imagining my research site/body as a *zone* of friction where awkward engagements occur is perhaps an improvement — allowing some fuzziness and leakiness over where exactly the body ends and another begins, where research occurs and where the other stuff of life happens.

I navigate the awkwardness of the research site by envisioning my 'site' as a *relational space centred* on my body but not bounded by it. My bodily presence in Xining enabled a sort of conceptual or relational space, a zone of friction, in which interesting things happened. Such relationality of space is theorised by Massey who describes it as a 'simultaneity of historical trajectories', or the 'sphere of multiplicity, the product of social relations', where social relations are 'real material practices, always ongoing' (Massey 2005: 61, 95). The historical trajectories of women such as Xiao Shi, their parenting and employment histories, the specificities of their encounters with me and other foreign mothers, the specificities of *my* parenting and employment, travel histories, encounters with others and the institutions and spaces in which we variously deal with... these all assemble, converge, coexist somehow in a simultaneity, a zone or relational space centred on my moving-mother-body. *This* is my 'site' of research.

Ethnographic research is a method of *embodied* and *relational* engagement

with a 'site' or 'space' where a multiplicity of trajectories converge. Rethinking what we mean by 'site' or 'space' helps us to rethink the parameters of our ethnography. In my case, it helped me to understand that my ethnography was perhaps 'unbounded' and difficult to delineate. Yet although unbounded, it was still *centred*: in this case centred on my own embodied engagement with particular trajectories in Qinghai — the trajectories of various mothers and their young children, of various ethnicities and classes and places of origin. In the end, it was fairly straightforward to navigate the connections of two apparently unconnected places of research: the relational space in which I lived and moved and mothered in Xining, connected via the web and later in person to mothering groups in Australia and New Zealand.

CONCLUSION: SEEING THROUGH THE BODY

This chapter has addressed some of the questions of knowledge-making we all face as researchers in the field. Through candid narrative, I have explored the role of the researching body in the field and in the resulting ethnography. I have outlined the ways in which my embodied vulnerability as a mother provoked certain limitations on what I could do as an ethnographer in the field. I have suggested that becoming aware of, and surrendering to, the vulnerability and limits of my maternal, researching body led to different possibilities for a particular ethnographic engagement that perhaps could have *only* happened under these vulnerable circumstances. Surrender to the embodied practices of mothering taught me to look around and use all my senses to observe and absorb the diversity of place in Xining, and to open up my mind to the possibilities of a research project that fell outside the normal parameters of doctoral research in Australia. Eventually it enabled me to start seeing and mapping a broad and diverse hygiene assemblage, gathered around infants and their caregivers.

Surrendering to the needs of my daughter also made me appear 'more Chinese' to some people, and thus enabled me to become an 'edgewalker' between two

worlds of mothering. My bodily presence as an edgewalker provided a zone where awkward engagements between different mothering practices or beliefs could occur, thus co-producing *new* knowledges and mothering practices *with* research participants in northwest China (Dombroski 2011a). These moments of awkward engagement enabled me to see particular points of interest and friction within the hygiene assemblage I was starting to map.

I have described how I came to re-envision my field 'site' as unbounded yet still centred — centred on my own embodied engagement with people and place, the particular trajectories of mothers and spaces I crossed in Xining. As I travelled across provinces, continents and cultures with the open stance of a beginner, I became aware of the interactions of my body in places other than Xining, thus bringing into contrast the embodied knowledges I had absorbed in Xining. I was thus able to begin mapping the hygiene assemblages gathered in each place, as the differences became apparent to me through slow and gradual embodied knowing.

This has taken me one step closer to answering the question I posed in the introduction to this chapter: how do we get beyond our own embodied, embedded, habituated, invisible assumptions and blindspots to see what is 'out there'? The starting point for answering this question is to make our researching bodies and their method assemblages visible — to gather them into presence, rather than silence them by assuming their absence (Law 2004). This chapter has made visible the embodied processes of research that have come together to make this thesis. Through vulnerability and surrender, an open stance, embodied awareness of awkward engagements, and an unbounded yet centred fieldsite, I have crafted a methodology that has underpinned the remainder of my doctoral research. Making visible the embodied *research* process in Xining was the first step in making visible the diversity of the *other* embodied processes I have come to write about: in situated, diverse, embodied, dynamic assemblages of infant care and hygiene.

INTERLUDE:

THE PHYSICS AND POETICS OF MILK-FLOWING

“Wei?” I answer my cellphone in Chinese, not recognising the number calling.

A woman replies in rapid Qinghai-inflected Mandarin, and I catch that she is Head Nurse Zhang, free for an hour or so, and willing for me to come and interview her in the maternity ward of the hospital, as requested by our mutual friend Dr Zhu. I quickly agree and take the short walk down to the hospital.

I meet Head Nurse Zhang near the security gate of the hospital compound. She appears to be in her late thirties, a petite woman in the crisp white nurse’s uniform (complete with stiff little cap) common in China. We enter into the dingy and dark foyer of a four-storey building in the shadow of the eleven-story main building, and take the elevator up several floors. We come out into a well-lit hallway decorated with advertising from formula milk companies not-so-subtly disguised as parenting advice. I catch a glimpse of a room full of pregnant mothers, some with oxygen tubes up their noses, enduring a droning lecture from a nurse as they get their oxygen fix (said to help baby’s development at this high altitude). We turn into a small office with

concrete floors and old wooden and iron furniture. A neat desk in the corner belongs to Head Nurse Zhang.

She sits down and asks to see my questionnaire. This is a common enough assumption in China, where despite society being grounded on the ethereal and fluid systems of *guanxi* relationships, research is assumed to be statistical and authoritative. I politely demur, explaining that I am an ethnographer and interested in a more casual conversation about her job in the hospital, if she didn't mind proceeding in that way.

I ask her to describe her job, and we immediately begin to discuss the techniques of teaching breastfeeding to new mothers. With her doll and fake nipple, Head Nurse Zhang demonstrates correct positioning and technique to me, repeating what she tells mothers in the antenatal classes she runs.

Although I try hard to follow her rapid Chinese, I quickly become confused with the medical terms and more complex grammar she uses as she explains the biophysics of breastfeeding, digressing into a discussion of Apgar scores and hepatitis B — neither of which I really understand until I get the interview transcribed and translated. Eventually I grasp that she is now talking about the Sanlu milk crisis, and that she believes breastfeeding is once again becoming more popular.

“Before that,” she observes, “we did not realise how amazing breastmilk is”.

I am immediately interested since, according to the local women I was interviewing around the city, this had not necessarily featured in their decisions to breastfeed. She insists it is so, and that except for cases of hepatitis B, the mothers in her hospital all initiate breastfeeding. She knows of only two mothers who have started out bottle feeding due to imminent return to work (before baby reaches the ritual first ‘month’ or 100-day celebration).

I ask her what she does if a woman is having difficulty

breastfeeding or feeling like her milk supply is low and she replies,

“If it is in the past, she will possibly use milk powder to feed the baby, if she has limited breastmilk. Now, if it is so, she will ask, ‘What can help me increase my breastmilk?’ ... If they feel like they do not have enough breastmilk, commonly we encourage them to eat more, and still insist on breastfeeding. Moreover, [we advise them to] allow more rest, and keep up good nutrition. Here nutrition refers to protein. She should consume fairly nutrient-dense foods, and keep her state of mind in good terms.”

I must look rather quizzical at this point, as Head Nurse Zhang breaks with her usual textbook narrative style and goes out on an almost poetic limb to try and explain the importance of a good frame of mind to breastfeeding.

“With family members, um, her mood
... sometimes, she will be anxious.

This child,
she has become a mother to,
in one fell swoop become a mother
transforming her role.

This child —
she becomes aware of this child.

It seems perhaps she cannot take care of a child

It could become sick
— could this child become sick?

Could it have heart disease?

She is worried about things like this,
dispirited.

Or her relationship with her mother-in-law is not harmonious
that is, her mother-in-law
her husband’s mother,
the relationship between them...

That is, because of financial difficulties

Or (differences in the ways in which)

To feed a child

— therein may lie some problems,

it can reveal a conflict.”

Head Nurse Zhang describes potential interpersonal conflicts that can have an effect on the mother trying to breastfeed — matters mostly where ‘modern’ mothering clashes with ‘traditional’ practice: how much clothing to put on a child, or in the complex requirements of the Chinese confinement period (referred to as *zuo yuezi* ‘sitting the month’) where new mothers are prohibited from a variety of activities. Not being able to touch water even to wash, or to leave the house for 100 days, is enough to stir up conflict between the two generations. Head Nurse Zhang reverts to her professional, textbook, tone as she summarises,

“One thing is that they don’t get enough rest. If we exclude this factor, then the rest of the cases are divided between mothers who need to eat more, sleep better, and keep in a good mood. Then we also encourage them to feed the baby more. If the baby is still hungry and the breast is empty, you can prescribe a little formula. The next feed time, let the baby breastfeed first and then if it is not enough, feed formula. If this is the situation, mother is going to have more breastmilk. If not, we may suggest they drink (a particular) herbal tea.”

Once again the slippage from professional, textbook, authoritarian tone occurs, and Head Nurse Zhang’s language becomes less sure, although more poetic as she slips from her surefootedness as a ‘modern’ healthcare professional trained in biomedicine into the more murky complex subject position of Chinese woman with some knowledge of traditional remedies and Chinese medicine:

“If there is still none, we have some Chinese medicine.

We also use this (currently)

Hmm, have some kinds of traditional Chinese medicine.”

“So can Chinese medicine produce a bit more (milk)?” I ask.

“Hmm, right
Milk-flowing
A let-down kind, this one
A let-down kind of Chinese medicine
She can drink those scales of the scaly anteater (in soup) or there
are some Chinese medicinal herbs
Also can put those pig's trotters in
can put them in
Carp can go in
She can stew it up
Can drink the soup
This is a kind of diet therapy method
Another way is to directly eat that
Directly eat Chinese medicine
Hm
Then it's...
There are some like this.”

Head Nurse Zhang reverts to her professional style again as she moves away from herbal remedies:

“But then there are some patients, but I haven't surveyed how many, there are also some patients who don't achieve good results. One said her milk only equals five millilitres, each time only two or three mouthfuls. Then she has run out of breastmilk. She tried herbal teas and other ways but she still has limited milk. Things like this do happen. In this circumstance, she still breastfed for five or six months, each time only two mouthfuls here, two mouthfuls there, as necessary. In this kind of circumstance, [the mother] can still persist.”

Here, Head Nurse Zhang has described the general method of 'treatment' for perceived low milk supply in Western biomedicine — that is, to do nothing but encourage the mother with perceived low milk supply to frequently feed the baby, assuring her that there will still be enough. I ask her if she has had any experiences like this when she

was breastfeeding her own child.

“Of course,” she agrees immediately, launching into a story of how while putting together the necessary finances to finalise the purchase of her home, her milk supply dwindled over two or three days and she felt she had to give her ‘more than one month old’ baby supplementary feeds of artificial formula. She attributes this to her anxiety at the time:

“Hm, probably this kind of situation was because at the time I as extremely *fachou*.”

“*Fachou*?” I ask.

“It means getting worried, *aiya*! So much money, what to do! What to do? What to do?”

“Yes, it’s stressful.”

“Mm, it’s stress. Because my milk was obviously less! We have also noticed that with our patients’ relationships with their loved ones, husbands, mothers, mother-in-laws, uh...

if they have a sudden argument

they have argued

and that night she can’t fall asleep

after the argument she is so angry

then the next day there is no milk

the letdown is reduced.”

Head Nurse Zhang goes on to describe an embarrassing experience where her letdown returned at work and breastmilk stained her nurse’s uniform rather obviously. The mental image this story triggers serves to highlight the fact that Head Nurse Zhang embodies two women: the Biomedicine trained health professional in her starched white uniform, and the Chinese mother drawing on centuries of breastfeeding theory and practice, leaking through at indiscreet discrete moments.



III

UNHOMOGENISING MILK EMBODYING AND SITUATING GLOBAL CHANGES

SEPTEMBER 2008, PALMERSTON NORTH, NEW ZEALAND. Mere days after the Beijing Olympics closing ceremony, I am glued to the news in horror as images of sick Chinese babies and frantic, exhausted parents flicker past my eyes, interspersed with interviews with shifty looking representatives of New Zealand dairy company Fonterra. New Zealanders are shocked to discover that our biggest dairy company — part-owned by thousands of New Zealand dairy farmers — has been privy to a widespread scandal of contaminated milk powder, albeit produced by a partially owned subsidiary in China. As the story unfolds, we discover that the formula was produced with contaminated fresh milk. Either the farmers or the middlemen were watering down the milk and then adding the chemical melamine to boost the nitrogen levels and thus pass the standard tests for milk protein content. The high content of melamine was poisoning thousands of Chinese babies who depended on formula entirely for their nutritional needs, with

many developing kidney stones and failing to pass urine for days on end.

I receive an email from a Tibetan friend living in Sichuan, whom I haven't heard from for more than five years. Serendipitously, I am back working at my old university, and her email to a five-year-old address is able to reach me. She is frantic, her eight-month-old son is fortunately healthy but she doesn't know which formula to buy now the full extent of the scandal has become evident. Sanlu Company was just one of many companies selling contaminated milk powder, and it was Fonterra's belated notification to the New Zealand government and the resulting diplomatic exchange with Beijing that brought about the inquiry and all this to light. I think she wants me to offer to send her milk powder, but I know the postage would cost me hundreds of dollars for only a couple of tins. I try to find out which foreign milk powders available in China are actually produced outside of China, in order to help her decide what to buy. She ends up weaning her son early, on to simple foods and boiled fresh milk.

Later in the year, as I return to my studies and plan for a third fieldwork trip, I keep coming back to these stories. I wonder if this hugely publicised scandal involving many formula milk companies has sparked any changes in the way families feed their babies. I wonder if there has been anything like a breastfeeding revival in Qinghai, where traditionally weaning occurred anywhere up to seven years of age. I wonder why the use of formula milk has been taken up so readily throughout China, yet other 'Western' practices such as disposable nappies have been less attractive. Both formula milk companies and disposable nappy companies aggressively market their products in an effort to 'break into the Chinese market', virtually salivating over the potential profits to be made in a nation of a billion souls. Yet clearly one industry is more successful than the other, and the supposedly 'inevitable' fact of globalisation is not running its course.

It seems like everywhere you turn in China, someone is advertising milk and milk products. The advertising is mostly directed at children and their parents, since most adults detest the taste of cow's milk and are not accustomed to consuming it regularly. It is tempting to cynically write this off as just another example of globalisation-as-Westernisation, where multinational companies create desire for particular products resulting in widespread global homogenisation in culture, land use, economics, and health. But as I have already established in Chapter One *Thinking Multiplicity*, it is unhelpful to assume that change always occurs in only one direction. I had hoped that after the infant formula milk contamination scandal of 2008, I might find an example of resistance to the homogenising influence of milk marketing in northwest China, perhaps a return to traditional extended breastfeeding practices. In this hope, I was rather disappointed.

Yet exchanges such as that with Head Nurse Zhang, mentioned in the previous interlude, suggested to me that changes in infant feeding practices in Xining were not simply a result of good marketing. It seemed that something else was going on — that somehow, the interactions between the correct-breastfeeding 'universals' of biomedicine and those of traditional Chinese medicine were in fact engaging in such a way as to provide a series of openings for the entry of infant formula into this health-keeping assemblage! The case of infant feeding practices in Xining became an intriguing way to examine processes by which social change might happen — or in other words, to make visible the ways in which infant hygiene and health-keeping assemblages are gathered and re-gathered from a multiplicity of historical trajectories converging on the space of the Xining mother's body.

This chapter therefore has two purposes. The first is to make visible the infant feeding practices already present in Xining, and how they are intertwined with

the broader infant health-keeping assemblages there. The second is to examine the ways in which these assemblages shift and change. I do this through examining interactions between some of the ‘universals’ simultaneously present in the bodies of Xining mothers — and also my own body when situated in Xining.

Continuing the theme of the possibilities of the body introduced in the previous chapter *Seeing Diversity*, the first section of this chapter lays the ways in which the different ‘bodies’ imagined by biomedicine and traditional Chinese medicine can be simultaneously present in a single maternal body — the idea of ‘the body multiple’ (Mol 2002). The second section of this chapter describes infant feeding practices in Xining with an eye to the overall infant health-keeping assemblage of which they are a part.

This chapter takes a further step in the overall project of making visible the infant health-keeping assemblage of Xining. In this chapter, we see an assemblage which includes mothers and milk, artificial formula, supplementary foods and weaning practices, and beliefs about breastfeeding bodies and infant bodies from a number of medical and folk traditions. We also see the ways in which a health-keeping assemblage might change, through examining the ‘openings’ by which infant formula has entered the assemblage. This chapter thus works to *unhomogenise* the various milks of Xining, highlighting a fluid and dynamic hygiene assemblage which is heterogenous and potentially open to future changes in multiple directions.

OF MILK AND MOTHERS

For all women with milk, it is blood and vitality that are transformed into milk. Therefore we say that good and bad are all born of blood and vitality. Regarding her happiness, anger, drink, food, and all other restrictions, it is appropriate to restrain carefully. If she is unrestrained and uncontrolled, and nurses a child in such a state, the child will contract an illness. (From the Sung Dynasty (960–1279 AD) text *A Thorough Discussion of the Hygiene of Small Children*. Quoted in Hsiung 2005: 76).

One thing is that [the breastfeeding mothers] don't get enough rest. If we exclude this factor, then the rest of the cases [of low supply] are divided between mothers who need to eat more, sleep better, and keep in a good mood (Head Nurse Zhang, Xining 2009).

Sometime between the time of the Sung dynasty (960–1279 AD) and the year 2000, official discourse of infant feeding in China became less a matter of blood and vitality, and more of a matter of nutrition and science. Yet as the interview with Head Nurse Zhang illustrates, discourses of traditional Chinese medicine continue alongside those of biomedicine³⁸ in much of contemporary China, and both inform the ways in which mothers understand the physiology and sociology of breastfeeding. Breastmilk is upheld as the most suitable substance for infant feeding by both biomedicine and traditional Chinese medicine (in its formal-government approved form known as Traditional Chinese Medicine or TCM, *and* its less formal folk form). The complex interaction between Western biomedicine teachings on the physiology of breastfeeding (not to mention the nutritional composition and relative importance of breastmilk and other substances) and traditional Chinese medicine teachings about the maternal body and the nature of disease result in local infant feeding practices that rarely correspond with the official advice of either tradition. The health-keeping assemblage thus produced is shifting and reassembling, and it also includes trajectories of artificial infant formula, traditional and folk medicines, and the realities of everyday mothering practice.

Like many places in the world, the availability of artificial infant formula in China has become widespread since the 1970s. The use of breastmilk substitutes was at its highest in urban areas in the late 1980s. At this time in Beijing, for example, only around ten percent of mothers breastfed their babies (Jing 2000). Throughout the 1990s breastfeeding rates started to climb again,

³⁸ I use 'biomedicine' in preference to the term 'Western medicine', because the practice of biomedicine in China (and no doubt other places) is not necessarily the same as that in 'the West'. In fact, even *within* 'the West' there are quite different regional and national practices of biomedicine — all claiming to be based on the latest 'international' evidence (the radically different maternal health policies of New Zealand and Australia are a case in point). In Chinese, however, the term is *xiyi*, literally 'Western medicine'. When I *do* use 'Western biomedicine' I am referring particularly to the commonalities in the practice of biomedicine in Western nations, without denying the diversity that is also present.

and in Beijing by 1994, breastfeeding rates had climbed to 64 percent (Jing 2000); by 1997, another study showed that 76 percent of babies were receiving some breastmilk at four months (Xu *et al.* 2009). In more rural and out-of-the-way areas, breastmilk substitutes have been less readily available until recent years: thus in Qinghai province a high percentage of mothers begin breastfeeding.³⁹ However, the key point for this chapter is that *exclusive* breastfeeding remains an unpopular option (the same study cites the exclusive breastfeeding rate in Qinghai at four months as 39.2 percent) — infant feeding practices in northwest China are complex and many infants are fed substances other than breastmilk even during the first six months of their lives. So it is that while ‘any breastfeeding’ rates are climbing again, the use of artificial formula is *also* becoming increasingly popular.

A 2010 overview report of the ‘paediatric milk sector’ indicated that sector-wide sales had increased from approximately 160,000 tonnes in 2005 to 340,300 tonnes in 2009, and are predicted to grow to 686,000 tonnes by 2014 (My Decker Capital 2010). This is to be followed with an even greater growth in value as people turn to higher-priced premium products for fear of potentially contaminated low-cost products. Like many industries ‘breaking into’ China, the artificial infant formula industry has built itself not on the per-capita consumption of artificial infant formula (which measured in dollars is relatively low compared to developed nations), but on the potential size of the Chinese market.⁴⁰

The increase in formula feeding has been met with frustration by healthcare professionals, and is blamed on a variety of things: short maternity leave arrangements, poor understanding of the health implications, marketing campaigns that link artificial infant formula with infant intelligence, and time constraints on mothers’ lives. These things are often grouped together by nutritionists as ‘modernisation’ which is ‘causing’ a decrease in breastfeeding.

³⁹ In 1999, the ‘any breastfeeding’ rate at two weeks was 93.8 percent (Zheng *et al.* 2001, cited in Xu *et al.* 2009).

⁴⁰ My Decker Capital cites a potential market in 2010 of 38.9 million babies between 0 and 36 months old (2010).

This is despite programmes that promote ‘scientific infant feeding’⁴¹ in rural China (Guldan 2000, Guldan *et al.* 2000). Resistance to ‘scientific infant feeding’ programmes is common, yet still baffling to nutritionists. I suggest this is because they have not adequately explored or appreciated the underlying principles of infant feeding practices in much of China — principles rooted in the concepts of ‘blood and vitality’ codified in the texts and practices of traditional Chinese medicine. Where these ideas have been investigated, they have been labelled as ‘remnant’ traditions, marked for change, in a teleological view of medicine that sees biomedicine as the pinnacle of medical achievement and all other medical traditions (even the state-regulated and modernised version of traditional Chinese medicine or TCM) as ‘backward’ (see for example many of the chapters in Jing 2000). To date, there has been little reflection on the ways in which this teleology could potentially contribute to increased use of artificial infant formula.

Whether one accepts the validity of Chinese medicine as a medical tradition or not, the ongoing influence of traditional understandings of maternal physiology and psychology should not be underestimated. These understandings of the relationship between breastmilk, the maternal mind/body, diet, and infant health are second nature for many women, and rarely elaborated on in a way comprehensible to those schooled in biomedical physiology. How, then, can we make visible these second-nature health and hygiene assemblages, where multiple trajectories of medicine and understandings of the body interact in the one body?

I attempt to do this through paying close attention to moments of awkward engagement. In Head Nurse Zhang’s story, told in the previous interlude (see page 97), the image of breastmilk ‘leakage’ onto her starched white nurse’s uniform illustrates the way in which two different ‘bodies’ co-exist in the one mother. This image, and Head Nurse Zhang’s sudden changes in manner and language as she switched between medical traditions, indicate the two

⁴¹ *Kexue weiyang* — programmes in rural China that promote breastfeeding until 12 months and weaning practices that include an increased calorific intake from traditional rice porridges.

different 'bodies' striving for universality. In that story, we can see that on the one hand Head Nurse Zhang embodies the 'natural', breastfeeding, mammalian maternal body of biomedicine, where breastfeeding is largely a matter of physiology and persistence. This body is considered universal to *all* mothers, from any ethnic background or medical tradition. Yet at the same time another body also seeks universality: the specific, depleted, post-partum body of traditional Chinese medicine. This body is one where emotions, food types, and herbs are able to affect the quality and quantity of milk produced, where the mother herself is more aware of the changes in milk quality and supply than any outside 'expert', and where breastfeeding is not really even a matter of 'medicine'.

In her story, the universalistic, demand-supply, baby-centred discourse of Western biomedicine contrasts clearly with the whole-person 'blood-and-vitality', mother-aware, and equally universalistic perspective she herself draws on as a breastfeeding mother. As a breastfeeding mother trying to read the signals of her own body and her baby's, Head Nurse Zhang drew primarily on traditional Chinese beliefs about breastfeeding. Although she clearly stated that in professional circumstances she recommends women to persist with feeding their baby 'a mouthful here and there', when, in her own circumstances, her milk supply seemed to be dwindling due to anxiety, she did not hesitate to supplement with artificial formula for four days. Her certainty that the cause of her milk supply dropping was the worry over purchasing a house meant that she did not consider, as she perhaps would have in her professional role, different baby-related causes for the perceived drop in milk supply. The baby could be going through a growth spurt, I thought, or teething, or even picking up anxiety herself and thus needing to feed more frequently (thus exhibiting the signs of hunger that would make one feel the milk was

inadequate).⁴²

In Xining, the maternal body of biomedicine is present and has definitely gained local purchase. But her presence is not singular, and does not necessarily indicate a homogenisation of the maternal body (and its milk) via biomedicine. Another body, imagined and performed by traditional Chinese medicine, is *also* present, so that the maternal body is in many cases *multiple*. I argue that it is the presence of multiplicity alongside the *insistence on singularity* that provides an opening for the encroachment of international artificial formula companies. The next section will ‘flesh out’ what Mol (2002) calls ‘the body multiple’ with reference to mothers and infants in Xining.

THE BODY MULTIPLE

In uncovering the messy route of artificial formula success in Xining, I have come to see that the knowledges and beliefs specific to this place also have claims to universality — each grandmother offering advice to young mothers is not imagining her advice as specific to Xining only, but as applicable to all kinds of maternal and child bodies, everywhere. Where I failed in some crucial aspect of childcare in Xining, such as keeping the particular appendages of my baby clothed in particular ways (head uncovered to release upward heat, legs in triple layers to promote circulation), I was judged on the *same criteria* as local mothers with little consideration for my background or potentially different child-raising beliefs. The grandmothers of Xining in some ways forced me to develop a deeper respect for the potential universality of the knowledges and beliefs that popped up in the specific conversations, discourses, histories, and practices of my fieldwork.

As I argued in Chapter One *Thinking Multiplicity*, there is no one modernity to

⁴² In fact, if Head Nurse Zhang was referring to the baby having just passed the age of the first ritual month of 100 days, the ‘three-month-old growth spurt’ would most likely have been ‘diagnosed’ under Western biomedicine understandings of child development and breastfeeding. This is described by Day (2004) as involving several days where the baby seems to want to feed all the time and thus signalling the breast to produce more milk, followed by a clear slackening off as the milk supply stabilises.

which all the other contemporaneous places of the world are moving towards. Rather, there are multiple modernities, and multiple maternities too. This is relatively straightforward to grasp when we can spatially separate these multiple modernities — contemporary Xining is one modernity, contemporary Sydney another. I argued that some modernities imagine themselves as universal, and travel through that imagining — influencing other places and spaces in various ways. One of the travelling ‘modernities’ is biomedicine — it is travelling and being altered and performed globally, albeit in complex and differential ways.

The difficult thinking comes when we try to understand multiple maternities — not just multiple as in different people having different beliefs, but multiple *within one body*. As the interview with Head Nurse Zhang aptly illustrated, she embodies two medical modernities, two different maternities *both striving for universality*.

On the one hand, scholarship in the social sciences has insisted that universals are nothing more than folk beliefs ‘with efficacy only within the cultural system that gives them life’ (Tsing 2005: 7). But on the other hand, Western scholars have generally reserved for themselves the right to make theory (Connell 2007), regarding knowledge produced in other societies as little more than culturally relevant scraps of data (Tsing 2005). While this is being increasingly challenged, social scientists have been slow to challenge the universals and theories expounded in Western biomedicine — perhaps because for many, this requires the exhausting task of rethinking *our own* embodiment.

How do we overcome our ‘curmudgeonly suspicion’ (Tsing 2005: 7) of non-Western universals of the body, and respect them as valid objects of research? Firstly, we can study these universals of the body on their own terms, without trying to ‘translate’ them into biomedicine, as exemplified in the work of Charlotte Furth (1999) and Yi-Li Wu (2002). We can explore these universals with an open stance, conscious of the possibility that they may help to

describe and explain my (Western) body too. Secondly, we can ‘read for difference’ in Western understandings of the body, showing the diversity of bodies even within biomedicine, and thus showing the fragility of biomedicine’s universals. I use Mol’s concept of ‘the body multiple’ to understand how even Western biomedical understandings of the body are diverse.

In taking a critical stance toward Western biomedicine and an open stance toward traditional Chinese medicine, I do not romantically or naively assume that everything traditional Chinese medicine teaches about the body is ‘true’ or ‘better’. Rather, by doing this I hope to highlight that *both* biomedicine and traditional Chinese medicine are complex systems of knowledge that only partially explain the processes of the body (in its broadest sense, including the unexplained psyche and spirit). It has been too common for researchers to try and *interpret* traditional health practices in places such as China in terms of the universals that have been ‘proved’ by biomedicine — for example, they explain Chinese practices of avoiding water during post-partum confinement in terms of avoiding *germs* rather than the stated reason of avoiding cold (Leung *et al.* 2005). This is a ‘perspectivist’ approach to dealing with multiplicity (Law 2004), where a singular, real, body is imagined but is viewed from different ‘perspectives’. However, in this case the perspectivist approach favours the theories of biomedicine over those of traditional Chinese medicine. I argue that our understanding of bodies must be more complex than this.

The knowledge of the body produced by biomedicine is not infallible. It is based on leaps, imaginings and preconceived ideas which often go unrecognised in the stark, objective language used to describe medical studies. More importantly, biomedicine actually *produces* the bodies it attempts to describe (see Latour and Woolgar 1986, Law 2004). As Annemarie Mol’s work (2002) shows, different practices of diagnosis not only produce different *perspectives* on the diseased body, but also different *realities* — even for what might seem to be conditions produced by a single disease!

In her study of the biomedical condition lower-limb atherosclerosis, Mol asks what exactly *is* atherosclerosis? The answer is complex, she discovers, and multiple. The consulting room, the therapy room, the microscope, the operating theatre, the radiology department, the ultrasound — each space and method describe atherosclerosis differently. Sometimes these come together in one patient: pain on walking, clinical examination, angiography, duplex, surgical intervention, and pathology may all somehow fit together to produce a single co-ordinated atherosclerosis. But more often the relevant practitioners find they are faced with ‘poorly coordinated realities’, where contradictions occur between the results of pathology and the life of the patient, or the measurements of the angiography and other instruments. There are rules of thumb for discriminating between contradictory versions of atherosclerotic reality, for deciding, in fact, what reality *is*. Frequent contradictions require the frequent application of these rules of arbitration. We can see then that these poorly coordinated realities are not definite and fixed in form, but vague, fluid, indefinite, connected and enacted. Mol writes:

In a single medical building there *are* many different atheroscleroses. And yet the building isn’t divided into wings with doors that never get opened. The different forms of knowledge aren’t divided into paradigms that are closed off from one another. It is one of the great miracles of hospital life: there are different atheroscleroses in the hospital but despite the differences between them they are connected. *The body multiple* is not fragmented. Even if it is multiple, it also hangs together (Mol 2002: 55, her emphasis).

My point here is that if different practices of diagnosis *within* biomedicine can enact multiple realities, the engagement *between* biomedicine and traditional Chinese medicine enact them that much more, through producing multiple lived experiences sometimes in the one body. The human body is incredibly complex. Biomedicine and traditional Chinese medicine have long histories of attempting to explain some of the same complex phenomena. In some cases, they vary in their success: traditional Chinese medicine has a lot of success in treating irritable bowel syndrome, for example. Westerners being treated by complementary Chinese medicine practitioners for irritable bowel syndrome

must at least work with traditional Chinese medicine explanations for it. In effect they are enacting multiple realities within the one body.

John Law concludes in his work (2004) that our research methods work to *detect* reality (which is multiple, complex, indefinite and in flux), and also to *amplify* it. Hence English-language research based on an epistemological stance which merely looks for the commonalities between biomedicine and traditional Chinese medicine practices often detects the accepted reality of the former within the latter, thus *amplifying* the position of Western biomedicine as arbiter of (a single) reality. But what would happen if we allowed that the bodies of mothers and infants in China might be *multiple*? If we entertained the idea that they may exhibit the realities of biomedicine *and* traditional Chinese medicine, simultaneously?

In reading the bodies of both mothers and infants in northwest China, I take the stance that there is a 'real' 'out-there'. But I accept that this is not neat or definite, nor easily knowable, and in fact, my attempts to know it can also produce or perform a new kind of reality. I seek to move forward with 'knowing' by taking the stance of a beginner, where the possibilities are many. Although for most of my life I have seen the realities of biomedicine in my body (and more recently, my children's bodies) I seek out the realities of traditional Chinese medicine also. In doing so, I make visible the complexities and techniques of knowledge production within and between places. I pay attention to the ways in which the body of biomedicine and the body of traditional Chinese medicine are *both* present, sometimes awkwardly as in the case of Head Nurse Zhang, and sometimes more seamlessly as in the cases of other stories later in this chapter.

Leaving myself open to the possibility that the statements made by women about their bodies may not just be true 'for them' but true also for me (and likewise their infants and mine) was a definite change in stance. For more than ten years, I had been dismissing all Chinese health beliefs as superstitious and illogical. Because they so obviously contradicted my version of reality, I had

never really attempted to understand their complexity — let alone the ontology and epistemology which brought them into articulation. In a sense, the ‘universals’ of traditional Chinese medicine and the ‘universals’ of Australasian biomedicine slid past each other, without awkwardly engaging — because I denied the potential truth of the former, and held fast to the latter.

Once my resistance began to dissolve and I began to accept and understand many of the statements made by Chinese friends and acquaintances about their own bodies, their beliefs began to engage with my own — often in moments of contradiction or confusion. Finally, in 2010, the two sets of universalist understandings engaged more fully. After the birth of my second daughter, Analiese, I experienced ongoing difficulties with maintaining breastmilk supply, despite applying the best of biomedical knowledges to the problem. I began to listen with some interest to the stories I was translating, stories of Xining women’s success with managing low supply. I re-read my transcripts in a different light from then on, as potentially true for me and my daughters and not just true for Xining mother-child dyads.

As these two different universals of the breastfeeding body began to engage in a sort of ‘edgewalking’ health-keeping assemblage gathered around my body (and Analiese’s), I began to understand and experience the ways in which multiple medical or physiological realities can be enacted in one body.

I therefore offer the next section in humble atonement for the many years of patronising and hypocritical interactions with Chinese friends and research participants. I take up the history and diverse practice of traditional Chinese medicine as it relates to infant feeding *on its own terms*, without attempting to ‘translate’ it into the universals of the human body as understood by biomedicine. In doing so, I hope to introduce the reader to the less-well-known ‘maternity’ (simultaneously present with the biomedical one) in the bodies of Xining mothers.

TRADITIONAL CHINESE MEDICINE

Infant health-keeping assemblages necessarily draw on situated understandings of infant and maternal bodies. In Xining, infant and maternal bodies are shaped by the discursive and material practices of biomedicine and, less explicitly, the discursive and material practices of traditional Chinese medicine. Like the discourses of biomedicine, the discourses of traditional Chinese medicine in theory uphold breastfeeding as the best way to feed a baby and to supplement a toddler's diet. But practices of breastfeeding, like anything else, are affected by a myriad of interventions, beliefs, opportunities and restrictions also present in the health-keeping assemblage in question. I think here of post-WWI Australia and New Zealand, where the biomedical promotion of breastfeeding combined with the socio-cultural preference for a strict clock-based 'regulation' of breastfeeding (post-WWI Australia and New Zealand) actually worked to *reduce* breastfeeding rates. We now know this is because reducing the amount of time or frequency of suckling reduces a woman's milk supply. Advocating breastfeeding discursively, then, is just one strand in the health-keeping assemblage, and does not necessarily translate into practices of breastfeeding.

The pro-breastfeeding discourses of traditional Chinese medicine also interact in a complex way with competing discourses of the human body and the management of infant health, all present in the health-keeping assemblage gathered around Xining mothers. As medical anthropologist Zhang Yanhua insists:

...health-seeking strategies are complicated processes that respond to a complex of personal, social, and material exigencies and involve negotiating among diversified perspectives and resources available to patients and their families. To assume that people make rational decisions simply based on what they believe and explain the complexity of health and illness in terms of a few oversimplified cultural rules and beliefs offers an impoverished understanding of both culture and medicine (2007: 2).

With Zhang's warning in mind then, I attempt to offer some general principles of traditional Chinese medicine for the reader less familiar with the ideas and

beliefs present in this ancient and diverse body of thought, focusing particularly on aspects relevant to infant and maternal bodies and practices of keeping health.

Traditional Chinese medicine was once referred to in China merely as *yi* — medicine (Zhang 2007). It developed from the different knowledges, theories and methods of an eclectic collection of practitioners through periods of increasing theorisation and standardisation. Many of the classical medical texts were written during the Han dynasty (206 BC–220 AD), and the medications prescribed for various disorders (including ingredients and dosages) underwent only one period of radical change in the course of sixteen centuries (Goldschmidt 2009). The twelfth-century practice of *yi* therefore closely resembles that of pre-Republican nineteenth-century China⁴³ (Goldschmidt 2009). Increasing interactions with foreign medicines meant that by the early twentieth century, *yi* had come to be referred to as *zhongyi* ‘Chinese medicine’ as opposed to *xiyi* ‘Western medicine’. The initial clash and chaos between these two systems of health is well documented (see for example Rogaski 2004). The two systems were seen as radically different: some individuals would almost ‘convert’ to *xiyi* then ‘proselytise’ through the establishment of *xiyi* hospitals or propaganda campaigns (although Lei does not refer to it in these terms, see Lei 2009, 2010a).

During this time, the efficacy of *zhongyi* was attributed, in the opinion of *xiyi* practitioners and advocates, to its *jingyan* or ‘accumulated experience’. Theories of Chinese medicine and the efficacy of Chinese drugs were thought to be quite separate issues to these Western-style doctors: the former was seen as dangerously false, and the latter helpful only insofar as the drugs could be incorporated into *xiyi* understandings of healing, health and the body. After the 1949 revolution and the establishment of the Communist-led PRC, *zhongyi* came under official government protection and support. This period heralded the development of an official *zhongyi* — referred to in English as Traditional

⁴³ Republican China refers to the period from the fall of the Qing dynasty and establishment of the Nationalist-led Republic of China in 1912 through to 1949 when the Communist-led People’s Republic of China was declared.

Chinese Medicine or TCM. From this time, *zhongyi* has developed through dialogue with *xiyi*. Despite quite different theories of the body, disease, and health, *zhongyi* and *xiyi* are now accepted as complementary. In China, *zhongyi* practitioners may read *xiyi* test results and order scans and blood tests, for example. Patients fluidly pass between sometimes contrasting philosophies as it suits their needs and symptoms (Zhang 2007). In this thesis, I will follow the convention of using TCM to refer to the modern standardised practice of *zhongyi*, while using traditional Chinese medicine to refer to the broader collection of traditional medical practices and beliefs (complexly interrelated with TCM) that are embodied and naturalised in the average layperson.

The key concepts of TCM are the balancing of *yin-yang* via the flow of the vital life force *qi*, in accordance with the five phases or *wuxing*. In this way,

...health and disease are directly associated with the balance of Yin and Yang... Yin represents the passive and receding aspect of nature whereas Yang represents the active, advancing aspect of nature. It is believed that Yin and Yang exist at the emotional, physical, interpersonal/societal, and ecological levels...The two forces are thought to be interdependent, and the imbalance between them results in disease (2001: 391).

The ancient medical text *Plain Questions (Su Wen)* puts it as follows:

Yin and *yang* in the human body must always be kept in balance. The predominance of *yin* will cause *yang* disease and the exuberance of *yang* will lead to *yin* disorder (cited in Men and Guo 2010: 71).

Women, being more *yin* in nature, are more susceptible to *yin*-excess diseases, especially at times of depleted or *yin* states such as menstruation, pregnancy, and childbirth, when *yin qi* is predominant. Men are more *yang* in nature, and thus more prone to 'hot' disorders.

Through the internal flows of *yin qi* and *yang qi*, physical functions interchange from one 'state' to another. The five states or phases are referred to as *wuxing* (where *wu* is five) and are linked with the five elements of wood, fire, earth, metal and water, which are in turn linked with the five major

organs or viscera in the five basic systems of the human body:

The Liver⁴⁴ (wood) system encompassing the liver and gall bladder and consisting of the tissues, organs and their functional activities pertaining to wood, as well as tendons, eyes, tears, and the emotion of anger.

The Heart (fire) system centering on the heart and consisting of the tissues, organs and their functional activities pertaining to fire, as well as the face, tongue, sweat and the emotion of joy.

The Spleen (earth) system led by the spleen and consisting of the tissues, organs and their functional activities pertaining to earth, as well as the stomach, muscles, lips, mouth, saliva and the emotion of contemplation. The breasts and reproductive organs are also linked to this system.

The Lung (metal) system, centred on the lungs and composed of tissues, organs and functional activities pertaining to metal, along with the large intestine, skin, body hair, nose, nasal mucous, and the emotion of grief.

The Kidney (water) system centred on the kidney and formed by the tissues, organs and their functional activities pertaining to water, along with the bladder, bones, hair, ears, spittle and the emotion of fear.

These systems interpromote and interrestrain one another in various ways (Men and Guo 2010). The theory of the five elemental systems is used to explain the relationship between humans and their environment, and is one of the least comprehensible to people brought up outside this system of thinking. Inferences between these organs, elements, tastes, directions, temperatures and so on were often present in my conversations in Qinghai — with women of (Muslim) Hui, Han, and Tibetan backgrounds. TCM theory has in more recent years tried to lay out the logic of these inferences so that it can be

⁴⁴ In English-language discussion of TCM, the organs or *zang* are referred to using capital letters in order to emphasise that it is not the biophysical organ being referred to, but a visceral process.

taught and passed on, but for the average layperson these are associations embedded deep in daily life, particularly in terms of diet, and are not necessarily directly associated with the more ‘philosophical’ concepts of *yin* and *yang* and the theoretical notions of *wuxing*.

To apply all this to the daily life of the average layperson, I provide the following example. During the times where *yin qi* is predominant, such as menstruation, a woman should avoid ‘cold’ foods that would augment the coldness and dampness present in her body and would make her blood become thick and phlegmatic resulting in poor circulation. ‘Cold’ foods are those both literally cold in temperature, and those ‘inherently’ cold in nature — such as root vegetables like turnips which are associated with damp ‘earth’ (Pillsbury 1978). Consuming turnips during menstruation, then, could contribute to the weakening of the spleen (earth) system, which combined with other factors such as obsessive contemplation or anxiety and exposure to cold wind through washing one’s hair can result in the ‘cold syndrome’ symptoms of abdominal pain and diarrhoea.⁴⁵ So it is that the natural predominance of one type of *qi* over another works alongside a combination of factors associated with various ‘states’ (influenced by the actions and emotions of the woman and her association with her environment) to prevent or expose this woman to illness.

It will be immediately clear to most readers that this is quite a different notion of the relationships between health, body, emotion and environment considered ‘common sense’ in Western cultures. It will also be immediately clear to readers familiar with China that no Chinese person ever seems to explain it so well. This does not reflect my skill as a writer or my superior understanding of TCM, but rather the fact that most ‘common sense’ cultural notions operate on a day-to-day basis without overt theorisation or rationalisation. Just as the average Australian may not be familiar with the

⁴⁵ As an absolute beginner in the theory of TCM, I hope any readers more familiar with these concepts forgive my simplistic attempts at explanation. I thank Sue Cochrane, a TCM scholar, for checking this over. I also thank my ex-boarder Cai Youwen for providing my initial schooling in these concepts — normally in the form of admonishment!

exact theoretical mechanisms researchers have proposed for the transmission of hepatitis, for example, they can still assume the day-to-day common sense ‘rules’ of not sharing drinks and washing their hands.

In terms of infant feeding, it is important to understand how breastmilk production works in traditional Chinese medicine. Blood and *qi* flow along certain channels or meridians, two of which are particularly important for breastmilk production.

Women’s breast milk comes from the transformation of *qi* and blood of the *Chong* and *Ren* [meridians]. Downward flow is menstruation and upward flow is breast milk. If, after childbirth, milk is delayed or scant, it is due to insufficient *qi* and blood. When there is no milk, it is indubitably due to deficiency of *Chong* and *Ren*. (The complete works of Jing Yue, 1624, cited in Cochrane 2010: 3)

Breastmilk is therefore directly related to menstruation, in that the *qi* and blood of the *chong* and *ren* meridians are transformed either into menstrual blood or breastmilk (as with western biomedicine, there is recognition that breastfeeding delays the return of menses). So it is that in the traditional confinement period and beyond, breastfeeding mothers are supported in nourishing their blood in particular, as this is directly related to their breastmilk. Blood-nourishing foods and practices are encouraged throughout breastfeeding. As many of these practices (such as rest, increased liquids, and nourishing food) make sense with regards to biomedical understandings of the needs of breastfeeding mothers, they are present in all kinds of settings in Xining.

As we turn to study these specific practices of infant feeding in Qinghai, then, I hope the reader can keep in mind the different imaginations of the TCM universalist ‘body’ and its processes. This ‘body’ works to subtly inform infant feeding practices in interaction with other trajectories in a situated infant health-keeping assemblage of Xining.

INFANT FEEDING PRACTICES IN XINING

In the maternal education room of a Xining hospital, ten heavily pregnant women yawn through a droning antenatal presentation by a white-clad maternity nurse. I understand very little of it, and spend my time observing the room and the women. The room is light, and decorated with brightly coloured posters of mothers and babies, information on baby feeding provided by the formula company Dumex. This is a ‘baby-friendly hospital’, according to World Health Organisation guidelines — meaning it has policies in place to promote breastfeeding and strictly limit artificial infant formula advertising. I can see already by the Dumex-branded posters that these policies are loosely interpreted.

I stifle a yawn as the class comes to a close, and prick up my ears for question time. The very first question is from a pregnant woman who looks to be due any minute.

‘Excuse me, nurse, but what should we bring with us to the hospital?’

I look at the nurse with interest — surely this would have been covered in the antenatal class?

The nurse answers, and goes on to take many other very basic questions from the audience — how do I know when to come in to the hospital? How much will I have to pay in advance? Will I need oxygen during the birth? Will there be other people in the room?

I start to wonder what *was* covered in the droning presentation of which I understood so little. The class breaks up, with many of the mothers-to-be muttering unhappily. The nurse stands at the door handing out packets of ‘mother formula’ and promotional material from Dumex. I stick around to question her further.



It turns out that in Xining, infant feeding begins in pregnancy. The nurse tells

me that she educates the women in appropriate pregnancy nutrition — which explains why the terminology was so unfamiliar to me. She is not expected to give any antenatal information about the birth, whether they are imminently due or otherwise. The ‘mother formula’ is a powdered milk drink produced by infant formula company Dumex, meant to give added nutrition to pregnant women to help foetal development. The pregnancy nutrition class was droning because she was reading the information out directly from a Dumex-provided pamphlet. She was reading from the pamphlet because the ward has no funding or materials to teach antenatal classes. She gives the same talk most days, and shows me the boxes of promotional material provided by Dumex.

This less-than-subtle marketing strategy is not received well by the women. But it is insidiously problematic all the same. I review the pamphlets from which the talks are given and realise that the diets they prescribe are complicated and time-consuming to prepare. It is clear that what I had taken as an exercise in brand familiarity is more than that. It is a strategy to introduce an association between scientifically formulated milk products and easy nutrition. Compared with the instructions for specific amounts of protein and the types and amounts of vitamins supposedly required for optimum foetal development, the simple formula mix which covers all this is incredibly attractive.

While formulaic drinks and porridges are not uncommon in China (you can find ‘seniors’ formulas’ in almost any small convenience shop), these are normally based on one or two key ingredients that are considered beneficial for general health. What is of interest here is the idea of a scientific formula that you merely have to consume once a day in order to meet all your extra nutritional needs. The appeal is in its simplicity — it is not that one could not achieve optimum nutrition through diet, but that it would just be so much easier to not have to think about it. And as I will go on to argue, the appeal of artificial infant formula is not so different, when a mother is up against all the breastfeeding requirements placed on her by the health and wellness advice of at least two different medical traditions.

POST-PARTUM FEEDING PRACTICES

Despite pro-breastfeeding training conducted by health professionals such as Head Nurse Zhang, the first ‘opening’ for artificial infant formula in the infant health-keeping assemblage occurs in the hospital, immediately after the birth of an infant. Mothers and infants were transferred into Head Nurse Zhang’s care approximately two hours after the birth. Head Nurse Zhang and her staff would teach them how to breastfeed sometime in the first day, *if the mother and baby were both healthy*. During the interview, I assumed that what Head Nurse Zhang meant by ‘healthy’ was that neither had to have any further intensive care or undergo any operations, treatments or blood transfusions that prevented them from being transferred to Head Nurse Zhang’s care. But after reviewing interview transcripts of more than twenty Xining mothers, only *one* of whom breastfed on the first day, I began to question my understanding of the conversation that took place between myself and Head Nurse Zhang. The qualifiers she uses to describe the first breastfeed are perhaps more important than I initially realised. Our understandings of a ‘healthy’ mother and baby were perhaps not as contiguous as I first assumed.

If all these mothers had delayed their first breastfeed by more than one day, did this mean they were not healthy? In Western biomedicine, women are assumed to be ‘healthy’ even after having gone through labour and birth. This is because these are thought to be ‘natural’ events, and breastfeeding, a similarly ‘natural’ act, appropriately follows — these days within the first hour after giving birth. Even women who have gone through Caesarean sections are assumed to be ‘healthy’. Here ‘healthy’ is a general statement about the mother’s body, not necessarily related to their current specific state which is clearly *not* ‘healthy’ after having gone through major abdominal surgery. My background of birthing in Australia meant that I expected *almost everyone* would be healthy enough to breastfeed on the first day (excepting perhaps mothers with issues such as HIV or Hepatitis, or perhaps extreme blood loss).

Yet for many of the women I spoke to in Xining, the first breastfeed was not

only delayed by one to two days, but was also initiated only when hospital staff suggested to mothers to do so. The hospital staff rarely suggested it before the second day.⁴⁶ Perhaps then, when Head Nurse Zhang speaks of teaching 'healthy' mothers to breastfeed on the first day, she is referring to the exception rather than the rule. Even after twenty-four hours, many mothers responded to the suggestion to try breastfeeding with surprise since they felt that they had no milk. Dong Mei Li, a Han migrant restaurant owner and mother of a ten-month-old, describes her first breastfeeding experience as follows:

The day he was born, he was so sleepy, so I didn't try (to breastfeed). Then on the second day, the doctor told me to feed the child. I said, 'There is no milk!', and she said, 'You already have milk.' So I tried to feed, and there was!

Many of the women had also already given the baby other liquids before initiating breastfeeding. Guo Lihao, a Hui fruitseller and mother of three, and her friend Ma Xiao, a Hui baker and mother of two, agreed that a baby could be breastfed after two days. Before that time, it could be given a little sugar water. Liu Chang, a Han university lecturer and mother of a teenager, told me that she gave her son a little boiled water on the first day on her mother's recommendation, in order to 'clean his organs'. Even though her son cried on the first day, it was not until the morning of the second day that she decided to respond to his cries by attempting to feed him.

Liu Chang describes her first breastfeed as follows:

Mmm, I didn't have breastmilk at that time, and it's really painful. So I asked the doctor, I asked why I didn't have breastmilk. I felt my breasts were swollen and in pain. Then a nurse came by, the nurse, she says 'Get up', the nurse, after I got up, she helped me to express. That breastmilk, it squirted out, and I screamed loudly. It was so painful. Then I felt a lot of breastmilk let down and my baby started to feed. However, I felt that my breastmilk's quality was not good. It was painful when the baby was feeding. It was really painful. I thought, 'It is not easy to be a mother.'

⁴⁶ Dr Marion Foggin, a medical practitioner who trains birth attendants in remote Tibetan areas of Qinghai, notes that in her experience with rural Tibetan mothers, babies are rarely fed within the first three days after a birth (personal communication, 2007).

The fact that Liu Chang and many of the other women were surprised to find they had milk in their breasts in these early days could indicate they expected to wait longer before breastfeeding, perhaps on the advice of their mothers or mothers-in-law. When hospital staff initiated a feed, the mothers generally acquiesced, but often commented that they felt their milk quality was not good. Initially, I interpreted this as a common enough assumption when women all over the world have their first encounter with breastmilk, which is considerably lighter or more watery than other familiar mammals' milk such as cows, goats, sheep, and yak. Yet after researching literature on breastfeeding in China further, I began to wonder at the frequent (yet unelaborated) passing comments made about 'depletion' — the state of the mother's body immediately after birth according to traditional Chinese medicine and health beliefs. Could it be that the depleted state of the mother's post-partum body affects the quality or quantity of breastmilk?

I had a difficult job finding the answer to this question post-fieldwork. Studies of women breastfeeding in China rarely go into the nitty-gritty detail of women's breastfeeding experiences, or the larger meanings associated with their feeding decisions. Instead, research on breastfeeding in China is mostly limited to analysis of factors that influence breastfeeding outcomes at the meta-level.⁴⁷ In contemporary China this sort of research dominates in all fields, because 'there is supposed to be no ambiguity, no partiality, no bias, no preconception in the strict quantitative reduction of social reality' (Liu 2009: 88). Even in an area as complicated and muddled as embodied infant feeding decisions, research has been conducted purely from a biomedical perspective and has not taken local beliefs about breastfeeding seriously enough to explore them in any significant way.

Xu et al.'s treatment of the issue (2009) is typical: under a heading *Incorrect traditional perceptions*, the authors state that traditionally in China complementary food and liquids are introduced fairly early, then promptly

⁴⁷ A significant exception is Suzanne Gottschang's anthropological work in a Beijing hospital (Gottschang 2007).

sum the matter up with the statement that ‘even today, these incorrect traditional perceptions still have a strong adverse influence on “exclusive breastfeeding” in China, especially in less developed and minority areas’ (Xu *et al.* 2009: 1). Researchers thus make no effort to separate out the non-exclusive breastfeeding group into babies who were largely breastfed (but had been fed a small amount of medicinal solids to ‘promote digestion’) from babies who were being fully bottle-fed — because they are using categories based on Western infant feeding patterns. The best data I could get for Qinghai shows that at two weeks, 93.8 percent of infants were breastfed (Zheng *et al.* 2001) — meaning that despite sugar water and a delayed start, breastfeeding was still happening, although not necessarily exclusively.

The English-language literature on Traditional Chinese Medicine was equally frustrating in the search for some information on the effect of a mother’s postnatal ‘depleted’ state on initiating breastfeeding. As far back as 1978 Pillsbury provided some insight into the literature gap on early breastfeeding practices and TCM theory:

It is something ‘everybody’ does to get well and remain well after parturition, and its specialists generally are simply mothers, mothers-in-law, and older women who are experienced in such matters (1978: 15).

As such, there has been little need until recently to write about these practices in a theoretical or analytical way by TCM health professionals.

Despite the lack of clear discussion of early breastfeeding practices in ethnographic or medical literature, there are references to needing to restore the maternal body after the depleting act of birth. Anthropologist Suzanne Gottschang writes that the maternal body was viewed by her research participants as ‘depleted, thus vulnerable to illness and disease’ (Gottschang 2007: 65). One of the steps in restoring balance after giving birth is to allow the mother to recover in some way before initiating breastfeeding.

In general traditional Chinese medicine treats the mother’s health as equally

important to the babies, and there is no shame in stating that the main reason for delay is maternal recovery. Yet it could also be considered beneficial to the baby's health too. Beijing women in the 1990s told Gottschang that if the maternal body remains depleted, it 'has the potential to provide poor-quality milk to the vulnerable infant and hence cause its death or illness' (Gottschang 2007: 65). In this light, it becomes clear that delaying the first feed for a day allows the maternal body to recover some of its balance and thus presumably provide better quality milk *for the infant*.

Officially, contemporary TCM practice makes no such claims. However, in the past bad milk from depleted mothers has clearly been a concern. The classic Chinese medical text *The Essence of Paediatric Medicine* warns that 'If ill *ch'i* [*qi*] reaches the milk, its liquid will be static. For the child who gets the milk, illness immediately arrives...', where one of the listed illnesses is 'crying in the night' and 'pain in the abdomen' (cited in Hsiung 1995: 82). It is therefore conceivable that Xining mothers and others are drawing on older traditions of Chinese medicine, and are concerned about the *baby's* health as much as the mother's when it comes to delaying that first breastfeed.

Knowing the reasons for a delay in beginning breastfeeding is not a blanket approval of each case of delay, nor for the varying expertise of the female relatives charged with caring for the new mother. There have been cases of hypoglycaemia and even death of infants who have had their first feed delayed for inappropriately long periods. According to TCM paediatrics, a delay of '12-24 hours after birth' is considered 'difficulty breastfeeding' (Flaws 1997: 68), indicating that longer may not in fact be supported by TCM best practice (Flaws 2006), even if traditional.

A sad case of inappropriately delayed feeding was related to me by Dr Marion Foggin, the biomedical paediatrician mentioned in the introduction to this thesis. She tells it to express her deep concern over delayed feeding in the context of rural (Tibetan) Qinghai:

But there are a lot of false beliefs. One of the ones that most concerns me is that ... as

long as the baby feeds within the first three days, that's OK. Which is terrifying! And I've seen, I've been brought hypoglycaemic babies. I had one of the doctors⁴⁸ who brought his wife and child. They had lost five babies in a row. This was their sixth. They brought her to me and said "she's not feeding". The baby was hypoglycaemic! And I gave her a plastic syringe of sugar water, boiled, to try and get something into the baby – to make it wake up enough to feed. It didn't have the strength to feed. And so I'm worried now about just how many babies are dying of starv... of hypoglycaemia. (Dr Marion Foggin, interview transcript, 2007)

Dr Foggin was especially concerned about the heightened probability of hypoglycaemia in an extremely cold environment, meaning babies were already predisposed to hypoglycaemia even without the added danger of a three-day delay.⁴⁹

The three-day delay *seems* to be related to the substance colostrum. This thick yellowy breastmilk is available drop-by-drop as the infant suckles during the first three to five days until the milk 'comes in'. My Xining respondents were surprised that there was milk in the first twenty-four hours, since it is in such small, concentrated amounts as to be unnoticeable. Dr Foggin observed that people she spoke to in Tibetan Qinghai knew about the importance of colostrum with regards to their animals, but seemed unable or unwilling to apply it to their own mothers.⁵⁰ Although studies in other Asian cultures call this delay 'colostrum avoidance',⁵¹ my interactions with women in Xining seem to indicate that this is less about avoiding colostrum (a substance which many were unaware even existed) and more about delaying breastfeeding for

⁴⁸ Here she is referring to the modern equivalent of a 'barefoot doctor' — a local person with medical training but not necessarily a medical degree. The communities in which Dr Foggin works have no traditional doctors or midwives, and local health knowledges and practices are not necessarily based on Chinese or Tibetan medicines.

⁴⁹ Historically, Tibetan babies were fed butter for the first two days after birth, until breastfeeding began on the third day (Wilson 2012). However, delaying or withholding feeding is also a method of infanticide in Qinghai, and other foreign doctors in Xining related instances even within the hospital walls, usually when a baby is perceived as disabled in some way. Dr Foggin does not speak of this, but it is possible that in some cases an increased delay is an intentional strategy of dealing with unwanted births.

⁵⁰ Tibetan medicine now recognises the importance of colostrum, but this may not have filtered through to layperson understanding and practice (Wilson 2012).

⁵¹ See for example the review study by Dixon (1992), which reveals a variety of so-called 'colostrum avoiding' practices in Asian cultures. Findings from this review also seem to indicate that knowledge of colostrum is limited, and therefore delays are not necessarily colostrum avoidance.

recovery reasons, or even just until someone taught them how to do it.

Although the case Dr Foggin relates is extreme (where five babies have died and a sixth is in danger), presumably throughout the history of Chinese and Tibetan medicine babies *have* been surviving and getting enough colostrum to bring in the mother's milk even after a wait of one to three days. However, enough cases of hypoglycaemia have been diagnosed in recent times for people to become aware that sugar water can 'stand in' for breastmilk if needed. It has now become almost standard practice to administer sugar water to a newborn while waiting for the mother to partially recover. Sometimes this is done by the hospital and sometimes by relatives within the hospital (both scenarios were present among the women I interviewed). Although it is still unusual for women to breastfeed within the first day or two, there is now an increasing concern for the baby's hunger and possible lapse into hypoglycaemia (as evidenced by the frequent performance of the sugar-administering ritual) within the first few hours after birth.

It is unsurprising that sugar-water has been taken up so readily, since there is a long history of supplementary liquids being provided during the immediate post-partum period in order to 'clear' or even kick-start the infant's digestion. Some ancient guides advise parents to first feed a baby clear water, or even some form of clay, for a number of reasons, one of which is to cleanse the digestive tracts (presumably of meconium) (Hsiung 2005).

Liu Chang, the previously mentioned Han mother of a teenager, was the only respondent who mentioned introducing food in order to 'clean the organs', but other mothers did mention digestion. When I asked Hui mother of three Guo Lihao about the timing of her infant daughter's bowel movements, she indicated that she introduced solids early in order to 'regulate' these. At the time I assumed she meant early as in before six months, but later in the interview she reveals it was actually at nine days — a piece of steamed bread. Hsiung (2005) notes that in early imperial times, paediatric texts recommended that infants be given a small amount of ground-up grain mixed

with water, in order to help the stomach with ‘digestion’. She notes that the main idea was to give a slight share of food, where the stress was on stimulating digestion, not providing additional food intake or nutrition. This is dismissed as unnecessary by biomedical professionals, since breastmilk is easily digested anyway. Yet in the context of northwest China, I discovered the element that had previously been overlooked by these dismissals.

Guo Lihao’s comment revealed that giving solid foods results in a *more solid stool*. The solidity of a baby’s stool is of no importance in the Western context where nappies are used to contain them. But in the context of infant hygiene in northwest China, regulating the stool into a solid, daily ritual is an important milestone. As will be detailed in the next chapter, keeping hygiene without nappies requires a fairly good understanding of when bowel movements are likely to occur. Even biomedicine recognises that the introduction of non-breastmilk substances changes the bacterial population of the gut and normally results in a firmer, less frequent stool.⁵² Doing this too early is viewed negatively by current Western biomedicine, but as we can see with Guo Lihao’s comment, for the practical purposes of managing infant and family hygiene it makes a lot of sense. ‘Stimulating digestion’, then, is perhaps a misleading term to people trained in Western contexts.

In sum, contemporary post-partum feeding practices provide gaps or openings in the health-keeping assemblage, where universals of biomedicine and traditional Chinese medicine awkwardly engage in such a way as to almost cancel out the pro-breastfeeding advice of the other. These gaps provide a space for the entry of artificial formula into the health-keeping assemblage. By delaying the first breastfeed yet still performing ‘lack’ or ‘hunger’ through administering sugar water, the shifting health-keeping assemblage invites the intervention of artificial formula — which appears to solve the problem here through preventing hypoglycaemia and allowing for maternal recovery. Because there is no taboo against the early consumption of non-breastmilk

⁵² Exceptions occur when allergies or food sensitivities result in diarrhoea.

substances, illustrated through the common practice of introducing other foods as aids to digestion, the mother has already ‘failed’ according to the biomedical definition of ‘exclusive’ breastfeeding. A further opening in the health-keeping assemblage for infant formula is thus created.

It seems that the marketing of breastmilk substitutes does not override local practices and beliefs, changing culture ‘from the outside’. Rather, marketing is just one trajectory that is complexly interrelated with local practices and beliefs concerning post-partum infant feeding simultaneously enacted in the maternal and child bodies of Xining. We can see this in the strategy taken by Sunlife International’s colostrum product in Figure 5.

FIGURE 5: ARTIFICIAL COLOSTRUM ADVERTISING OUTSIDE MATERNITY HOSPITAL



Source: Author, 2009

Directly outside a maternity hospital in Chengdu, Sichuan Province, Sunlife advertises its product based on cow’s colostrum. A colostrum-based product intervenes directly in the post-partum gap in the infant health-keeping assemblage. It is attractive to families who want their infants to get the best nutrition at birth but are wary of breastfeeding too early and thus damaging the mother’s health or allowing the infant to consume ‘poor-quality’ milk. Strategies to better promote breastfeeding in northwest China might therefore

attempt to also intervene in this gap in the infant health-keeping assemblage — but they can only do so if the strategists are willing to recognise the multiplicity of trajectories gathered around maternal and infant bodies.

PRODUCING MILK AND ‘DOING THE MONTH’

The second stage in an infant’s life provides an example of where the health-keeping assemblage is relatively stable, with no obvious awkward engagements between biomedicine and traditional Chinese medicine. After returning home from hospital, the mother is commonly confined indoors for a ritual ‘month’. ‘Doing the month’ or *zuo yuezi* is extremely important in establishing breastfeeding.

Because I myself had found establishing breastfeeding difficult with my first daughter, I often asked women how they found the first few weeks of breastfeeding — whether it was difficult or painful. Some, such as Liu Chang earlier, indeed found it both difficult and painful. But for the most part, this early period of breastfeeding was not particularly memorable to the women I spoke to. Perhaps this is because with only one exception, the women had live-in support during their *yuezi*, which could last up to three months.

The *yuezi* tradition provides for an older, experienced woman to ‘accompany’ the new mother in her period of strict confinement. This person was normally her mother-in-law or mother, though sometimes another relative. She is referred to as the *pei yue* or ‘confinement accompanier’ although in fact she generally *directs* the procedures for caring for the mother and child during the *yuezi*, including monitoring the quantity and quality of her food intake (six meals a day, certain kinds of ‘blood nourishing’ and easily digestible foods). No doubt their direct instructions and assistance with establishing breastfeeding are helpful for many women — although it is also not completely unknown for *pei yue* to be ignorant of breastfeeding and thus end up inhibiting its

establishment.⁵³

Because breastmilk production is conceptually linked to the *chong* and *ren* channels, a number of related behaviours can affect the quality and quantity of breastmilk. Since the flow of *qi* and blood in the *chong* channel relates to the (visceral) Liver, harbouring the emotion of anger (also linked to the Liver; see Men and Guo 2010) could therefore impair its flow and cause breastmilk problems. Likewise the *ren* channel is linked to the womb and the (visceral) Lungs, and therefore the emotion of grief and the activity of worry. Thus it makes sense that these particular emotions, and any other activities or foods that affect the *chong* and *ren* channels, would also impinge on breastmilk quality and quantity. While modern TCM does not link *specific* disorders to *specific* ‘undesirable milks’ as was common in imperial times (Hsiung 1995), this type of thinking is evident in the *yuezi* conventions as passed and practised down maternal lines.

Certainly among the women I interviewed, emotions and ill health were factors taken into account while breastfeeding. As discussed earlier, Head Nurse Zhang supplemented with artificial formula for four days while she was feeling anxious. All of the women who had Caesarean sections had difficulties with breastfeeding, feeling that their milk was ‘watery’ or ‘not enough’ or ‘not good quality’.⁵⁴ Others who had difficult births also linked this to their breastmilk quality and quantity. When I asked Dong Mei Li if she breastfed her son in the beginning, she assented but added that later ‘[there was] no milk, did not have milk; after I gave birth, I was not so well’. She thus links her ability to produce milk with her post-partum health — which was not good due to a painful delivery, blood loss (and subsequent transfusion), and failing to deliver the placenta in a timely manner. The loss of blood is thus linked

⁵³ Although this is certainly a problem often reported in China, none of my interview participants or other women I met in Xining had concerns about this — perhaps because artificial formula was not easily available for their mothers’ generation due to the turmoil and relative isolation of Qinghai in the 1970s and 1980s.

⁵⁴ This is also noted in Western biomedical literature: breastfeeding success is less likely to occur for babies who have been born via Caesarean section, even between twins where one has been delivered vaginally and other by Caesarean (in that the vaginally-birthing twin is more likely to breastfeed).

quite clearly with breastfeeding difficulties — while blood is flowing downward, it cannot be flowing upward and stimulating milk production.

Despite various difficulties, breastfeeding seems to be mostly straightforward during the *yuezi* period. Perhaps the enforced isolation and the total reliance on — and even obedience to — the *pei yue* reduces the exposure to any conflicting advice from biomedicine. Or perhaps it is because the period works well with both biomedicine and traditional Chinese medicine. The enforced rest period provides plenty of opportunity for demand feeding as prescribed by biomedicine, despite all the other traditions that make no sense in biomedical theory. While this period is relatively free of any breastfeeding conflicts between the two universals of the body imagined by biomedicine and traditional Chinese medicine, the next section deals with issues of breastmilk supply and quality as baby grows and changes. Here we see quite divergent views on breastfeeding, and the negative consequences of these conflicts playing out in the lives of Xining women.

MILK SUPPLY AND QUALITY AS BABIES CHANGE AND GROW

The second ‘opening’ for infant formula to enter the infant health-keeping assemblage in Xining is the awkward engagement around concepts of milk supply and quality. On the one hand, biomedicine regards milk supply as related almost entirely to demand, that is, the sucking of the baby. On the other hand, traditional Chinese medicine recognise that a mother may sense that her supply is low, as well as a range of possible causes for an unsatisfied infant that include ideas about low supply and variable milk quality.

Dong Mei Li hints at some issues of supply and quality in the quote below:

My baby has already got used to being rocked to sleep. For example [I say] ‘Mama is holding you, embracing, embracing, go to sleep...’ And he just sleeps. But it didn’t work during the first three months, when he was young. Often he would eat but not be full, because my milk was too watery. Sleeping was very difficult. But now he has grown, and finds it easy to fall asleep. He likes *mantou* as well as *momo*, these foods [types of steamed bread] (Dong Mei Li, mother of ten-month-old, 2009).

In this quote, she clearly links her son's inability to fall asleep with the quality of her breastmilk, and indicates that once he was eating foods and older (and also drinking formula from five months), his sleeping difficulties dissipated. In her view, her breastmilk was inextricably intertwined with her son's sleep.

Linking milk quality with sleeping habits is not just limited to the Xining infant health-keeping assemblage. A sleeping infant is a satisfied infant, according to Gottschang's research with mothers in 1990s Beijing (2007). If the baby was not sleeping, the mother's milk was thought to be 'not good'. These Beijing mothers, like Dong Mei Li, received help and information from biomedically-trained maternity nurses while establishing breastfeeding in hospital. But when it came to thinking about issues of milk quality and supply, traditional Chinese medicine understandings took precedence for these mothers.

This is because biomedical researchers are skeptical of the concept of 'low supply', calling it 'perceived breastmilk insufficiency' (Xu *et al.* 2009). Xu *et al.* go so far as to imply that women who give up breastfeeding due to 'low supply' are merely using a socially appropriate excuse so as to avoid owning up to the fact that they dislike breastfeeding or have other reasons for giving up. They cite data showing that prior to the Baby-Friendly Hospital Initiative (a breastfeeding-friendly certification linked with the World Health Organisation), one third of mothers claimed they terminated breastfeeding because of disliking it or feeling uncomfortable, with only eight to nine percent claiming their milk was insufficient. After the initiative was introduced in 1995 and breastfeeding was promoted as the 'best' option, only 14 percent gave 'dislike or feeling uncomfortable with breastfeeding' as their main reason, while 35 percent cited insufficient milk, with little change in other factors.

While indeed Xu *et al.*'s interpretation of the statistics is plausible, they have based the idea on findings from an *Australian* study of *Japanese* women, which found this to be the case, since no Chinese studies have directly examined the issue. For a start Australia has significantly higher breastfeeding promotion

rates than even Baby-Friendly hospitals in China, so social pressure to breastfeed is presumably also much higher. Secondly, I would argue that ‘insufficient supply’ and ‘feeling discomfort’ are in fact not mutually exclusive reasons for quitting breastfeeding, and could in fact refer to the same thing. Many breastfeeding women report that feeding an infant on an ‘empty’ breast (that is, if supply is low or milk let-downs infrequent) can be very uncomfortable.

I suspect that the best explanation for Xu *et al.*’s statistics is to do with the complex interaction between different elements in the infant health-keeping assemblage. Mothers receive conflicting messages about milk supply. On the one hand they experience low supply through the behaviour of their baby and the feeling of their breast. On the other hand, because low supply is not currently recognised by biomedicine there is no treatment to address it. Because treatment is delayed, unsuccessful, or unavailable, low or poor supply becomes a reason for terminating breastfeeding rather than a hurdle or difficulty to overcome in a long-term breastfeeding relationship. Whether there is evidence for its existence or not is almost immaterial.

Unlike Dong Mei Li mentioned earlier, Deng Yi is a mother who overcame breastmilk supply issues using traditional measures. She went on to breastfeed successfully with constant awareness of the need to maintain her supply. She regularly referred to the difficulties in her breastfeeding relationship with her eight-month-old by way of her milk ‘quality’. She initially found positioning difficult, and had a number of concerns about her baby’s ability to suckle. After her body recovered from a Caesarean section, she reports, things got easier. Deng Yi told me that in the mornings she would return from a walk and then allow her son to play awhile before feeding him. She then added ‘if the milk is not good, I would feed him several times [in the afternoon]. It has not been bad these last two days.’ Here Deng Yi clearly links the quality of her milk to the number of times her son needs feeding in a certain period of time, where the more feeds he requires, the worse her milk quality.

Later in the interview, her and another mother present related their difficulties with keeping up good supply during the night feeds. Deng Yi fed her son every two to three hours during the night, and the three of us discussed strategies for increasing the milk's quality and quantity:

Deng Yi: So every night I need to wake up four times... at eleven, usually he would have the milk at eleven or twelve, or one in the morning. And then at three or four in the morning. If the milk is of good quality, it would be four. Otherwise it's once every hour or two hours.

Kelly: Do you mean that the milk is not of good quality, that the breastmilk is not good? Do you mean at night, if you haven't eaten or drunk anything, it's not good?

Xiao Shi: So at night the milk would be better after the mother drinks something. Just a little.

Kelly: Hmm, so maybe this is what is wrong with my friend. She said that her baby woke up at two, three, four and five o'clock. Something may be wrong with her. She should drink more?

Xiao Shi: She should drink more.

Deng Yi: Once an hour!?

Kelly: Yes, it's like this after three o'clock every night. I wake up as well, I can hear it [through the wall]. This may be the problem.

Deng Yi: This is difficult for the adults. Every night I have two or three bags⁵⁵ of milk, I have... Or I boil some eggs. I drink until I am very full. He falls asleep and I also fall asleep. When he is hungry, it is also the time for my breastmilk to come. Actually, I am not hungry, but I have to drink anyway. I have no other way, in order to feed him breastmilk... the breastmilk was not enough.

Xiao Shi: At one time, breastfeeding my baby, it took the whole night, she could not stop. At that time we didn't have any money. We had meat, pork, and then she had serious diarrhoea. Mutton and beef are extremely good.

Deng Yi: I am OK, I can have cold food. I am OK after eating cold dishes.

⁵⁵ Due to a widespread dislike of refrigerated, cold foods, milk in China is most often ultra-heat treated and sold in 125-250 ml plastic packets.

Xiao Shi: I can't. I told her father, 'Could you buy some mutton? The baby does not have enough. It hurts a lot when she sucks my nipple'. Then he bought some mutton for me, he bought three *jin*!⁵⁶

Deng Yi: ...Tonight, I prepare soup. Otherwise, I would not have breastmilk. It is very strange. No soup, then no breastmilk.

Xiao Shi: That day, when I asked my husband to buy some mutton, after I had the mutton soup – I had it over three or four meals – then the breastmilk was so good. So good! Just in the right way. You can suggest to your friend [directed at Kelly]... to have more soup.

In this excerpt of the transcription, it is clear that the quantity and quality of supply are considered to be directly related to the amount and types of foods eaten. All of the foods suggested are 'hot' or 'warm' foods according to traditional Chinese medicine classifications. These foods are suggested because they nourish the blood, restoring the depletion that comes through the transformation of blood into breastmilk. In times where the woman's milk supply appears to be failing, they may use diet therapy to assist with producing more milk. Far from being a 'natural' (though learned) process as described by the World Health Organisation (2012), breastfeeding here is imagined as an embodied experience particular to each woman, requiring minute management of her particular dietary needs.

Xiao Shi, for example, notes that when she had little money she was eating pork, a 'neutral' meat — her comment was understood by both women to mean that she was skimping on the more expensive 'hot' meats she should be consuming during this time, such as mutton, beef or chicken.⁵⁷ Deng Yi notes in response that she can eat 'cold' (and therefore presumably neutral) foods and still be fine — that is, still produce milk. Xiao Shi goes on to relate how her milk quality and quantity suffered (evidenced by her daughter's diarrhoea)

⁵⁶ 1.5 kilograms

⁵⁷ Chicken is the more common post-partum food in China, but since in Xining eating chicken requires selecting and purchasing a whole chicken, which must then be cooked and eaten in a timely manner, it is difficult for someone like Xiao Shi who lives in a rented storage room with no refrigeration or plumbing and a limited selection of cooking equipment. Mutton and beef are sold by the *jin* (500 g) or fractions of the *jin*, so it is easier to buy small amounts.

and then was restored after her husband bought her several *jin* of fresh mutton to make into a nutritious, blood-nourishing soup. Deng Yi agrees: she also must have soup each night in order to have sufficient milk of sufficient quality (evidenced by her baby waking less) to cope with the night feedings.

Although Deng Yi can eat ‘cold’ foods and not be affected, she still makes sure she balances this out with plenty of ‘hot’ foods: in addition to soup, she also consumes milk and eggs each evening even when not hungry — both being ‘heating’, blood-nourishing foods. In both these cases, it is clear that recourse to traditional understandings of breastmilk production and composition have in fact led to breastfeeding success — the women were both able to recognise and treat their breastfeeding supply difficulties without the use of artificial formula.

This opens up the issue of breastmilk supply. In biomedicine there is a distinct reluctance to recognise the possibility of ‘low supply’, and the situations of Deng Yi and Xiao Shi would be regarded as mostly imagined. In fact the term in biomedical research and practice is *perceived* low supply, illustrating that it is largely thought to be mythical. Breastfeeding is understood as natural and achievable for the vast majority of mother-child dyads. As long as the baby continues to be put to the breast, the story goes, enough milk will be produced.

Because low supply effectively does not exist in biomedical discourse, there is no treatment readily available to mothers who perceive or experience supply difficulties. Yet we can see in both Deng Yi and Xiao Shi’s cases that their low supply was *managed* through diet therapy and rest. While I do not doubt that in some instances women interpret other problems as issues of supply, allowing only for *percieved* low supply (as opposed to recognising ‘actual’ or even just ‘potential’ low supply) privileges the gaze of the medical ‘expert’ and dismisses the perceptions and knowledge a woman has of her own body. Denying the possibility of ‘low supply’ assumes that only the expert can know about breastmilk, based on medical studies. Since there are currently no large-scale studies examining what is happening biophysically to women perceiving

low supply, and there *are* plenty of studies showing that supply is linked undoubtedly with demand, the biomedical professional mostly works with the assumption that low supply does not exist. What is thought to exist is the false *perception* of low supply harboured by a breastfeeding mother.

The reason ‘low supply’ has come to be seen as a dangerous concept (by breastfeeding advocates drawing on biomedical research) is because it is thought to endanger the health of the baby through giving an excuse to wean. Even in Xining the expert eye dismisses the mother’s own perception of her body and milk production — Head Nurse Zhang encourages mothers to persist with a mouthful here and there. Yet as can be seen in the above discussion between Deng Yi and Xiao Shi, the recognition of ‘low supply’ *does not* mean accepting that low supply must necessarily lead to premature weaning, but rather, that supply ebbs and flows over the breastfeeding relationship due to a number of different factors. One of these factors is the amount of time the baby is suckling, and it is an extremely important one — but this *does not exclude* other factors affecting supply.

How would the behaviour of Deng Yi and Xiao Shi’s babies during the night be interpreted by Australian and New Zealand breastfeeding mothers who mostly accept that breastmilk supply will naturally adapt to demand? It is commonly thought in these nations that babies older than around six months do not need to be fed during the night, and babies much younger than this are in fact expected to sleep through the night.⁵⁸ In this infant health-keeping assemblage, mothers with babies the same age as Deng Yi and Xiao Shi’s (eight and four months respectively) would interpret unsettled behaviour during the night not as a milk quality or quantity issue but most likely as a sleeping issue or even ‘disorder’.

Although there is plenty of other biomedical research to suggest that night-waking and night feeding is common and developmentally appropriate for

⁵⁸ See Henderson *et al.*’s research into ‘sleep consolidation’ in infants. They cite the most likely age of ‘sleeping through’ to be three months (Henderson *et al.* 2010).

babies and children,⁵⁹ currently the maternal and child health support structures assembled in Australia and New Zealand still tend to interpret night-waking as a sleeping problem rather than an issue of feeding or hunger. In this health-keeping assemblage, the solution is thought to be training babies (and their parents) to accept independent night-time sleeping, and to train babies to fall asleep independently so when they wake at night they do not need to disturb their parents to fall asleep again. In recent decades, 'sleep clinics' have sprung up around urban areas of both nations in which mothers and babies having 'settling' issues can stay overnight and get assistance with sleep training. Maternal and child health nurses in both countries give advice to new mothers on settling their babies and helping them sleep independently (see for example www.raisingchildren.net.au and www.plunket.org.nz).

In the health-keeping assemblages gathered around mothers and babies in Australia and New Zealand, the night-waking of infants is thus conflated with infant sleep problems. There is little recognition of any kind of link between sleeping and feeding. While in some circles in Australasia, it is accepted that night-waking can be related to food intolerances (see <http://fedup.com.au>), including intolerances to foods in the maternal diet coming through in breastmilk, this is far from being mainstream. Biomedical research is also inconclusive into the effects of 'gassy' vegetables and legumes affecting infant sleep through breastmilk, although many midwives and mothers attest to disturbed nights after beans, cabbage and so on. There is plenty of biomedical research to support the fact that drugs and alcohol are passed through the breastmilk, but these have not been linked to sleep issues particularly. The scant research into the relationship between breastmilk composition and infant night-waking is problematic when biomedicine comes into contact with traditional Chinese understandings of this relationship.

Yang Shan Shan, a Han university lecturer and mother of a seven-month-old

⁵⁹ See for example the outcry of other researchers responding to Henderson *et al.*'s (2010) study on http://pediatrics.aappublications.org/content/126/5/e1081.abstract/reply#pediatrics_el_50845. One of the main points of contention was that the study involved self-selected participants who were mostly middle-class Pakeha New Zealanders already involved in baby sleep training; it also failed to indicate whether the babies were being breastfed.

baby, chose to switch to artificial formula rather than attempting to improve the quantity and quality of her breastmilk supply (or supplement it with formula). In her interview, she draws on her own reading and research on infant feeding to belittle the knowledge of her mother and mother-in-law and traditional Chinese medicine in general. When breastfeeding was delayed⁶⁰ and her milk seemed insufficient to satisfy her baby, her main resources for thinking this through were Western-influenced writings that split bottle and breastfeeding into polar opposites. It seemed that she felt she had already missed out or 'failed' at breastfeeding and was thus left with the option of 'bottle-feeding'.

Other women such as Sun Bo, a Tibetan university staff-worker with a ten-month-old baby, also felt pulled between the two options with no way to decide:

Sun Bo: Should I feed him with milk powder or my breastmilk? Generally I prefer to let him have my breastmilk, but I only had a little. I think my breastmilk is healthier, no contamination, cheap, and without something artificial and harmful.

Kelly: I heard that the more frequently you breastfeed the baby, the more the breastmilk will be produced.

Sun Bo: Not really. I breastfed my baby many times, and it was still limited.

Sun Bo, like Yang Shan Shan, had spent many hours researching her mothering decisions, and yet had not come across any strategies for increasing milk supply. She recognised the 'symptoms' of low quantity and/or quality as per her upbringing in Chinese and Tibetan medicines, but was not aware of any strategies of addressing this. When I mentioned the biomedical recommendation of feeding the baby more frequently, it came out that she

⁶⁰ Apparently because of treatment for jaundice. I am unsure why this required separation.

had tried this to no avail, and began supplementing with milk powder from three or four months.⁶¹ She first bought Nestlé, then Dumex — both foreign brands — and clearly had some anxieties about giving these to her son because of the potential both for contamination and also that he may start to prefer formula to her breastmilk. She felt torn between the knowledge that her milk, and the cow's milk available from nearby farms, are 'pure' and 'natural' — yet she had read that babies cannot process cow's milk well and it is not nutritious enough. Her commitment to continuing breastfeeding is shown by the fact that initially her family used a spoon to feed the baby milk powder (to reduce any nipple confusion). Yet all her reading had not provided her with any potential solutions to her problem of low supply. She thus supplemented with expensive imported formula and contributed to this rapidly growing sector of the formula market in China.

In this period of the infant's growth and development, biomedicine and traditional Chinese medicine may awkwardly engage over issues of supply, often leaving a gap or opening for the entry of infant formula into the health-keeping assemblage. Constraining this opening may involve the simple strategy of biomedical professionals recognising the experience of low supply in the maternal body — again, allowing for the 'multiplicity' of the maternal body. Recognising the *possibility* of low supply does not *necessarily* need to mean that breastfeeding will terminate earlier. Recognising mothers' experiences of periodic low supply allows treatment and counselling that may in fact *encourage* longer-term breastfeeding.

Although the marketing of artificial formula in western China is becoming a pervasive and powerful presence in the infant health-keeping assemblage, the experience of low supply does not necessarily have to lead to formula use. Rather, individual infant feeding decisions can be made that may or may not include the use of artificial formula. Unfortunately some women are caught

⁶¹ At the time, I did not follow this line of questioning much further, mostly because I had not then considered that low supply could be anything more than a myth. I just assumed Sun Bo was not feeding often enough, as per my own biomedical understanding of breastfeeding.

between two ‘universals’ of breastfeeding, due to poor complementary linkages between TCM and biomedicine in the case of obstetrics, post-partum care and breastfeeding. One tells them poor supply does not exist, and does not offer strategies to help them with their perceived low supply. The other tells them that their breastmilk quality and quantity is closely linked to their diet, lifestyle and emotions, which must be closely managed in order to maintain supply. The gap in assistance is too easily filled by artificial formula, especially imported premium formulas, which seem to offer a way out of the problem of low or poor-quality supply.

WEANING AND NUTRITION

There is a further gap that invites infant formula into the health-keeping assemblage. I will not explore it in great detail for reasons of space. But for what it is worth, this gap occurs around the time of solid food introduction and extends throughout the weaning period. In rural areas, the biomedical concern for nutrition is awkwardly engaging with the traditional concern for ease of digestion in terms of baby’s first foods. The types and amounts of foods suggested by biomedical health professionals (such as vegetables and meats) are unacceptable to families in terms of their traditional understandings of the infant body, and in fact are seen to *contribute* to malnutrition since they are considered too difficult for babies to digest (thus the nutrients are not absorbed and the food ‘stagnates’ causing the symptoms of malnutrition).⁶² While even as little as ten years ago, malnutrition could be partly apprehended through extended breastfeeding (it was not unknown for rural children to be breastfed until school age), the increased number of migrant mothers who have ‘left behind’ children and grandparents has drastically reduced this likelihood.

All the above elements combine to create a gap for rural families in the weaning period, where familiarity with biomedical recommendations means

⁶² Suggested foods may also cause unacceptable changes in babies’ stools or urine frequency, making keeping hygiene more difficult and thus also potentially increasing illness.

they are increasingly concerned about nutrition, yet are both unable to continue extended breastfeeding and unwilling to feed their toddlers the types of food suggested by biomedical nutritionists due to their unsuitability according to traditional Chinese medicine. Vitamin-fortified, high-protein artificial infant formula is an easily available nutritional supplement that smoothes out some of these concerns.

CONCLUSION: UNHOMOGENISED MILKS

The rise and rise of artificial formula in Xining seems odd in the light of the contamination scandals of 2008 and earlier. Yet infant health-keeping assemblages include a multiplicity of trajectories affecting feeding practices. This chapter has shown that infant feeding practices do not correspond directly to either official biomedical health recommendations or TCM recommendations. Despite both biomedicine and TCM overtly promoting breastfeeding as ideal, the mess and mesh of everyday practice reveals specific gaps and dissonances that have allowed — and even encouraged — the entry of artificial formula use into the infant health-keeping assemblage of Xining. In this chapter I have argued that the different universals of the body playing out in the lives of Xining infants and mothers engage within this assemblage to create quandaries which artificial infant formula appears to solve.

In sum, the concept of post-partum maternal depletion (in need of recovery before the first breastfeed) awkwardly engages with the biomedical concern for the nutritional inputs of the baby. This leaves a 'gap' in the infant health-keeping assemblage filled either by sugar water or formula. The bodily experience of low supply, and the interpretation of infant behaviour that is locally recognised as due to bad or insufficient milk, provide gaps too. This is especially the case for younger, educated women not familiar with (or sceptical of) traditional measures to address these issues. The lack of recognition or treatment options for the experience of low supply practically invites infant

formula into the health-keeping assemblage. In addition to these openings, the introduction of sugar water or formula during the post-partum gap, and the TCM practice of early introduction of non-breastmilk substances meant to assist digestive function, means that exclusive breastfeeding ‘failure’ appears to have already occurred according to biomedicine. This polarisation also paves the way for artificial infant formula to enter the assemblage. Finally, at the time of weaning, contrasting concerns of nutrition and digestion present in biomedicine and TCM respectively interact with processes of migration and the reduction in the length of the breastfeeding period. These interactions produce a gap in the health-keeping assemblage of rural families where once again, infant formula enters the mix.

The gaps seem to be a result of both TCM and biomedicine insisting on *singularity*, a universal maternal body and a universal infant body which should inform correct feeding practices. This insistence on singularity, *either* traditional Chinese understandings *or* biomedical understandings of the body, is what creates the series of openings in the health-keeping assemblage filled by artificial infant formula.⁶³ These openings are clearly complexly overdetermined within the health-keeping assemblage, and show that there are other things going on in Xining besides a simple story of ‘modernisation’ or ‘Westernisation’. The increasing availability and visibility of foreign artificial infant formula is just one factor that contributes to changes in feeding practices in Xining. Despite the changes so far being in favour of infant formula sales, there is room for possibility, experimentation, and other futures.

Changes in infant feeding practices are *not* the result of an inevitable progression towards Western modernity, and *neither* are they the result of the unstoppable conspiracies of unethical multinationals. Rather, they result from awkward engagements between various universals of the body present within the health-keeping assemblage, which work contingently to leave unintended

⁶³ This comparable with the situation of the Hmong-American child Lia Lee featured in Anne Fadiman’s groundbreaking piece of medical anthropology *The Spirit Catches You and You Fall Down*. In that case, the insistence on medical singularity had devastating consequences for an epileptic child (Fadiman 1997).

openings for the entry of infant formula. Social change, then, is something that happens when assemblages (in this case of hygiene and health) shift in such a way as to leave gaps or openings that invite other trajectories into the space. In this case, I believe the change has not been for the better — in terms of the health of mother and child, the health of the land increasingly being converted to dairy production, and no doubt the health of cows and their calves!

Although openings in the health-keeping assemblages *enable* widespread changes such as has been the case in infant feeding, they do not *necessitate* them. In the next chapter, I will explore the ways in which a particular opening has emerged for disposable nappy use, but has also been constrained and contained by the continuing contemporaneous efficacy of traditional infant hygiene practices.

INTERLUDE:

IN THE COURTYARD OF VENERABLE GRANNIES

In the communal courtyard of my *xiaoqu* or block of apartments, it is almost as if an entire village has got up and replanted itself on the edge of urban Xining. Older residents hang about the communal areas playing mah jong and Chinese chess, drying chillies and making pickled cabbage, gardening, exercising gently, rocking babies, or knitting while watching older children play. Small children toddle around, invariably dressed in split-crotch pants, often several padded layers. These pants keep the legs warm of both babies and toddlers, while making it very easy to hold them out to urinate or for them to squat and urinate independently without wetting their pants.

A grandmother encourages her small charge to squat and urinate on a concreted area of the courtyard, where it may be clearly seen and avoided by others. A few grandparents perch on wooden benches and small stools with their grandchildren held calmly ‘in position’, chatting to their neighbours while waiting for the child to respond to this positional cue to eliminate. Around the *xiaoqu*, the action of holding

out a baby is frequent, almost instinctive, the grasp under the knees mimicking the squat position which is used for toileting from birth to old age. Eventually, a baby urinates, responding to the cue of a low whistle from Grandma. The small puddle quickly dries in the cool, arid climate of the Qinghai-Tibet plateau.

It is here that I begin my study of infant toileting practices in Xining. My *xiaoqu* is called Yellow South City, after a regional town some hours from Xining. This *xiaoqu* was built by Yellow South City's local government, and in a way a village has been transported here – the majority of the inhabitants hail from Yellow South City itself. Its 300 or so apartments were first made available to local government employees and retirees for purchase. In March 2007, I rent one of these while living here with my family, taking a Mandarin booster course at the nearby Qinghai Minority Nationality University. Every day when I return from class, I bring my daughter downstairs to the courtyard to play with the other toddlers. She grasps my hands and uses them to help her walk around and explore the large, pedestrian-friendly area. I answer interested questions from the local *nainai* 'grannies', who begin offering me advice in every area of child-raising. I quickly discern a particular pattern to our conversations:

Granny: And how old is this little treasure?

Kelly: Eight months, almost nine.

Granny: Do you care for her yourself?

Kelly: Yes, with my husband.

Granny: Is he a businessman?

Kelly: No, we are students. I am doing my doctorate in Australia. I've come here to do fieldwork and study Mandarin at Qinghai Minorities'. My husband took some time off to come help me.

Granny: Hmm. Where is *popo* (mother-in-law)?

Kelly: Back in New Zealand.

Granny: Why didn't you leave baby with her?

As far as the grannies of Yellow South City *xiaoqu* are concerned,

childcare is something that comes with retirement. It may seem obvious, but it took me some time to realise that for many of them, this was their first experience of full-time mothering/childcare — when their own children were small, their own mother-in-law took responsibility for them. Age and socially sanctioned responsibility gives them the edge over me, as far as status as a caregiver goes. The grannies in my *xiaoqu* treat me like any other mother my age, advising me in all matters childcare. This includes the practice of *baniao*.

I have some experience with infant toileting, or *baniao* ('holding out') as they call it here. I had in fact started 'holding out' my own daughter at five days old over a little 'potty-basin' back in Australia. But until arriving in Xining, I certainly did not have the cultural, social, and spatial support that is enabled through living permanently in a *baniao*-ing community. The grannies provide little tips on holding out, answer my questions, and monitor my daughter's clothing. Sometimes other people even hold out my daughter when they think she needs to go. As we laughingly stumble through communication with a mixture of speech and sign-language — they with their heavily accented Qinghai-Mandarin, and I with my limited toileting vocabulary — I get the sense that vocal communication is not emphasised for these grannies and their babies. They do not seem to understand my attempt at explaining the 'signs of toilet readiness' taught to mothers in Australia who plan to 'toilet-train' their toddlers conventionally (one of which is being able to say the necessary words). For these women, toileting is an issue separate from speech development, and babies are bodily communicating their toileting needs from birth anyway. It is *our* job, these grannies insist, to care for the child's hygiene — picking up their signals and helping them to an appropriate place whether they can speak or not.

Later that month while visiting a neighbour, I witness a grandfather sitting on the edge of a toilet seat and holding out his five month old grandson over the tiled floors of the bathroom. He laughs

when I shake my head and balance somewhat awkwardly as I try to cue my daughter into the toilet. He points at the mop on the floor, indicating it is for mopping up baby urine. I suddenly understand the legion of rag mops projecting out bathroom windows, washed and then dried outdoors. Cueing infants to urinate on the floor turned out to be fairly common, even in living areas if a basin or potty was not close at hand. After my initial shock, I understand that mopping the floor is preferable to handwashing wet garments if baby is not responded to quickly.

In fact, living in a *baniao* space of practice alongside other parents and grandparents revolutionises our own toileting practice with our infant. We enthusiastically buy a few versions of the standard toddler outfit: sets of cotton split-crotch thermal underwear, woollen or synthetic jerseys, split-crotch dungarees or padded jacket-and-pant sets, topped off with polar fleece ‘pinnies’ that catch most of the daily mess of toddler-living. Our baby’s cute bare bottom is regularly seen flashing around the place, and we become known in the foreign community as a bit ‘out-there’. But the clothing makes sense in this dry, cold climate — removing a toddler’s (several layers of) pants every time they need to urinate is both time-consuming and tantrum-inducing — and the split-crotch makes holding out the baby an effortless action, as we keep informing our foreign friends (some of whom appear a little uncomfortable with the ‘nudity’ of our daughter and local children).

We also begin to understand the role of place in our *baniao* practice: until moving here, we had not realised how inhibited we had felt by the Australian environment and society where our practice was mostly kept to private spaces. Although we never manage to feel comfortable with cueing our daughter on the floor, and we have our fair share of accidents and wet pants, we eventually pull together a hybrid practice of *baniao* that fits with our living space and habits.



IV

HOLDING OUT

INFANT BODIES AND SPACES OF HYGIENE IN XINING

I hoist my baby daughter onto my back, adjusting the straps of my mei-tai, jiggling and swaying in the special dance that calms her and points her in the direction of sleep. I smile at a grandmother wearing the distinctive black velvet headgear that in Xining marks her as Hui, Muslim. She totes her grandchild around without the help of straps or cloth — the child seems to melt into her arms, fast asleep. She stares at me: she can't believe what she has just witnessed. I had just 'held out' my baby over the gutter, her split-crotch pants open as I manipulated her gently into a squat position. A soft whistle, a yellow stream, a little wiggle to dry out the bottom. She's not staring at me because of that,

however — that's pretty ordinary around here, where mothers and grandmothers pick up subtle cues from babies and help them to direct their 'eliminations' to the appropriate spot. She's staring because it's the first time she's seen a foreign woman and a foreign baby do what she 'knows' is right and normal. She catches my eye and nods in approval as she settles herself and her sleeping charge comfortably on a small stool to catch the rays of warm sunlight that stream through the smog-free skies of the Qinghai-Tibet Plateau. As I continue down the street I begin planning a post to my virtual friends on the OzNappyfree webforum, who would be just as excited as I am by the normalcy of toileting babies in China.



Although the practice of using formula to feed infants is widespread and popular in northwest China, the well-marketed practice of using disposable nappies is nowhere near as prevalent. Instead, infants and their carers are involved in a subtle relational dance of signs, cues and opportunities whereby the elimination needs of the infants are met through responding to subtle cues, infants are 'held out' over an appropriate spot for elimination, nappies are either not used or used merely as backup, and the infants gradually ease into elimination independence over a period of one to two years. Is this an example of a 'backward' practice of an 'undeveloped' region, which is yet to 'catch up' with the 'developed' world? Will increasing 'modernisation' mean that people can afford disposable nappies and will gradually give up the inconvenient and time-consuming practice of listening for and responding to non-verbal signs? Will the skills needed for this practice 'die out' with increasing modernisation, globalisation, Westernisation?

In the previous chapter, I have already argued that even in the case of formula feeding, globalisation is produced differentially in specific places through

specific practices. In that case, the specific gaps left in the awkward engagement between Western biomedicine and traditional Chinese medicine provided an opportunity for formula use to flourish in very specific ways. In this chapter, I take this argument further through examining the specificities of infant hygiene practices in Xining. Not only is globalisation produced differentially in specific places through specific practices, but it is a *two-way* process whereby the local not only resists *but also affects* the global. Indeed, the practice of *baniao* is doing more than just surviving — it is actually contributing to spread of infant toileting globally. This chapter connects to the following chapter, Travelling Practices, where I take up the story of a group of Australasian women who, via a web-based support group, are experimenting with producing knowledge about the practice of what they call ‘elimination communication’. The ‘link’ between these two places or groups is my researching, maternal, relational body and its movement through the spaces of practice in Xining, Australia, and New Zealand.

Through an embodied ethnographic and experimental approach, I outline my understanding of local people’s practices of managing infant hygiene with minimal use of nappies. Although the marketing of disposable nappies in China has received media attention for its ‘innovation’ in ‘cracking’ the market (Frazier 2010), in reality most consumers use on average only one disposable nappy per day — and there are many more people who use none at all. In this chapter, I delve into local practices of infant toilet hygiene to consider the ongoing resistance to disposable nappy use in northwest China. Through awkward interactions between marketing strategies and traditional Chinese medicine, a hybrid hygiene assemblage is produced that draws on some of the conveniences of disposable nappies without compromising the health of babies’ bottoms. In continuing to ‘hold out’ their babies in a literal sense, mothers and others are ‘holding out’ metaphorically against the so-called homogenising force of development-as-Westernisation. And more than that: they offer hope to mothers in Australasia trying to develop a more environmentally friendly infant hygiene practice.

OTHER HYGIENES

Chinese people are not accustomed to using nappies, because those things – for children – cannot be endured. It seems their quality is not good.

Dong Mei Li, mother of seven-month-old baby, Xining, April 2009

You are forever trying to keep the child dry and clean. Why? Because this skin is so sensitive. Ai, [nappies are] bad for the child's skin!

Lao Yang, migrant grandmother of six, Xining, May 2009

In many places of the world, nappies are not used as the primary means of infant toilet hygiene. Digo children in the Congo, for example, are dry by night as early as four months of age (Rogoff 2003, see also deVries and deVries 1977). This is in contrast to North America where children can be as old as four *years* of age before being reliably dry through the night, a state of affairs attributed by Rogoff (2003) to a cultural emphasis on children's verbal rather than non-verbal communication of toileting needs. In northwest China, it is possible for babies to be 'dry' through the night as early as four months too, although this is not expected. People clothe their young babies and older toddlers in split-crotch pants, holding them out over an appropriate spot to urinate as needed, both night and day. This practice has no specific name, but is an action referred to colloquially in Mandarin Chinese as *baniao*, literally, 'to hold out to urinate'.⁶⁴

It is often assumed by foreigners who travel around China that the ubiquity of bare babies' bottoms is a sign of poverty, and even a lack of hygiene 'knowledge'. It has been my experience that even very knowledgeable anthropologists and foreign residents in China have a complete lack of understanding around the practice of *baniao*. I believe that this is because of the deep-rooted acceptance of Westerners of their own tradition of infant

⁶⁴*Ba* (把) refers to the action of grasping the child under the legs. *Niao* (尿) refers to urine or urinating. Some student translators assisting me with my transcripts translated *baniao* rather clumsily as 'holding the baby's legs apart so it can urinate'.

toileting, and a general lack of awareness of the ways in which this tradition informs their understanding of their own bodies and therefore ‘the human body’. Even for people trained in critical thinking or cross-cultural work, who are able to accept the validity and variety of other cultural ways of doing and being in many other areas of life (such as religion and social organisation), the idea that babies may in fact have a degree of control over their eliminations and that adults may in fact be able to communicate with babies over these eliminations) is simply not considered. Where babies are *permitted* to urinate on the floor, this is often interpreted — even by anthropologists I deeply respect — as proof that caregivers do not know when babies need to eliminate, and understood as ‘just going anywhere’.

In my research I have found that there are fairly clear social and spatial codes of *baniao* conduct into which babies are gradually socialised, as the two-way relationship between caregivers and babies develops over time. Babies may be permitted to urinate on concrete, dirt or tiled floors, for example, but not on carpets or rugs, the couch or someone’s lap (although accidents do happen, as with any aspect of learning). My ‘ability’ to see these codes of conduct is not because of any special training in ethnographic research, but mostly due to the fact that I had already practised a form of *baniao* with my own daughter and thus was primed to see the connections and similarities between our practice and that of the families I interacted with in Qinghai.⁶⁵

In the same way that breastfeeding mothers inhabit and enact multiple maternities between biomedicine and traditional Chinese medicine, my daughter and I came to inhabit and enact multiple hygienes between Xining and Australasia. While living in Xining, we adapted to local hygiene customs, although not always while visiting foreigners. I posted to an online forum of mothers in Australia and New Zealand about *baniao* in Xining, apparently

⁶⁵Similarly, I often find my own infant toileting practice has coloured my representation of both Xining and Australasian practices — I have tried to mitigate against this by showing my draft chapters to people familiar with either group and incorporating their suggestions (special thanks to Rebecca Poh of Xining and Anna Spinaze of Tasmania). The entire thesis has also been edited professionally by Mona-Lynn Courteau, who has previously been a member of OzNappyfree.

affecting the ways that some of them practised hygiene enacted at home. My daughter came to know that in some spaces she wears split-crotch pants and is taken to a toilet or other space to eliminate, and that in some spaces she wears training pants or nappies and trousers and may or may not be taken to the toilet as easily. She did not appear particularly confused by this, although she communicated clearly and strenuously if she really wanted to use a toilet and not her nappy. Through her body, multiple toileting practices and beliefs were enacted, sometimes in the same day. She was thus the lens through which I came to understand *baniao*.

My experience of communicating with my babies over their bodily functions in this way opened me to seeing the ways in which hygiene was effectively kept in Xining. I absolutely refused to assume that millions of people all over the world have no understanding of hygiene, just letting their babies 'go anywhere'. I was committed to understanding how the practice of *baniao* worked to keep hygiene and promote health. In the same way, the experience made it possible for me to see and question some of the assumptions about the body normalised in biomedicine.

The vast majority of research into toilet training in biomedical literature is based on Western practices. Since most babies in Western nations are currently kept in nappies until at least the age of two, then this is the 'normal' starting point for any research into toilet training (see for example Schum *et al.* 2002). Through the exclusion of 'abnormal' practices in toilet training research (such as EC), Western biomedicine has come to assume that the sphincter muscle (which enables one to 'hold on' when needing to urinate) is not mature until around two (see Largo *et al.* 1999, Sillen 2001). From here, a subtle slippage occurred between research and general practice, where the 'fact' that the sphincter muscle in Western children is not well-developed until around age two becomes entwined with the belief that the sphincter muscle *cannot* be

developed until around age two.⁶⁶

Because of my experience with *baniao* and early toilet training, I have come to hypothesise that babies in Western nations are *trained to ignore* their bladder, bowels, and sphincter muscle until the age of two. Once they are able to *verbally* communicate toilet readiness and take off their own clothes, they are *re-trained* (or independently begin) to pay attention to the muscles that control elimination. I know that it is possible for very young babies to be gradually helped into an awareness of these bodily functions, because I have seen and experienced it. I know they can start ‘holding on’ (imperfectly, inconsistently) around the same time that they start being able to consciously control other muscles in order to open and close their hands or smile. I know this because I tried it, and as a result my babies came to defy medical wisdom and enact a different sort of infant body. This knowledge allowed me to be open to the infant hygiene assemblage of Xining families in a way that other researchers perhaps could not be.

In the next section, I begin to map out an assemblage of infant toilet hygiene in Xining based on ethnographic observations over three periods of *in situ* research. This included three weeks in 2006, nine months in 2007, and three months in 2009. In 2007 I interviewed a number of women on economic practices including conducting surveys with a research assistant. During this time that I began to pay attention to the presence of infant toileting mostly carried out by mothers and grandmothers in the everyday spaces I spent time in. In 2009, I returned to conduct a further twenty semi-structured, recorded interviews with a section of questions specifically directed at infant toileting.

⁶⁶I found two pieces of research that support the possibility that infants have some muscle control earlier than widely believed — both of which include researchers from Chinese backgrounds. The first, Yeung *et al.* (1995), seems to support the idea that elimination is involuntary, but they also find that newborns never urinate during ‘quiet’ sleep. The second, Liu *et al.* (2000), finds that Chinese children attain nocturnal dryness earlier than Western children. Other studies claim to have tested the idea that training produces earlier control only to find that the continence is achieved at the same age as those who begin training later (Largo *et al.* 1996, 1999). Yet when looked at in close detail, the ‘training’ in these studies involves no communication, but simply putting infants on potties at set times, ‘continence’ is fairly narrowly defined as toilet independence (no parental help required) and there is no recognition of a gradual improvement in the length of time a baby can hold on. Another study by Bakker *et al.* (2001) finds that late toilet training leads to greater bladder dysfunction in older children, suggesting that earlier toilet training and a focus on achieving dryness and avoiding urinary tract infections have lasting consequences.

These were transcribed by local university students from Qinghai Nationalities University, and translated into English by master's-level translation students at Macquarie University. All interviews were conducted in Mandarin Chinese, sometimes with a local research assistant present to help translate difficult ideas or terms. I (re)-translated all direct quotes from the various transcriptions, in order to better represent the feel of the conversation of which I was a part. I received signed or oral permission for recorded interviews as appropriate, and my research was approved by the Australian National University Human Ethics Committee.

KEEPING BABIES CLEAN AND DRY FROM BIRTH TO TOILET INDEPENDENCE *NEWBORNS AND IN-ARMS*

If you were to walk around the maternity ward of the Red Cross Hospital in downtown Xining, you would notice that every available centimetre of the exposed piping of the central heating system is hung with oblong cotton rags of varying colours and prints. These are the *niaobu*, literally 'urine cloths', of the newborn babies you might glimpse being rocked gently by grandmothers or other *pei yue* women in the rooms adjacent. The newborn baby is not generally 'held out' to urinate, but is dressed lovingly in new cotton garments with a well-worn and washed *niaobu* tucked between the legs of white cotton, cutesy-print, tie-up, open-crotch pants.⁶⁷

These tie-up garments minimise the distress of dressing a newborn baby, as they can be gently dressed by laying the baby on top of the opened clothing and tying it on. The soft cotton *niaobu* are cut from old sheets and pillow cases, are 100 percent cotton, and are prewashed or scalded in boiling water to soften and sterilise them.⁶⁸ The *niaobu* are oblong, tea-towel-sized rags that are

⁶⁷ Similar to split-crotch, but with a much larger cut-away area.

⁶⁸ Although some boutique baby shops in Xining sold Japanese-made *niaobu* equivalents alongside leak-proof nappy covers, none of the women I saw ever used anything but homemade *niaobu*.

folded into a pad of around 15 to 20 centimetres in width. These are tucked in front and back to the split-crotch pants, sometimes with a small band of elastic worn under the pants to secure them (see Figure 6). The baby is then dressed in more layers of cotton, often padded or quilted cotton split-crotch suits, and then wrapped in a large cotton-filled hooded sleeping bag or quilt. Often this already-large bundle is added to with a mink-style polyester blanket, which is wrapped over all this and sometimes covers the baby's face while outdoors. Keeping newborn babies warm is a concern all over the world, and local beliefs are strongly in favour of minimising the baby's exposure to 'wind' or draughts, as well as keeping them as warm as possible with natural, soft layers of cotton.

FIGURE 6: *NIAOBU*



It can be difficult under all these layers to change the *niaobu*, which may also leak and wet the other clothing if not done immediately after the baby has urinated. It would seem to be much more convenient therefore to use disposable nappies in the early days.⁶⁹ Yet from the large amount of *niaobu* hanging around the hospital ward, the inconvenience does not seem to deter contemporary mothers and their *pei yue*, who must watch the baby's body language closely in order to ascertain when it needs the cloth changed. This is actually the first stage of the infant toileting process — learning the baby's idiosyncratic elimination signs, and responding to them quickly and consistently in order to reinforce them.

⁶⁹ There is no tradition of plastic nappy covers in China, for reasons which will become clear in this chapter.

Perhaps because local and TCM infant-feeding discourses emphasise the importance of not overfeeding the baby, the *pei yue* or the mother will respond to signs of discomfort with other actions before trying to feed the baby. If the baby is squirming, crying out or unsettled, its carers will often first try a change of scene, rhythmic movement (in order to help it sleep), or checking the *niaobu* before trying to feed the baby. Sometimes responding in this way resettles the baby and it goes back to sleep without feeding, thus reinforcing communication around the interactions involving sleeping and elimination.⁷⁰ If the *niaobu* is wet the *pei yue* will change it to a dry one and immediately handwash the wet *niaobu* and anything else that got wet in the process.⁷¹ These are then hung to dry on the central heating system or, having returned home, in the *yangtai* (literally ‘sun platform’ — a glass-enclosed balcony considered essential to newer Xining apartments, and a popular spot for the wet washing, the convalescing, the elderly, and babies).

Some mothers now use disposable nappies during this early period. Zhuo Ma, a Tibetan mother of a seven-month-old baby, says she used disposable nappies for the first two months, the first pack having been given to her in the hospital:

In the hospital, he only wore disposable nappies. Around the time of two months, I was at my hometown and then I didn't use disposable nappies, because disposable nappies are plastic and using them all the time is not good. Could have been around... we were here [in Xining] for one month, then returned home... you could say from the second month, I just let him wee independently [of a nappy]. Until this day he wears split-crotch pants in the home, and from the time of the second month we just put a cotton *niaobu* on him [while out].

In this case, Zhuo Ma had five months off work, the first of which was spent convalescing in Xining directly post-partum and the second in her hometown, a village around three hours drive from Xining. Once in her hometown, they

⁷⁰As will be seen in the next chapter, Australian and New Zealand mothers tend to respond with breastfeeding first, then to subsequent unsettledness with elimination-related interactions, leading to a different sort of infant toileting practice.

⁷¹Because the phrase *baniao* and the word *niaobu* refer specifically to ‘urine’ (*niao*) and only allude to other eliminations, and because I failed to ask specifically about bowel movements in the period immediately following birth, it was unclear whether the baby was held out for bowel movements during this time.

switched from disposable nappies (most likely not available) to *niaobu*. After another month of recovery, she and her mother started holding out the baby or as she puts it ‘let him wee by himself’. This marks the beginning of the next stage of infant hygiene management.

HOLDING OUT

Families begin holding out babies to urinate on or around the first month (sometimes the ‘ritual’ month of 100 days, sometimes an actual month of 28–30 days). This time also coincides with a certain measure of infant head control, making the whole process much easier. From this time the baby can easily be held by gripping under the thighs with both hands (the action inferred by *ba* in *baniao*), in an upright position with its back and head resting against the carer’s stomach or forearms. The baby is suspended above the ground or over a receptacle in a comfortable and secure way, and the position can be maintained easily with little pressure on the carer’s back or arms (see Figure 7). The relaxed position is essential in assisting the baby to relax and thus release a stream of urine. In the early days, merely holding a baby in this position is enough to trigger urination or defecation, and the family use this opportunity to set up the cue — a low, soft whistle. Soon after, when the baby develops more control over the sphincter, whistling in this way will stimulate the relaxation of that muscle and signal to the baby that now is an appropriate time to eliminate.

Babies develop different signs for impending elimination, which may change throughout the year or more of holding out. Deng Yi’s seven-month-old baby would make a noise like ‘unh unh’ when needing to wee or poo. Others, like Dong Mei Li’s seven-month-old, made no clear signs and ‘always wet his pants’. Guo Li Hao’s one-year-old would toss and turn in the bed when needing to urinate, and she would then hold her out over a basin beside the bed. One nineteen-year-old Hui university student told me how his younger cousin (around 12 months old) would squirm on the couch and grunt in a specific way before urinating. He would then have time to lift the baby off the couch and

hold him out appropriately.

Alongside signs, most families used a degree of timing in predicting when to hold out their babies. Ma Xiao Long estimated that when he was watching television with his little cousin, he tried to hold him out at least every hour. Zhuo Ma likewise indicated that her father (who is the primary carer for her son during the day) holds out her seven-month-old every two hours. Guo Li Hao told me that if her one-year-old had recently been breastfed or drank some water, she held her out every ten minutes. Other mothers and caregivers used timing between thirty minutes and two hours, with variations depending on the last feed, the amount of water drank, and the type of weather.

FIGURE 7: HOLDING OUT AT HOME



In addition to set time periods, there were certain times of day when the babies were always held out: first thing in the morning and after any naps were the most common, with other times including after a drink, before going out somewhere, and if the baby had not urinated in a while. If the baby did not want to urinate, it would ‘look uncomfortable’ or arch its back, clearly showing a refusal. Some families respected refusals even though they were pretty sure

the baby needed to eliminate, and merely tried again later — for some of these families, their stronger-willed children went through long periods of back-arching and wet pants. Others (often grandparents) felt that in certain circumstances the baby should be grasped firmly and remain in the position until they responded. This strategy was most often pursued when outside or on the balcony, where the baby might look around and sit peaceably until something happened.

During the night, around half of the babies whose mothers I interviewed wore disposable nappies, which allowed the mother to be less responsive and, hopefully, get more sleep. Most of the babies urinated two to three times during the night, and the mothers with babies in disposable nappies still appeared to wake and know when the baby was urinating. All of the babies slept alongside someone, normally their mother or both parents, but sometimes with their grandparents. For those babies not in disposable nappies, they were placed on a thick cotton-stuffed quilt, sometimes with a plastic layer underneath in case of accidents. Guo Li Hao's baby slept on a such a quilt, but mostly stopped urinating at night from around two or three months (despite one to two night feeds). At the time of the interview her baby was one year old, and was frequently feeding at night (being more distracted during the day), yet she still rarely had to get up to *baniao* her.

A *niaobu* was also used when disposable nappies were not, although this did not prevent urine from leaking through onto the quilt. Zhuo Ma, the Tibetan mother of a seven-month-old, felt this was easier in rural homes where families slept on heated brick platforms known as *kang*. Here, a damp quilt would be turned over and would quickly dry during the night. In urban situations, the quilt would be changed, or a layer of towels or rags would be used on top of the quilt, and these changed instead, leaving the quilt only slightly damp. The quilts would then be washed in the morning and hung out to dry in preparation for the next night. These were some of the most ubiquitous items of washing in my *xiaoqu* — probably meaning that night-time accidents were not uncommon. And if this quilt leaked through onto the

mattress? According to Han migrant mothers Lao Yang and Xiao Shi, the mother would sleep on the wet patch and move the baby on to the drier side of the bed.

Almost all the babies were expected to defecate first thing in the morning. This was encouraged by giving the baby a large drink of warm milk or a long breastfeed, and then someone in the family would generally sit and hold them out until they performed. Having the bowel movement over for the day created a degree of freedom for the rest of the day, as the carers could be pretty sure that they would only be dealing with relatively sterile urine accidents. Some, such as Yang Shan Shan, a university lecturer and mother of a seven-month-old, felt that holding out the child too long to defecate might 'pressure' the child too much, and cause some 'psychological problems', so she offered for a maximum of three minutes then tried again regularly. Her baby generally did its daily bowel movement later in the day.

Babies were generally held out over a large, wide plastic basin, used specifically for the purpose of catching urine: other similar basins were assigned respectively for foot-washing, clothes-washing, vegetable or dishes washing, and hand, face or hair-washing (for families without bathrooms). This basin was kept in a prominent position in the main living area. In some families, such as Deng Yi's and Lao Yang's, the baby was held out over the tiled floor in the living room. This was considered more convenient than emptying and washing a basin (which may end up being left around and not emptied, causing a smell), as a mop could be used to mop up the puddle immediately and only had to be washed out every day or so and poked out the bathroom window to air.

Other families held the baby out over the bathroom floor, sitting on a Western-style toilet with the seat down and holding the baby out over the tiled, drained bathroom floor. The basic rule of thumb appeared to be: hold out the baby somewhere light, easy to clean, and with interesting things to look at, in a position equally comfortable for baby and adult. This often

excluded holding babies out over toilets or sinks, which in Xining are often internal, cramped rooms that did not assist with baby relaxation or adult comfort.

In basic rental homes there is often no toilet. In Guo Li Hao's fruit shop with back bedroom, Xiao Shi's vegetable shop with back storage room, Ma Xiao's rented room in a shared courtyard, and Zhang Li's wine shop with loft bed, the babies did their daily bowel movement on several layers of newspaper on the floor, which was wrapped up and disposed of in the daily commercial district rubbish collection. In fact, even homes with bathrooms sometimes used this method, as it allowed the adult to sit comfortably while the baby defecated, and also minimised (or even eliminated) the contact required with faeces — the paper could be shaken into the toilet, then thrown away, rather than having to scrub out a potty or basin.

Yang Shan Shan, whose baby was the only one not made to defecate every morning, described a time when her and her husband realised while out that their baby needed to poo. They quickly bought a newspaper, placed it on the side of the street, and held the baby over that. She found the experience 'very embarrassing'. This is an interesting case to note, as many Western observers assume that the holding out of babies over gutters goes for both kinds of eliminations, but clearly this is not the case.

Once a baby is of 'holding out' age, even when they are wearing a *niaobu* or a disposable nappy they are rarely just left to urinate in it (during the day at least), and *never* left to defecate in it. If a baby seemed to have begun defecating, the nappy or *niaobu* would be removed and the baby held out for the remainder. Some domestic brands of disposable nappies were in fact designed along similar lines to *niaobu* — long sanitary-pad-type nappies with sticky areas at either end for tucking into split-crotch-pants, allowing carers to still hold out their babies regularly but providing extra back up. Zhang Li, a Han migrant from an eastern province, lived and worked with her husband in a small alcohol and cigarette store while caring for her eight-month-old baby.

Sometimes she found it convenient to use these nappy pads while looking after her baby in the shop. She says her baby

...uses disposable nappies, but they are just used on a temporary basis. Sometimes when I don't know, or he has diarrhoea. You don't want to use it, but also don't want him to poo his pants, [then we] use one of these [nappy pads] and every now and then hold him out.

Sometimes she would get to the end of the day and throw the nappy out without it having been wet or dirtied, her 'holding out' having been successful despite her baby's loose bowels.

ON THE MOVE

While the younger babies normally had *niaobu* (or a disposable nappy pad) tucked in their pants to absorb any accidents, these were used less often as the baby got older. The *niaobu* are not overly absorbent, so in no way do they equal a 'nappy' in terms of protecting people and places from accidental eliminations. Once the baby was moving around a lot more, the *niaobu* also did not offer much benefit, and were discontinued as soon as babies were walking with assistance. Although Guo Li Hao did not use disposable nappies at night with any of her three children, she did use them with her youngest during the earlier months while visiting friends, as she felt that when the baby's pants were wet (from a leaking *niaobu*) it would feel uncomfortable. But she adds that at home:

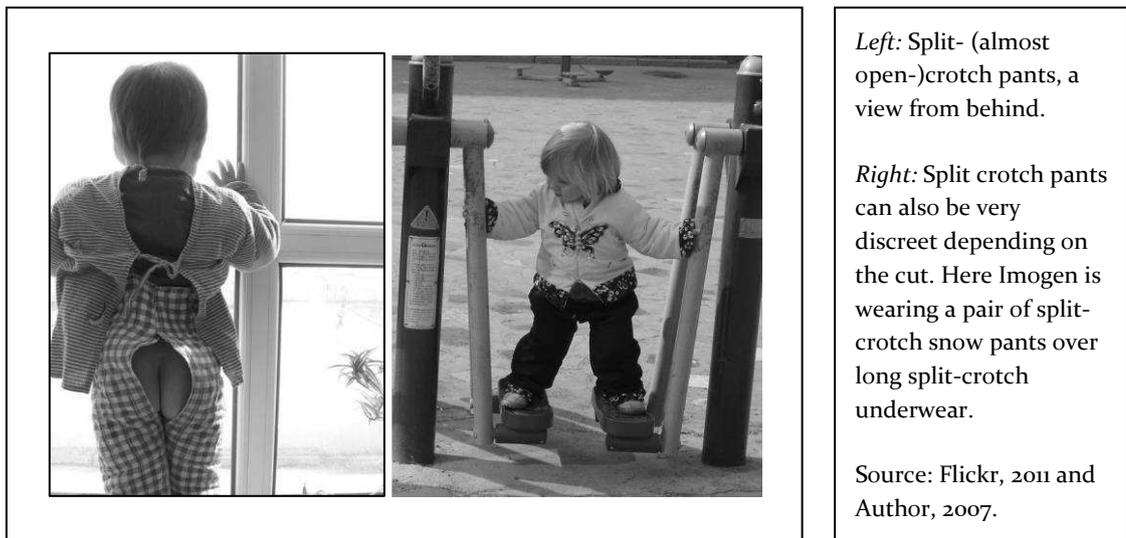
You don't need to use nappies. If clothes get wet, you can change them immediately, it is very convenient. Because of that, normally people don't use nappies [at home]... when she is a little over a year old, or can walk and squat, I don't use any nappies, because when she can squat down, she can wee or poo by herself then.

Older babies generally wore several layers of split-crotch pants, with cotton long underwear (padded or not) closest to the skin, topped by hard-wearing split-crotch-pants or dungarees made from materials such as denim, corduroy,

or nylon water-resistant and fleece-lined snow pants (see Figure 8). Sometimes the child would also have hand-knitted woollen or acrylic pants in between these layers. In the winter, pants would often be immediately changed if they got slightly wet during the *baniao* process, but during the summer they may be left to dry if not touching the baby's skin directly.

Because very few people had washing machines, *baniao* practice and the wider hygiene assemblage is informed by the necessity to hand-wash all clothing. When Xiao Shi lived in her hometown with her infant son, she rarely washed out wet pants immediately. Instead she preferred to dry them out in the sun or on the central heating and re-use them several times in a day, hand-washing them out at night only. Most women did some washing every evening after their children were in bed, although older children and adults each hand-washed their own undergarments and socks every night. Mothers or grandmothers washed out the baby's clothes. Larger soiled items such as jackets, jeans, quilts, and knitwear were often washed by professional laundries common in every street.

FIGURE 8: SPLIT-CROTCH PANTS



Pinnies were thus an extremely important element of children's clothing in Xining, and were often extremely dirty — their job being to protect the cleaner, more difficult to wash, clothes worn underneath. Likewise, hard-wearing fabrics such as denim, corduroy, and nylon were preferred as outer layers, as these could be brushed down rather than needing to be washed like the stretch-knits popular for babies in Western countries. Caregivers also used spatial strategies to prevent their children from getting dirty, such as preventing them from sitting on the ground or touching dirty items. In addition to all this, children had their faces and hands wiped frequently to prevent the transfer of dirt into other spaces.

In the city, girls often stopped wearing split-crotch pants between 12 and 18 months of age, whereas boys were more likely to wear them until two or even three. In the countryside, children of both sexes wore split-crotch pants until much later, as they spent more time outdoors out of arm's reach of their carers. Two mothers of teenage children I interviewed had generally left their children in split crotch pants until three and four years respectively, implying that there have been some changes. The gendered differences in length of the use of split-crotch pants appeared to be related to several things. Some Hui families felt that girls should be covered while in public from around this age; some families from varying nationalities felt that it was 'cleaner' for girls to wear ordinary pants once they were playing independently (referring to the differences in genitalia, and the difficulty of cleaning a girl 'down there' after playing outdoors). Many agreed that girls were less likely to wet themselves than boys from around this age, an observation also supported by English-language biomedical literature (Schum *et al.* 2002).

The downside of switching to ordinary pants is that the children were still unable to remove their own pants until around two, so they would remain dependent on their parents to help them go to the toilet — this is increasingly less of a concern as people have less children and the adult-to-child ratio in

the household increases.⁷² In all cases, there was considerable flexibility and variance with regards to the use of split-crotch pants — for example, a baby might wear split-crotch pants at home and ordinary pants while out, or split-crotch pants when one family member is caring for them but not another, and so on.

Almost all families expected significant control over the bladder and bowels by the age of one, although there was a lot of variance in how much control. Many families expected children to occasionally urinate on the floor until they were walking confidently and could easily make it to the bathroom and squat independently over the in-ground toilet or a potty— which appeared to be around two years old. In my upstairs neighbours' apartment, which had an unfinished concrete floor (presumably on purpose, until toilet training was complete), I witnessed a two-year-old pull down her pants and urinate on the lounge-room floor. She was briefly and gently scolded and told to go the bathroom to urinate, and the puddle was promptly mopped up.

Despite the apparent independence of the children from an early age, most families took responsibility for managing children's eliminations until they were at least two, often older: Hui mother and Associate Professor Luo still woke her six-year-old and told her to go toilet if she was tossing and turning in their shared bed, in order to prevent bed-wetting. Wang Ping, a Han mother of a teenage girl, commented on the whole process in retrospect:

Well, after a longer time, you can call out 'quick, go and wee'. She would understand and then wee. Well, she did OK. If she got her clothes wet, then you just changed them. After all, she was just a child. It was natural for her to wet her clothes. Just wash the clothes, and change her into some new ones. Wash her wet trousers, and dry them in the sun... It was not troublesome, no trouble at all. This is just what you have to do. No trouble.

⁷²China's one-child policy does not apply equally to all: rural dwellers may have a second child if the first is a girl, minority people are entitled to one extra child (so two in the city or three in the countryside), and in some areas, if neither parent has any siblings, they are entitled to two children. In all cases, if the mother is under thirty, there must be a four year gap between children — meaning that one is toilet independent before the next is born. Mothers over thirty may be entitled to have children closer together.

In summary, the journey from birth to toileting independence is one marked by a number of stages: the first ritual month of lying-in, where babies are observed in their elimination habits and timings; the second period of holding out where babies are responded to and themselves respond to different cues, signs, and signals; and the final period of walking and squatting where increasing toilet independence is expected and achieved. At each stage, caregivers strive to keep babies' bodies clean and dry, with the minimum of fuss and laundry. Although there were differences between families of different income-levels, living spaces, and education, the fact remains that *no* families used disposable nappies exclusively, and *no* families regularly used more than one a day after the initial few weeks. Mothers were involved in the process of caring for babies' toileting needs in varying levels of intensity at different times of the toileting journey: from mothers who were solely responsible for this aspect of their baby's needs for the first two to three years, to mothers who were separated from their babies for hours, days or even weeks while other family members cared for baby's toileting needs, with many variations between. One thing that all the mothers agreed on, however, was that the use of nappies was unequivocally bad for their babies' health.

CONTRARY TO MARKETING RHETORIC, 'PAMPERS' DO NOT PAMPER THE SKIN

The most heavily-marketed disposable nappy product in China is the Proctor & Gamble brand Pampers. The idea is that Pampers are meant to pamper the baby's skin with their soft and luxurious product. Yet in Xining, this is far from accepted as truth.⁷³

Large multinational companies such as Proctor & Gamble and Nestlé are often thought to be some sort of manifestation of evil by those who are familiar with

⁷³ In fact, the company chose not to translate the name 'Pampers' into Chinese, since the word has a negative meaning approximating 'raising a spoiled child' (娇养 *jiao yang*). The brand is known as 邦宝适 *bang bao shi*, where *bang bao* gives the sense of supporting or helping with something precious, and *shi* refers to disposable nappies.

some of their less ethical marketing tactics. In 2005 Nestlé was named the United Kingdom's most boycotted company, and the world's most irresponsible company (<http://faircompanies.com>). In Nestlé's case, people have still not forgiven them for their unethical marketing practices of artificial formula in the 1970s, where white-coated salespeople handed out samples to mothers in African hospitals. Their blatant mis-education endangered the nutrition of some of the most at-risk babies in world, and performed what is seen by some as 'the largest uncontrolled clinical experiment in human history' (Minchin 1987: 25). In response to increasing concerns over the role of infant formula in malnutrition and diarrhoea related deaths in the 'developing world' in 1981 the World Health Organisation released the *International Code of Marketing of Breast-milk Substitutes* (WHO 1981). This voluntary code requires signatories to cease the promotion of breastmilk substitutes to infants (although not to toddlers). Most multinational formula producing companies are now signatories to this code, and it is widely supported as necessary in affirming the importance of breastmilk for babies anywhere in the world.

I mention this because increasingly in environmental circles, disposable nappy companies are coming to acquire a similarly bad reputation. While their product is not as damaging to children's health as is the use of artificial formula in vulnerable communities, their marketing techniques are increasingly distasteful in a world where excess waste is becoming an international and seemingly insurmountable problem. Trying to 'create a market' for their product in a situation where there is barely enough landfill space to meet current demand is extremely problematic. In addition to this, a similar campaign of mis-education has been conducted, where companies fund research that finds the environmental impact of disposable nappy use is 'comparable' to that of cloth nappies.

In 1991, the Women's Environmental Network in the United Kingdom commissioned the Landbank Consultancy to conduct an independent review of the available research on the environmental impacts of disposable versus cloth nappies. The review found that *all* the studies to that date have been

funded by the disposable nappy industry, making their claims of ‘comparable impact’ between the two nappy types somewhat dubious (Landbank Consultancy 1991). The Landbank Consultancy carried out additional research which found that disposable nappies used twenty times more raw materials, three times more energy and twice as much water as well as generating sixty times more waste (Landbank Consultancy 1991). With reference to this, the Women’s Environmental Network challenged Proctor & Gamble’s claim of environmental equivalency before the United Kingdom Advertising Standards Authority, who forced Proctor & Gamble to withdraw the claim (Mothering 2003).

If we were to take the health of the environment as seriously as the health of babies, it is entirely possible that an ‘international code for the marketing of disposable nappies’ would also be issued. As it is, subsequent studies into the environmental impacts of disposable nappies have been dogged with controversy over the parameters of the life-cycle analysis techniques used (Aumonier *et al.* 2008).⁷⁴ Australian researchers from the University of Queensland are dissatisfied even with the assumptions about cloth nappy use in the Environment Agency report (O’Brien *et al.* 2009). They have begun a detailed life-cycle analysis of their own based on Australian conditions such as low-water-usage washing machines and the prevalence of outdoor air-drying of washing. Preliminary findings are even more strongly in favour of cloth nappies than the Environment Agency report (Aumonier *et al.* 2008), yet still 95 percent of Australian babies are nappied in disposables (O’Brien *et al.* 2009). It is possible that the environmental impact could be reduced even further, since even this study still excludes the widely-used modern cloth nappies, which use significantly less cotton than traditional Australian ‘terry flats’ or New Zealand flannelette squares.

But what if using disposable nappies was not just bad for the environment but

⁷⁴ A life-cycle analysis tries to account for the environmental impact of the product from manufacture and raw materials through to disposal and breakdown of discarded product. For further discussion of problems with the methods used in these studies of disposable nappies see What a Waste, <http://whatawaste.info/but-i-heard/flawed-impact-studies-review>.

also for babies' health? A number of studies in the West have suggested possible links between disposable nappy use and a number of health issues, including aggravation of asthma (Anderson and Anderson 1999) and chemical-related nappy rashes (Child Health Alert 2005), not to mention a considerable increase in toilet-training age over the last sixty years⁷⁵ which is thought to be linked to lower urinary tract dysfunction (Bakker *et al.* 2001). There are also more sinister baby health scandals linked to disposable nappies: in 2010 Proctor & Gamble introduce their new 'Dry Max' technology into their Pampers line, which was quickly followed by thousands of complaints from parents, who claimed that it caused rashes and bleeding blisters in their babies. The subsequent lawsuit was settled in June 2011 with payouts to parents and their legal fees covered, as well as a commitment to update the Pampers website with tips on treating nappy rash and funding for a training course for paediatric resident doctors on baby skin health. There are also cases of more serious chemical burns and skin reactions occurring when disposable nappies burst, which have been reported with Pampers and other brands. In one case a family lost custody of their children for eight months until an independent consultant could prove to doubtful doctors and police that serious burns on a two-year-old were caused by bursting nappies (Narain 2012).

Among Xining mothers and grandmothers, research papers and manufacturing scandals are not necessary for them to know that disposable nappies are bad for children's health, in particular the health of their skin. In fact, this is one of the biggest reasons for limiting nappy use and continuing the practice of *baniao*, in conditions of both poverty and affluence. Yet Proctor & Gamble have tried to break into the Chinese market by sidestepping the concerns of health and targeting two of the other big issues of parenting: sleep and child development (Frazier 2010). Their multi-billion yuan campaign to change the nursery habits of millions of Chinese consumers has won them praise from marketing experts.

⁷⁵ Research links this delay to a change in attitudes towards toilet training, but there is some evidence to suggest this change in attitude has been enabled by the widespread availability and convenience of disposable nappies (Bakker *et al.* 2001).

In a nutshell, Proctor & Gamble partnered with the Beijing Children's Hospital Sleep Research Centre to conduct home-visit research on more than 1,000 babies in eight cities. Their findings were that babies in disposable nappies fell asleep 30 percent faster and slept on average 30 minutes longer (although it is not clear whether this comparison was with the same baby without disposables, or with the average of alternatively-napped/nappy-free babies). The company lost no time in linking this extra 30 minutes sleep with brain development, a particularly astute move in a society where academic achievement is extremely highly valued, and began the 'viral' Golden Sleep campaign. Parents uploaded photos of their sleeping children to a website, which were then used to create a huge photo montage in a Shanghai department store as part of the marketing campaign. The company also made sure their product felt soft and light and less plasticky, imitating the soft cotton feel which is an important characteristic of *niaobu*. The campaign seems to have done its job well: in 2009, Proctor & Gamble's Pampers brand was the top-selling brand of disposable nappy in China, with a market share of around 30 percent (Frazier 2010).

Yet even Proctor & Gamble admits that most of its customers only use one nappy a day (Frazier 2010). Initially I felt some ethical discomfort about writing about why I think parents in Xining avoid the overuse of disposable nappies, stemming from a narcissistic anxiety that a Proctor & Gamble marketing specialist might pick up my thesis and it somehow becomes responsible for revealing the secrets of disposable nappy resistance in China. Yet it is more likely that Proctor & Gamble have done just as much research into the matter as I have, with their more than 6,000 home visits for the Golden Sleep campaign mentioned above. They therefore must be avoiding the question of skin health for a good reason.

On reflection I think that sidestepping the issue of health and showcasing sleep and brain development invites parents to experiment with the new product without forcing them into a position of black-and-white health decisions. The breastfeeding promotion campaigns of recent times often do

just that, and we have seen how this can backfire when they feel they have already ‘failed’. In doing this, Proctor & Gamble have also been much more respectful towards the 5,000 years of medical and cultural tradition informing current practice. But if Proctor & Gamble are avoiding the issue of disposable nappies and skin health, Xining caregivers certainly are not. In the next section, I outline the ideas informing the clothing (or baring) of babies’ bottoms in Xining.

THE IMPORTANCE OF BABIES’ BOTTOMS

The baby’s bottom is *tai nen*, ‘so delicate’, and it must be cared for attentively, according to Han migrant grandmother Lao Yang. As soon as the *niaobu* gets wet, it must be changed, she says: ‘You are forever trying to keep the child dry and clean’. As soon as the baby is able to be comfortably held out, this is the preferred option for all eliminations as this means the delicate skin of the baby does not have to come into contact with either faeces or urine. While baby urine is considered relatively harmless — and in some cases, even medicinal (Rogaski 2004) — the idea of a baby sitting in even a damp nappy is objectionable (and a *soiled* one, inconceivable).

So as to avoid this dampness, Deng Yi changed her baby’s nappy up to three times during the night when he was younger and still urinating frequently. Zhang Li used *niaobu* until around eleven o’clock at night, then used a disposable until morning — when she ‘threw it [down] and let the baby pee on top of it’. Although it is well known that disposable nappies ‘draw away’ the urine from the baby’s skin somehow, every person I talked to felt that even so, dampness was present and contained against the skin because the nappy did not breathe. Deng Yi says with regards to disposable nappies:

Just sticking them in disposable nappies, that kind of sealing up I think is not good, too airtight!

She preferred to use *niaobu*, despite appearing to be living in circumstances

that would enable her to afford disposable nappies. Her concern with nappies, then, is not just the baby sitting in its own urine or faeces for any length of time, but rather that the very nature of nappies was to ‘seal up’ and be ‘airtight’, stopping the flow of air around the bottom area. This was considered bad for the baby’s skin, *even if the nappy was clean*.

The concern for keeping air flowing around the baby’s bottom was evident in Xiao Shi’s comparison of *niaobu* with Western-style cloth nappies. Xiao Shi is an experienced nanny or *baomu*, and has come into contact with many Western baby care practices during her time in Xining. She discusses the differences between Western and Chinese cloth nappies with Deng Yi and me:

Xiao Shi: Our *niaobu* are different from yours [directed at me]. Yours are thick, pretty thick. Ours are comparatively simple. Just a whole lot of squares [of cloth], a whole pile. Theirs [directed at Deng Yi], you would notice, are really thick! Ours are pretty much like this one here [indicating Deng Yi’s son], all are cotton, one layer at a time, and of the same size as disposable nappies. They are homemade, or you can also buy.

Deng Yi: Ours have just one layer, very thin. It should be changed right after it is wet.

Xiao Shi: So that the babies are comfortable.

Deng Yi: If it is too thick, although it won’t leak, he will feel uncomfortable.

Xiao Shi: Babies’ bones and flesh are all soft. Their legs might become deformed [if it is too thick].

While Deng Yi and Xiao Shi are both concerned with the thickness of Western nappies causing discomfort through stopping airflow, Xiao Shi also alludes to another older custom in some areas in China and central Asia where babies’ legs are swaddled straight in order to prevent ‘deformity’.⁷⁶ She did not swaddle her babies, as this is not common practice anymore, but still harbours a concern for anything that might hold babies legs apart in a set position. In Xining, it is the custom to carry babies high, with their legs held tightly together, half-seated on the arm of the adult, rather than low and over the hip

⁷⁶ Some research in other areas of China indicates that the deformity referred to is most likely rickets, and could in fact be caused by various post-partum practices such as not eating vegetables and not going outdoors (into the sunlight). Many families tried to prevent this through swaddling practices, which have largely been discontinued as understandings have changed (Strand *et al.* 2009).

as many Westerners do.⁷⁷ The legs apart position is a cue for babies to eliminate, so would hardly be appropriate for carrying small babies — yet there is still an underlying concern that the position might be innately damaging to the hips or legs.

Disposable nappies are thus in some aspects considered more appropriate than Western-style cloth nappies, at least in terms of their thickness *between* the legs, which allows for the legs to come together in the preferred position for carrying Xining babies (See Figure 9).

FIGURE 9: A DEMONSTRATION IN HOLDING BABIES



Yet disposable nappies are still of concern because of their plastic content, which not only reduces airflow and contributes to their ‘airtight’ quality but is also a non-natural, factory-made product with the potential for contamination or danger. In one interview, Zhang Li alludes to a nappy manufacturing scandal, saying she prefers the Anerle brand over the Queshi one, because she had read in a newspaper article that the ‘brand was not good’. In light of recurring quality scandals in a variety of manufactured products, let alone the

⁷⁷ In fact, this position over the hip is probably enabled by nappies; I discovered it was very uncomfortable with a nappy-free baby.

Pampers scandal in the United States (Wohl 2010), it is not unreasonable for mothers and others to worry about the potential for disposable nappies to harm their babies in some way.

In Xining, nappy rash is considered unusual and abnormal. Including plastic as a guard against leakage is not necessarily a good thing in the eyes of many caregivers, since it can lead to nappy rash. The Anerle ‘nappy pad’ is preferred among many local mothers as being a sort of disposable version of the *niaobu*, allowing frequent removal and *baniao* opportunities as well as increased airflow due to its less constricting design. Although it still appears to contain a plastic backing, it is less worrisome as it is not pressed up against the baby’s bottom.

In addition to concerns about the babies’ bottoms and their delicate skin being prone to rashes, keeping the area overly damp and hot creates other health and skin-related concerns. Zhuo Ma notes that it is not appropriate to use disposables while sleeping on a heated *kang* in her home village, as the plastic combined with the warm *kang* means that ‘blood cannot go smoothly in its vessels’. She felt that cloth was not only more comfortable (as long as it was changed promptly), but protected the child’s health in other ways. Here she alludes to ‘coagulated blood’, a condition common to both TCM and Tibetan medicine. If the blood is ‘coagulated’ or not flowing smoothly in its vessels, there is a danger that this will allow the development of stagnant damp heat, which in TCM is indicated by redness around the two *yin* (genitalia and anal areas; see Flaws 2006). According to *A Handbook of TCM Pediatrics* (Flaws 2006), this ‘nappy rash’ is a symptom of damp heat and not necessarily a condition in itself. Damp heat can migrate, causing other health problems, many skin-related (such as cradle cap or eczema) and some gastric-related (night-time colic and continuous abdominal pains).

Although many would assume rural families are less likely to use disposables because of economic constraints, it is just as likely that in northern and northwest China, families with *kang* avoid disposables at night because of

damp heat concerns. On the other hand, Zhuo Ma felt that using disposables in the city was more appropriate since the bed was not heated and a *niaobu* would quickly become cold when wet. In other warmer and damper areas of China, disposable nappy use was also reduced in the summer, presumably because of similar concerns about damp heat. So it is that babies' bottoms are more than just a delicate area of skin; they are an important temperature-regulating area that must be kept clothed in natural fibres with some airflow permitted.

Because of the reasons discussed above, disposable nappies are therefore not always desirable, even if supposedly more convenient. In fact, many people I talked to felt that using split-crotch pants was actually more convenient, in that it allowed one to care for this important area of skin without the hassle of constant nappy changes. Nappy-changing becomes more and more difficult as children grow and become more mobile, and this, combined with the lack of nappy-change facilities in Xining and the comparative ease of mopping up urine from tiled floors, meant that disposable nappies were really only considered useful during the night, if then. The benefits of the *baniao* method of infant hygiene were considered to far outweigh its disadvantages: some considered it to have no disadvantages, though others felt one disadvantage was that *baniao* was bad for 'the environment' (meaning the cleanliness of the domestic and urban environment). Indeed, although the brand name 'Pampers' is presumably meant to refer to the pampering of a baby's delicate bottom, in Xining, it is more likely to refer to pampering the inanimate home and street, the *huanjing* or (immediate) 'environment' — because any caregiver seriously wanting to pamper a baby's bottom would be committed to the practice of *baniao*.

CONCLUSION: HOLDING OUT UNIVERSAL BOTTOMS?

None of the reasons for preferring *baniao* to disposable nappy use are limited to Xining babies' bottoms. Although occasionally Xining women excused the

apparent ignorance of foreigners with regards to health practices with a shrug and the statement ‘our bodies are different’, for the most part people believed the characteristics of babies’ bottoms and bodies were universal. Anyone who looked closely at foreign children’s illnesses could probably find evidence of problems of damp heat, related both to foreign diets (high in wheat, dairy, red meat and sugar — foods that, according to TCM, stagnate in the immature digestive systems of children and babies and do not help produce quality breastmilk) and also foreign clothing and napping practices.

As far as Xining caregivers are concerned, the ‘universal’ baby body imagined by Western biomedicine is just plain wrong. Clearly babies *do* have sphincter control at a much earlier stage than what is thought possible in Western biomedicine. Western commentators insist, according to their own universalist paradigm of child development, that in the case of *baniao* ‘it is the parent being trained, not the baby’ (Dunn 2011). I argue that there are *multiple* babies’ bottoms, and that caregiving practices enact different sorts of hygienes *and* different sorts of bodies. My ethnographic research in Xining (and my own experience with my daughters and friends’ children) shows that babies *are able* to control their own elimination needs if caregivers *are willing* to assist them through ‘holding out’ at appropriate times — baby and caregiver are not independent, and neither is infant hygiene. The assemblage of infant hygiene gathered around Xining babies (including my own, while in Xining) is one that requires the participation of both caregivers and infants. The development of the sphincter muscle is an important part of this hygiene process, but its development is something that is enacted (or not enacted), rather than it being identical in each child around the world.

This chapter has also shown that Westernisation through the marketing practices of large, sometimes less-than-ethical, multinational corporations is not inevitable. Through continuing to literally ‘hold out’ their children, caregivers in Xining are also holding out against the powerful globalisation discourses that presume increasing homogeneity (or existing homogeneity, in the case of sphincter muscles). In fact, through holding out against these

forces, caregivers in Xining provide a very real alternative to napping practices in Western nations. It is partly through Xining caregivers continuing in holding out (both metaphorically and literally) that Australasian mothers have come to know of the potential for their own babies to be toileted in this way. The locally-enacted 'universal' baby's bottom of *baniao* is coming to have global significance, and is a bridge by which the practice of infant toileting is travelling, and by which new hybrid assemblages of hygiene are being gathered in faraway places such as Australasia.

INTERLUDE: VIRTUAL HYGIENES

I turn on my computer and sit sipping my coffee while waiting for it to boot up. I connect to the internet and immediately check my webmail to see if there are any emails from the OzNappyfree forum. I haven't checked for a few days, and I have a few in my inbox:

Stands to wee – what now?

Feed to pee

Nappy free time!

Help! Poo explosion

BAD reaction to ECing in public!

OT- Failsafe Diet - WAS sudden wees out of nowhere

Give night time EC a go!

4-month update

I recognise some of the regulars, members who joined the group at the same time as me, their eldest kids around the same age as mine. These members, including myself, play more of a mentoring role to newer members, answering questions about our experiences and offering tips in answer to any help requested. I open a post from Penny,

a Brisbane mother of two who I had met while conducting a focus group there earlier in the year. She is having problems with her older daughter, now two and a half, who has suddenly ‘regressed’ and started weeing on the floor, often several misses within an hour or so. A lively conversation ensues between members.

Some suggest altering the diet that she has recently begun following, a ‘Failsafe’ elimination diet used to uncover any allergies in her colicky breastfeeding son. They reason that although the diet excludes many potential allergens, it is high in ‘gassy’ vegetables, and this could be giving *all* the family members extra gas. This gas can be a problem for children who are still learning to tell the difference between the various sensations ‘down there’, as the release of gas can sometimes release a bit of urine.

Others suggest checking out emotional issues, changes in carers, changes in the attention given to the younger son, changes in family schedules — in short, anxieties that could be manifesting in toileting accidents. Others suggest bowel-related viruses that create gas, or the onset of two-year-old molars affecting urination. Developmental leaps such as a jump in speech and communication are suggested as distracting from bladder awareness, given that with babies, lots of accidents often precede or accompany developmental leaps or the mastery of new skills such as crawling or walking. Penny jumps back in towards the end of the conversation, joking that she might just have to ‘go with the flow’ until something makes itself more obvious. The posts spin off into an ‘OT’ (off-topic) discussion of the merits and drawbacks of following the Failsafe diet with children suspected of having food sensitivities.⁷⁸

As a form of fieldwork, studying an online group is a rather different experience to hanging out in Xining. In the seclusion of my office, I read fairly well-written and articulate accounts of people’s

⁷⁸ See Sue Dengate’s book *Fed Up: Understanding How Food Affects Your Child and What You Can Do About It* (Dengate 1998).

infant toileting behaviour, some in great detail. I merely have to cut and paste items of interest into my electronic notes, tagging them with the relevant terms. But I miss that sense of embodied engagement with space that the ethnographic method allows, and I also treasure the opportunities I have to meet with EC practitioners in Australia and New Zealand. I travel out to webforum-creator Marnie's house in a Sydney suburb, and spend some time hanging out with her and her home-schooled daughters, now EC 'graduates'. Marnie maintains her interests in EC via the forum — as an ex-IT systems analyst, she finds this an easy and natural way to communicate. I too enjoy the instant intimacy of a group of web friends, but still want to meet more of them in person after my previous focus groups in Brisbane and Melbourne.

I help to organise a Sydney meet-up in the Botanic Gardens, observing the various mothers who attend as they tend to their babies, toddlers, and older children's toileting needs. Some are fashionably dressed in tight jeans, boots, earrings, and make-up, pushing immaculate black three-wheeled strollers. Others look like they have just had time to slap on some clothes, chuck the baby in a frontpack and catch the train in. Others sport the classic 'hippy' look one might associate with a practice like EC: eclectic mixes of second-hand, brightly coloured clothing and expensive Birkenstocks, kids in cloth slings. One mother holds her bare-bottomed baby out Chinese-style against a large tree, responding to the baby's immediate 'no' signal (an arched back and straightening of the legs) with a shrug, hoisting him on to her hip as she continues to chat with another. Other babies are nappied and dressed in cute outfits, which their mothers remove periodically at certain signals or at certain times to offer them a 'pottyunity'. Others prefer not to potty their children in public spaces, and have dressed them in cloth or disposable nappies, which are changed at set times or when babies seem to be fussing. Some babies are held close to their mothers in slings, from homemade to expensive designer, while others recline in their jogger strollers, regarding the

babies and children seated on picnic rugs with wide eyes. A heavily pregnant woman looks on with interest — she has come along to see what the whole fuss is about, and meet some other mums in preparation for her own imminent arrival.

As it starts to rain lightly, we begin to pack up our picnic rugs and bundle our children into nappies, prams and slings, and slowly dawdle back towards Circular Quay. I am pleased to have met another group of mums from our webgroup — especially those that are ‘lurkers’ on the forum, people who read but do not post. I ponder on the variety of different approaches that people have to this form of infant toileting — full-time, part-time, hobby or obsession. The practice is still very much in the experimental stage here in Australia. These mothers are still trying to work out how best to manage infant toileting that fits with Australasian spaces and cultural norms. The OzNappyfree webgroup seems to serve a similar function to the courtyard at Yellow South City *xiaoqu* — a space where caregivers (virtually) gather and sift through experience and information to assist them in caring for their own charges’ toileting and hygiene.



V

TRAVELLING PRACTICES HYBRID HYGIENES IN AUSTRALASIA

XINING, QINGHAI, CHINA. June 2007. My thirteen-month-old daughter, clothed in split-crotch pants and sturdy sandals, is squatting outdoors in our *xiaoqu* exercise area, examining ants. She tires of squatting, and plonks her bare bottom down on the concrete. I automatically reach over and pull her on to her feet, supporting her in a squat so she can continue her study. It is not that I am worried about her bare bottom being in contact with concrete, although that cannot be too comfortable. It is more that I just *know* she should not do that here, just as I know she must always wear shoes and shirts with sleeves. How do I know this? In 2007, I do not even *know* I know this, but I do it nonetheless. My body knows it.

BANKSTOWN, SYDNEY, AUSTRALIA. August 2011. My 12-month old (second) daughter is toddling around barefoot on the concrete area outside the school hall, where inside her five-year-old sister has just performed in the school production. She toddles, wobbles, then plonks

down hard on the concrete, fortunately protected by her cloth nappy, waterproof cover, and stretchy leggings. Refusing my outstretched hand that offers help in regaining her feet, she crawls across the concrete and pulls herself up on the brick wall to begin again. Midway through the next cycle she stops, looks at me, and says ‘unh’.

‘Do you need to go potty?’ I ask.

She looks around for a potty, which I take as a yes. Unfortunately, the toilet is inside the crowded school hall, and I would have to push through other parents watching the performance to get there. I make a quick decision — I pick her up and walk around behind the building. Looking around to see if anyone can see me, I quickly pull down her leggings and remove her nappy, holding her out on the grass. She immediately urinates, and with some difficulty I manage to put her nappy back on with her balanced on my knee. The tension goes out of my shoulders as the operation is completed without having to explain myself to anyone.



Despite the ubiquity of *baniao*-type practices globally, they are currently familiar to only a minority of parents in Western nations such as Australia and New Zealand. In the context of late toilet-training, landfill pressures, and concerns about the environmental impact of both disposable *and* cloth nappies, these practices are nevertheless worth experimenting with. In this chapter, I make visible the shifting and experimental hybrid hygiene assemblage of Australasian practitioners of the *baniao*-like practice ‘elimination communication’ (EC). I use this experimental assemblage to begin thinking about how social change can happen through this gathering of new hygiene assemblages, a theme taken up in more detail in the next chapter *Guarding Life*.

My experience in practising EC and *baniao* with my own two children certainly inform this chapter in many ways. But in order to get a sense of the wider

assemblage of hygiene in which I am embedded and implicated, this chapter is based mainly on material gathered from the webgroup OzNappyfree, the online 'nappy-free' support forum I have been a member of for more than six years. OzNappyfree is a Yahoo! Group of more than 500 mothers based mostly in Australia and New Zealand, who support each other in learning and practising EC.

Using ethnographic material from this webforum, in this chapter I describe the practice of EC in its Australasian context, focusing particularly on how practitioners are rejecting the idea that 'developed' nations are necessarily more advanced in their efforts to learn skills from 'less-developed' contexts in their everyday mothering practice. I use the webposts of EC parents on OzNappyfree, supplemented with two focus groups in Melbourne and Brisbane, and observations at a Sydney meet-up, all in the year 2009. In the last section of the chapter, I show how Australasian EC parents situate their practice within a global diversity of toileting and parenting techniques that fall outside what is considered mainstream in their own societies. Drawing on these contemporaneous 'other modernities' challenges teleological understandings of hygiene and modernity, thus providing a gap for these parents to experiment with alternative forms of hygiene-keeping.

HYGIENE ALTERNATIVES

Perhaps people are starting to see the madness of our disposable nappy driven, 4-year-olds-in-nappies society and we're the beginning of a move back towards early [toilet training] as the norm (Ainslie, Australian EC mother of two, webpost, December 2008).

The fact that they do it so successfully [in other societies] is the one reason to try it... when people who don't understand what EC is – or once [my daughter] was 13 months and in training pants and basically trained – they would be surprised... [Then] I'd often say, 'Well, I figured if kids in Africa can be toilet trained by 12 months, my kids aren't any more stupid than any of theirs' (Nadine, Australian EC mother of two, focus group interview, January 2009).

You have learnt so much that now you have a trained professional coming to YOU for advice and information. If you had not gained that knowledge and confidence you have now you would not be able to pass on that information and enrich your community. Be grateful [sic] for what you've got, because its F***ing BRILLIANT! (James, New Zealand father of two, in response to a 2009 webpost 'Nurse wants to know about EC').

Variouly referred to as 'infant pottyng', 'natural infant hygiene', 'diaper/nappy-free babies', 'early toileting' and 'elimination communication', the practice of holding out babies to eliminate their waste has recently gained interest among certain groups in Western nations. Sydney Morning Herald reporters Emily Dunn and James Woodford have both written articles in recent years (Dunn 2011, Woodford 2006) that mention the practice. I myself first heard of 'nappy-free' babies via a friend in the United Kingdom who had seen a newspaper article there in 2005. Typically, media reports on EC set it up in opposition to widespread delayed toilet training, playing off the medical community against EC parents by placing quotes from nurses or paediatricians (who say EC is unlikely to be anything but parent-training) alongside interviews with parents describing their child's toileting successes in glowing terms. Dunn, for example, frames her report in terms of 'who should decide when to toilet train — you or your baby?', categorising EC as a more 'parent-driven' approach and a backlash against ever-later toilet-training milestones.

Dunn's article appears to be largely in response to a non-peer-reviewed report released by University of New South Wales researcher Anna Christie, who is disgusted with the way in which Australian parents appear to have 'abandoned' toilet training (Christie 2010). This report mentions EC as an emerging 'fringe movement' among tertiary educated Australian mothers, that 'skews' the data. If the ECers are not taken into account, the mothers with higher education in her study were more likely than their less-educated counterparts to delay toilet-training, and less likely to offer assistance or direction in their children's toileting (unless asked directly by their children).⁷⁹ Regarding current toilet-

⁷⁹No justification is given why mothers are used as the unit of analysis, rather than both parents.

training practices in this group of more-educated mothers, Christie writes 'mothers tended to wait for verbal signs of [toilet-training] readiness, but were not attuned to non-verbal or pre-verbal cues' (2010: 30). While many parents 'believe they are toilet training', Christie opines with regards to the 'child-centred' approach to toilet-training readiness, 'all they have done is remove the nappies and ... offer some directions to the child' (2010: 33). Although the report is based on a very limited number of interviews and a poor understanding of appropriate qualitative data methods, it claims to find that a certain 'window of opportunity' occurs between 18 and 24 months of age, where initiation of toilet-training is more often successful, if combined with a parent-directed approach to initiating toileting opportunities. The report's recommendations included a toilet-training awareness campaign that encourages parents to begin toilet training within this window and portrays the process as relatively easy and straightforward.

While Australasian EC practitioners would agree with a number of Christie's statements about toilet training, most would take a less moralistic approach to the issue. The group of EC practitioners I base my research on meet virtually through OzNappyfree. They mostly come from a fairly educated background and favour a 'child-centred' or 'attachment-parenting' approach including practices such as co-sleeping (bed-sharing with one's babies and/or children), babywearing (carrying babies around in slings/soft carriers for most of the day), breastfeeding on demand for a relatively extended period, and 'gentle' or 'positive' discipline (non-punitive). For many of these parents, EC is simply extends the child-centred approach into the area of toilet-training, where baby's signals and cues for eliminating are taken as the starting point for toilet opportunities from birth, rather than waiting until the age of verbal communication to begin the process. For others in the group, EC came first, and led into these other attachment-parenting practices, which fit well with the non-verbal and trust-based communication approach of EC.

OzNappyfree began in 2004 as an offshoot of the North-American *Diaperfree* group. Marnie is still a member of that group, but felt that ECers 'downunder'

needed a space to discuss EC that was relevant to their experiences. She considered these different mostly due to climate and the opposite seasons (for example, discussions on what to wear for EC in the winter were always coming up during the Australian summer).

I collected webpost content (with permission from group members and Marnie) throughout the year of 2009. As of early January 2010, the group had 453 members, although in December 2009, 35 mothers contributed 100 per cent of the posts. Members post questions, advice, and reflections on EC practice and strategies, along with regular 'off-topic' discussions prefaced in the subject line with 'OT'. These OT discussions grew more and more frequent during 2008, as a core group of members came to rely on each other for advice in all kinds of parenting-related areas, so much so that Marnie set up a secondary group for 'other' parenting discussions of ECing parents — this group grew to a membership of around 40 mothers, who are still regularly posting at the time of writing, many having gone on to have second and third children. I have included both groups in my research, since it is often in the OT group that ECers reflect on the wider effects of EC in their parenting styles and in the community.

I received ethical clearance from the Australian National University Human Ethics Committee, and provided members of both groups with a permission form to use their webposts in my research (see Appendix Two for Information Sheets). Members who did not fill out a permission form are not quoted, but my 'ethnographic' sense of the group still includes their contributions. I also email sections of text mentioning or quoting research participants back to them for approval. Members who participated in focus groups gave written permission for me to use their comments from transcribed audio files.

KEEPING SPACES CLEAN AND DRY, FROM BIRTH TO ‘GRADUATION’

PREGNANCY AND PREPARATION

In the early days of OzNappyfree, many members found the group (and indeed, first heard of EC) through members who are also on Ozcloth, a Yahoo! group for cloth nappy users in Australia and New Zealand. These days, EC is much more widely known in certain circles of Australia and New Zealand, and people who belong to forums on cloth napping, baby-wearing, baby-led weaning, ‘natural’ parenting and organisations such as the Australian Breastfeeding Association or Homebirth Australia may hear about EC and the OzNappyfree webgroup.

When a new person signs up to the webgroup OzNappyfree, they receive an email asking them to introduce themselves, their children (and ages), their EC experience, where they live (most give their city and state), where they heard about this group, and whether they belong to any other EC groups. Once this email has been returned, forum moderator Marnie approves their membership in the group, and they are able to start reading posts, receiving posts as emails, and posting questions via the Yahoo! webgroup or directly via email. A number of people sign up during pregnancy in order to get a feel for EC practice before their baby is born. Most often, these women ask to hear others’ experiences of ‘ECing’ immediately following birth, be it in the hospital or at home.

At times when there is no direct discussion on how to prepare to EC children, some pregnant women browse through the Australian website *Tribal Baby*, or read one of the books available on EC, most often Australian doctor Sarah J Buckley’s *Gentle Birth, Gentle Mothering* (2005) which describes EC in one of the chapters. Other common books are Ingrid Bauer’s *Diaper Free! The Gentle Wisdom of Natural Infant Hygiene* (2001) and Laurie Boucke’s *Infant Potty Training: A Gentle and Primeval Method Adapted to Modern Living* (Boucke

2002)⁸⁰. *Tribal Baby* and all of the books above emphasise the ‘gentle’ aspect of EC, deliberately distancing themselves from other, more disciplinarian forms of early toilet training. These books are all written by mother-EC-practitioners, and all refer to a ‘full-time’ version of EC, whereby the primary caregiver (in most cases the breastfeeding mother) attempts to go almost completely without nappies, or at least only uses nappies to catch ‘accidents’ while remaining ever-vigilant to elimination communications from their baby. Women who join the group after having read these books generally have a much higher expectation of being free of nappies, and less expectation that eliminations will always be contained somehow. Those who join the group after having children, or after the EC child is born if they have older conventionally trained children, are often more likely to see EC as a part-time thing in addition to nappy use — perhaps as a way of reducing nappy use.

In preparation to EC, forum members have variously suggested the following purchases: a bowl, basin, or tiny potty for catching eliminations; cloth nappies with no covers so as to easily feel when wet; easily removable clothing (no all-in-one suits); plastic-backed mats or lanolinised woollen blankets⁸¹ to protect surfaces from accidents. A number of small ‘mumpreneur’ businesses (Ekinsmyth 2011) have been importing, making, and selling EC equipment, books and DVDs, such as The Potty Shop (www.thepottyshop.com.au), Noonee Wilga (www.nooneewilga.com.au), Nappyfree! (www.nappyfree.com.au), Jungle Mama (www.junglemama.co.nz), and Bongo Baby (www.bongobaby.myshopify.com). Most of these mumpreneurs are part of the OzNappyfree network. Those planning to EC fulltime are also likely to avoid many of the standard pregnancy purchases, including forgoing bassinets and cots for the close contact of co-sleeping/bed-sharing, and forgoing infant seats, prams and structured carriers for soft slings.

⁸⁰ Christine Gross-Loh has also written a book called *The Diaper-Free Baby* (Gross-Loh 2007). Loh is associated with an American movement of EC support groups gathered under DiaperfreeBaby™. Compared with the above cited authors, the book works more *with* Western hygiene practices rather than directly challenging them. It seems more accessible and professional, so it is rather surprising it has not been taken up as readily.

⁸¹ The blankets are put through a very hot machine wash, often with lanolin, in order to shrink the wool and turn the blanket into a water-resistant felt surface.

NEWBORN AND 'IN-ARMS' STAGE

When a new baby is born to a group member, OzNappyfree members generally email the announcement to the forum, sometimes as part of a group email to family and friends. There may be an email from a dad just returned to hospital (sent to a list of addresses pre-selected by mother-members), or the mother herself may post within a few days of the birth, perhaps with a story of a 'first catch' of an elimination into a receptacle. Although some members begin holding out their babies within hours of birth, many members then go on to start a period of observation, where they keep their baby nappy-free for a set period of time each day (or all day, especially if they are staying in bed for their 'babymoon' or first few weeks post-partum), and try to observe any signs that precede elimination.

Newborn signs include passing gas, a 'pushing' face, drawing up the knees repeatedly, fussing at the breast, crying and squirming, sudden increases in motion such as rapid arm waving or leg kicking, or sudden ceasing of motion. Other newborns simply eliminate every time they breastfeed, so mothers may simply start breastfeeding the baby seated on a flat nappy or over a small potty-bowl — a number of which have been designed especially for this purpose, fitting very small bottoms and easily grasped between the knees of the seated adult. The next time the group is likely to hear from a family with a newborn EC baby is after the 'first catch'. 'First catch' stories are generally detailed, explaining when and how the 'catcher' knew to hold out the baby. Tamara writes as follows:

Hi everyone... Well I didn't think I'd be writing so soon with success but..... Our little boy Evan is just over 3 weeks now. This morning I caught our first poos and wees in the potty and the toilet!!! I was so thrilled it was as much as I could do not to wake my sleeping husband and share the good news!!! I had Evan on the change mat about to change between sides as I was bfeeding... when he started to 'push' as he does so clearly. I also needed the loo (!) I took him with me and sat on the loo with him... I had him with his back up against my tummy and opened my legs wide enough so that his bum had room to get in there.... said the magic word, caca (we use) and ssss... and sure enough he started poeing... (Webpost, August 2009)

Tamara's post is fairly typical of posts in the early days, and other readers generally respond with stories of their own, or suggestions on positions, timing and so on. Many ECers catch their first elimination in the first few days back from giving birth in the hospital. For those who homebirth, the first catch is often within the first day — saving the parents from having to clean up the sticky black meconium of the first few eliminations.

In the early days, babies eliminate almost every time they are held in one of the two common positions. The first of these is the 'classic' position, where the baby is held in a squat-like position over a receptacle with its back against the adult's stomach, or leaning on the adult's forearms, with its knees higher than its bottom. The second of these is the 'cradle' or 'reclined' position, where the newborn baby is held reclined on one forearm as if being rocked, with both hands grasping under the thighs, bottom pointed towards the receptacle — the advantage of this position for newborns is that the head is supported (see Figure 10). Both positions serve to straighten out the sphincter muscle and allow the release of any eliminations. It almost seems that newborns held in this position cannot help but eliminate.

The elimination is then reinforced with a cue — often a sibilant, water sound such as 'ssss' or 'shhh' as they urinate, or a grunt or cue word such as 'poopoo' or 'caca'⁸² as they defecate. As the baby comes to associate the release of the sphincter muscle with the cue word and position, the cue word soon becomes a prompt to release rather than merely a comment on it. The ability to relax and release the muscle is the first stage of EC learning for the baby, and even from this early age, the process quickly becomes much more interactive than merely timing and catching. It is not uncommon for babies in the early days to be dry through the night, if they are consistently offered the potty when waking to feed. Some members explained this through reference to research: if a baby went down dry, and cycled through first REM sleep and then into quiet

⁸² French word for poopoo, common even in Australia due to the bilingual Canadian Ingrid Bauer, author of *Diaperfree!*

sleep before waking, it would often stay dry since babies rarely eliminate during quiet sleep.

FIGURE 10: HOLDING OUT NEWBORNS



Babies are dressed in a variety of different clothes in the early days, depending on what time of year they are born and the climate. By and large, most of the babies are still in nappies for most of the time. Summer and tropical babies may spend some of the day dressed in a top layer only, and carried around with a cloth nappy or towel underneath them. Winter babies are sometimes dressed in warm nightgowns and booties with a nappy underneath them, then wrapped in a blanket or carried in a sling. Part-time ECers, who are by far the most numerous, tend to fully dress their babies and use nappies either with or without covers. They then offer 'pottyunities' when changing nappies, or simply remove all the bottom half of the clothing as needed. Other families do not start ECing until a number of weeks have passed, using cloth or disposable nappies to give themselves time to 'get used' to parenting before beginning EC. Many families use disposable nappies at night, although by and large, cloth

nappies are preferred by OzNappyfree members — for both environmental and ease-of-EC reasons (since cloth nappies allow the parent and child to be more aware of the timing of eliminations).

At this stage, there are very few messy ‘misses’ — or at least no more than conventionally napped babies who spend some time each day ‘having a kick’ (lying on the floor with no nappy on, normally on a towel or mat). By and large, the major issue during this period of EC is the interactions with family members and health professionals. First-time parents, and first-time ECers in particular, often feel embarrassed about the whole thing, and try to hide it from relatives and medical staff until the babies are much older. One ECer writes, ‘Although supportive, even my mother thinks that I am making extra work for myself’. Nadine felt that EC had isolated her from seeking help from family and health professionals, because of the feeling of surveillance:

I think this feeling of being watched, that you’re being watched by a bunch of people who want you to fail and this sounds like I think everyone’s horrible, I don’t, but I think its just natural that when you’re struggling, everyone’s struggling with mothering, they are all struggling with guilt, they are all struggling with the fact that their mother or their husband or their husband’s father doesn’t necessarily agree with what they are doing in a multitude of areas, and then to take upon yourself another area where everyone disagrees with you! From the start and you just have to push, push, push through and just in a way, by committing to do it, you are committing to not talk to anyone about it. Because they get upset and they get vindictive and they get angry – and it can be quite isolating (Focus group, Brisbane 2009).

The fear of health professionals and family members seemed to be more common than actual negative interactions at this early stage, and is a concern that probably emanates from a number of memorable stories shared on the forum. One OzNappyfree member with an older baby was fined by the company managing her block of units for allowing her ‘naked’ child to wee in an outdoor area. Another was abused on the street for discreetly offering her baby a pottytunity in the gutter near her car. Both these women were shaken and angered by their encounters, and found it hard to believe baby urine

would be more offensive than the amount of dog excrement found in both these areas. Although these incidents are uncommon, they serve to feed the fear of being watched, expressed by a number of first-time mothers on the forum before they gained confidence in their parenting style and practices.

MOBILE BABIES

As babies grow and change, so does EC practice. The signs of imminent elimination often become less clear as new frustrations are introduced into the babies' lives, meaning that fussing is no longer related to the classic checklist of the newborn stage: hunger, tiredness, discomfort, fear, or elimination. Some big milestones occur after around six months, including increasing mobility, introduction of solids, and increasing ability to communicate and eliminate more consciously.

Many of the ECers start relying on the use of potties and seat-reducers on the toilet, as the baby is now able to sit unaided. Babies are often dressed in easy-to-remove pants with nappies or training pants (padded underwear that absorbs one 'miss'), some wearing split-crotch pants in the Chinese style (sometimes with a *niaobu* style cloth or prefold nappy tucked in), some in ingenious 'drop-flap' nappies. A few leave their babies bare-bottomed with legwarmers and a long top in cooler weather. Clothing often depends on the house and the weather: those families living in carpeted rental houses in cooler climates are most likely to keep their babies fully nappied.

EC practice becomes a little more difficult once babies begin getting more mobile in terms of being able to roll, sitting up, preparing to crawl or crawling, and pulling themselves up on things. ECers that use potties (rather than holding out) often find their babies start getting off the potty before having finished (or even started) their eliminations, and have to start distracting them with books or toys or games while waiting for the baby to relax the appropriate muscles. Dave writes of his 10-month-old:

Giving her a toy or reading her a book really helps her settle for long enough to relax and let the wee out (otherwise she just stands straight up and jumps off the potty) (Webpost, March 2009).

ECers holding out often find the baby resists the elimination position, even if needing to eliminate, because they are interested in doing something else rather than toileting. Many members report 'potty pauses' during this stage, where they go from high 'catch rates' to high 'miss rates', often within a few weeks. Some respond by returning to full-time nappy use and stop offering potty opportunities regularly, while others ride it out with misses in nappies or trainers, but continue to offer potty opportunities when they spot a sign or at certain times of the day until the baby adjusts to this new stage. Dave writes again:

Offering potty opportunities is harder these days because she is such a squirmer to get the nappy and clothes back on (need to move to Queensland where its warmer!), so it would be good to re-enforce the signalling. I've been thinking of easing back on the timing-based offers and wait more for signals (Webpost, March 2009).

A second factor contributing to changes in EC practice is the introduction of solids. Current recommendations in Australia are to begin introducing solids at six months, while New Zealand baby health organisations such as Plunket recommend solids begin 'between four and six months', when certain signs of readiness are exhibited. The World Health Organisation recommends six months at the earliest, and most ECers follow this as a rule of thumb. Many of the OzNappyfree members follow a method of introducing solids known as 'baby-led weaning' (www.babyledweaning.com), which prioritises breastfeeding as the main source of nutrition for the first year, while the baby learns to feed itself with finger foods from six months. Once solids begin to be introduced, the baby's digestive system changes, normally leading to less frequent and more solid faeces, which the baby has to consciously excrete. Holding the baby in the 'classic position', or seating the baby on a potty where the knees are higher than the bottom, helps this excretion process, but does not necessarily prompt it anymore. During this time, the ECers must begin to watch the baby for signs of imminent defecation such as obvious pushing or

grunting, and can lead to a period of frequent ‘misses’ until the family becomes adjusted to this stage. Others, such as Dave, say that after starting solids they were for the first time able to catch bowel movements because of the obvious pushing. At this stage, there is clear evidence that babies are ‘holding on’, and most OzNappyfree members reported that their babies rarely defecated while out of the home, preferring to wait until home to defecate in the potty or over the toilet.

The introduction of solids also can affect EC in other ways. ECers are well-positioned to notice any food sensitivities in their children. For babies with food sensitivities, the first sign of intolerance is often an obvious increase in urine frequency and volume after certain foods, or greenish-coloured faeces or diarrhoea. Common food intolerances that cause obvious changes in urine frequency are dairy, wheat, certain preservatives, and amine-containing, sulfur-containing, and salicylate-containing foods. Kristina writes:

Foods that I have noticed increase wees for us are: melons, grapes, citrus. too much tomato based things. I try to rotate the tomato based foods so there are a couple of days with none... and I realise we have slipped a bit with the diet, as there are a few things that are needing attention such as light sleeping. I do feel that it makes a difference for us with her awareness about wees. No surprise wees/misses (Webpost, June 2009).

Babies with dairy and wheat sensitivities normally have this show up in irregular, frothy greenish-coloured faeces; however, babies with these sensitivities generally exhibit symptoms during breastfeeding when the mother consumes these foods, so the family is already alerted to this prior to introducing solids. Some babies grow out of these early sensitivities by the time they get to classic toilet-training age in the West (beginning at two years of age), and do not go on to have food sensitivities, which certainly explains the Chinese belief that babies must be fed ‘easy to digest’ foods, avoiding too many vegetables or fruits until after the digestive system has further matured — no one wants to be constantly urinated on by a baby reacting to salicylates!

A third factor contributing to changes in EC practice is the increasing ability of the baby to consciously communicate and to eliminate. Communication can take the form of verbal noises and the beginnings of words, sign language or other deliberate signals, and movement such as tapping the potty or moving towards the bathroom. A large number of OzNappyfree members use ‘baby signs’ with their babies from around seven months of age, teaching their babies how to sign ‘potty’, ‘toilet’, ‘wee-wee’ or ‘poo-poo’, as well as other signs such as ‘milk’, ‘hurting’, ‘drink’ and so on. Babies from this age are capable of signing pre-emptively, although more often use the sign after the fact of elimination to signal that they have gone.

This stage of EC is a stage of learning for both parents and babies — along with many frustrations and miscommunications resulting in misses or ‘accidents’. The ability to hold on to eliminations develops, and EC becomes much more about getting the baby to relax and release. Parents must now factor in the will, temperament, and preferences of their baby in any potty opportunities. The creativity of EC parents at this stage is crucial, as they come up with all sorts of interesting methods of getting their babies to relax and eliminate as appropriate. ECers begin to find that their babies are willing to urinate into one potty and not another, in one room but not another, in one position but not another, and even with one person present and not another. The webforum archive has hundreds of posts offering suggestions on helping babies during this stage — if the ECer knows the baby needs to ‘go’, they can begin with the cue sounds developed earlier, then try various positions, rooms, potties, and so on, or reading stories, singing songs, taking deep breaths (baby copies and relaxes), running water and so on — anything to get the baby to relax and eliminate.

This stage is probably the most time-consuming and difficult stage of the EC journey, and many ECers back right off the whole process during this stage. Very few people begin ECing in this stage, as it can be rather disheartening. On the other hand, looking at the monthly updates posted for ECers with babies in this stage, most are still catching 95 percent of bowel movements so

still feel pleased to not have to clean up these, even if urine misses are frequent.⁸³

Timing is still an important factor for ECers during this stage, and those having difficulty reading baby's signs, yet not willing to give up and go back to full-time nappies, will often begin to rely almost completely on timing to 'catch' their baby's eliminations. Some ECers are rather 'scientific' about this — observing and recording the times of day their baby eliminates along with other important factors such as drinks, feeds, sleeps, outings and so on. They then offer their baby pottyopportunities when appropriate: most often immediately after sleeps and after feeds, then at a certain time period after this — say twenty minutes — then at other times such as every forty-five minutes, or before going out or on coming home, or while running a bath or going to the toilet oneself. Others develop a sense of intuition around the timing of elimination — offering when they feel like the baby needs to go based on these activities rather than signs or signals from the baby. Some ECers can have an eighty percent 'catch rate' based on timing alone. There is an ongoing discussion on the forum about whether it is better to rely on waiting for signals or timing, and this is affected by the parents' beliefs about the abilities of their child and how much they value independence and their respect their child's developing 'will'. Some parents prioritise catches over independence, taking responsibility for their child's body as a sort of extension of their own — this is sometimes referred to on OzNappyfree as a more 'Asian' approach. Amber, an Australian-born Chinese with four children, writes in this vein:

Overall our parenting style is NOT to push them towards independence, we tend to follow a more Asian style of doing a lot for them, so others may have different desires and aims. I guess I am also a more controlling type of person in general, and I really don't like accidents, so I did try to push for potty perfection as well as communication, again other people may have differing styles and goals (Webpost, November 2009).

⁸³ Anecdotally, according to OzNappyfree members reporting on their friends, it is at this time that a large number of non-ECers start holding their babies over potties or toilets to defecate, when they note the obvious pushing of some babies.

Others prefer to leave the process more up to their child's communication and have a very strong belief in and respect for children's own ability to control their bodies — this is more in line with current toilet-training models which place the onus on the child to toilet-train as they are ready. Members of the latter approach who continue with EC during 'potty-pauses' mostly have a much higher tolerance and acceptance of accidents — one member went the entire EC journey with her youngest son defecating daily on the laundry floor since he disliked pooing in nappies and wanted to poo standing up holding on to something rather than in a potty or toilet. Kimberly, mother of a six-month-old baby, writes with regards to accidents during this stage:

I seem to be getting much more of a feeling for when he needs to wee and am more alert to his signs/signals since I have been leaving nappies off during awake time at home. In spite of the messy misses I have tried to just clean up and continue on. I'm glad that when there have been messes that it has never been anywhere near as terrible as my imagination had led me to believe. Getting peed and poo'ed on isn't as terrible as I thought it was (Webpost November 2009).

The age of emerging mobility and communication, along with a changing diet, heralds a transition to a more concentrated EC effort. This is the most common stage under discussion on OzNappyfree, and the forum is an important part of ECers lives during this stage as they seek guidance and inspiration from other ECers online.

TODDLERS TO TOILET-TRAINERS

As the EC babies begin walking and talking, EC parents continue to communicate over eliminations. Because ECers envision the whole journey as a 'toilet-learning' process rather than a 'toilet-training' process, the culmination of the journey is normally referred to as 'graduation' — the children 'graduate' from toilet-learning and go on to toileting independence. The final year of EC, from around 15 months until graduation, is a stage of constant re-negotiation and increasingly handing over responsibility for toileting awareness to the child. During this period, the differences between 'full-time' and 'part-time' ECers become more apparent, as full-time ECers

seem to graduate much earlier into dryness (as early as nine months, through to around 24 months), with part-time ECers varying wildly from early graduation to rather late even compared to conventionally trained children.

During the latter stages of EC then, there is great variation in terms of the use of potties, toilets, and holding out, and in terms of the types of clothing, nappies, trainers, and undies used. There is also a number of ECers who change their approach from one of elimination communication to one of overt toilet-training, using sticker charts, drill methods, and promises of 'big girl/boy' undies and so on. The different approaches between 'offerers' and 'waiters' become more apparent here too with the emerging transition between relying on offering and timing to relying on the child's own ability to communicate their desire to eliminate or their own ability to get themselves to an appropriate toileting spot and remove their clothes independently.

Elizabeth, a mother of a 22-month-old boy who was part-time EC'ed, posted asking for 'tips for encouraging DS to tell me beforehand' (where DS is internet shorthand for 'Dear/Darling Son'). She related her son's almost '100% poo miss rate' (in nappies or trainers) over the previous few months. She got a variety of responses, with Janelle suggesting teaching him baby-signing, me wondering whether to teach him where to go rather than expect him to tell her, Annette suggesting he might want more independence or privacy, Dina suggesting putting the potty in the shower recess if he wanted the privacy, and Rebecca suggesting signing and reinforcing *every* instance of his signing 'potty' with a trip to the potty even if he did not need to go right then and was just copying the sign. Maggie encouraged Elizabeth, saying that even though catches were not happening right now, eventually it would 'all come together'. This led on to another discussion started by Rebecca, with subject line 'offering vs them asking & a graduation question'. Rebecca writes with regards to her 21-month-old:

Now my thoughts were that you should encourage them to ask for the toilet, once they get to a certain age, and certainly by the 18 month mark. I don't want to be pre-

emptying all his wees/poos when he is at an age when can tell me. So Kelly's viewpoint made me stop and think... I don't wait for DS to tell me he's hungry before I feed him, I pre-empt that, so why is the toileting any different?... I know if I take him to the toilet he will wee pretty much every time, even if it's only half an hour after the last wee... [but then] how will he learn that really full bladder feeling, and what to do? And as for graduating... I guess this is why I am so interested in the offer vs them asking thing. *If* I offered based on timing, I am quite sure DS would be dry, definitely while awake, and quite probably if I always took him before he went down for a nap... what are people's thoughts on this? (Webpost November 2009).

The answering posts reveal the huge range of perspectives on the 'graduation' issue. Some writers use the '100 hours benchmark' — meaning that graduation refers to 100 hours of continuous dryness no matter how that is achieved. For Amber's first daughter, this occurred at around 14 months, and according to Rebecca above, would be entirely possible for her son if she chose to follow the 'offering' route. Others agreed with Annette that graduation has occurred 'when I can't remember the last time I worried about his toileting' — that is, a significant period of either complete toilet independence or complete reliability in communicating toileting needs to an adult.

Annette later posted wondering if EC had been a mistake, since several of her friends' children had toilet-trained 'overnight', without the years of elimination communication and hassle Annette had experienced (although she later posts it was worth it for the number of cloth nappies 'saved'). The concern with when graduation can be said to have happened, and the 'offering versus asking' debate in general, reflects an awkward engagement between EC ideas of a gentle 'journey' of gradual toilet learning and conventional Australasian ideas of toilet training as an 'event' or 'milestone' that occurs sometime between the second and third birthday (or later). Worrying about the 'moment' of toilet-training completion probably occurs in a context where parents are often asked whether their child is toilet-trained, or has begun toilet-training. Likewise the concern with whether toilet training occurs 'faster' or 'earlier' whether one relies on offering or waiting to be asked is one which reflects the pressure of Australasian ECers to prove that their method is better

than conventional toilet training — where ‘better’ means earlier, more reliable, and less hassle for the caregiver.

Lila, another part-time ECer, illustrates this awkward engagement when reporting her daughter’s ‘graduation’ from ‘EC to TT’ (toilet-trained). She writes:

At about 21 months I read some of, and had several discussions around ‘potty-training in 3 days’ [a drill method of potty-training used by people who need to rapidly toilet-train]. A friend was (for medical reasons) trying to toilet train her very unaware (her words) son. Something clicked and I took DD’s nappy off. Very rapidly things clicked for DD (or maybe she was waiting for me?) and we were nappy free at home, including day sleeps (Webpost, August 2009).

Lila did not follow the three-day method, nor really instigate any ‘training’ as such, but the discussions with her friend around issues in conventional toilet training alerted her to the fact that her daughter was actually very aware of her eliminations. Lila goes on to relate how at each step of the way, she realised that it was her that needed to ‘take a deep breath and stop putting her into nappies for longer car trips’ and later, daycare. After her daughter started coming up to her and signing toilet (rather than signing only to herself) Lila ‘was brave enough to send her [to daycare] without a nappy on, forcing them to toilet her’. Lila summarises her EC journey as follows:

I have tried to let DD guide me, but also needed to give her the environment in which she could learn and move forward, and to get over my own fear/impatience of dealing with public accidents/dealing with potties/finding toilets/asking shop owners to use their toilets etc... we have toilet trained slowly, at the end of a great EC journey that was filled with many many books, potty songs and lots of fun (Webpost, August 2009).

The fear and impatience of public accidents is another factor of conventional expectations that deeply affects the way that the final stages of EC are handled by most of the members. For the most part, it is common practice in Australasia these days to leave children in nappies for outings until they are completely reliable — going against this and getting over this fear was a major jump in Lila and her daughter’s EC journey, culminating in graduation.

Amber likewise relates a positive graduation experience, with both her daughters out of nappies before their second birthdays, the older one at 14 months. In response to concerns that relying on offering might delay the child's development of their own awareness of a full bladder and toileting needs, Amber writes that although she was still using a lot of timing and offering when she announced that her second daughter had 'graduated' at 22 months, since that time (about three weeks), her daughter has 'gone to telling me fully when she needs to pee/poo, or simply taken herself to the potty and peed herself without me knowing'. All this had apparently 'happened on her own steam' without Amber pushing her to be independent in any way because 'basically they do it when they are ready.'

Here Amber uses the 'basically they do it when they are ready' line to defend her use of a *parent*-initiated pottying schedule. Interestingly, other part-time ECers use the same line to defend a more hands-off approach, because 'they will start going (and getting out of nappies) when they are ready' — recently someone posted this same line with reference to an almost-five-year-old still in night nappies.

EC in Australasia does not stop at 'graduation' (using either definition), but continues on for years as various children still rely on certain aspects of toileting being managed by their parents, such as handwashing, clothing removal, finding public toilets and so on. Annette compares it to swimming lessons, in that the point of taking a six-month-old to swimming lessons is not to get them swimming independently, but to start them on a positive journey of increasing water confidence. The point here is that EC is a journey of 'elimination communication' rather than a task-focused toilet-training programme, and Australasian ECers and their babies display considerable variation in the approaches taken to manage the tasks associated with this communication.

'MY KIDS AREN'T ANY MORE STUPID THAN ANY OF THEIRS': EC AS A GLOBAL PRACTICE

OzNappyfree members imagine their practice of EC as part of the global norm for infant hygiene. The fact that *baniao* is a contemporaneous practice with a large following in most of China, 'holding out' against the aggressive marketing practices of Western-origin multinational companies (let alone the continued existence of similar practices in other parts of Asia and Africa) allows OzNappyfree parents to re-imagine their 'minority' practice as a global 'majority' practice. In fact, a variety of other EC-like practices also inform their hygiene assemblage.

Until now, EC literature has not drawn on Chinese practices very explicitly. In EC literature such as the books mentioned above (see page 197), the most commonly cited academic articles on 'other hygienes' is the 1977 paper by deVries and deVries. This paper outlines the basics of EC in an article based on ethnographic work among the Digo people of East Africa. DeVries and deVries argue that in light of Digo 'toilet training' practices, which enable dryness from four to six months, 'sociocultural factors are more important determinants of toilet training readiness than is currently thought'. They then apply this argument to the United States, showing through a review of historical toilet-training advice that sociocultural factors have indeed played a large part in determining readiness.

As part of their argument, deVries and deVries cite a number of reviews of historical literature on toilet-training recommendations in three United States women's magazines between 1890 and 1948 (see Table 1), mostly to show how these have changed over the years (the research they base this on was published in the early 1950s). Of course, while reviewing magazine recommendations on toilet training reflects the dominant professional discourses of parenting and toilet-training at that time in the United States, it does not represent the actual diversity of practices present. One of the main socio-cultural factors affecting toilet-training techniques was the increasing

emphasis on the soldierly disciplines of routine, obedience, and coercion during the period spanning the World Wars. The toilet-training norms shifted from a mother-centred perspective – where the mother was responsible for ascertaining the right moment to introduce toilet-learning – to a practice of rigid scheduling based on assumption children just needed to be disciplined into toileting (see ‘Mother-centred readiness’ and ‘Early readiness, rigid environmental scheduling’ in Table 1). This ‘soldierly’ toileting discipline include practices such as tying children on to potties until they perform at set times every day, and punishments for pottying accidents. This coincides with other changes in caregiving practices at the time, such as strict routinised feeding and sleeping meant to produce independent and tough future soldiers (as was also the case in the same period in New Zealand, see Kedgely 1996).

TABLE 1: TRENDS IN RECOMMENDED INFANT TRAINING METHODS EXTRACTED FROM THREE UNITED STATES WOMEN’S MAGAZINES FROM 1890 TO 1948

	Mother-determined readiness	Early readiness, rigid environmental scheduling	Child-oriented readiness (2–3 years old)
1890	100%	0%	0%
1900	78%	22%	0%
1910	23%	77%	0%
1920	0%	100%	0%
1930	0%	75%	0%
1940	0%	33%	66%
1948	0%	0%	100%

From deVries and deVries (1977: 171)

In the United States at least, this was followed by a swing towards more permissive, child-oriented toilet-training recommendations in the post-war period. People became more concerned with the psychological effects of

coercive toilet-training, and tended to use rewards and encouragement in conjunction with later toilet training (see 'Child-oriented readiness' in Table 1). While some might read these changes in toilet-training techniques teleologically, in that United States women's magazines are reflecting a gradual improvement or evolution in understanding child behaviour and development, deVries and deVries read this as illustrating the socio-cultural situatedness of toilet training, given that 'infant care writers changed opinions in unison, without the benefit of strong empirical evidence' (1977: 171).

DeVries and deVries are careful to separate out Digo 'gentle conditioning' approaches from the 'early readiness, rigid environmental scheduling' of the wartime period in the West, preferring to link the Digo approach with the child-oriented approach of their contemporaries in the United States, where infants are imagined as 'active participants in training, at quite different times, and prove equally successful' (deVries and deVries 1977: 176). They note that the Digo also have concepts of the physical and emotional development of infants resulting in a perceived optimal time for bowel and bladder training, yet clearly these are at a different time from those favoured by the 'maturational approach' then (and still) current in the United States. They argue that since 'this comparison across cultural settings suggests varied and contradictory possibilities, the maturational explanation for training success should be re-evaluated', concluding that:

Expectations and perceptions of infant capabilities and their subsequent translation into behavior are adaptive and attuned to environmental and cultural factors. Concepts of physical maturation are similarly responsive to these factors. Contrary to the current view that all early training is ineffective and/or coercive, maturational timing and 'readiness' ideas are related to success only in the way they fit into the total rearing milieu. Readiness is a consequence of a group or family's conceptual and functional ability to carry out a nurturant conditioning technique, and is probably limited only the individual infant's biologic constraints (deVries and deVries 1977: 176).

In light of the 'multiple infant training possibilities across cultures and over time', they go on to recommend that paediatricians and clinicians take into

account the 'potential diversity and effect of maternal and family expectation' and not dogmatically advocate a 'seemingly scientific' approach, especially in medical practices with racially and ethnically heterogeneous clientele. Unfortunately, it appears that even thirty years down the track, most paediatricians and child health practitioners in Western nations have yet to take up deVries and deVries' challenge, even if a growing number of parents have. Some cynics would blame this on the extensive marketing techniques of disposable nappy companies as even Dr Brazelton, mentioned in deVries and deVries' work as pioneering research into a more gentle child-centred approach to toilet training, ended up working for Proctor & Gamble – his approach to late toilet-training no doubt assisting in nappy sales.

Despite the resistance of official medical practice, however, EC in Australasia is increasingly well-known, and is spreading from the more 'alternative' parenting circles to some mainstream circles in the form of 'part-time' EC. It is true that many ECers come into knowledge of the practice through attachment parenting groups and literature. Attachment parenting, a term coined by a husband/wife paediatrician/nurse writing team William and Martha Sears, draws on research into infant attachment extending back to John Bowlby's work on the emotional life of children (Bowlby 1971, 1973, 1981, Sears and Sears 2001). Attachment parenting's even more child-centred relative 'natural parenting' draws on customs of parenting in an Amazonian tribe as described by Jean Liedloff (1986), and is a reinterpretation of babies and parents as primarily social mammals with an evolved 'natural' style of parenting based on instinct and preservation. These parenting approaches provide a good fit with EC practice since they advocate keeping babies close and 'in-arms' and being responsive to their non-verbal communications. EC writers Ingrid Bauer and Laurie Boucke are most definitely 'natural parents', and combine EC with other baby care practices such as later weaning, positive discipline, co-sleeping and baby-wearing.

There are certainly a large number of attachment and natural parents on OzNappyfree, but these are by no means the only parenting philosophies

present. In 2008, an off-topic discussion on ‘scientific research’ into parenting erupted into an argument between a number of attachment parents and a schoolteacher arguing for a form of ‘controlled crying’ (a non-attachment-parenting method of training babies to sleep through the night). This discussion eventually had to be closed by the moderator, as defenders of both sides continued to restate their opinions and post links to articles and online material supporting them. Most of the more profuse contributors on the OzNappyfree forum are fairly highly educated mothers who understand the implications of attachment research on parenting, but they vary in their adherence to natural parenting or attachment parenting ideas and practices.

Rather than viewing EC as only being an attachment parenting practice, there is recognition that various forms of EC are present all over the world and throughout history. A number of OzNappyfree members have posted of the positive responses they have got from grandparents and great-grandparents who toilet-trained their children early, as well as some members whose parents are from various parts of south, east, and south-east Asia. Other ECers reported conversations with non-Australasian-origin mothers at playgroups and other places, delighted that they were ‘not the only ones’ ignoring the mainstream toilet-training advice. Of course, not all of these are practices that completely overlap with EC, which emphasises communication with the child and eschews coercion (grandparents and great-grandparents of the war era may have been more coercive than OzNappyfree members, for example). Still, there is a definite sense of being a part of a global and historical community of practice, which is most likely the majority practice of infant hygiene globally.⁸⁴

It was this sense that contributed to the desire of Australian ECers to hear more about my experiences and research in northwest China. During an ‘EC meet-up’ in Brisbane in 2009, I presented a summary of *baniao* practice in Qinghai province. This prompted ECers to reflect on the different socio-cultural spaces of parenting they inhabited compared with those of people in

⁸⁴ Based on the rough and unscientific estimate of populations where EC-like practices (at least until recently) are the norm. Asia, Africa and non-Anglo Oceania together have a population of more than 5 billion.

more 'EC-friendly' places. ECers openly disagreed with people who painted a picture of EC as a 'Third World' practice, which only worked because 'over there' they 'can just do it anywhere' because 'babies can only hold on long enough to get to the gutter' (to quote Nadine's father-in-law). They imagined a more idyllic EC lifestyle enabled by a society, such as China, where it was broadly accepted. They felt that the broad acceptance of EC in 'other' societies would relieve the pressure of having to 'prove' EC as completely reliable, hygienic, and resulting in better and earlier toilet training. They also felt that the living conditions in Xining allowed for more relaxed EC practices (that is, no carpet and considerable amount of time spent outdoors or in a courtyard), since the basic toilet-training rules were 'not on the bed or couch' rather than 'in the potty or toilet' (deVries and deVries also make this point in their 1977 paper).

Because of the social, spatial, and cultural environment of Australasia, OzNappyfree ECers must work a bit harder to establish EC practices that allow their children to develop toileting awareness in an unpressured way. Many ECers try to reduce any pressure on the children to 'perform' in this unsupportive environment by using nappies or training pants as 'back-up', even if their children are pretty reliable. This helps both parent and child to better relax in spaces where accidents would not be socially acceptable. Despite these pressures, ECers insist that their children are nevertheless capable of coping with early toileting. Nadine, a Brisbane mother of two, dismisses concerns that it might not be possible in Australia with the comment, 'Well, I figured if kids in Africa can be toilet-trained by 12 months, my kids aren't any more stupid than any of theirs'.

Imagining this *global* community of EC practitioners allows a certain measure of perspective with regards to the cultural specificity of our understandings of hygiene and appropriate toileting behaviour, meaning that the child's experience of accidents or 'misses' (a preferred term by many ECers as it emphasises that the fault is the parent's rather than the child's) is rarely negative or disturbing. Imagining a global community of EC is also a strategy

that resists the teleological positioning of infant toileting as a 'backward' (and thus 'dirty' and 'uninformed') mothering practice. In fact, ECers imagine themselves and the global community of ECers as somewhat 'progressive', in that science is only just now beginning to 'catch up' with the possibilities of EC. Imagining the 'developed' world as one which has lost its way in terms of environment and society, and imagining themselves as experimenters partnering with non-Western women to cultivate alternatives to the overuse of nappies, repositions EC and ECers as being at the forefront of efforts to make a better world. Ainslie, an OzNappyfree mother of two, wonders whether ECers are 'the beginning' of a swing away from disposable nappies and late toilet training, and looks forward to a time when it has become 'the norm'.

CONCLUSION: HYGIENE FOR A BETTER WORLD

This chapter has begun to make visible the hygiene assemblages gathered by Australasian families practicing elimination communication. I have focused on the day-to-day practices of how EC works, linked with an analysis showing how this hygiene assemblage draws on a particular imagining of 'other hygienes' and 'other places' that allow ECers to sidestep teleological ideas of hygienic modernity and development.

In Chapter One *Thinking Multiplicity*, I argued that it is important to show the *bidirectionality* of travelling universals and practices between out-of-the-way parts of China to other parts of the globe. This thesis challenges typical analytical frameworks that replay the tired 'inevitable emergence of a global era', and steer clear of the equally problematic 'culturally-relative scraps of data' interpretation of practices and beliefs in out-of-the-way places and spaces. I suggest that so-called 'developed' centres of the world need to be open to the fact that there are knowledges and practices in more out-of-the-way places that have relevance for more global contexts, and if we look closely it is relatively easy to see that these are already travelling.

While in Chapter Three *Unhomogenising Milk*, I concluded that infant feeding practices in Xining appear to have become more ‘Westernised’, I argued that these changes have been the result of awkward engagements between universalist trajectories of TCM and biomedicine. These awkward engagements worked to reassemble infant hygiene and health-keeping assemblages in such a way that ‘gaps’ or ‘openings’ appeared at specific moments in babies’ development. Chapter Four similarly argued that *baniao* is a hygiene assemblage that is ‘holding out’ against processes of apparent Westernisation, again through commitment to local and TCM universalistic understandings of the nature of babies’ bottoms in particular. This chapter has taken the argument one step further: the practice of *baniao* not only ‘holds out’ against Westernisation in the form of a particular hygiene modernity, but has actually *travelled* (against the assumed flow of West → Rest). *Baniao* practices and the hygiene assemblage in which they are embedded actually connect with, and contribute to, the complex development of the hygiene assemblage known as ‘elimination communication’ in Australia and New Zealand.

The fact that relatively educated women in apparent strongholds of hygienic modernity are taking the hygiene knowledges and practices of women in more out-of-the-way places seriously has potential for strengthening the resistance of *baniao* and similar practices against discourses that position disposable nappy use as more modern and hygienic. The continual ‘co-production’ of hygiene assemblages, via long distance and cross-cultural awkward, unstable, and even bizarre interactions such as this, offers hope that global hygiene homogenisation is not the only future. It also shows that changes in hygiene assemblages can be brought about deliberately — that we can ‘tweak’ and ‘re-assemble’ these hygiene assemblages to better suit the needs of this climate-changing world. The next chapter moves on to explore this ‘re-assembling’ in more detail, a new gathering of hygiene which is less about keeping things sparkly-clean and more about guarding life and health for our infants *and* the planet they live on.

INTERLUDE: BABYWISE OR HYBRIDISE?

In April 2009, I returned to Xining for three months of follow-up fieldwork. One of the first things I did on returning to Xining was to call my old friend Xiao Shi and invite her over for lunch. A migrant nanny and domestic worker, Xiao Shi had previously regaled me with stories of rural life and mothering, although by that time her son was a teenager. As we spoke on the phone, she (almost in passing) added that she “had also given birth”. It took me several seconds to process what she had just said.

“Did you say *you* have given birth to a child?” I asked in shock. Xiao Shi is Han Chinese, and with a teenage son back in her home province, she is certainly not legally entitled to more children.

“*Shi de*,” she replies, “It is so.” She laughs at my shock. “I’m almost forty years old!” she continues, rounding her age up by a good few years. “A little girl, called Yingying. She’s four months old.”

“Well, you have to bring her over!” I exclaim.

She comes over the following day, and we greet each other with the ease of old friends. She carries baby Yingying in a frontpack, huffing up the stairs to our borrowed apartment. She hands over a bag of fruit

from her husband's fresh produce shop, and proudly shows off a chubby, cheerful baby dressed in many layers of brightly coloured and patterned baby clothes.

After lunch, Xiao Shi launches into Yingying's remarkable story, where presumed infertility, long-distance marriage, and an unexpected reunion collaborated to produce an unwanted and unexpected pregnancy. Xiao Shi had been devastated, torn between her desire for a termination of the pregnancy and her Christian faith that saw this foetus as God-given and an opportunity for miracles. After praying with a single mother of an illegitimate baby, and consulting with her husband who disapproved of abortion for secular reasons, she had eventually decided to go through with the pregnancy as an act of faith.

Soon after the baby was born, she found she had to give up her main sources of paid domestic work, since the foreign family she had previously worked for had recently had a second child. The presence of two babies in the house was "too noisy" and "too troublesome", according to Xiao Shi.

"And what of Yingying's *hukou*?" I ask, concerned that her illegal birth would mean she could not get a birth certificate or register her on any household registration (*hukou*).

"Unnh." Xiao Shi pauses. "We didn't tell the provincial government."

If the government of her home province were to find out, her husband's parents would be liable for steep fines, and would have to go into debt for years. The fine was more than two years of Xiao Shi's previous full-time earnings — most of which was 'eaten up' week by week. Not telling the government of her home province, and hiding out in the western province of Qinghai, was a pretty good strategy — except that it cut her off from her family support networks until the fine could be paid, and she was unable to work like before with a baby to care for.

Second time around, Xiao Shi's mothering role was less clear than it had been thirteen years earlier in the countryside. In previous

conversations in 2007, she had confidently described her role and the role of her mother-in-law, her father-in-law, and her husband with relative clarity. In her village, she was mostly expected to stay close to her child around the home for the first three years, then hand over day-to-day care to her mother-in-law and return to work in the fields. With her son, there was always someone around to hold him, and he slept close to her, feeding as needed throughout the night. When her son started school, she finally weaned him and moved to Xining to seek paid work, as was expected of her. Her income paid for household expenses related to her son back home.

Life is complex, and as Xiao Shi's story illustrates, can take quite unexpected turns. She now found herself with a child and no mother-in-law, a husband with a produce shop which barely broke even, and school fees and support owing to her in-laws back home — more than twenty-four hours' train ride away. She had no money or desire to use artificial formula, and was therefore bound to close proximity with Yingying for the time being. Yet needing to be close to Yingying reduced her availability for paid work, thus compounding her difficulties even as she insists on her daughter's right to be physically close for the first two to three years of life.

Some friends and I hired Xiao Shi to give us Chinese cooking lessons. She would bring Yingying along and borrow my *meitai*, strap her on her back, and tutor us in choosing vegetables to planning a meal and everything in between. We also discussed my research during these times. Xiao Shi had developed an avid interest in 'Western' parenting practices (after years of disapproval). She had been given a book by a foreigner, which advocated a cry-it-out method of baby training and provided a 'parent-directed' schedule of feeding and sleeping.

The book was an object of both horror and fascination to Xiao Shi. She was fascinated by the promises of easy babies and more sleep (even whole nights of sleep!), a possibility rarely considered in her

social world where childcare is generally acknowledged as *hen lei* ‘very tiring’. Babies are thought to need near-constant care and attention for at least a year, but a mother is not expected to provide all of it herself. At the same time, Xiao Shi was horrified by the idea that a small baby should have their natural appetites for food, physical closeness, and sleep overwritten by a routine.

Xiao Shi first showed me the book when I visited the small, concrete produce shop she rented and lived in with her husband and baby Yingying. She pulled it out surreptitiously from where it had been stuffed under her pillow. It turned out to be a translated copy of the controversial baby-training manual *On Becoming Babywise* by American authors Ezzo and Bucknam (1995). It was an oddly disconcerting juxtaposition of spaces. Xiao Shi and her elderly neighbor discussed the book’s contents in the dark windowless storage room not much wider than the set of iron bunk-beds the family retired on nightly. Yet the book’s contents conjured up for me an image of a large American-style multi-storey suburban house, with a separate nursery littered with the paraphernalia of baby care.

Where would one put a cot in here? I wondered, noting the simple storage system Xiao Shi and her husband used for their belongings: tying clothing and objects up in plastic bags and shoving them in gaps between the bunk-beds and the wall, under the bed, and in alcoves in the darkened room. *How could you leave a baby to sleep alone in here?* You couldn’t leave the baby alone on the bunk-bed to put itself to sleep: even at four months Yingying could roll off onto the floor in a fit of crying. *Where would you encourage Yingying to play “independently”?* I thought, looking around me at the cramped living and working space where the small family lived. Yingying was bouncing happily in the arms of the elderly neighbour, who came around every day after dropping her grandson at school to “help out” — meaning sit on a stool and hold the baby while Xiao Shi and her husband served customers and chatted to her. I wondered who the foreigner was who

had gifted this book to Xiao Shi: clearly they had never visited Xiao Shi here at home.

The trajectories of this controversial little book and that of Xiao Shi's migrant family crossed for a brief moment, providing a flash of light that allowed me to glimpse the spatiality of different modes of child-raising and ways of mothering. Holding this book in the presence of her elderly neighbour (a grandmother of seven, who had been involved in raising them all) it also became clear that *her* space of mothering was not what would be typical in China either. She had no mother or mother-in-law present to take on the traditional role of raising Yingying as she returned to work, and her husband could not provide for her to stay at home for a few months since the produce shop was barely breaking even. Thus she was bound to a certain conflicting spatial relationship with her child in a way many other caregivers were not. Like the "at-home" mother imagined by *Babywise* author Gary Ezzo, Xiao Shi perhaps had now found herself in a situation where reducing the demands of her child (rather than merely getting relief from them) was extremely attractive.

The promise held out by *Babywise* fascinated Xiao Shi. It painted a picture of a world of simple order where babies were predictable and mothers rested and independent. But it hid under her pillow, as something potentially contraband or dangerous to her mothering ideals, impossible to implement yet attractive all the same. As we spent time discussing the contents of this book, Xiao Shi's own non-negotiables of mothering and child-raising came to the fore. The awkward engagement of horror and fascination in *Babywise* allowed her to experiment with different ways of achieving some of its fascinating promises of independence without the horror of neglect.

Xiao Shi experimented with a number of strategies for managing without family support. While she believed the *Babywise* methods to be quite wrong and even cruel, she was nevertheless inspired to experiment with less-cruel methods. Firstly, she began putting Yingying

down in a borrowed basinet for her naps, gently rocking and feeding her until she slept, but not carrying her around as she had with her now-teenage son. Through experimentation, Xiao Shi discovered it was not so much she believed babies needed to be in constant physical contact, but that babies needed to be comforted physically if tired or upset and crying.

A second area of experimentation occurred when Yingying began to show an interest in solids. According to Xiao Shi and her elderly neighbour, babies should be fed whenever they are hungry, and whatever they show interest in. This mostly involved feeding Yingying pre-masticated *mantou* (steamed bread rolls) from around her fourth month, but also other foods such as fruit, rice porridge, cooked vegetable dishes (none of these cooked especially for the baby, but shared with adults) as well as sugary “teething rusks”,ⁱ milk balls, lollies and sugary drinks. After around one month of eating solids, Yingying became severely constipated, and Xiao Shi began to doubt the wisdom of her feeding strategy.

While not wanting to go the *Babywise* route of preparing or buying special baby foods and feeding them according to a certain routine (which in her mind was “very troublesome” and could lead to problems with eating disorders later on), she did start to think about experimenting with different ways of feeding. She came across me one day during this time while I was sitting outdoors with a mutual friend who happened to be a doctor. Xiao Shi approached us and mentioned Yingying’s constipation to this doctor. The doctor, an aid worker from Europe, never even asked if Yingying was on solids, or what type of solids she was eating. She advised Xiao Shi to drink more water and breastfeed Yingying more frequently. When later Xiao Shi and I discussed this, and I wondered aloud whether the doctor didn’t realise Yingying was eating adult-type solid food including snacks, and whether she would have advised Xiao Shi more specifically if she had.

The particular juxtaposition of Yingying’s constipation, the

incomplete advice of the doctor, the *Babywise* feeding routine, and her elderly neighbour's strong beliefs led Xiao Shi to rethink what she believed about feeding infants. After some discussion, we concluded that the feeding practices of her elderly neighbour and herself had developed during a time where access to processed and sugary foods was incredibly limited. After establishing this, the belief that babies should *completely* "decide" their own diet became a negotiable, although she still strongly believed they should be allowed to eat whenever they liked and as much or as little as they liked of the food available.

In the end, under the scornful eye of her neighbour, Xiao Shi stopped providing Yingying with sugary snacks, replacing them with homemade dishes which she was free to consume as she chose. The constipation eventually cleared up, and Xiao Shi's experimentation with infant feeding led to further changes in her practice of infant health-keeping.



VI

GUARDING LIFE

RETHINKING HYGIENE FOR A BETTER WORLD

More than eighty years ago, Chinese industrialist Nie Yuntai ripped out his Western-style bathroom fittings and replaced them with a simple basin. For many years, Nie had campaigned to persuade the population of China's cities to adopt Western understandings of health and hygiene. But later in life, he gave up his bathtub and his pursuit of 'hygienic modernity', and began writing against the new 'morbid addiction to cleanliness' he saw around him (Lei 2009: 496). After years of arguing that only through Western-style hygiene could China embrace modernity and kick the label of the 'sick man of Asia' once and for all, why would Nie suddenly change his mind so drastically (Hong 1997, Lei 2010a)?

For Nie, the issue was not just whether hygienic modernity was effective in preserving health; but whether it was effective in establishing and maintaining the kind of community he wanted to be part of (Lei 2009). He concluded that the obsessive pursuit of 'modern hygiene' was a sort of save-yourself-first

individualism that could only be implemented by those with the material conditions to do so — the very wealthy. He argued hygiene needed to be a set of simple practices that ‘could be implemented everywhere, including in places of poverty and simple homes’ (Nie 1931, quoted in Lei 2009: 497). He understood hygiene as being something intimately related not just to the functions of individual bodies, but to society as a whole.

In this century, Australasian EC families are also questioning the material conditions necessary for the particular brand of hygiene preferred in their social worlds. Their argument, however, is not just about the health of their societies, but also the health of the planet and its inhabitants. Like Nie Yuntai’s repudiation of hygienic modernity (as imagined and practised in rapidly modernising Republican China), the alternative hygiene assemblage gathered by Australasian ECers functions as a critique of mainstream hygiene. But it is more than this. The ECers and their families constitute a new type of hybrid research collective (Roelvink 2008), where intentional research activities are organised and gathered around matters of concern by researchers outside the formal academy (Latour 2004b).

This chapter returns to the research aims set up in the Introduction (see page 15). The first of these was to make visible the deeply embodied habits and beliefs about keeping babies healthy, which has been the focus of what has come so far. I now move on to more explicitly consider the second research aim, which was to theorise how these hygiene assemblages might change and travel and *re-assemble*. I begin with the problem of socially and environmentally harmful hygiene assemblages, setting up hygiene as a matter of concern for researchers and others. I then move on to consider the multiplicity of possible and already-present hygiene realities, and explore the role of the researcher in making some ‘realer’ (Law 2004: 67). I then move on to describe and (and thus make ‘realer’) two possible interpretations of how hygiene change happens — through awkward engagements creating friction, and through the experiments of hybrid research collectives that have ‘learned to be affected’ by babies and ecosystems. I finish by outlining my vision of a

future 'hygienic modernity' based around the concept of 'guarding life' rather than 'killing germs'.

QUESTIONING HARMFUL HYGIENES

Could hygiene practices favoured by the Western world really be harmful for people and planet? In contemporary times, Sarah Jewitt argues that indeed they are, from both an environmental and social justice perspective. In her article 'Geographies of Shit' (2011) she problematises the 'Northern' preference for expensive and wasteful flush-toilet, water-based sanitation systems, which are not necessarily any more effective than ecologically and economically friendly 'dry' systems. But all over the world, entrenched cultural norms, powerful emotions, and deeply embedded taboos around human faeces combine with 'a lack of academic curiosity' to create barriers in thinking up alternative 'excreta-management systems' (Jewitt 2011: 609, 610). In her work, Jewitt is particularly concerned with the infrastructure of sanitation systems, those large-scale water-based (mostly) public works that are the quintessential marker of 'hygienic modernity' globally. When she refers to alternative 'excreta-management systems' she is mostly referring to alternatives to these public water-based systems found in 'developing' countries. But perhaps 'alternative' is not a helpful way to be considering the matter, as it labels whatever is outside of the water-based systems as already other and minor — whereas in the case of places like Qinghai a diversity of management systems exist and partially overlap, even in cities. In this chapter I use domestic and particularly infant hygiene and health-keeping practices of Qinghai families to take a critical look at this most closely guarded universal of Western thought: hygiene.

There is no doubt the 'wrap and toss' system of excreta disposal used in Indian toilet-less households is problematic (Jewitt 2011). But currently the infant excreta management system used for 95 percent of Australian babies (O'Brien *et al.*, 2009) is not too dissimilar! Although disposable nappy companies

recommend that caregivers flush faeces before disposing of the nappy, the practice is certainly not widespread, with most of it being ‘wrapped’ in the nappy, and ‘tossed’ out in the household rubbish collection bins, ending up in landfills. Like the wrap-and-toss system Jewitt describes, it is a less-than-ideal way to dispose of faecal matter — let alone the paper and plastic waste of a disposable nappy. Jewitt notes that the ‘deeply embedded taboos surround[ing] human faeces... have often created barriers to the development of more effective and/or sustainable excreta-management systems’ (2011: 610). This is true in places with and without public sanitation infrastructure, and with diverse systems of waste management.

It seems most parts of the world have taboos around faeces. Those of us who have been habituated into systems of waste management that require large quantities of water, not to mention disposable hygiene products, often view systems that require more (or different kinds of) bodily contact with human waste with disgust, as taboo. These taboos around systems of sanitation become problematic when environmentally damaging systems spread to become the norm at such a large scale. Given the concerns for social justice in hygiene expressed by writers such as Nie and Jewitt, and increasing concerns about the ecological footprint of the average Australian or New Zealander, the time is certainly more than ripe for openly and unashamedly addressing domestic hygiene and the habituation and spread of different kinds of hygiene practices.

But how do we shift a supposed ‘universal’, such as hygiene? Do we need to publicly condemn and scientifically prove the harmfulness of something millions of people hold dear? If we do that, will people then change their hygiene preferences? As we can see in the case of climate change, just telling people that what they are doing is harmful, while important, is not always enough to activate widespread change. It is not helpful to imagine hygiene as being a matter of rational deliberation and action (that should be changed through the presentation of facts and plans). This thesis has shown that it is more of a messy assemblage, a bundling of trajectories from diverse

hinterlands of interconnected knowledges and trajectories. The voice of scientists or public health experts or the state are mixed in with different disciplines of science and social science, popular culture, marketing, and the deep habituation of bodily practices of hygiene. These voices are just one strand — albeit an important one — in multiple, active and evolving assemblages of ‘hygiene’.

Rather than a ‘matter of fact’ which must be solidly and unequivocally established, the topic of hygiene therefore is best thought of as a ‘matter of concern’ around which research and new realities gather (to use Latour’s terms, see Latour 2004b, 2005).⁸⁵ Our research should consider broader ‘matters of concern’ and work to *construct* rather than *deconstruct* other realities. This means that rather than trying to establish matters of fact, such as the ‘fact’ of handwashing as a necessary hygienic practice, we should be investigating the ‘concern’ of hygiene and working to establish appropriate practices to support our goal of health-keeping. In this way, the role of research is not just to critique and pick apart the ‘facts’ of hygiene, but to work to assemble and enact hybrid hygienes that keep health for all.

MULTIPLE HYGIENE REALITIES

By this point in the thesis, it should be clear that there are multiple hygiene realities ‘out there’ in the world. The multiplicity of hygiene realities present in space is not just a function of a globalised world, where increasing interconnections leads to more and more realities coming into contact with each other. Historically, too, multiple hygiene realities have existed — and while official accounts might often tell stories of the march of a singular hygienic modernity, we can also trace other hygienes present in history, other hygienes which haunt hygienic modernities and provide us with glimmers of

⁸⁵ Latour (2004b) argues that his previous work showing how scientific facts are constructed (Latour and Woolgar 1986) should not be interpreted as a blanket approval for ‘deconstructing everything’. Rather, he argues that *because* facts are constructed, researchers should be more aware of *what* facts we are constructing.

possibility.

Environmentally harmful hygienes are just one of the multiple hygiene realities being enacted at any one time. These multiple hygiene realities are not ‘out there’ in isolation, but interact and travel and reassemble and even sometimes exist awkwardly side by side in the same space at the same time. They are also ‘in here’: embodied and situated and habituated in our own lives, their mundane normalcy blinding us to the multiplicity at work even in our own bodies. As I argued in Chapter One *Thinking Multiplicity*, it is the *multiplicity of reality* that we must grasp if we are to contribute to alternative futures. Some of these hygienes may be harmful — bodily, socially, or environmentally — but they are not the only options available. Other hygiene realities may have been pushed to the margins of mainstream societies, but are potentially less harmful. The question is, can we reassemble hygiene to make some less-harmful realities ‘more real’?

This section sets up my approach to hygiene multiplicity, in order to help us better think about tweaking and reassembling hygiene, and making ‘more real’ those contemporaneous or historical versions that better fit with visions of environmental and social justice. I do this firstly through tracing the multiplicity of hygiene realities present in the Chinese word *weisheng* ‘hygiene’ in *Ghosts of Weisheng* below. This story mirrors some of the concerns of our own time, and gives a sense of some the difficulties researchers face in thinking and researching and enacting hygiene multiplicity. I then go on to explore these difficulties in the section *Making It Up*.

GHOSTS OF WEISHENG

The story of the word ‘hygiene’ in Chinese is one which occupies a junction between Chinese, Japanese, and English languages, histories, and modernities. The word ‘hygiene’ is now translated as *weisheng*, from an ancient word which literally means ‘guarding life’. But its route to modern usage is rather unusual, and reveals much about the multiplicity of hygiene realities present in China both historically and in contemporary times.

The story of translation begins not in the classics of ‘guarding life’, but in *Meiji*-period Japan (1868–1912). In this time of rapid change, concerns around modernisation were central to Japanese scholars and officials (Rogaski 2004). One of these concerns was the establishment of ‘modern’ public health systems such as those increasingly present in Europe and North America, and the associated concept of public hygiene. Rather than translating ‘hygiene’ into a commonly used Japanese word or a transliterated English-sounding word, translator Nagayo Sensei followed the common Japanese practice of finding an elegant word of approximate meaning in classical Chinese. In 1870, Sensei opted for 卫生 ‘guarding life’ (Lei 2009). These characters from classical Chinese are pronounced *eisei* in Japanese, and *weisheng* in Mandarin Chinese.

When the Japanese occupied parts of China during the Sino-Japanese war, they instituted many of their own public health practices and infrastructure. Japanese translators referred to these measures by simply pronouncing 卫生 in Chinese: *weisheng*. But what *weisheng* now referred to was something quite different from its classical origins: not the protection of health or life alone, but the ‘particular type of government structures that are in charge of protecting the general health of the state’s citizens’ (Liu 2001:47, quoted in Lei 2009: 477). This type of public health-protecting enterprise had never been given a name in East Asia before because it was a totally new endeavour (Lei 2009). Some scholars argued that the word *weisheng* never really fitted well with the sense of public health, as scholar of public health Chen Fangzhi (1884–1969) wrote during the Republican period:

The Japanese people have rashly translated the word ‘hygiene’ as *weisheng xue* (Lit: the study of guarding life], which is the origin of the modern Chinese compound *weisheng*.... To translate ‘hygiene’ into the Chinese language, they should have either used *jiankang xue* [‘study of health’] or *baojian xue* [‘study of preserving health’]. Although the compound *baojian* has not existed in the past, it would be the ideal choice because the content [of hygiene] is to guard health and not at all to guard life....

This term has passed through so many hands that it has become incomprehensible (Chen 1934: 2, translated by and quoted in Lei 2009: 477).

Despite these concerns, for the most part the word *weisheng* was taken up. The double meaning continued to retain traces of an alternative hygiene embedded in cosmology and personal health, while it performed its new function as a symbol of China's modernity. Ruth Rogaski sees the role of the word *weisheng* as so central to discussions of China's modernity that she actually *translates* it as 'hygienic modernity'. She comments on her preferred translation:

Today... [*weisheng*] is variously rendered into English as 'hygiene,' 'sanitary,' 'health,' or 'public health.' Before the nineteenth century, *weisheng* was associated with a variety of regimens of diet, meditation, and self-medication that were practiced by the individual in order to guard fragile internal vitalities. With the arrival of armed imperialism, some of the most fundamental debates about how China and the Chinese could achieve a modern existence began to coalesce strongly around this word. Its meaning shifted away from Chinese cosmology and moved to encompass state power, scientific standards of progress, the cleanliness of bodies, and the fitness of races. The persistent association of *weisheng* with questions of China's place in the modern world has inspired me to translate it as 'hygienic modernity' (Rogaski 2004: 1).

Because she focuses on the word *weisheng*, Rogaski's work reveals how important this word and the idea of hygiene have been historically, especially with regards to aspirations of (a particular kind of) modernity.⁸⁶ It is clear why she chooses to translate *weisheng* as 'hygienic modernity'. However, focusing only on the 'hygienic modernity' aspect of *weisheng* works to silence the multiplicity of *weisheng* understandings and experiences in China's recent history.

An alternative understanding of hygiene and *weisheng* is deliberately unearthed by Sean Hsiang-Lin Lei (2009). Using the writings of Nie Yuntai and other Republican-era writers, Lei sketches the boundaries of an alternative hygiene or *weisheng*, articulated in response and opposition to the hygienic modernity discourse. Working discursively, he lays out the boundaries of what he calls 'Chinese-style hygiene', to refer to 'the alternative and specifically

⁸⁶ In Chapter One *Thinking Multiplicity*, I drew attention to the ways in which mothers are conceptually 'lined up' into two categories in northwest China, where 'backwardness' is symbolised by traditional hygiene practices and is negatively contrasted to 'modernity'. One of the words that figured in this lining up is in fact *weisheng*, which I translated as 'hygienic'.

Chinese forms of hygiene that had not been incorporated into (or that positioned themselves outside of) Western-style hygiene' (Lei 2009: 479). This is most clearly made visible in Nie Yuntai's rejection of the accoutrements and individualism necessary for Western-style hygiene, and his promotion of a simple hygiene centred around the welfare of the community and society of which one was a part.

'Chinese-style hygiene' is thus not an unchanging feature of traditional Chinese culture, but a product of a specific historical encounter within the modern age. It involved an absorption of some elements of Western-style hygiene and germ theory, and even 'translated' some traditional Confucian elements of moral wellbeing into 'medical instructions with concrete health benefits' (Lei 2009: 492). It also involved a rejection of certain elements of Western-style hygiene, and a reinforcement of elements of Chinese tradition that contributed to wellbeing at a whole-of-society and a whole-of-person level. Lei examines the intersection between hygiene and community through a number of hygiene examples, such as the custom of eating together.

In Chinese tradition food is shared from central dishes on a table, each person helping themselves with their chopsticks, multiple times at each meal. Western-style hygiene argued that this approach to eating transmitted tuberculosis, and followers of Western-style hygiene often insisted on helping themselves to the dishes first. The problem with this approach is that it only preserved the health of the first person to touch the dishes with their personal set of chopsticks (Lei 2009). In addition to this problem, in Chinese custom it is polite to urge others to eat before you, and also to continue to eat when your host urges you to. Dishing oneself first and eating only the one time would disrupt the entire social and community dynamic of the eating ritual.

Nie argued that the antisocial behaviours of the Western-style approach rendered it *unhygienic*, if one considered the health of the entire *shen* 'body and psyche' or *sheng* 'life' of a person and their community. Alluding to the associations of traditional Chinese medicine, he argued that obsessive

individualist hygiene practice was in fact pathological — it *caused* disease through acts of selfishness and anxious worry about health, which disrupt the flow of *qi*. The overemphasis of the *material* causes of illness, and neglect of the spiritual and psychological links to wellness, could actually result in *more* health problems, even if one were able to avoid tuberculosis.

Lei provides us with many other examples at the intersection between hygiene and community, including communal sleeping arrangements, bathing styles, spitting, fresh air, and nutrition. In a further article, Lei investigates a number of material solutions to hygiene problems raised, including the invention of the so-called ‘hygienic table’ (a ‘lazy susan’ with serving utensils for each dish), which preserved the sociality of eating without transmitting germs (2010). Lei demonstrates that while these alternative thinkers accepted the role of microbes in physical hygiene, they also

spared no costs to emphasize the importance of ‘governing the heart’ and of ‘mental hygiene’, even regarding these aspects as the special contribution of Chinese *weisheng* (Lei 2009: 481).

What Lei calls ‘Chinese-style hygiene’ emerges as a point of resistance to a hygienic modernity focused *exclusively* on microbes and their interactions with the *material* body. Chinese-style hygiene makes visible the ghost present in the word *weisheng*: the tradition of holistically ‘guarding life’. Lei’s work to make this ghost visible is not an easy task, however, as what he is describing does not have its own ‘name’ — that is, *both* the discourses of modern hygiene and Chinese-style hygiene use the word *weisheng* to name something. Lei writes:

One major difficulty in the methodology of researching this history lies in the fact that these alternative and indigenous Chinese discourses on *weisheng*, since they failed to meet with the approval of scholars of public health, never received their own specific and exclusive name. Because they attempted to partake of the same name as the Western concept of hygiene, they embarked on an uncertain and treacherous path. Subsumed under the popular term *weisheng*, they may have succeeded in initiating local endeavours that had little in common with the Western notion of hygiene; on

the other hand, though, it is more likely that they were pushed out to the fringes of Western-style hygiene, to the point of vanishing into invisibility, as a result of this terminological confusion. Furthermore, how can historians possibly ascertain whether a phenomenon that does not have its own name even really exists? And how should they refer to it? (Lei 2009: 478)

But perhaps what is also happening for Lei is the difficulty of imagining and gathering an assemblage. Lei's object of research, these 'alternative forms of hygiene', are referred to within just two pages of his 2009 article with fourteen different terms: 'phenomena', 'phenomenon', 'conceptions', 'practices and ideas', 'discourses', 'term', 'alternative hygiene', 'Chinese-style hygiene' 'endeavours', 'forms', 'practice', 'entity', 'creation', and 'product'. It is almost as if none of the words quite capture the nature of 'hygiene' — is it primarily a practice? Or a way of thinking? Or a bodily habit? Or an enterprise of the state? I think Lei's main difficulty lies not only in the problem of having to grasp, map, and name a rather messy assemblage — as I can attest to in my own research — but the fact that there are *two* such cohabiting assemblages to disentangle. Lei is in fact calling into being *multiple (but interrelated) hygiene realities*, which are overlapping and extending into each other. What Lei calls 'terminological confusion', I call multiplicity.

In engaging with this multiplicity, the role of the researcher becomes something other than that of fact-finder trying to discover if something without a name 'can really exist'. The researcher is participating in *enacting* a reality where this something *does* exist.

Lei does not make visible his own politics of research in his English-language articles (Lei 2009, 2010a). We do not know *why* he wants to grasp what is almost invisible, that which is 'pushed to the fringes, to the point of vanishing' (Lei 2009: 478). Is he interested in better establishing the 'facts' of the history of hygiene? Or is he interested in constructing a space for new forms of hygiene to be nurtured? The question then becomes not what hygiene realities are 'out there' (for there are many), but which do we describe and make 'more real' (Law 2004). Whatever his aim, Lei describes, names, and thereby makes

(more) real a ‘Chinese-style hygiene’. In doing so, we can say Lei’s work effectively gathers a hygiene assemblage where *another hygiene reality* has become (more) possible. Through exploring the partial connections (and disconnections) of the definitions of *weisheng*, Lei gathers microbes, practices, the body, thoughts, emotions, desires, *qi* and air, lazy susans and chopsticks, sleeping platforms and wash basins, the writings of public figures and the practices of the ‘masses’. He names this gathering ‘Chinese-Style hygiene’. In doing this, Lei is pushing at the bounds of the singularity of hygiene, implying not a plurality of hygienes separate and contained but rather a multiplicity of hygiene realities interacting and interconnecting.

One important implication of his study is that the trajectory of *weisheng* as hygienic modernity *could have been otherwise*. He gives us a picture of hygiene as an ephemeral and slippery assemblage (of practices, knowledges, materialities), haunted by multiple could-have-beens, actively evolving and changing in response to the contingencies of history, space, and the intentional actions of people. Another implication of his study is that researchers participate in making some hygiene realities ‘more real’: Lei’s gathering and naming of ‘Chinese-style hygiene’ somehow gives it more solidity, makes it more of a viable option — not just historically but now also. The very naming of Chinese-style hygiene calls it into being. No longer a vague haunting drifting around the fringes of *weisheng* history, it is now given form — a ghost with traceable boundaries, though still ephemeral and difficult to grasp.⁸⁷

MAKING IT UP

Throughout this thesis, I have argued that research methods do not *discover* and depict realities, but rather *perform* or ‘participate in the *enactment* of those realities’ (Law 2004: 45). When successful they make some realities ‘more real’ while pushing others to the fringes of reality. What we know about ‘out there’ is not only affected by the way we seek to know it, but our seeking

⁸⁷ Thanks to colleague Hermann Ruiz for providing this apt metaphor from his own research in Indonesia.

to know it actually participates in the creation of that ‘out there’ and makes possible new ‘out-there-nesses’ (Law 2004). There is no ivory tower.

I have considered my role as researcher as I work to map the shifting hygiene assemblages of EC and *baniao*. One of the questions I am most often asked when I describe my research into these practices is, ‘But how do they keep good hygiene without nappies?’⁸⁸ I could answer this question by explaining how Australasian ECers mostly still use nappies, but take their babies to the potty regularly. I could erase the experiences of ‘misses’ and bare bottoms from the explanation, use quotes like Nadine’s highlighted in the previous chapter to show how clean and hygienic EC families are, according to the expectations of mainstream Australia or New Zealand. This story is entirely possible, and would reflect the ‘majority’ experience.

Likewise, to the more sympathetic listener, I could also explain the ways in which germ-theory-style hygiene is effectively kept in northwest China, where dirty and clean spaces are kept separate conceptually and practically, thus avoiding cross-contamination with germs. I could erase the experiences of the very poor, who use floors and newspapers, disgust, and shoes to keep these spaces separate in their bathroom-less homes. I could tell and normalise the stories of only the richer families who teach their children to urinate on the bathroom floor, and mop it up with an especially-reserved and frequently-washed mop.

But to explain *baniao* and EC in terms of mainstream hygiene expectations does not allow these practices to *challenge* mainstream expectations. In fact it would continue to enact practices that fit with mainstream expectations as ‘more real’. What if the way we practice hygiene in mainstream Australasia is *not* the pinnacle of hygienic modernity? What if other modernities and hygienes have got better options, options that may be practiced by wider groups outside northwest China and fringe Australasia? And what if hygiene

⁸⁸ Australian ECers also get asked this frequently, as noted in the previous chapter where Nadine commented that people seemed to believe that ‘in order to EC, you must have poo everywhere’.

did not have to mean just one thing? Explaining *baniao* and EC hygiene-keeping only in terms of germ theory (and glossing over bits that may provoke discomfort) does not help us understand the *multiplicity* of hygiene.

In addressing these questions, I am coming up against a research decision about what to ‘make real’. I feel myself somehow getting pushed into a position where I have to explain EC and *baniao* either as totally different or exactly the same. I am not alone in this, as Law reflects in the context of academic ‘Euro-America’:

We are being pressed, all the time, to make a choice between singularity and pluralism. Either there is one, one reality, one ethics, one politics, or there are many. There is nothing in between. This pressure to dualist choice is why I take it that we are being pushed up against the enacted limits of Euro-American metaphysics – and, to be sure, being asked to re-enact it. But the dualism imposed by the choice does not follow. Something in between is a possibility (Law, 2004: 63).

Rather than choosing between singularity and pluralism, Law suggests that we can explore the partial connections and ‘fractionality’ between multiple realities. We can participate in research that helps ‘to interfere, to make some realities realer, others less so’ (Law 2004: 67), and thus we can think about and choose what kind of world we want to enact and participate in.

But if assemblages are really so messy and complicated, entangled and multiple — can we really intentionally *decide* to do anything? Is it not just then totally overdetermined by a huge range of contingencies over which we still have no control? It seems one thing to re-read history the history of *weisheng* as multiple, but what can that mean for the future? In the following sections, I address intentionality for future hygiene changes by exploring two ways of thinking about how infant hygiene assemblages shift and re-assemble. *An Awkward Engagement in Hygiene* examines an *unintentional* shift through a moment of awkward engagement ‘sparking’ changes in hygiene practice in Australia. *Hybrid Research Collectives Experimenting for Change* examines some of the same material, but reading it as an *intentional* coming together of

a collective of parents ‘researching in the wild’ (Callon and Rabeharisoa 2003) to enact change based on a shared matter of concern. I then explore the ethics of research enactment and argue that while both types of change occur, it is the latter interpretation that best enacts the future possibilities of a different sort of hygiene reality.

AN AWKWARD ENGAGEMENT IN HYGIENE

In early 2009, the Melbourne-based and Brisbane-based mothers on OzNappyfree decided to hold ‘meet-ups’ in their respective cities. I had recently returned to Australia after my long break mothering, teaching, and writing autoethnography in New Zealand. I had also recently received administrative and ethical approval to change the topic of my thesis and to collect data from OzNappyfree and interview OzNappyfree members. Both groups were interested in hearing about *baniao* in China, and willing to have me along to run a brief focus group during the meet-up. I ran the focus groups by first showing pictures of living and public spaces in Qinghai, showing toddlers and babies and various other *baniao* related material.

At the Melbourne meet-up, we sat on the ground at the Birrarung Marr playground in central Melbourne. I was handing around the picture on the right in Figure 11: An Awkward Engagement in Hygiene, a grandmother and her granddaughter relaxing outdoors in the apartment complex we lived in on Bayi Road. Next to me, Janine removed her daughter’s nappy and sat her on a little portable potty (see the picture on the left in Figure 11). That moment was a defining one for me as a researcher: suddenly, I clearly saw the quite different spatialities of hygiene practice in Xining and Melbourne. I had bodily experience with both types of hygiene, Xining-style and Australian, but as a traveller neither had appeared particularly obvious or shocking to me. As related in Chapter Two *Seeing Diversity*, I had just let my body do what seemed appropriate in each context. Until seeing the two images together, I had not previously considered what is now obvious: both hygienes are

commonly thought of as *universal*. Just as the average Australian or New Zealander coming across split-crotch pants for the first time might react with bemusement or aversion, so too would the average Xining resident in seeing the image on the left of Figure 11, where baby and mother are seated directly on the concrete.⁸⁹ This is why the juxtaposition of the images so clearly reveals the hygiene assemblages — not in a sort of trivial ‘spot the difference’ way, but in a visceral, affect-laden response to different embodied and habituated hygiene universals. This section firstly makes visible the specific hygiene assemblages, then moves on to consider how the awkwardness of engaging with another hygiene assemblage sparks change.

FIGURE 11: AN AWKWARD ENGAGEMENT IN HYGIENE



Source: Author

MAKING HYGIENE VISIBLE

In these two images, the hygiene assemblages of two different spaces are illustrated clearly. In the image on the left, apart from the unusual sight of a small baby using a potty in a public place, we have a perfect illustration of the norms of hygiene practice in Australasia. Janine sits on the ground, as do we all. Her baby is seated on a potty, but her bare feet touch the ground. Her bag, behind her, is full of the requirements for a day out with a baby. Her drink

⁸⁹ If one really needed to sit down on concrete in Xining (and other public places such as buses), it was common to sit on a piece of newspaper or a plastic bag.

bottle is sitting on the ground too. Once the baby has completed its business in the potty, Janine will remove the little plastic bag in the portable potty and place it in the rubbish. If you were to replace the portable potty with a disposable nappy, you would pretty much have a standard picture of Australasian infant toilet hygiene — an assemblage that gathers a variety of materialities and practices to protect spaces from contamination with infant faeces or urine.

In the infant toilet hygiene assemblage gathered around Australasian ECers, the techniques favoured by the mainstream hygiene assemblage are used alongside elimination communication to ‘keep hygiene’. Keeping hygiene here means to protect others and oneself from contamination by potentially harmful germs. The technique of *containment* is used to do this, where the potentially harmful germs present in human faeces are *contained* in a potty, toilet or nappy. Any contamination that results from uncontained eliminations (of any kind, not just disease-carrying faeces but also more harmless urine) must be *decontaminated* — through handwashing, floor scrubbing, nappy or clothes washing and so on. This hygiene assemblage enables (or is enabled by) a very intimate bodily engagement with the environment, as illustrated by Janine and her baby. Adults and children may sit, touch, even lie on the floor or ground in public spaces or homes, with little concern for contamination of disease-carrying matter.⁹⁰

The hygiene assemblage thus includes the materialities of faeces and urine and microbes, and the various containers in which they are contained: potties, nappies, toilets, plastic bags. The assemblage also includes the spatialities of engagement with these materialities: floors and ground firstly, but also landfills, sewerage systems and oceans, tree and cotton plantations providing pulp for disposable products, the places and spaces of design and production of products, even oil extraction for transport or plastic manufacture. The

⁹⁰ This varies according to place within Australia and New Zealand. As I noted in Chapter Two *Seeing Diversity*, our bodies sometimes pick up when this is inappropriate. I have found this type of behaviour less appropriate in my current residential suburb of Sydney. Also, in New Zealand, it is not unusual for people to go out barefoot in public spaces, but this seems less common in Australia.

assemblage includes the subjectivities of the children and adults involved — their understanding of the body and selfhood developed through their habits of eliminating, decontaminating, and otherwise engaging with spaces, substances and others. The hygiene assemblage also includes the socialities established through the habituation and normalisation of this particular form of hygiene-keeping, meaning that challenging this assemblage is not a simple matter of individual decision.

Consider now the picture on the right of Figure 11, where a grandmother sits on a small stool, outside on the concreted public area of the apartment complex. Her granddaughter wears split-crotch pants and little shoes, and is seated on her grandmother's feet. For both, only the feet are touching the ground. Despite hanging out in the courtyard for most of the day, neither have any other possessions with them, aside from the small folding stool. There is nothing particularly interesting about this picture for the average Xining resident, bar perhaps that the toddler's head has not been shaved recently, as is considered hygienic until around the age of three when the hair and head can be more easily washed. Yet this picture also illustrates the hygiene assemblage common to Xining, including the practices and relationships that 'keep hygiene' and health.

In Xining, hygiene is kept in a more overtly spatial way than Australia and New Zealand, using the techniques of *imagination* and *separation*. Particular spaces are *imagined* as quite dirty, whether they are visibly so or not, and people use bodily and relational techniques to *separate* themselves from the dirty spaces. Only the feet touch the floor or ground in most situations,⁹¹ and even in newer, tiled houses where the shoes are removed, slippers are worn on the tiled floors. The ground is generally considered dirty, and often is considerably more dusty and visibly dirty than outdoor spaces in Australia and New Zealand (presumably because of different, finer, soil composition). Babies and toddlers

⁹¹ An obvious exception is in the prostrations of Tibetan Buddhism and some ancestor worship. This has meaning itself — humbling oneself through contact with the dirt. Hui/Islamic prayer generally includes a prayer mat, but the supplicants making prostrations in Tibetan Buddhist pilgrimages may only wear protective coverings on the hands and knees.

wear split-crotch pants that enable them to squat and freely urinate in public spaces and some homes. Children are not permitted to touch or sit on the ground, even in relatively clean spaces. They are physically redirected into a squat, unless they are seated on a bed, couch, or rug. They are thus habituated into a particular engagement with space that requires bodily boundaries between clean and dirty spaces to be strictly kept.

When a baby or toddler urinates on the floor, it is cleaned up using a rag-head mop (sold in any local marketplace and made from recycled or scrap fabric). In rural areas, ashes from the fire are often thrown over urine puddles or even faeces, and these are swept up and discarded. This continues until a child has learned to walk to the appropriate place and navigate into position over a bathroom drain, squat toilet, or potty.⁹² Eventually the child is able to wear ordinary pants and pull them down to use any type of toilet — public, Western-style, outhouse or squat. But even after complete toilet independence has been achieved for the young of the household, the ground is still imagined as essentially a dirty space. It seems that this ‘dirtiness’ is not necessarily related to the potential trace presence of urine (or even faeces); rather, imagining the ground and floor as essentially dirty *enables* a practice of hygiene that includes infant urine (and sometimes, faeces) on the floor.

Historically, farmers came into cities and urban areas to collect night waste for use as fertiliser, and thus excrement has a long history of being considered ‘less a public health matter’ and more ‘an integral element of agricultural production and a precious commodity’ (Yu 2012). Although no longer collected in this way, it is not uncommon to use human manure for farming in rural China. Human waste is thus looked on as a resource, especially in parts of China that are mostly crop farms with few farm animals to provide manure.

The hygiene assemblage thus gathered in Xining, as loosely represented in

⁹² Where Western-style toilets are present, children often learn to go over a bathroom drain until they are old enough to climb onto the toilet. In rural areas, homes often have outhouse non-flushing style toilets, which may be little more than planks over a cesspit with holes cut to squat over. Since this is rather dangerous for very small children, and generally quite removed from the house, they may thus use alternatives for much longer.

Figure 11 includes these historical trajectories of imagining faeces primarily as a resource. It also includes the spatialities of traditional and contemporary housing, waste management, public bathrooms, and farming. It gathers the materialities of dirt, urine, soil, faeces, fertiliser, crops, split-crotch pants, potties, mops, cesspits, ashes, concrete, tiles, toilets and drains. And finally it includes the different subjectivities thus habituated in children and babies and caregivers, played out through different bodily engagements with space and stuff and each other, as visible in Figure 11.

As can be seen in the above discussion, these two hygiene assemblages become more visible when brought into conversation together, even if this awkward engagement is primarily a moment of photographic juxtaposition. The moment of awkward engagement illustrated in Figure 11 not only allows us to see hygiene assemblages, but also to think about how they shift, change, and reassemble.

FRICTION: AWKWARD ENGAGEMENTS SPARKING CHANGE

What kind of friction does an awkward engagement between these different ‘universals’ of hygiene produce? And how does this particular friction come to enable movement or change? In the awkward engagement resulting directly from the focus group interactions with the photo (illustrated previously in Figure 11 page 245), the mothers at the Melbourne and Brisbane meet-ups first noticed that in comparison with *baniao* practice in northwest China, they relied on a lot more ‘stuff’ to practise EC. This was despite the fact that one of their main aims in practicing EC was to *reduce* their reliance on ‘stuff’, in particular nappies and all the associated items for nappy care: disposable nappies, but also cloth nappies, nappy buckets, disposable wipes and liners, special disinfectants and whiteners. Yet because their practices of hygiene demanded the *containment* of eliminations, it followed that their EC practice was characterised by various containers even if some of the other ‘stuff’ of babycare was reduced.

In Brisbane, discussion focused around the potties, buckets, waterproof mats,

training pants and cloth nappies required for the hygienic practice of EC. Compared with this, Xining practitioners relied less on containers (although these were still used) and more on the spatial management of hygiene. This is very clear in Figure 11 where the Melbourne picture is cluttered with the stuff required for a day out with a baby: nearby sits a stroller, a large nappy bag/backpack, a water bottle, and a portable potty. Contrast this with the grandmother in the Xining photo, who can socialise in a public space located much closer to home (in fact, at home), and requires only a small portable stool if she desires to sit, and sometimes, a screw-top jar of tea.

Coming face to face with a different technique of keeping hygiene, Australasian ECers first shared some of their 'failures' in containment/decontamination hygiene with a new confidence. Penny, a Brisbane ECer, throws her nappies in with her ordinary daily cold wash, using no anti-bacterial or special soakers, and trusts the sunlight to get out the stains if any. Others — without carpet — admitted to leaving their toddlers bare-bottomed in the warmer months, and cleaning up any 'accidents' with a rag or flat nappy (although still attempting to get them on to the potty as normal). Most of the mothers were fairly relaxed about disinfecting 'accident' zones, unless faeces was involved, holding that urine is sterile on leaving the bladder so hardly a substance to be worrying about. Others dried out wet items such as bunny rugs or even nappies in the sunshine, reusing them several times during the day and putting them in the wash at the end of the day.

These confessions of 'lax' hygiene practice are hardly world-changing in themselves, but the willingness to question the necessity of 'containment' and hospital-grade sterility was certainly important in terms of domestic duties. These 'lax' practices saved time and energy for other pursuits such as study, work, homeschooling or other time spent with children, not to mention the main goal of reducing nappy usage and thus the environmental impact of their

baby.⁹³ The willingness to question hygienic requirements through EC practice also spilled over into other practices within the home, and in other homes, as the online group took up some of the questions of hygiene and housekeeping begun in the face-to-face focus groups.

A discussion developed online where ECers shared various ways in which they reduced their consumption of disposable hygiene and manufactured cleaning products — some of these through replacement with more environmentally friendly alternatives, and sometimes through changing and reworking their own hygiene standards and beliefs. The focus of this discussion was around the use of cloth products to replace disposable hygiene products such as sanitary pads, breast pads, baby wipes, toilet paper and so on. Several families had switched to cloth wipes not just for baby's bottom, but for all the females in the family — reserving toilet paper for bowel movements. Many of the women had switched to cloth sanitary pads after feeling hypocritical trying to reduce baby's disposable waste while still producing their own. Others had purchased reusable rubber or silicon menstrual cups as replacements for tampons. For many on the list, this was the first time they had thought about or questioned their own use of disposable 'hygienic' products, and certainly the first time that many had even heard of reusable alternatives such as menstrual cups or family (cloth) wipes.

The flow-on effects of discussions around hygiene values showed up in various ways, especially in a popular thread on alternative cleaning products: baking soda, vinegar, salt and essential oils featuring heavily in everything from toilet cleaner through to shampoo and conditioner. Others experimented with a reduced reliance on cleaning products in general — washing children's hair and bodies, as well as other surfaces and fixtures and their own bodies with water only. Posting the results of their experiments on the online forum allowed other mothers to pick up alternative practices with more idea what to

⁹³ Interestingly, for mothers in Qinghai, the environmental benefits of *baniao* were never mentioned, and rarely comprehended if I brought them up as a reason for Australasian women to try a form of *baniao*. As discussed in Chapter Four *Holding Out*, their practice of *baniao* was almost entirely framed in terms of the health of the baby's skin.

expect: for example amounts of baking soda required to wash hair, as well as the specific system to use and store the baking soda in the bathroom (right down to the type of old yoghurt container used to mix the baking soda, the amount of water needed to rinse it, the optimum number of days between washes and so on). Other posts detailed the size and material of cloth wipes, the method of storage both prior to and after use, the method of washing, the number of wipes required for the family and discussions about whether or not to use them for bowel movements and if so the potential risks for illness and how to mitigate against these. The amount of detail into daily routines and practices seemed almost inane at times, but it is these details that save weeks of experimentation with reducing waste and consumption of certain products.

While not everyone took up every alternative, the discussion of these alternatives and the ways in which to go about implementing them certainly *enabled* a shift in the hygiene assemblage of ECers. It also enacted a subtle shift in subjectivity: inviting hygienically modern mothers to become global environmental maternal activists. So it is that what began as an awkward engagement between different spatialities of hygiene became a moment of friction enacting a change in subjectivity — thus re-assembling EC and domestic and personal hygiene into a potentially more sustainable formation.

In a sense, then, the awkward engagement between Qinghai-style and OzNappyfree-style hygienes that occurred at the focus groups could be said to have sparked the discussion on alternative hygiene practices. This discussion likewise led to some actual changes in particular families — one changed to using cloth wipes as a result of this discussion, I started washing my daughter's hair weekly rather than every two days with the knowledge that others did not even wash their children's hair except with water as necessary. Others gave up shampoo for themselves, or their partners decided to go without. One of my supervisors read an early draft and attempted washing her hair less often. Change thus happened, and with this change the potential for future changes. Perhaps also present is the potential for a future where hygienic modernity (and its environmental effects) is less important, where

hygiene comes to embrace a whole range of health promoting or life-guarding practices.

Yet I find myself dissatisfied with this as an endpoint, and it strikes me as a somewhat bitsy way in which to describe the changes taking place. Sure, actual awkward engagements spark experiments and changes — but in a sense it is not the awkward engagements that are of interest here. The fact that people decided to join the OzNappyfree list, and the OzNappyfree OT list, seems more important, because this is what actually enables them to be discussing and producing these knowledges and subsequent changes in their homes and communities. Having joined the webgroups is what *allowed* this particular awkward engagement to take place, and illustrates the *intentional* commitment of these mothers to a different sort of hygiene.⁹⁴

The OzNappyfree list, in effect, gathers together a group where knowledges are exchanged, theory is developed, and testing and experimenting is carried out and reported back on. The possibilities for the future lie more in this deliberate and collective attempt to assemble, than in the somewhat accidental and somewhat isolated moments analysed using the notion of awkward engagements. Could we think of OzNappyfree as assembling a research collective that produces new knowledge about new forms of hygiene that ‘guard life’ in all its messiness rather than merely ‘protecting health’ through killing germs?

HYBRID RESEARCH COLLECTIVES EXPERIMENTING FOR CHANGE

A hybrid collective... interacts in a process of co-transformation and co-constituted action... A hybrid research collective is an assemblage that, through research, increases possibilities for (being in) the world (Gibson-Graham and Roelvink 2009: 327).

J.K. Gibson-Graham and Gerda Roelvink adopt the notion of the hybrid

⁹⁴ Tsing does not specify that awkward engagements must be unintentional — I am merely commenting on my own experiments with using this sort of argument to explain how hygiene changes.

research collective in order to explain the ways in which their own work has been a process of ‘learning together’, with human and more-than-human others (Gibson-Graham and Roelvink 2009: 327). Roelvink (2010) describes the way in which she, as a researcher at the World Social Forum, became part of a ‘hybrid collective creating new worlds’ and ‘enacting a new econo-sociality’. Roelvink describes the hybrid collective, which included all the other participants acting together, and all that made the Forum possible (technologies, tents, food markets and so on, see Roelvink 2010: 117). In the same way, I have come to understand the collective endeavour of the OzNappyfree network (including myself) to be part of a hybrid research collective reassembling or enacting new forms of hygiene.

How does this hybrid research collective then come together, and what does it research? How does it intentionally tweak and reassemble the hygiene assemblage? What kinds of realities does this research enact? I argue that deliberate cultivation of embodied connection with a child through elimination communication shifts the hygiene assemblage towards connection, rather than a reliance on products (although materiality and ‘stuff’ is still part of the assemblage). This embodied connection becomes the basis for a connection with other ECers, and a matter of concern around which intentional knowledge production is gathered. In this section, I outline how these connections are established through learning to be affected, and how the connections inform collective research ‘in the wild’. I finish the section through considering the multiple connections thus enacted in the collective research.

LEARNING TO BE AFFECTED

Although people may *start* EC for a variety of reasons (including environmental, economic, practical, health-related and more), there is something about the actual process of becoming aware of a small baby’s elimination communications that is *potentially transformative* for those involved. Philosopher Sara Ruddick has argued that the nurturing *practice* of

normal mothering leads to a specific kind of concrete non-violent ‘maternal’ *thinking* by mothering practitioners, with potential for building peace (1989). In the same way, the *practice* of EC and *baniao* lead to particular type of embodied engagement with babies, whereby practitioners ‘learn to be affected’ by subtle communications that do not normally impinge on the awareness of mainstream Australian or New Zealand society. This has broader transformative potential too.

‘Learning to be affected’ is a phrase I have drawn from Bruno Latour (Latour 2004b), who uses it to refer to the ways in which bodies learn to be more receptive to the world around them. Economic geographers drawing on this work (such as Cameron *et al.* 2011 and Gibson-Graham and Roelvink 2009) are mostly concerned with the ways in which bodies learn to be affected by the ‘more-than-human’, and the potential for inspiring empathetic environmental action and social change. Gibson-Graham and Roelvink argue that a collective process of ‘learning to be affected’ brings together an ‘increasingly differentiated world’ that allows for ‘new possibilities for living and acting’ together, and together with active Earth-others. In this chapter, I am interested in the ways in which parents ‘learn to be affected’ by the elimination needs of their children, and how this works to inspire further collective experimentation that builds on this connection.

The basic idea behind learning to be affected is that the body is an interface, which can be trained to connect with others in various ways. Latour (2004b) gives us the example of the ‘Nose’, trained in the perfume industry through the use of odour kits until it is able to distinguish a wide range of odours not distinguishable to those who have not learned to be affected in this way. Cameron *et al.* (2011) give examples of learning to be affected by country, by climate, by butterflies and bees and gardens in a way that is *embodied* and not easily rationalised. I am particularly interested in the relationship between the *intentional* aspects of setting out to ‘learn to be affected’ and the *unintentional* and flow-on transformative effects of this.

Both the infant hygiene assemblages under consideration here include a deliberate training period where mothers and others ‘learn to be affected’ by the baby’s embodied communications regarding elimination. As they learn to communicate with the baby, his or her signs and signals for impending elimination become increasingly differentiated. In turn, the baby also learns to be affected by the particular responses and cues of the caregivers, increasing their ability to communicate and the diversity of their forms of communication.

In Xining, this interfacing happens primarily during the *yuezi* period of ‘lying in’. During the initial part of this period of thirty to one hundred days, the grandmother or other accompanier takes responsibility for the baby’s eliminations with the support of soft *niaobu* cloths, split-crotch pants, and a wide basin. During this time, the new mother and baby are not permitted to go outside, and in many cases the mother is also discouraged from watching television or reading or any other activity. She is encouraged to eat and sleep and make breastmilk (through special foods and six meals per day). This period is justified mostly in terms of the *mother’s* health, but its adherence also allows a sustained period of learning to be affected by the baby — its signals and patterns for feeding, sleeping, and eliminating in particular. This *yuezi* period is effectively a time of important transitions, where the mother, baby, grandmother and other family members transition into their new relationships and family roles. By the end of the confinement period, the elimination patterns are well-known by the family, and the baby responds bodily to holding out and other cues with elimination.

ECers also put themselves through a period of training and learning to be affected. Some begin by removing their baby’s nappy and holding it wrapped in a towel for a certain amount of time each day, making an effort to observe when the baby eliminates and any signs that precede this. Others may take note of the common signs listed by others on OzNappyfree, or in books on the subject. When their babies appear to give one of these signs, they respond by holding the baby ‘in position’ over a potty or bucket or sink. The process of

response is an important part of learning to be affected (and this is perhaps not always immediately evident in the use of the concept with reference to the more-than-human). With this relationship, if the signs are not responded to, the conversation is one-sided and eventually grinds to a halt. If the signs are responded to fairly promptly and fairly consistently over time, they may develop into more deliberate signals through reinforcement and response. Eventually the ECing caregiver may also develop an embodied intuition that does not require deliberate ‘signal and response’, because they have learned to be *bodily* affected by the baby’s signs.

In both Xining and Australasian *bainiao*/EC practices, the *bodies* of mother and baby are each affected or moved by their ‘relationships with the wider body-world or collective body’ (Roelvink 2010: 112). The bodies entangle and (re)connect forming a mother-baby collective that is more differentiated than the mother-baby collective embodied in pregnancy. Learning to be affected has therefore increased this mother-baby collective’s options for hygiene-keeping action.

It is worth noting that this bodily interfacing between mother or caregiver and child happens outside of EC, although I think the EC interface is of particular interest. Breastfeeding mothers commonly read embodied signals (from their own and their baby’s bodies) in knowing when to feed. Parents read their children’s faces in ways that others cannot, knowing when they are just about to cry, when they are amused, scared, or going to vomit pink fizzy drink all over the lady on the bus. But all this gets so tied up in our gendered and social expectations of parents and children that it becomes difficult to see the ways the ‘learning to be affected’ process happens. With EC, the *deliberate* cultivation of this awareness makes it more visible. The awareness thus cultivated is of special interest because with greater awareness of one’s relationship to others, in the first instance one’s baby, the resultant assemblage of hygiene has shifted towards *embodied and subjective connection* rather than a reliance on material hygiene products or *stuff*.

How and why does this happen? I suspect that the embodied connection cultivated and deliberately practised leads to a transformation in thinking and knowing, where *the connection between baby and caregiver* becomes the arbitrating factor in judging the various hygiene methods, universals, and products that shift in and out of the assemblage. We have already seen this in the failure of disposable nappies to take hold in Xining and Qinghai, where mothers and others spoke of the differentiated needs of babies' bottoms definitively, needs which were not served by the use of disposable nappies. The small 'gap' left for disposable nappies to enter into the infant hygiene assemblage was therefore constrained by the fact that caregivers had *learned to be affected* by their babies' bottoms, which had come to be seen as unique parts of the body with special, differentiated needs. And this is not just true for hygiene directly related to bottoms — in the Interlude on page 221, Xiao Shi's circumstances provided an opening for changes in her infant sleeping and feeding hygiene practices, yet the opening for these changes was ultimately constrained by her embodied connection to Yingying's communications.

Here we have an important kind of knowledge production, one which is gathered around the specific hygiene and health needs of a baby, as interpreted by its mother and other caregivers operating in an entangled, embodied, mother-baby collective. Experimentation occurs, but within the constraints of embodied connection and the body's knowledge of the other. This collective research, experimentation, and knowledge production can occur in conversation with others and in the gathering of broader collectives. The mother-baby collective acts within broader hybrid collectives to experiment and produce knowledge about hygiene, as illustrated in the Interlude in the interactions between Xiao Shi, her elderly neighbour, the European doctor, and myself. It also can occur (and is occurring) as mother-baby collectives gather together into hybrid research collectives in virtual spaces such as the OzNappyfree webgroup, which I will now move on to discuss.

RESEARCH 'IN THE WILD'

...it might be fruitful to consider concerned groups as (potentially) genuine researchers, capable of working cooperatively with professional scientists. In so doing, they invent a new form of research, which we propose to call research 'in the wild' (Callon and Rabeharisoa 2003: 195).

The experimentation and knowledge production discussed in the Interlude are effectively a form of research, research that is outside the formal academy or 'in the wild'. Callon and Rabeharisoa developed the concept of 'research in the wild' through their work with the French Muscular Dystrophy Association. The association collaborates with professional scientists to produce new useful knowledge about the disease. In the case of muscular dystrophy, the embodied experience of the disease is critically important to knowledge about the disease, yet is difficult to study 'from the outside' or 'in the laboratory'. Patients and parents thus develop methods to document life with muscular dystrophy for use by scientists, using photos, journals, testimonies and so on to collect and convey the diversity of bodily experiences of life with muscular dystrophy. Their research 'disrupted the discourse representing patients as... a single homogenous terminal case' (Roelvink 2010: 113). In a similar way, OzNappyfree parents use methods that capture embodied experiences and connections to produce knowledge that differentiates the variety of babies' bottoms and experiences of sphincter control, toileting, communication and so on. They also disrupt a medical discourse of homogeneity, in this case, the presumed homogeneity of the infant sphincter, communication, and hence toileting capabilities.

Researching embodied experiences is not the only reason for research 'in the wild', however — sometimes the professional researchers are just not as motivated to research matters of deep concern for particular groups in society. More 'domesticated' forms of research have traditionally been organised around 'matters of fact' rather than 'matters of concern' (Latour 2004b), where our research has intended to produce more and more accurate facts about the world and its inhabitants within our particular discipline. Increasingly, social

scientists are doing research that does more than just critique or uncover facts, and there is a groundswell of affirmative and reparative forms of critique that work to construct possibilities in particular areas of concern (Brown *et al.* 2011). But for researchers ‘in the wild’, organising around matters of concern is a distinctive feature of their work, being mostly uninhibited by the established disciplines of professional research. It has even been argued that historically, it has been amateurs ‘in the wild’ who have made big breakthroughs in research fields as disparate as computing, palaeontology, and physics, *precisely* because of their ability to obsess over a matter of concern and go against established wisdom (Hitt 2012).

In the case of OzNappyfree, the collective (and I) argue that contrary to popular belief in Australia and New Zealand, babies *can* actively participate in toileting, even at just a few days old. They may not be able to physically ‘hold on’ to urine for significant periods of time, but they *can* actively *release* their sphincter muscle and thus respond to toileting cues. If babies continue to practice releasing their sphincter muscle, it is possible for the exercise to enable full bladder control to develop well before the age of two years old cited as ‘normal’ in Australia and New Zealand. But how do OzNappyfree members and ECers (and I) *know* this? Is this knowledge reliable? How does their research process compare to that of a university or medical researcher?

In the case of muscular dystrophy, Callon and Rabeharisoa point out that research is necessary in *both* laboratory and ‘wild’ contexts. They argue that ‘lay’ and ‘scientific’ research are complementary, refusing to place one over and above the other as the final arbiter of truth or usefulness. The parent-practitioners of EC would no doubt agree — in fact many of them work within the medical establishment as nurses, midwives, doctors and therapists, and others work in universities as scientists or researchers, or are studying in any one of these fields. Most of the members actively draw on ‘scientific’ research in theorising and making claims about their EC practice. Yet still, at some significant points, the knowledge produced by OzNappyfree *contradicts* that of the medical establishment and published research. At times, the areas of

research interest to OzNappyfree members are of little interest to the wider research community (or funding bodies). Research questions such as ‘how can we keep hygiene in a more sustainable way, without hygiene products?’ is a question not likely to be funded in medical research, and certainly not funded by major pharmaceutical or health product companies! Moving forward in producing knowledge about EC is therefore done *almost entirely* through hybrid collectives of lay researchers.

The mother-baby collectives represented by OzNappyfree members (and more intensely OzNappyfree OT members who discuss a wider range of topics) are also engaged in a *collective* process of learning to be affected. The mother-baby collectives connect with each other via the technologies of modern computers, phones, the internet, wireless, and cabling to form a hybrid research collective gathered around the concern of hygiene. In this hybrid research collective, ideas are tested and experimented and reported on, and then adopted and habituated by other group members and their families. Because of my connections, the hybrid research collective extends out into northwest China, where my writing and photos represent the mothers and grandmothers who have resisted disposable nappy use and experimented with sleeping and eating hygiene through engagement with foreigners (see the previous interlude). The hybrid research collective also extends to others, firstly the children and babies entangled with the bodies of the OzNappyfree members in a multiplicity of little collectives, and secondly the non-human such as microbes and the previously mentioned technologies enabling communication. The hybrid research collective also includes the webgroup services of the company Yahoo!⁹⁵

The kinds of research undertaken have been described in Chapter Five *Travelling Practices*, where EC is analysed and theorised by its practitioners, and new knowledge is produced through collective discussion,

⁹⁵ Yahoo! prides itself on ‘making the world a better place through giving people the tools and context to help them take action’ (<http://forgood.yahoo.com/>).

experimentation, and refinement. For example, in the discussion related in the section Toddlers to Toilet-Trainers (page 208) about whether to ‘offer’ pottyopportunities or wait for children/babies to ‘ask’ for them, members posted their philosophy and theory, their experiments, and their results. The diversity of results does not take away from the validity of this research process — in fact, it illustrates the flexibility of EC as a process of two-way *communication*.

Through the practice of elimination *communication*, OzNappyfree members had already learned to be affected by the unspoken communications of their children. I personally came to be affected by this after a series of battles with my then-two-year-old daughter. In desperation, I posted to the OT group my issues with hair-washing, asking for suggestions to elicit my daughter’s cooperation that would respect her communications of dislike. Instead, I received from group members a (surprising) challenge to my insistence on hair-washing, in light of the discussions that had already played out about the unnecessary use of cleaning products such as shampoo.

Another group of parents may have just insisted that children learn to cope with hair-washing, but this group had already learned to be deeply affected by the non-verbal communications of their children in the practice of EC. Beginning from the assumption that my daughter had a valid point, various members researched and posted links to information on the chemicals in shampoo and toothpaste, and the reasons for their inclusion in standard products (they are a cheap way to add foam, which we habitually expect from these products). Others posted links to research articles and radio programmes on skin health and dermatology. Others, of course, posted their experiments with alternatives such as baking soda and apple cider vinegar, mentioned previously, going into excruciating detail about how much of each to use, in what kind of container, and methods for rubbing it into adult or children’s hair. Others posted their long-term reflections on this (one mother of teenage daughters, for example), while others posted in detail the day-to-day progress until their body adjusted to life without shampoo.

Here, it is clear that through an openness to listening to the child-other, an entire collective research endeavour was spawned. I was not the first to ask this question, and it regularly arises and the process is repeated and refined, until a number of research conclusions seem to have been collectively reached:

Shampoo is unnecessary for good hygiene, and certain kinds are harmful to the health of the skin, the eyes, and also waterways.

You can wash your hair with just hot water and a lot of rubbing.

You can do this very irregularly with children, and have no smelliness, oiliness or dirtiness, provided you brush or comb out any food or other stuff that gets in their hair.

Alternatives to shampoo that have been shown to work well by this collective are a baking soda and water paste, followed by an apple cider vinegar and water rinse; conditioner only; sorbalene; eggs; lemon juice; rosemary-infused water.

It takes a period of time for your hair to adjust to a different regimen, and may involve a period of oiliness. Brushing the hair a lot seems to help redistribute this. Eventually the scalp settles down and stops producing so much oil (theorised to be a response to the stripping effects of shampoo).

Hair may look a different colour or have a different texture from what one has been used to under a shampoo regimen.

Cleaning hair has been done differently in different places and different historical periods.

Some types of hair do not respond very well to this regimen at all, especially those with very fine or blonde hair, or a large quantity of hair, or those that sweat a lot.

People have varying attachments to nice-smelling hair, that can be achieved through the use of light essential-oil-and-water sprays, or coconut oil as is common in India.

A number of organic, plant-based herbal products such as shampoo bars are available in Australia and New Zealand that can be

used by those who do not seem to adjust to 'no 'poo' as the practice is referred to.

One can also drastically reduce the frequency of hair-washing with shampoo, with a transition period, for those not willing to go completely "no 'poo".

It is clear that the hybrid research collective gathered around OzNappyfree has come to be affected by children's communications of discomfort to such a degree that the hygiene regimen comes to be questioned before the child. Through a collective research process, the group gathers a vast assemblage of information from formal academic sources and lay experimentation. This research not only sparks new thinking of possibilities for hygiene, but it also results in changes in material conditions and in subjectivity. It thus tweaks the assemblage towards one which better incorporates the needs of babies and ecosystems. It enacts a particular hygiene reality that experiments for change while prioritising the connection with babies and children.

ENACTING MULTIPLE CONNECTIONS

Hygiene assemblages can thus shift, be reassembled, and thereby provoke social change. They may do so through hybrid research collectives gathered around concerns of hygiene. These hybrid research collectives contribute to the development of different kinds of subjects, adults who are 'affected' by babies and children, and babies and children and adults who are 'affected' by the world around them. Being affected by others is the first step in empathy, and empathy is implicated in our care for others and the world around us. This is important in thinking about how positive social change might take place in a way that considers the needs of different groups. Cindi Katz argues in her longitudinal study of modernisation and development in rural Sudan that "development" often takes place on the backs of children' (Katz 2004: 84). It is well-established that development often takes place at the expense of the planet. An approach to social change built on empathy towards children and non-human Earth-others might lead to very different kinds of social change.

The idea that empathy and being affected by others leads to a better world is not a new one for ECers, or for researchers and activists ‘in the wild’. Ingrid Bauer, a lay researcher who self-published her book *Diaper Free!*, states after long engagement with the EC international community:

...through learning to recognise and respond promptly to your baby’s elimination needs, you strengthen skills and values that will last you and your child a lifetime. You enhance your relationship, your parenting, your life (Bauer 2001: 219).

She believes EC helps develop a practice of valuing relationship, responsiveness, and receptivity over false convenience — that it enhances the connection between parent and child in a way that has resonating effects long after toilet independence has been achieved, in the lives of both parent and child. Although she does not explicitly use the idea of mother-baby collectives joining others in hybrid collectives, she does emphasise the embodied, intuitive connection that can develop through the practice, and the idea, that this connection leads all those involved to develop empathy with others.

A similar argument has been developed by academic researcher Sara Ruddick, in her 1989 book *Maternal Thinking: Toward a Politics of Peace*. She argues that the embodied practices of mothering — birthing, nursing, nurturing — encourage a certain kind of thinking that can deal with complexity, tolerate ambiguity, and multiply options in order to respond concretely to specific problems (Ruddick 1989: 3). She argues that this thinking has potential for a broader politics of non-violence and peace. Learning to be affected by one’s children (or the demands of one’s children, as Ruddick puts it) develops an appreciation that ‘the world and other persons, including children, are not entirely subject to one’s control’ (as summarised by DiQuinzio 1999). The world of mothers is thus increasingly diversified through learning to be affected by the act of nurturing children.⁹⁶ Likewise, the various goals of mother-work can be at odds with one another, meaning that maternal thinking involves ‘analysis of its conflicting goals within specific material and

⁹⁶ Thanks to Gerda Roelvink who pointed this out to me.

social contexts, in order to determine the action most likely to accomplish these goals to whatever extent possible in that context' (DiQuinzio 1999: 120). To translate all this into the terminology I have been using: mothering, as a practice of learning to be affected, may provoke thinking multiplicity and enacting research around matters of concern.

OzNappyfree is a hybrid research collective involving mothers. It engages in the specific mode of maternal thinking and conversation described by Ruddick (1989), where specific problems are concretely responded to in light of larger, sometimes conflicting goals. This hybrid research collective, while focusing overtly on mundane matters (of babies' eliminations, and body hygiene practices) works to habituate and enculturate a particular type of 'affectedness'. This standpoint is one which does not require singularity but is comfortable with multiplicity, and one which is serious about fostering interconnectedness and responsiveness. Maternal thinking and conversation is not limited to matters of child-raising, but extends into other arenas as the hybrid research collective draws on its members' various skills and hinterlands. These mothers are also scientists, health professionals, artists, activists, home educators, and they gather around the matters of concern of elimination communication, parenting, hygiene and health.

The hybrid research collective is not just one of mothers, but also involves children. Although children only 'speak' to the hybrid collective through their mothers, they are, in fact, the whole point of the research endeavour. It is *their* bodies that are being evoked in the EC research, and it is *their* future world that the collective hopes to enact differently. The connection formed between parent and child (and children and their bodies) through the EC practice is also theorised as being important to the future of the world.

The argument goes as like this: psychologists argue the ability or opportunity to form connected relationships as a child works to develop empathy (Karen 1998, Karr-Morse and Wiley 1997). Related arguments are that becoming more aware of one's own body allows greater awareness of the world around

(Gronda 2010, Naess 1995, Plumwood 1993). EC provides ongoing opportunities for connectedness with the parent and the body (Bauer 2001, Buckley 2005). EC thus potentially deepens empathy development and awareness. This empathy and awareness has the potential to enable a ‘collective shift in human consciousness’ (Grille 2005), where deeply empathetic and aware humans work together to create a new ‘social ecology’. In fact Sydney psychohistorian Robin Grille sees that meta-collective as being an already-present reality:

Today almost two million organisations exist worldwide promoting social justice, indigenous rights and environmental sustainability – striving for a common purpose despite the fact that most are unaware of each other, that there is no stand-out leader, no figurehead and no unifying manifesto. This is suggestive of a collective shift in human consciousness: we seem to be poised on the threshold of a more empathic, ‘we-centred’ rather than ‘me-centred’ social ecology (2005: 387).

Grille thus invokes a meta-collective acting to change. And, while Ruddick argues the practice of *mothering* directly alters the *adult* involved and thus the collective in which the adult is embedded, Grille argues the practice of connected parenting produces different kinds of *children* who become different kinds of adults producing a meta-collective of *grown-up children*. While the academic in me is repelled by certain aspects of Grille’s teleological argument, I am intrigued by his claim that this collective of connected children are the ones changing the world for the better, and that we are poised on the threshold of a new, more empathic social ecology. But is it just when they/we grow up? Cannot children as children be involved in world-changing, as emotionally intelligent, fully human beings even if not yet mature?

In the hybrid research collective of OzNappyfree, we have seen that these babies and children already participate in the research and knowledge production of the collective, as essential and full partners. They are the ones most often generating the concrete research questions and challenges, and they are the ones that are learning to be affected by the world around them. They are not interested in ‘hygienic modernity’, an area already habituated into different bodily experiences of the world. They also insist on multiplicity:

what worked for the mother-baby collective of child one will not work with the mother-baby collective of child two; what was ‘real’ for the first three children is not ‘real’ for the fourth.

Hybrid research collectives thus allow for a certain measure of intentionality in researching and reassembling hygiene for a better world. But they also gather a range of actors together in research, including babies and children, internet providers and forum hosts, servers and smartphones, microbes and monitors, each with varying degrees of intentionality. Although in one sense the explanation for change via hybrid research collectives is still ‘bitsy’, using this explanation enacts a more deliberate social change. Like Lei ‘calling into being’ his Chinese-style hygiene, my use of the hybrid research collective idea also ‘calls into being’ and names a hybrid research collective: OzNappyfree. In sharing the idea with OzNappyfree and OzNappyfree OT members after a conference paper (Dombroski 2012), the feedback was mixed: some liked the idea, some laughed and called it ‘academic talk blech’, while others played down their abilities to research. Still, the guarding-life research continues. A recent extremely lively and well-researched and referenced discussion on dietary fats included consideration of the environmental and health implications of different types of edible oils. In the week of completing this chapter, there are threads open with members actively researching dietary requirements for ‘fussy’ eaters, the role of touch and unwanted intervention in birthing outcomes, child development and realistic expectations for saying ‘sorry’, and food intolerances via breastmilk in very young babies.

Whether or not this hybrid research collective chooses to take up the name, they are enacting and enabling different hygiene and health-keeping realities that coalesce around connection. In fact, the group description of the OzNappyfree OT group, publicly available on Yahoo!, reads, ‘A parenting group predominantly for Australian and New Zealanders who are raising their families (babies, toddlers, children, teens) upon the basis of mutual respect and communication’. Here, we can see that the connection fostered through EC has become the basis for gathering this hybrid collective together, and

underpins all the research activities that take place on this virtual space. This is a collaborative project of ‘guarding life’, ‘in the wild’.

CONCLUSION: GUARDING LIFE

Before disposable nappies, scented baby wipes and sanitary pads were even invented, Nie Yuntai was already critiquing the ‘obsessive pursuit of the material conditions necessary for hygiene’. In fact, he even argued that this morbid addiction to cleanliness was pathogenic in itself, causing sickness through the disruption in *qi* that came through promoting the health of the individual above connectedness to the collective. He invoked a collective of people beyond himself to challenge harmful hygienes. He asked his contemporaries to consider a simple form of hygiene, that can be implemented everywhere, including in places of poverty and simple homes, that does not obsess over germs and microbes, but is balanced with a consideration of the total health of the body and the society. He asked that *weisheng* go beyond protecting health, and to instead guard life.

In 2012, in a time of climate change and inequality, the challenge is still pertinent. I have argued in this chapter that we can best guard life through working collectively to re-assemble and enact hygiene realities around *connection*. Like Nie, I want to re-appropriate *weisheng* and hygiene as being more about ‘guarding life’ — life in all its forms, from children to oceans to microbes and back. I have asked how we might reassemble a hygiene that ‘guards life’, and how we might enact a hygiene reality where ‘guarding life’ is habituated. I have proposed that we might do so through gathering in hybrid research collectives around matters of hygiene concern.

As we have seen in the research and changes sparked by OzNappyfree and OzNappyfree OT members, an ethic of ‘guarding life’ through connection can be enacted and habituated in ourselves and our children, as we learn to be affected by others. Re-imagining ourselves in connection with Earth and

others provokes us to question our deeply-held hygiene taboos and inspires us to start where we are to reshape and reassemble our harmful hygienies into configurations that are less resource-consuming and waste-producing. We might dare to hope for and work towards guarding and nurturing life collectively, and thus towards different modernities, different realities, and a better world for our babies and Earth-others.

CONCLUSION

In this new Earth era, social change must encompass different ways of living with our planet and each other. In this thesis, I have argued that these changes can come through creative thinking that explores the multiple contemporaneous realities present. I have rejected teleological arguments that assume change comes about through global homogenisation, and have provided detailed accounts of changes that have come about through complex and contingent interactions between multiple trajectories, multiple modernities or multiple realities.

This thesis, too, is one of multiple possible realities. Sometimes this is visible: when I discuss the contingencies that brought it into being, or when I interpret the same research material as firstly awkward engagements sparking change, and then hybrid research collectives enacting change. I have assembled a thesis from a number of different piecemeal trajectories, pulling together an argument, research design and fieldwork that could easily have been otherwise. It is potentially, even now, fluid and dynamic and multiple — it is printed and bound at a particular moment according to the university calendar but still exists in multiple versions on my hard drive. Some of the decisions of enactment were intentional, *deciding* what realities to enact as ‘more real’, but much of the way things turned out was responding to contingencies. In a sense, though, that is what learning to be affected is all

about. We learn the languages of others and respond to their communications — babies, the planet, our partners and supervisors, our most influential friends or social groups, the debates in the literature and media. This thesis is my response to all that — it has been gathered from a vast hinterland of people, places, theories, realities, experiences, modernities and ideas.

My response has been to demonstrate that these ‘other modernities’ may harbour glimmers of possibility for different Earth futures — different ways of being with others in space, ways that can travel. I have followed the twists and turns of the travelling practice known as *baniao* and the ways in which it is active in gathering different assemblages of hygiene. Finally, I have examined the ways in which these different assemblages of hygiene have been re-assembled in new configurations through collective experimental research by non-academic researchers. In this final chapter, I revisit each of the key steps in my argument and lay out the key contributions of the thesis. I tease out some implications for a post-development approach to hygiene and social change more generally, where the nature and direction of ‘development’ is no longer self-evident, where the discourse of change is ‘generative, experimental, uncertain, hopeful, and yet fully grounded in an understanding of the material and discursive violences and promises of the long history of development interventions’ (Gibson-Graham 2005: 6). In doing so, I demonstrate how to operationalise the concept and practice of a new hygiene and research practice that works to guard life, for infants, communities, and Earth-others.

BETTER WORLDS IN THE MAKING: A SUMMARY OF MY ARGUMENT

This study has addressed the issues of social change in a climate-changed world primarily through the topic of hygiene and health-keeping. I have argued that because concepts of hygiene and modernity have been linked inextricably in recent history, and because hygiene is deeply embodied and normalised for each of us, the *diversity* of workable hygiene assemblages ‘out there’ is somehow obscured. I have contended that hygiene assemblages

reliant on disposable hygiene products, water-based sanitation systems and ‘killing germs’ need to be rethought. These hygiene assemblages are not only problematic because they are resource-depleting, but also because they assume that hygiene and health-keeping of humans is somehow separate from the health-keeping of the planet and our Earth-others. Making alternative hygiene assemblages visible is essential in increasing our options for better hygiene and health-keeping for all.

In this thesis, I have addressed the problem of hygiene difference and visibility. As per my first research aim, I have *made visible* these deeply embodied practices of infant hygiene and health-keeping in the contemporaneous modernities of Xining and Australasia. As per my second research aim, I have *detailed the ways in which these assemblages shift and change* in and between these contemporaneous modernities. Finally, as per my third research aim, I have *contributed to possibilities for future change* in the area of health and hygiene and social change more generally. These research aims were addressed mostly in this order, although the dynamic nature of hygiene assemblages has meant that in the very act of *making hygiene assemblages visible*, I was also seeing them *shift and change*. In this sense then, I was also already *contributing to future change and possibilities*.

I began to clear the way for making hygiene assemblages visible in Chapter One *Thinking Multiplicity: Undoing Teleologies of Mothering Modernity*. In this chapter, I contended that economic difference, ethnic difference, and differences in mothering should not be conflated, nor should these differences be lined up into the categories ‘backward’ and ‘modern’. I drew on and extended feminist geographies to undo these teleological understandings of difference, through envisioning space as multiple and relational (Massey 2005), and the economy as diverse (Gibson-Graham 2006). I situated mothering practices in place, yet also argued that they can travel and change and produce multiple maternities and modernities. It is in this multiplicity that I found glimmers of hope, where practices in out-of-the-way places can travel against the flow of presumed teleologies and challenge some of the problematic

practices in the very strongholds of hygienic modernity.

I continued to work on making visible these hygiene assemblages in Chapter Two *Seeing Diversity: Vulnerability, Possibility and Embodied Ethnography*. In this chapter, I drew on and extended the work of anthropologists and geographers to develop an embodied ethnographic methodology. I argued that through surrendering to the embodied vulnerabilities of maternity, the researcher is able to open up further possibilities for seeing hygiene assemblages. I reconceptualised my site of research as the relational space of my own body as it lived, moved and mothered on the edge of cultures in place. I then outlined the ways in which this site of research awkwardly engaged with others and spaces to make visible the assemblages of infant hygiene present.

Chapter Three *Unhomogenising Milk: Embodying and Situating Global Changes* begins to describe the hygiene and health-keeping assemblages in more detail, and the ways in which they are shifting and changing. I used my method of embodied ethnography to make visible the ‘body multiple’ produced by interactions between biomedicine and traditional Chinese medicine. Drawing on and extending medical anthropology and science and technology studies, I argued that the interactions of these two medical traditions at the site of the maternal body sometimes produced negative outcomes for breastfeeding. I showed how globalisation is *not* a homogenising force turning mothers towards the commodification of infant feeding in the form of artificial formula. Rather, infant feeding is a practice that results from a number of different global interactions, where universals awkwardly engage to produce openings for artificial formula to enter the infant health-keeping assemblage. I argued that although these openings *enable* changes in the health-keeping assemblage they do not *necessitate* them.

In Chapter Four *Holding Out: Infant Bodies and Spaces of Hygiene in Xining* I finally turned to the babies’ bottoms mentioned in the thesis title. In Xining, the traditional practice of *baniao* infant toileting is embedded in the same complex assemblage of health-keeping and hygiene as infant feeding. But in

this case, the opening for commodification has been constrained, with disposable nappy consumers using less than one disposable nappy per day. I argued that the constraint is located in the particular embodied connections established through the practice of *baniao*, alongside the understanding of babies' bottoms as universally delicate and unsuited to enclosure in nappies (whether dirty or clean). In this case, commodification was constrained and the assemblage shifted only slightly.

I then connected the practice of *baniao* to the practice of elimination communication in Australia and New Zealand. In Chapter Five *Travelling Practices: Hybrid Hygienes in Australasia*, I detailed the hygiene assemblage gathered by practitioners of EC in a quite different hygiene and health-keeping environment from that of Xining. I showed how the practice drew on *baniao* and similar practices in out-of-the-way parts of the world, re-imagining infant toileting (rather than nappies) as the global norm. Here, I argued that not only was homogenisation of infant care practices *resisted* in the case of *baniao*, but the practice of *baniao* has actually *travelled and contributed* to a reworking of hygiene assemblages in Australia and New Zealand. These hybrid hygienes were assembled through global, long-distance and cross-cultural interactions, some of which happened through my unwitting intervention.

In Chapter Six *Guarding Life: Rethinking Hygiene for a Better World*, I returned to the final research aim of contributing to future hygiene changes. The chapter related directly back to Chapter One *Thinking Multiplicity*, and detailed the multiple hygiene realities present in place and history, while considering the role of the researcher in enacting some as more 'real'. I directly compared the hygiene assemblages of EC and *baniao*, showing how engagement between the two could be seen to have sparked further changes in hygiene practice for Australian ECers. I argued that the webgroup OzNappyfree is effectively a hybrid research collective experimenting with hygiene and health-keeping, inspired and constrained by embodied connections to others. Future hygienes can therefore be researched and enacted in hybrid collectives, where hygiene is a matter of concern around

which researchers and multiple others can gather. I suggested that future hybrid research collectives should gather, research, and enact hygienes that guard life rather than just kill germs.

In researching and enacting this non-teleological vision of hygiene modernities, I have, more generally, contributed to a larger body of research attempting affirmative critique, where critique is meant to work *towards something*, a gathering, rather than away from something in the form of mere deconstruction (Brown *et al.* 2011, Gibson-Graham 2011, Latour 2004b, Law 2004: and others). For this interdisciplinary gathering of affirmative critique writers, the role of research is to *enable* other realities, and to choose these realities based on matters of concern or ethical considerations. The main theoretical, methodological and practical contributions of this thesis coalesce around the concern of social change in a climate-changed world, and are outlined in the following sections.

CONTRIBUTIONS OF THIS THESIS

Studying in detail the practices of *baniao* and elimination communication is a mostly new undertaking in the academic world. Apart from deVries and deVries' article in a paediatric medical journal in 1977 (which gives details of the Digo practice of infant toileting in the Congo area), I have not discovered any other research that closely examines how this hygiene practice works. I have argued that this is because practices of toilet hygiene in particular are so embodied, habituated, normalised and universalised that researchers have often not considered that other practices have merit, or even exist. Even in the field of Chinese studies, there have been no contemporary studies of infant hygiene that investigate *baniao*, although traces of it appear in medical studies of Chinese origin that mention 'excreta management' (Cheung 1999) and development reports on sanitation. This thesis has been able to make an important contribution purely through studying a topic that is bit unusual, yet so intrinsic to everyday life.

Although the particular workings of *baniao* and EC are of great interest to my colleagues and reviewers (and spark a flood of questions following any conference paper), I do not consider the description of these to be the main contributions I have made to methodology, theory, or the disciplines in which I work. Instead I consider the main methodological contributions of this thesis to have been in the development of a method of embodied ethnography, and in operationalising this method for the detection of multiple (hygiene) realities. Likewise, the main theoretical contributions of this thesis have been in the areas of conceptualising hygiene, conceptualising the body multiple with reference to different medical systems, and theorising social change in relation to hygiene and embodied connections.

THEORETICAL CONTRIBUTIONS

This thesis has fleshed out a conceptualisation of hygiene as *an assemblage*. An assemblage of hygiene is a gathering of hygiene practices and the materialities, socialities, spatialities and subjectivities these draw on and produce. It is a shifting and active gathering of beliefs, bodies, relationships, objects (nappies, potties, pants) and more, where slight tweaks might have ongoing effects. This was made clear in Chapter Three where infant formula (a material object) entered the infant health-keeping assemblage in Xining through a gap opened by the interactions between biomedicine and traditional Chinese medicine. Yet some aspects of this shifting and active assemblage are embedded more deeply, as described in Chapter Four where the deeply embodied understanding of babies' bottoms constrained any openings for disposable nappies to be more than superficially gathered into the hygiene assemblage.

There are a number of important benefits to conceptualising hygiene as an assemblage. Firstly, an assemblage discourages teleological interpretations of practices as being 'backward' or 'modern'. Because it requires us to consider the hinterlands from which the assemblage is gathered (the social, historical, and economic trajectories, the place, the materials and subjects), it allows us to understand hygiene as situated in place rather than on a singular path to

modernity. We might thus avoid some of the problems of universalising inappropriate hygiene practices such as in the case of handwashing on the plateau (see page 9). Secondly, conceptualising hygiene as an assemblage allows us to pull apart some of the intertwined practices, materialities, and spatialities (among others) and see more clearly how we might re-assemble them more intentionally towards certain matters of concern (such as reducing environmental impact, or better infant health-keeping). Thirdly, considering hygiene as an assemblage allows us to better see and understand the ways in which multiple hygienes overlap and interpellate, whether as deliberate hybrid collectives as in the case of EC, or more contingently as described in the section *Ghosts of weisheng* in Chapter Six (see page 235).

In this thesis, I also contributed to the concept of *the body multiple* (Mol 2002; also Law 2004). In particular, I extended the concept through the study of multiple maternities produced by a range of medical belief systems in China. The consideration of ‘multiplicity’ in and between places is often not made explicit in Chinese Studies. This thesis has thus responded to calls from leaders in Chinese Studies to take seriously Chinese understandings of the world, and to allow them to ‘interrogate’ the West and other places (see page 52, also Barmé 2011, Liu 2009). I have done this through considering the ways in which traditional Chinese medicine and biomedicine were enacted in the bodies of Xining mothers and myself. This theoretical contribution has also had practical outflowings: during the course of this thesis I presented these findings to breastfeeding counsellors, midwives, and doctors at the Australian Breastfeeding Association conference with advice for dealing respectfully with the multiple breastfeeding realities of their Chinese clients.

This thesis has also contributed to theorising social change, which has implications for both post-development practice and inspiring social change in response to climate change. Feminist geographers have called for a greater appreciation of the potential for social change in the realm of ‘social reproduction’, or ‘life’s work’ (Meehan and Strauss forthcoming, Mitchell *et al.* 2004). I have responded to this call through theorising both unintentional and

intentional social change in non-teleological ways, based on my study of hygiene changes. My first non-teleological take on social change was an extension of Tsing's work. I show how social change can be sparked through awkward engagements between *assemblages* (as in the case of traditional Chinese medicine and biomedicine hygiene assemblages in Chapter Three). I theorised how these engagements can occur between partial assemblages, such as the *spatialities* of hygiene, which awkwardly engaged at the nappy-free meets (Chapter Six), and the mother-baby *socialities* of hygiene that awkwardly engaged via the translated *Babywise* book and the realities of Xiao Shi's life (Interlude, page 221). I also theorised how the awkward engagements that emerged as universalising trajectories, such as those around 'babies' bottoms' and 'mother's milk', reach beyond the ordinary gathering (as shown in Chapters Three, Four, and Five).

I argued that these awkward engagements sparked change not just contingently, as demonstrated in Anna Tsing's work with the concepts in Indonesia (2005), but also in a more direct way. They provided opportunities for others to intentionally reconsider the realities being produced in mothering, and a moment where some of the elements of the assemblage may be rearranged to produce a different outcome.

My second take on theorising social change in a non-teleological manner was to apply the concepts of the hybrid research collective. Combining this with the idea of 'learning to be affected' allowed me to elaborate the ways in which intentional shifts in assemblages might happen. My contribution to the work with concept begun by Roelvink, Gibson-Graham, Cameron, and Hill⁹⁷ has been to 'flesh out' some embodied connections that are important in the hybrid research collective I studied. The mother and baby formed a sub-collective within the hybrid research collective, where their embodied connection allowed the mother to 'interpret' the communications of her baby to others in the collective.

⁹⁷ See (Cameron *et al.* 2012, Cameron *et al.* 2011, Gibson-Graham 2011, Gibson-Graham and Roelvink 2009, Roelvink 2008, 2010).

My research has suggested that hybrid research collectives could sometimes be made up of a number of *other* collectives and their particular ‘Lorax’ figures,⁹⁸ or spokespeople, who are able to articulate some of what they know through embodied connection. These Lorax figures work to help others learn to be affected by those non-verbal beings and things they are connected with. Geographers of social reproduction have asked us to consciously appropriate glimmers of possibility in the ‘minutia and magnificence of life’s work’, in order to develop ‘new modes of practice’ (Mitchell *et al.* 2003: 433). This thesis has extended this project through using the concept of the hybrid research collective, where new modes of ‘social reproduction’ practice are being experimentally developed and implemented in hybrid collectives of mothers, babies, researchers, web technologies and microbes.

METHODOLOGICAL CONTRIBUTIONS

In reimagining my site of research as being the relational space of my body (including the hinterlands in which it lived and moved and mothered), I offer an alternative to traditional ‘bounded’ ethnographic studies without a complete shift into autoethnography (see Chapter Two). While the results of such a methodology may appear a little narcissistic, it does allow one to honestly consider the role of the researching body in producing ethnography (Dombroski 2011b). It also allows for the relational aspects of the researcher’s body to come into play, especially the ways in which a body is shared and connected with other bodies such as children, partners and others. I have extended the work of geographers who attempt to make the body, relationality, and the ‘fleshy, messy’ stuff of life’s work visible in research, into cross-cultural ethnographic work (Katz 2001, 2004, Longhurst 1997, 2001, Underhill-Sem 2001). This thesis has been especially explicit in detailing how using an unbounded site centred on the researching body can help make visible (multiple) hygiene assemblages, particularly through paying attention to

⁹⁸ *The Lorax* is a children’s book by Dr Seuss. The Lorax is a small ‘oldish, brownish, and mossy’ being who emerges from a tree stump to chastise the budding industrialist Oncler — on behalf of the trees, animals, fish and birds. He says: ‘I am the Lorax. I speak for the trees. I speak for the trees, for the trees have no tongues’ (Dr Seuss 1971: 21,23).

moments of awkward engagement sparked by the deliberate cross-cultural ‘displacement’ of my body-site (Katz 1994).⁹⁹

IMPLICATIONS FOR POST-DEVELOPMENT HYGIENES

I now want to draw out some of the implications of this thesis for a post-development approach to hygiene. Given the argument I have made in this thesis for understanding hygiene in a non-teleological way, how then do we work towards change in parts of the globe with very real hygiene and health issues? If hygiene is to be about ‘guarding life’, as I argued in Chapter Six, what would that really look like in ‘development’ practice? I address these questions to demonstrate the potential contributions to both the sub-discipline of development geography, and the development sector more generally.

Currently, the Australian Agency for International Development (AUSAID) and the office of the United Nations High Commissioner for Refugees (UNHCR) are both concerned with issues of hygiene, health and sanitation in various parts of the world. AusAID is currently calling for proposals from civil society partners to access funding for what are known as ‘WASH’ projects. ‘WASH’ refers to water, sanitation and hygiene, and is the replacement term for what was previously known as ‘watsan’ or water and sanitation. The justification for this project funding is linked to Millenium Development Goal Seven, Target Ten (access to safe water and basic sanitation).¹⁰⁰ AusAID states:

Access to safe water and basic sanitation combined with good hygiene behaviours (WASH) underpins Australia’s ability to deliver public health outcomes and significant economic benefits for developing countries (AusAID 2011: 1).

The aim of improving sanitation is linked to child mortality and infectious disease:

⁹⁹ In this contribution, my most avid readers have been other PhD students, who have read early drafts of my thesis and various papers such as Dombroski (2011a, 2011b), in order to work out how they can respond to the call for bodily awareness in academic writing and methodology.

¹⁰⁰ See <http://www.ausaid.gov.au/aidissues/mdg/Pages/home.aspx>.

Access to safe water and basic sanitation, combined with good hygiene behaviours, underpins the ability to make significant public health gains. For example, more than 1.5 million children around the world die each year as a result of diarrhoea, a water-borne disease and the second leading cause of deaths for children. Improved access to safe water and sanitation will lower the incidence of diseases carried by water, improving public health, especially for women and children (AusAid 2011: 3).

The logic is based on the historical development of water-based sanitation provided to private homes, that is, the experience of the industrialised West. Data on worldwide sanitation takes the definition of sanitation as having access to ‘improved sanitation facilities’ which are limited to *private* toilets connected to waste water or solid waste treatment infrastructure, or septic tank, and (for no apparent reason) *specifically excludes shared facilities*. The majority of nations in the world have more than thirty percent of their population categorised as ‘without sanitation’ (UNEP 2008), although many of these would access shared facilities (such as public, workplace, and school toilets and showers). Only a very few places outside of the industrialised West have achieved more than 95 percent sanitation coverage using this problematic definition.

Well-engineered water-based sanitation systems are indeed very effective in preventing faecal contamination and thus some forms of diarrhoea in children, but are by no means the only way of doing so. This thesis has shown that a workable infant hygiene assemblage is *not necessarily dependent on a flush toilet*. People living in shops and households without private toilets in Xining have strategies to deal with infant hygiene, including spatial strategies of habituating children into a particular relationship with ‘dirty’ spaces. Given this case, then surely it makes more sense to *separate* out concerns with hygiene and sanitation from concerns with water supply. Jewitt argues this point even further: we need to separate out concerns about *faeces* from concerns about water, sanitation, and hygiene (2011). Contaminated water supply is one issue, and it *can be* related to faecal contamination in places where basic hygiene systems are breaking down due to poverty or crowding. But sanitation (or more particularly, disposal of faeces) is *another* issue, which

may or may not be related to water — for example, the traditional nightsoil collectors in urban China and elsewhere around the globe were a form of waterless sanitation. Hygiene is *another issue again*, which also may have problems related to the management of faeces or water, but not necessarily.¹⁰¹

Generalisations about the relationship between water, sanitation, and hygiene are not the best way to approach these important inter-related issues. Through mapping hygiene assemblages in place, a post-development project of hygiene would be able to identify how specific practices, materialities, spatialities, and socialities are *already working to keep health*. Subsequent projects would then be able to identify the *specific trajectories* of hygiene (or water, or sanitation) that require ‘tweaking’ or reassembling. These may or may not require water-based sanitation systems.

Why is this an important point? In a climate-changing world, it seems clear that water-based sanitation systems are not our best option for sustainable hygiene futures. Currently, the majority of the world’s water is used in agricultural and industrial production, with domestic use only accounting for about five percent (UNEP 2008). Yet given the increasing levels of water stress and scarcity being experienced by communities all over the world (UNEP 2008), it hardly seems helpful to continue promoting increased use of freshwater resources for sanitation — especially if other options are available.¹⁰²

A post-development hygiene intervention based on the mapping of a specific hygiene assemblage would be more aware of the hinterlands of hygiene — the Earth-others that sustain and enable health. Here I include rivers,

¹⁰¹ This finding is in line with a 1999 statistical analysis of the relationship between water supply and child growth, and sanitation and child growth (Cheung 1999). The study concluded that improvement in water supply was statistically related to improved child growth outcomes (presumably through reducing contamination), but the addition of flush toilets resulted in only marginally higher weights in children. Households with ‘excreta present’ (which was not defined, but could mean the use of basins, potties, newspapers, or dirt floors as toilet spots for children) had slightly lower growth rates, but it was not statistically significant.

¹⁰² Jewitt (2011) highlights some of the many benefits of ‘ecological sanitation systems’ (‘ecosan’) based on the use of composting or dehydrating toilets. These closed-loop systems do not use water, thus reserving freshwater for drinking and other uses and, importantly, preventing the flushing of waste matter into water systems. They require no conventional sewerage infrastructure or treatment plants.

groundwater, soil, bacteria, edible nutritious plants and more. A post-development hygiene intervention would not just take knowledge from ‘developed’ contexts and implement it in ‘developing’ contexts. It would likewise not exclude the possibility that hygiene knowledge and practices in ‘developing’ contexts have relevance for potential hygiene changes in ‘developed’ contexts.

I caught a glimpse of this sort of intervention in the work of Plateau Perspectives, the Qinghai-based NGO of which Dr Marion Torrance-Foggin is a key member (see Introduction). While the local and foreign staff of Plateau Perspectives have not exactly ‘mapped’ a hygiene assemblage, fifteen years of work in the areas of health and conservation on the plateau have instilled their interventions with an appreciation of the interrelationship between hygiene, health and the environment (See Foggin and Torrance-Foggin 2011, Foggin *et al.* 2006).

While government policy-makers and other NGOs assume that the provision of health services is best provided in settled, urban environments, Plateau Perspectives has aptly demonstrated improved health provision through collaboration with the Sanjiangyuan National Nature Reserve, local herders, and local government. They argue that forcing herders to settle for the reason of health provision is counterproductive, and can result in unemployment, loss of hope, and cultural erosion (Foggin and Torrance-Foggin 2011). Since the 1990s, they have worked with remote plateau communities in collaborative environmental and community health. Dr Torrance-Foggin, for example, has worked to collaboratively train women from remote communities as a new generation of ‘barefoot’ midwives,¹⁰³ able to provide birthing and pregnancy services to women in remote communities in a culturally appropriate and

¹⁰³ The ‘barefoot doctors’ of pre-Open-Door China were villagers given basic training in health and first aid, and were the first tier in the health system. I use the term lightly, to indicate a similar approach — Plateau Perspectives does not use this term.

hygienic manner.¹⁰⁴ The organisation has monitored heavy metal contamination of water sources and related health problems, and advised communities on water supply.

The collaborative work with remote communities is not just a case of successful ‘development’ work ‘out-there’ in remote Qinghai. It is also an example of positive change that has *potential implications* for health provision and conservation management in *other parts of the world*, such as Australia. Australia also struggles with the provision of appropriate health services to remote communities, particularly indigenous ones. What does remote Qinghai have to offer in a post-development project of health-keeping in Australia? Unlike Qinghai, Australia arguably has problems with the *over-medicalisation* of childbirth.¹⁰⁵ Could the experience of Qinghai’s ‘barefoot midwives’ have something to offer in a post-development project at the intersection of birthing hygiene and culture in Australia?

If we understand hygiene as an assemblage, we can better understand the ways in which hygiene is complexly integrated with multiple trajectories of health, environment, space, pathogens, culture and so on. This does not mean that we would naively adopt a strategy for hygiene from Qinghai and unreflexively apply it to Australia — but it does mean we are not closed to the possibilities for tweaking our own health and hygiene assemblage with various gleanings from places like Qinghai. What this means is that we are not foreclosing possibility through assuming that every option outside our habituated norms of hygiene is necessarily unsuitable. Even if no solutions from out-of-the-way places find themselves implemented elsewhere, at least being open to the *possibility* of this helps us to better see the relationship of hygiene practices to

¹⁰⁴ Traditionally in these remote Tibetan communities, women birthed alone or with relatives on the ‘dung heap’ spot of the nomadic tent. Birth was seen as a polluting act that would contaminate other parts of the tent. Yet contamination through the birthing fluids led to puerperal fever and maternal mortalities. These barefoot midwives came up with a culturally appropriate solution of carrying a tarpaulin to place over the birth spot and thus prevent infection.

¹⁰⁵ A systematic review of published studies of birth outcomes for Western developed nations (Wax *et al.* 2010) found that mothers in these countries were at a higher risk of dangerous infections in *hospital* birth environments (as compared to planned homebirth situations where only ordinary pathogens were present and infection rates low).

their particular context. A post-development project of hygiene would thus start with what is already there, and seek out the openings for appropriate intervention that promote health and hygiene for infants, children, adults, *and* their Earth-others.

BEGINNINGS AND ENDINGS

In one sense, I finish this thesis the way I began: in a place of not-knowing. I do not know much about the kinds of possibilities out there for different hygiene futures. I do not know what this new Earth era holds for us or our children, or the Earth-others which survive alongside us. I began with little more than a desire to ‘imagine and work out new ways to live with the earth’, to contribute to ‘a different mode of humanity’ (Plumwood 2007: 1). I began with the hope that *things can be different*, because already, right now, multiple contemporaneous realities — modernities — offer us difference, options, glimmers of hope. I began with an attempt to *see* and *think* those multiple possibilities, outside of the tired old teleologies of modernisation and development. I began with a faith that these possibilities already present could somehow help me to imagine (and enact) an uncertain, hopeful, and experimental post-development ‘project’ of hygiene. These hopes, desires, attempts, and faith are now better articulated and informed, but they have not changed much. In fact, I have come to appreciate the possibilities latent in a place of not-knowing, since this is where new thinking and change can happen.¹⁰⁶

In another sense, I finish this thesis a long way from where I began. I began this thesis as a heavily pregnant twenty-five-year-old, arriving in Australia to meet with my supervisor, with a quite different thesis in mind than that in the dear reader’s hands. I had little idea how my husband and I would manage our studies with a baby, nor how to plan study and writing around babies and

¹⁰⁶ This is a point of which the late Julie Graham (of JK Gibson-Graham) often reminded us, in many different contexts.

children. But during this thesis journey I have ended up birthing two children, living in three different countries, four different cities, and being attached in various ways to five different universities. I have transitioned from a doubtful new mother-of-one trying to do everything ‘right’, into a somewhat cosmopolitan mother-of-two accustomed to being unusual — in fact, drawing my confidence from my fieldwork-related awareness of the many different maternal realities out there. I have arrived at this point: now a thirty-two year old, full-time academic, with an unusual thesis that draws on these experiences more than I ever would have thought possible. My desires for changing the world seem to have at least changed me.

But is that not how change happens? Starting with what we have, and moving forward? Being the change we wish to see in the world? I do not mean that the world needs more academics (it most certainly does not), but it does need more hybrid research collectives experimenting for change. I do not mean that the world needs more babies (it arguably does not), but it does need more of the softness and awareness that caring for babies brings. I do not mean that the world needs more cosmopolitans skipping around the globe in blissful ignorance of their jet-fuel usage (once again, it does not, but it does need more of the ‘edgewalking’ sense of other ways of doing things that cross-cultural engagement can inspire.

There have been other changes around me, too: little ones, that may add up for a different future. Women I interviewed and hung out with in Xining have had their mothering practices reaffirmed and connected to a broader global community. The OzNappyfree group has become more connected to concrete practices in ECing places and cultures. The OzNappyfree OT group has one more mother-researcher voice that contributes to its collective research endeavours. The Community Economies Collective now has connections with hygiene and northwest China. My first-year geography students at Macquarie University now know more than they ever thought they would about toileting infants and breastfeeding. My colleagues in the Institute of Australian Geographers have been subjected several times to detailed descriptions of

hygiene assemblages that challenge the normal development/modernisation trajectory.

And finally, my own two girls, Imogen (now six years old) and Analiese (now two years old), have been essential partners in this research, as we have together travelled a path of communication, connection, experimentation and embodied knowing. Who knows what the future holds for them, and for our planet? I hope we can continue to work together, with collective others, to enact a reality that guards life and makes real a better world for all bottoms.

GLOSSARY

CHINESE PINYIN	汉字	MEANING ¹⁰⁷
<i>aiya</i>	哎呀	(intj) ‘Wow’, ‘oh no’, ‘whoops’. Used to communicate shock, wonder, admiration, annoyance, resignation, and more depending on tone.
<i>baniao</i>	把尿	(v) To hold out (a baby) to urinate. Literally: <i>ba</i> grasp; <i>niao</i> urine/urinate.
<i>baozi</i>	包子	(v) Steamed filled bun. In Qinghai, often filled with carrot, potato, green vegetables. Can be filled with meat.
<i>bao</i>	保	(v) Hold, protect.
<i>baohaizi</i>	保孩子	(vo) Hold/look after a child. Literally: <i>bao</i> protect; <i>haizi</i> child.
<i>baomu</i>	保姆/母	(n) Children’s nursemaid, nanny, housekeeper. Literally: <i>bao</i> protect; <i>mu</i> nurse/mother.
<i>chai</i>	拆	(v) Pull down, dismantle. Often painted on structures that are ‘condemned’ (English equivalent).
<i>chong (mai)</i>	衝(脈)	(n) <i>Chong</i> meridian, in TCM ‘Penetrating Vessel’. One of the eight extraordinary meridians of the body according to TCM.

¹⁰⁷ This glossary has been compiled using the Wenlin Software for Learning Chinese (Wenlin Software for Learning Chinese 2002). The Wenlin dictionary is based on the ABC Chinese-English Dictionary compiled by John DeFrancis of the University of California (de Francis 2002). I have included the literal translations of the individual characters making up the Chinese words for the interest of non-Chinese speakers. They do not necessarily accurately reflect the contemporary usage of the term, but can ‘haunt’ the term nonetheless (see my discussion of this with regards to *weisheng*, page 224).

<i>danwei</i>	单位	(n) Unit (in measurement or organisation). Literally: <i>dan</i> unit; <i>wei</i> polite ‘measure word’ for people.
<i>danyuan</i>	单元	(n) Residential unit. In Xining, this generally referred to apartments grouped around a single stairwell. Literally: <i>dan</i> unit; <i>yuan</i> primary, basic (same character as basic unit of currency).
<i>fachou</i>	发愁	(vo) Worry, be anxious. Literally: <i>fa</i> emit; <i>chou</i> worry.
<i>fuyang haizi</i>	抚养孩子	(vo) Raise children. Literally <i>fu</i> pat or soothe; <i>yang</i> raise, nourish; <i>haizi</i> child(ren).
<i>gaitou</i>	盖头	(n) Veil or Islamic headcovering (also refers to the red bridal veil of Han custom). Literally: <i>gai</i> cover; <i>tou</i> head.
<i>getihu</i>	个体户	(n) Individual entrepreneur, privately owned enterprise, self-employed worker. Generally only refers to very small businesses. Literally: <i>ge</i> individual; <i>ti</i> body; <i>hu</i> household.
<i>guanxi</i>	关系	(n) Relationships, connections. (v) Affect, concerning. In this thesis I mostly use it to refer to the deliberate employment of relationships and connections in getting things done. Also known as <i>guanxi xue</i> ‘the art of <i>guanxi</i> ’. Literally: <i>guan</i> connection; <i>xi</i> system.
<i>huanjing</i>	环境	(n) Environment, surroundings. Also circumstances. It is used to refer to ‘the Environment’ as in ‘the natural environment’, but more often refers to surroundings and general environment where one is located. Literally: <i>huan</i> ring, encircle; <i>jing</i> territory.
<i>hukou</i>	户口	(n) Registered permanent residence. Each citizen of the PRC must be registered on a <i>hukou</i> , normally with their

family members, with exceptions for single people of age who live away from their parents for permanent work (they are registered on a company *hukou*). One's *hukou* is geographically tied to one's official place of residence, and citizens are not entitled to move their registration to another area without permanent work. Migrant workers are often registered with rural *hukou* in their hometowns, and are thus not entitled to formal education, employment, housing or healthcare elsewhere in China. Babies that are not registered on a *hukou* cannot be later enrolled in kindergarten or school.

<i>jingyan</i>	经验	(n) (v) Experience. Literally: <i>jing</i> longitude, scripture; <i>yan</i> experience.
<i>jiankang</i>	健康	(n) Health, physique. (sv) Healthy, sound. Literally: <i>jian</i> healthy, strong; <i>kang</i> health.
<i>jin</i>	斤	(m) Measurement of weight: about 500 grams.
<i>kang</i>	炕	(n) Raised brick bed warmed by a fire underneath. Common in rural dwellings in cold parts of China.
<i>loufang</i>	楼房	(n) Building of two or more stories.
<i>lu</i>	路	(n) Road, street.
<i>luohou</i>	落后	(v) To fall or lag behind. (adj) backward. Literally: <i>luo</i> fall, drop; <i>hou</i> behind, after.
<i>luohou diqu</i>	落后地区	(n) backward/behind areas. Used with reference to parts of western China. Literally: <i>luohou</i> see above; <i>di</i> earth; <i>qu</i> area, division.
<i>mantou</i>	馒头	(n) Bread, steamed bread roll. A staple in northern

parts of China.

<i>meitai /beidai</i>	背带	(n) <i>Meitai</i> is the Cantonese pronunciation, and is most commonly used in English to refer to an Asian-style baby carrier. This baby carrier is basically a rectangle of fabric with a long strap stitched to each corner. The baby straddles the rectangle and is comfortably tied to the back or front with the straps. This form of carrier is less and less common in urban China, as it is seen as a ‘peasant’ method of carrying a baby.
<i>minzu</i>	民族	Nation, nationality, ethnic group, race. See footnote 13. Literally: <i>min</i> people, <i>zu</i> people group, tribe, clan.
<i>momo</i>	馍馍	(n) Steamed bread roll, which can contain filling. A staple in northern parts of China. Preferred word used by Tibetan speakers of Chinese to refer to bread.
<i>nainai</i>	奶奶	(n) Colloquial address for grandmother, ‘nana’ or ‘granny’. Normally refers to the paternal grandmother, but also used to politely address people of the same age as one’s own grandmother. The character 奶 <i>nai</i> is the same one used for ‘milk’.
<i>nen</i>	嫩	(adj) Delicate, tender.
<i>niaobu</i>	尿布	(n) Diaper, nappy. Literally: <i>niao</i> urine; <i>bu</i> cloth.
<i>Pakeha</i>	Maori	(n) New Zealander of non-Maori descent. In NZ English, it usually refers to New Zealanders of British, Irish, or Scottish, descent who have been in New Zealand for several generations. In Maori, historically used in contrast to <i>tau iwi</i> (foreign tribe) to mean the more familiar British, Irish, and Scottish settlers. Now Maori usage is similar to NZ English.

<i>paocai</i>	泡菜	(n) Pickled vegetables. Literally: <i>pao</i> pickle or soak; <i>cai</i> vegetable.
<i>pei yue</i>	陪月	(n) Confinement nurse. The relative who ‘accompanies’ and cares for the new mother and baby during the <i>yuezi</i> confinement (see <i>yuezi</i> below). Normally the grandmother of the baby, but can be a relative or hired nurse. Literally: <i>pei</i> accompany; <i>yue</i> month.
<i>popo</i>	婆婆	(n) Husband’s mother, mother-in-law. Also used in some places as a colloquial address for grandmothers, particularly maternal. In Xining, this generally referred only to one’s own mother-in-law, both in addressing her directly and referring to her. Literally: <i>po</i> old lady, or wife.
<i>qi</i>	气	(n) Air, vapour, vital energy. In this thesis, I use it in the TCM sense to refer to ‘vital energy’.
Qinghai (<i>sheng</i>)	青海(省)	(pw) Qinghai Province. A province in northwest China incorporating parts of the Qinghai-Tibet plateau. The capital city is Xining (see below).
<i>ren (mai)</i>	任(脈)	(n) <i>Ren</i> meridian, in TCM ‘Directing Vessel’. One of the eight extraordinary meridians of the human body according to TCM.
<i>shen(ti)</i>	身(体)	(v) Body, life, incarnation, moral character and conduct, pregnant. When combined with <i>ti</i> refers specifically to the physical body and health.
<i>Sheng(huo)</i>	生(活)	(v) Give birth. (n) Life. (sv) Living, alive, raw, unprocessed, green, fresh. Same <i>sheng</i> as in <i>weisheng</i> (see below). When combined with <i>huo</i> , refers specifically to existence or livelihood.

<i>shi (de)</i>	是(的)	(v) Be, is. When combined with the possessive <i>de</i> , means ‘yes, that’s correct’ or ‘it is so’.
<i>suzhi</i>	盖头	(n) Quality. Literally: <i>su</i> plain, white, vegetarian; <i>zhi</i> matter, substance.
<i>ta</i>	他/她/它	(pr) He/she/it.
<i>tai</i>	太	(adv, adj) Excessively, ‘too’ (as in ‘too hot’). Also grand, great (see <i>yang</i> , where <i>taiyang</i> ‘great yang’ refers to the sun).
<i>wei</i>	喂	(intj) ‘Hey’. Greeting used when answering the phone. Can also be used to interject or flag attention.
<i>weisheng</i>	卫生	(n) Hygiene, health, sanitation. Literally: <i>wei</i> to guard, protect, nurture; <i>sheng</i> life, give birth.
<i>wuxing</i>	五行	(n) Five elements (metal, wood, water, fire, earth). Interactions between the elemental systems in the body. Literally: <i>wu</i> five; <i>xing</i> (multiple meanings).
<i>xiaoqu</i>	小区	(n) Residential area. In Xining, refers to a large block of apartment buildings, often gated. Literally: <i>xiao</i> small; <i>qu</i> area.
<i>xue</i>	学	(v) Study, learn, copy. When attached to the end of a word means ‘the study of’ or ‘the art of’, e.g. <i>weisheng xue</i> , ‘the art of health-keeping/hygiene’; <i>yixue</i> , the academic discipline of medicine.
Xining(<i>shi</i>)	西宁(市)	(pw) Capital city of Qinghai Province.
<i>xiyi</i>	西医	(n) Western medicine, biomedicine. Literally: <i>xi</i> west; <i>yi</i> medicine.

<i>yang</i>	阳	(n) Opposite of <i>yin</i> . Positive/active/male principle in nature. Also present in <i>taiyang</i> 太阳, sun (see <i>yangtai</i> below).
<i>yangtai</i>	阳台	(n) Balcony, deck. In Xining, this referred to a closed-in balcony or ‘sunroom’ where washing was hung and plants cultivated. Literally: <i>yang</i> sun; <i>tai</i> platform.
<i>yi</i>	医	(n) Medicine. (adj) Medical.
<i>yin</i>	阴	(n) Opposite of <i>yang</i> . Female/passive/negative principle in nature. Also refers to genitalia.
<i>yuezi</i>	月子	(n) (Birth-related) confinement, month following childbirth. Literally: <i>yue</i> moon, month; <i>zi</i> child, or noun suffix.
<i>zang</i>	臟, 脏	(n) Viscera, the internal organs.
<i>zhongguo</i>		(n) China. Literally: <i>zhong</i> middle; <i>guo</i> kingdom.
<i>zhongyi</i>	中医	(n) traditional Chinese medicine or Traditional Chinese Medicine (TCM — officially sanctioned Chinese medical science). Literally: <i>zhong</i> middle (as in <i>Zhongguo</i> see above); <i>yi</i> medicine.
<i>ziji</i>	自己	(n) Self, oneself. Literally: <i>zi</i> self; <i>ji</i> self.
<i>zuo yuezi</i>	坐月子	(vo) ‘Do the month’ (of childbirth confinement). Literally: <i>zuo</i> sit; <i>yuezi</i> see above.

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APPENDICES

APPENDIX I: RESEARCH TIMELINE

RESEARCH TIMELINE

2006

February 2006: Relocated to Canberra (7 months pregnant), began study at the Australian National University. Already in contact with Qinghai NGO about fieldwork.

May 2006: Gave birth to first daughter. Began maternity leave.

September 2006: Returned from maternity leave with a 3 scoping week trip to Qinghai.

2007

March 2007: Arrived in Qinghai. Enrolled at Qinghai Minorities' Institute (now university) for a semester-long Mandarin course.

May 2007: Fieldwork issues arise, with key NGO members leaving or being injured. Begin rethinking topic. Hire research assistants. Organise research with academic colleague from Qinghai Minorities' Institute.

July 2007: Planned research trip cancelled.

September 2007: Holiday in Xinjiang. Get food poisoning and lingering health issues.

October 2007: Toddler dislocates arm then falls seriously ill. Return to full-time breastfeeding during recovery.

November 2007: final interviews and ethnographic writing on anything. Decide to suspend thesis. Return to NZ via Canberra (to finalise suspension).

December 2007: resettle in New Zealand, begin work at Massey University.

2008

June 2008: fall pregnant.

July 2008: miscarriage. re-enrol part-time in doctorate. Continue part-time work at Massey.

November 2008: return to Canberra. Present seminar on fieldwork.

2009

January 2009: begin fieldwork with Oznappyfree. Visit focus groups in Brisbane and Melbourne.

February 2009: Human Geography department at ANU to be axed. Supervisor offered job at University of Western Sydney.

March 2009: Fieldwork in Qinghai focusing on *baniao* and infant feeding.

June 2009: Return to Canberra.

July 2009: Transfer to University of Western Sydney. Relocate to Bankstown, Sydney.

November 2009: Fall pregnant.

2010

August 2010: Gave birth to Analiese. Maternity leave.

November 2010: Return from maternity leave to part-time study, based in NZ with family.

2011

July 2011: Begin full-time job at Macquarie University.

APPENDIX TWO: INFORMATION SHEETS

Kelly Dombroski
Department of Human Geography
Research School of Pacific and Asian Studies
Building No. 9
Canberra ACT 0200 Australia

Telephone: +61 2 6125 3861
Facsimile: +61 2 6125 4896
Email: Kelly.dombroski@anu.edu.au
www.anu.edu.au

Mothers and the economy in north-western China

中国西北部母亲及经济之现状

研究时间：2009年4月至6月

研究者：研究目标：这个研究是我博士研究中的一部分。致力于在澳大利亚和中国西北部中，经济和母亲扮演如何的角色，以及母亲是如何看待她们自身的经济角色。

研究活动：我通过访谈、锁定目标人群、摄影和直接观察的方式来进行我的研究课题，具体如下：

- 采访一些学者及其他人关于青海的母亲在历史上和当下的经济角色
- 观察不同母亲的把尿和喂养婴儿的行为
- 深入的访谈一些母亲，从而了解婴儿卫生和喂养的决定过程
- 专门访谈4-5个来自不同种族的母亲，讨论母亲在经济中的角色
- 我也针对喂养婴儿和婴儿解便进行摄影：在公寓内，在乡下、家庭中和其他有孩子的地方。
- 通过陪伴一人一天的日常活动，观察6-10个母亲/祖母

我希望能够关于我的研究对您进行访问，会占用您大概一个小时的时间。

参与：参与研究完全自愿，你可以在研究过程中任何时间选择中止并退出。如果你希望退出，我可以将所有关于你的录音、照片及文本记录删除。针对小组方案，我可以完全的取消你的参与。

信息使用：这个研究中所相关的信息可能会使用于英文或中文的报告、杂志或者书籍形式中。我会尽可能地保护您的隐私并将您给我的信息列为机密。我不会在文本文档或出版物中用你的真名，除非您提出这样的要求。我只会在您的批准下将我们的谈话录音和拍取照片。这些文件将被保存在一个有密码的电脑中。任何翻译者或研究助理都被要求对你的信息保密。

如果你有任何问题或者要求，随时欢迎与我联系。如果你希望关于你的研究和其他人进行讨论，请联系澳大利亚国家大学我的导师：**TAMARA JACKA** 博士邮箱地址：

tamara.jacka@anu.edu.au（那位教授会说中文）。

Interview/Focus Group Consent Form 访问/访问组同意函

I consent to participate in an interview for the research outlined in the information sheet.
我同意参加在信息单上所列的研究内容的访谈 是/否

I consent to the interview being recorded.
我同意访谈被录音 是/否

I consent to Ms Dombroski directly quoting my comments in her thesis and any other publications resulting.
我同意 Dombroski 女士在她的论文或者任何出版物中直接引用我的言论 是/否
(Please let me know if you tell me something that you want to keep off the record).
(如果你想将你谈论中的任何东西不被记录, 请及时告诉我)

Please choose from the following:

请在下列选项中选择:

请在引用我的言论时使用我的名 (如果你选择本项, 我会在引用你的言论的时候, 通过邮件的形式提示你, 你可以选择不批准, 或者选用笔名, 或者做一些改变)

名字:

电子邮箱:

OR 或者

请在引用我的言论时使用以下笔 _____
用拼音的汉字, 或者英文

OR 或者

请在引用我的言论时为我选择一个笔名

I would like a digital copy of the audio-recording of my interview.
我希望能保存一份我的访谈录音的电子版 是/否

I would like digital copies of any photos taken of me or my house.
我希望能保存一份所有我或者我家的照片的电子版 是/否

I would like to receive a digital copy of the thesis when completed (English only).
我希望在论文完成时能保存一份论文的电子版本 (限英文) 是/否

如果选是, 请在下面写下你永久的电子邮箱地址:

Ref _____

Oral Consent Script

口头同意确认书

1. I have read out the information sheet about the research project “Mothers and the economy in north-western China”. Did I make things clear? Do you want to ask any questions about the project?

我已经将“中国西北部母亲和经济”课题信息全部朗读，您都清楚了吗？你有没有什么关于这个课题的问题？

2. I will keep all the information you give me in this interview confidential as far as the law allows. Any notes or recordings I make will be kept on a password protected computer. I will not share your personal details or personal views with anyone else. Is this OK?

我会将访谈中你给我的所有信息在法律范围内保密。所有文本记录和录音我将保存在有密码的电脑中。我不会将你的个人资料或者个人观点告诉其他任何人。这样可以吗？

3. Some of the information you give me may be published in English or Chinese. However your real name will not be used in relation to any of the information you have provided me, unless you tell me clearly that you want me to use your real name. Is that OK? Do you want me to use a pseudonym or your real name?

你给我的一些信息也许会以中文或英文的形式发表。但是除非得到你本人的许可，你的真名不会在任何刊物中发表。这样可以吗？你希望我用笔名或是真名呢？

4. You should know that even though I will avoid including any identifying information in any publication there is still a possibility that people will recognise you by the things you say, so you should avoid disclosing sensitive information or saying anything defamatory. Is that clear? Before I publish any of you statements or views, I will give you the chance to review what I have written.

你需要知道就算是我尽力避免在任何出版物中提及你的个人信息，仍然有可能有人能够通过你的言论中辨认出是你，所有希望你尽量可以避免提及敏感的或诽谤的信息。这样清楚吗？在我发表任何你的言论或观点前，你将有机会重温一遍我的记录。

5. You can stop this interview any time, without giving me a reason. And if you mention anything that you don't want me to publish, please say so and I will follow your request.

在访谈中的任何时候，你可以不需要理由地终止。如果有任何你提及到的东西你不希望我发表，请及时告知我，我将尊重你的要求。

6. I would like to record this interview using a digital audio recorder. That way, I can listen to the recording afterwards and catch things you say that I might not fully understand during the interview, or might otherwise forget. I will not give access to the recording to anyone else. Do you give me permission to record?

我想可以用录音笔来记录我们的访谈，这样在访谈后我可以重复地听访谈内容，避免我有任何遗漏，或者不能完全理解你的意思。我不会将访谈录音给其他任何人。你同意我录音吗？

7. Do you have any further questions? Can we start the interview now?

你还有别的问题吗？我们现在可以开始访谈了吗？

Kelly Dombroski
Department of Human Geography
Research School of Pacific and Asian Studies
Building No. 9
Canberra ACT 0200 Australia

Telephone: +61 2 6125 3861
Facsimile: +61 2 6125 4896
Email: Kelly.dombroski@anu.edu.au
www.anu.edu.au

Maternal Economics: Cross-cultural Flows of Parenting Practices between Australia and Western China (Elimination Communication Case Study)

Greetings!

This is a brief outline of my research and the part you may play in it. Please read it through and ask any questions.

Researcher

My name is Kelly Dombroski and I am a PhD student at the Australian National University in Canberra. I have also been a member of the OzNappyFree group since early 2006. My daughter is an EC graduate at 2 years old, and we practiced EC with her from birth. I did part of my PhD research in the far west of China, where EC is the normal way of caring for your infant's hygiene. Many people on the OzNappyFree list were interested in learning from Chinese tradition, and this has become an interesting aspect of my research into the diverse economic roles of mothers.

The Research Project

I am interested in all the activities that mothers do – from pregnancy, through childbirth and the regular daily activities with small children. I have been trying to use the huge variety of paid and unpaid daily activities of mothers to broaden our idea of what 'the economy' entails. Elimination Communication is an example of a daily activity that takes a lot of effort and time on the part of the mother but doesn't visibly 'contribute' to the economy. I want to do a case study of parents practicing EC in Australia and New Zealand and the way it interacts with our ideas of who we are as mothers in our (developed) economies. I will be drawing on comparative data I am collecting from western China – a 'developing' economy with a very different cultural history.

What will I be doing?

I will be collecting data from the archives and posts of our OzNappyFree yahoo! group, from discussions that have already taken place over mother's work, the economy, cross-cultural learning, the difficulties of EC without community support and so on. I will also collect some basic information from your 'introductory' posts so I can map the spread of EC over the two countries, and tabulate some statistics on number of children, where you heard about EC from, and the like.

In addition, I will be travelling to city meets as they occur to meet with you. If it is desired, I will make a short presentation on my fieldwork in China and here, and record or video a short focus-group discussion on this topic.

What will I do with the information?

I will be analysing the written posts and applying theories of the self and the economy to what we have all said. I will directly quote some people, and will require your permission to do so. I will let you know if I quote you, and ask you what you think about the way I have quoted you. You will be free to withdraw your permission for me to use your words at any time. I will

be using personal information mostly for trying to understand the different influences on your parenting style, and will not use the names of your children or partners. I would like, however, to quote you by your Yahoo! name or first name, mostly to acknowledge your intellectual contribution, and also so we can recognise ourselves in the text. If you prefer to use a pseudonym, let me know on the consent form.

Questions or Concerns

Please address any questions or concerns to myself, or if you feel more comfortable, to Marnie (the group convenor nooneewilga@gmail.com). Alternatively you can contact my supervisor, Professor Katherine Gibson (Katherine.Gibson@anu.edu.au) on (02) 61253154. Ethical concerns can be directed to the Research Office at the Australian National University on (02) 61257945, or email the Secretary (Yolanda.Shave@anu.edu.au) .

Thanks for your time

Yours Sincerely,

Kelly Dombroski

Kelly Dombroski
Department of Human Geography
Research School of Pacific and Asian Studies
Building No. 9
Canberra ACT 0200 Australia

Telephone: +61 2 6125 3861
Facsimile: +61 2 6125 4896
Email: Kelly.dombroski@anu.edu.au
www.anu.edu.au

Maternal Economics: Cross-cultural Flows of Parenting Practices between Australia and Western China (EC Case Study)

Interview/Focus Group Consent Form

I consent to participate in an interview on the above topic with Kelly Dombroski. Yes/No

I consent to the interview being recorded. Yes/No

I consent to the interview being videoed (if relevant) Yes/No/NA

I consent to Ms Dombroski directly quoting my comments in her thesis and any other publications resulting. Yes/No

(I will notify you if this is the case and allow you to see the context in which I quote you, allowing you to withdraw consent or ask for changes).

I consent to Ms Dombroski using my **first name** with reference to my comments. Yes/No

(If no, would you please state an alternative pseudonym here _____. Please note if you choose to use your Yahoo! ID, people who read my thesis that belong to any other Yahoo! groups you also belong to may be able to identify you.)

I consent to Ms Dombroski collecting additional information about myself and my family with the understanding this is strictly confidential and for statistical analysis only, and will not be associated with my name or pseudonym. Yes/No

(If yes please fill in 'Additional Information' box attached).

I consent to Ms Dombroski collecting and storing my comments and other information I have published on the OzNappyFree forum as part of her research. Yes/No

(Data collection will halt by December 31st 2009).

I would like to receive an electronic copy of the thesis when completed. Yes/no

Please write your permanent email address below:

Full Name: _____

Signed: _____ **Date:** _____

Reference _____

Additional information

This information is confidential, will not be associated with your name or pseudonym and is for statistical analysis only. This section is optional.

Birthdate:	
Ethnic Identifications:	
Cultural traditions you have had contact with (e.g. you have lived overseas, or your mother was of Indian descent etc etc)	
Educational level:	Primary/secondary/tertiary/degree/higher
Employment history/profession (if you consider this to be important to your identity, mention it)	
Children (sex and birthdate, and whether they were EC'd)	
Partner's details (sex, birthdate, other children, marital status, ethnicity, employment)	

Any other comments or provisos you would like to make with regards to your information?