Health Systems and Social Transition in Asia

John Grundy
BA, MPH

Submitted in fulfillment of the requirements for the degree of
Doctor of Philosophy
Deakin University

2015
# Table of Contents

Access to Thesis Declaration ........................................................................................................................ 3  
Candidate Declaration ................................................................................................................................... 4  
Acknowledgements ....................................................................................................................................... 5  
Foreword ....................................................................................................................................................... 6  
1. Thesis Abstract ........................................................................................................................................ 8  
2. Thesis Rationale and Research Questions ............................................................................................. 10  
3. Structure and Organization of the Thesis .............................................................................................. 13  
4. Analytic Framework .............................................................................................................................. 14  
5. Collection of Papers for Examination ................................................................................................... 16  
6. Rationale for Journal Selection ............................................................................................................. 18  
SECTION 1. LITERATURE REVIEW AND METHODOLOGY ............................................................ 19  
1. Literature Review .................................................................................................................................... 19  
2. Methodology ........................................................................................................................................... 43  
SECTION 2 OBSERVATIONS OF HEALTH SYSTEMS AND SOCIAL TRANSITION .......... 51  
2.1 Observations of Health System Typology in Asia ................................................................................ 52  
SECTION 3 CASE STUDIES IN HEALTH SYSTEMS AND SOCIAL TRANSITION .......... 53  
3.1 Analytic Frameworks of Health and Transition: the Case of Cambodia .............................................. 54  
3.2 Health and History in the Union of Myanmar ...................................................................................... 69  
3.3 History, Politics and Public Health in DPR Korea ............................................................................... 70  
3.4 History and Health Policy Change in Asia ........................................................................................... 72  
SECTION 4 IMPLICATIONS FOR HEALTH POLICY APPROACH .................................................... 73  
4.1 Public Health Critique of the Political Determinants of Health Inequities in Asia ............................... 74  
4.2 Public Health Critique of Aid and Foreign Policy in DPR Korea and Myanmar ................................. 76  
4.3 Public Health Critique of War and Defence Policy in Asia .................................................................. 77  
SECTION 5 CONCLUSIONS – Health Policy, History and Politics ......................................................... 78  
ANNEX 1 – PUBLISHED PAPERS BY THE AUTHOR RELEVANT TO THIS THESIS .......... 94  
ANNEX 2 PUBLICATION CO AUTHOR SIGNATURES ...................................................................... 99  
References ................................................................................................................................................. 115  
Index of Tables ......................................................................................................................................... 143  
Index of Figures ........................................................................................................................................ 143
Access to ThesisDeclaration

DEAKIN UNIVERSITY
ACCESS TO THESIS - A

I am the author of the thesis entitled: Health Systems and Social Transition in Asia

Submitted for the degree of: PhD

This thesis may be made available for consultation, loan and limited copying in accordance with the Copyright Act 1968.

'I certify that I am the student named below and that the information provided in the form is correct'

Full Name: JOHN JOSEPH GRUNDY.................................................................
(Please Print)

Signed: [Signature Redacted by Library]

Date: 21st April 2015......................................................................................
Candidate Declaration

DEAKIN UNIVERSITY
CANDIDATE DECLARATION

I certify the following about the thesis entitled "Health Systems and Social Transition in Asia" submitted for the degree of Doctor of Philosophy:

a. I am the creator of all or part of the work(s) (including content and layout) and that where reference is made to the work of others, due acknowledgment is given.

b. The work(s) are not in any way a violation or infringement of any copyright, trademark, patent, or other rights whatsoever of any person.

c. That if the work(s) have been commissioned, sponsored or supported by any organization, I have fulfilled all of the obligations required by such contract or agreement.

I also certify that any material in the thesis which has been accepted for a degree or diploma by any university or institution is identified in the text.

I certify that I am the student named below and that the information provided in the form is correct.

Full Name: JOHN GRUNDY

Signed: 

Date: 1st October 2014
Acknowledgements
I would like to acknowledge the support and advice of my supervisors, Assoc. Professor Liz Hoban and Professor Steve Allender at Deakin University. Over the years, Assoc. Professor B.A. Biggs (School of Medicine University of Melbourne) and Assoc. Professor Peter Anear (Nossal Institute, University of Melbourne) have also provided valuable advice and support in developing and critiquing concepts and papers for publication submission, some of which are included in this thesis.
Foreword

It was in 1993 that I first travelled to Cambodia to work with non-government organisations in the health sector in the rural province of Kampong Cham. Although this was around the period of the general elections conducted by the United Nations administration to resolve decades of conflict, remnants of this conflict persisted in many pockets of the country side. This ongoing conflict and conflict resolution effort, amidst the challenge of negotiating the re building of the health sector, appeared to me to be in total contrast with my previous experience as a health centre manager in indigenous communities west of Alice Springs in Central Australia. I realised I would need all of my skills of adaptation and understanding in order to adjust to such a radically different social and political setting.

Twenty years later I was still pondering this question of personal and professional adaptation to political and social context. In the interim period of 1996 - 2012, I had worked as a provincial adviser in Mindanao in the Philippines, had tackled health policy and planning questions in settings as diverse as Post Soviet Mongolia, Communist North Korea, pre and post reform Myanmar, the emerging Kingdom of Bhutan, the newly independent State of Timor Leste, and the developing and post conflict States of Bangladesh and Vietnam. How is it that we can view health policy and planning and other aspects of professional and personal experience through such radically different historical and political windows?

In 2012 I embarked on this PhD dissertation in order to synthesize the lessons learned from these diverse experiences, and get to the bottom of the question as to just how historical and political narratives shape our approach to health policy and planning and to development work more generally.

In drawing out the themes and lessons learned from these experiences, I have come to a better understanding of how knowledge of history and its intersections with health policy and planning cannot not only expand our knowledge of why things are the way they are. Just as importantly, it can provide clearer insights as to the likely directions that development agendas are likely to take.

This is not like crystal ball gazing; it is seeing things more clearly. It is like the metaphor of the landscape which I use frequently throughout this thesis. Knowledge of country travelled always provides a clearer picture of what future horizons are likely to offer in terms of types of terrain to be crossed and the potential pathways and means we have at our disposal to cross them.

As well as instructing me on potential roads, my landscape experience over the last two decades has also instructed me on missed opportunities. That is, there are roads I could have taken. For me, it has become very apparent that much of my development effort has focused on the “clean up” role of health system recovery and rehabilitation post conflict and post market reform.

If I had my time all over again, I would have interrogated far more rigorously the means by which public health thinkers and practitioners such as myself accommodate this arrangement through an unquestioning acceptance of the ‘clean up’ role. The lack of historicism in much of our public health thinking and analysis makes us run the risk, in the words of E H Carr, of becoming the “unconscious apologist of the static society.” From this standpoint, we are hardly in a position to question, comprehend and redirect a changing society for better public health. In contrast, we become locked into the reactive position of responding after the fact.
So if in fact it is history and politics that shape the evolution of health care systems and the health destiny of populations, then what public health organisation, methods and tools do we have to critique the directions and exercise of this political power?

In this thesis I have provided a thorough interrogation of the links between health systems and policies and political history in Cambodia, Myanmar, North Korea, Mongolia and other countries of the region mentioned above. At the heart of this inquiry is the notion of applying primary prevention as the main operating principle for the health development specialist. In this thesis I apply this principle outside the traditional domain of public health science and extend it into the wider field of political and social relations.

That is, how can we apply primary prevention to development practice in policy and planning settings that are so dominated by the political and historical determinants of health?

What I have learned in my time as a public health professional is that there is a big difference between a health actor and a health activist; I have been an actor for far too long! An actor plays the required part, and the activist always questions it. So if this thesis were to have any impact at all, it would be to encourage just a handful of additional thinkers and practitioners to dig deep into history and take on the activist challenge of public health critique of political power.

**John Grundy Cairns Australia 22 February 2015**
1. Thesis Abstract

Background: Over the last 40 years, the Asian region has been transformed politically, socially and economically. In this period, health systems and policies have similarly evolved to reflect the main direction of these social, economic and political reforms resulting in some negative effects, particularly with regard to delays in post conflict rehabilitation, and adaptation to free market and governance reforms. The intersection of political change and health policy and systems reform, and the implications this holds for the approach to health policy making, is the main focus of this thesis.

The hypothesis of the thesis is that there are causal linkages between the trajectory of political and social history and turning points in health policy and systems evolution.

The research question is: To what extent is regional diversity and change in health system organization and policy direction related to historical evolution in the social, economic and political order? The answer to this question (the “so what” response) has considerable implications for the approach to the construction of health policy.

The main objective of the study is to describe and analyse the impact of historical change (political, economic and social) on health systems and policy change in selected areas of Asia, and then consider the implications that these findings have for the practice of health policy making.

The main analytic stance that I adopt is that of the ecological model of policy analysis. This model assumes that health systems adopt many of the features of living interconnected systems that continually seek to re-establish an equilibrium following the impacts of rapid external environmental impacts – which in this context are the impacts of political, economic or social transitions on health systems and policies. The assumption is that rather than being viewed solely as independent, technically engineered constructs, health systems are social sub systems that are open to the influences of the wider social and political order within which they are located.

The main method I use for describing and analysing the evolution of health systems and policies is the case study approach. Utilizing historical, social science and health literature and my previous published case studies of health systems development in Asia, I have constructed timelines of health and history for each country setting. The analytic categories of historical trajectory and the current positions of policy actors were then applied in order to analyse the current content of health policy, as well providing the opportunity to project forward feasible boundaries for policy action.

The main finding of this thesis is that health policy and systems reform tracks political and social transitions, with a significant lag occurring in the health policy response to these transitions, particularly in the late 20th century and early 21st century. This has had adverse health effects, particularly with regard to the impact on population health of delayed policy responses to post conflict rehabilitation, and to the effects of free market and governance reform. In the second (observations) and third sections (case studies) of the thesis, I have undertaken in depth case studies of three countries (Cambodia, the Democratic People’s Republic of Korea and Myanmar), as well as undertaking comparative regional reviews of history and health policy change. These regional reviews examine the previous three countries as well as the cases of Mongolia, Timor Leste, Bhutan and the Philippines. The fourth section of the thesis addresses the second half of the research question, regarding the implications of these findings for
health policy making. This is the “”so what?” section that attempts to reflect on theory and historical observation in order to frame alternative approaches to health policy making in transitional contexts.

In the fourth section of the thesis, I consider the implications of these findings. Rather than viewing health policy as being socially and politically reactive, I describe how health policy can be socially and politically proactive by employing a more rigorous public health critique of political policy. That is, if health policies and systems are social constructs or politically determined patterns of institutional behavior (rather than simply being technical constructs or technological innovations), then how can health polices and systems be more proactive in shaping politics for health (the health determinants of politics) rather than being reactive to it (the political determinants of health). In order to illustrate and analyse this approach, I describe three case studies of public health critique of political policy in the areas of social and health inequity, international aid and defence policy.

In conclusion, I reflect on the future of health policy and I recommend strategies or approaches for countries to adopt that provide a more rigorous health policy critique that takes into accounts the political and historical foundations for health policy reform. Based on the case study findings, I then argue the case for situating politics and history, along with epidemiology and demography, at the very centre of health policy analysis.

An overview of the findings of the thesis is summarized below in Figure 1.

**Figure 1 Overview of Findings**

A. **Health & Political History**: Health systems and policy reforms track social, economic and political transitions, effecting both the pace and direction of health reform. (section 2)

B. **The Political Determinants of Health**: The direction and pace of health policy and systems reform is shaped by the character of the political and historical transition and the capability of health and social systems to respond to them. (section 2 & 3)

C. **The Health Determinants of Politics**: If health policy and systems formation are politically determined, then the implication should be considered as to how health policy can act to shape politics in contrast to being reactive to it. A starting point for this approach is more rigorous public health critique of political policy. (section 4)
2. Thesis Rationale and Research Questions

Problem Statement

The main problem I address in this thesis is the wide variety of health system design across the region and the challenge this presents for health policy makers and development specialists. The specific problem this diversity presents is how to remain technically consistent when countries transition through different political periods. The second specific problem I will address is accounting for the significant lag in health policy in response to the often negative impacts of transition on health care access and outcomes. The problem I expect to solve through examination of the intersections between health and political history is how to best position policy makers to formulate more responsive health policy in transitional contexts.

I have made three initial observations on history and health policy which have set the scene for in depth case study observations and analysis.

The first observation is that the region demonstrates a wide variety in the design of health system administrations, from highly centralized administrations in DPR Korea, to early reform countries including Myanmar and Mongolia, to highly diversified and complex and established reform settings such as in Cambodia and the Philippines.

The second observation is that these national states and health systems over the last 30 years have transitioned through different political periods, which have in turn shaped the re-design of health systems and policy directions.

The third observation is that, despite the links between political reform and health reform, the health policy response generally lags well behind social transition. The effects of this health policy lag behind economic, social and political change is evident in persisting inequities in health care access and outcomes post transition, and also in the lengthy time periods for attainment of universal health coverage.

Rationale for the Study

The rationale for the study is to describe and analyse through the case study approach the intersections between health policy and history. By better understanding the intersections of health and history, I envisage that health policy making strategy and tactics can be better adapted to the real world situation of the dominance of politics and history in shaping the evolution of health systems and health policy.

As is evident in many cases studies of health and social transition in the region (Bloom 2008, Burau 2006, Lhamsuren 2012), it is becoming increasingly challenging to develop consistency in health policy approaches. Impacts of globalization, political ideology, demographic shifts and conflict have all served to shape a wide variety in the design of health systems and the status of population health across the region. As we will see in the case studies, the challenge this presents for policy makers and development specialists is how to best adapt policy formation and content to such a wide variety in health system administration and political and social context. The problem with current approaches to health policy analysis is that they are mainly focused on technical analysis, or of process analysis that relates to the current state of events in a given setting. What is missing in the knowledge domain however is adequate testing of the hypotheses of the intersections of health policy and history, and on how this impacts on current dynamics and on feasible directions for health policy (Bloom 2011, Walt 2008). In this study I
attempt to address these gaps in knowledge of the intersection of health policy and history, with a view to guiding health policy makers and development specialists on how to best apply this knowledge to the study of current health policy dynamics and future health policy directions.

**Research Question, Objective and Area of Study**

In response to these observations and problem statements, the main question of this study is – to what extent is regional diversity in health system organization and policy application related to historical evolution in the socio-economic and political order?

The main research question is supplemented by specific research questions that are contained in the body of the published papers, and which are stated in the summary at the commencement of each chapter. The research questions that are specific to each paper are included in figure 2 below.

**Figure 2 Specific Research Questions from Published and Unpublished Papers**

| 1. | What are the main historical determinants of health policy change in Asia? |
| 2. | How do we analyse health policy responses to social change in Cambodia between 1975-2013? |
| 3. | How have political reforms shaped health policy change 1950-2013 in the Union of Myanmar? |
| 4. | What technical space is there for health systems strategy development in the Democratic People’s Republic of Korea? |
| 5. | How have political reforms shaped health policy change in Asia between 1950 and 2013? |
| 6. | What are the policy implications of persisting health inequities in Asia? |
| 7. | In the event of failing systems of international relations, who has the responsibility to protect the health of vulnerable populations? |
| 8. | What is the role of public health in the analysis of defence policy? |

Based on the initial observations described above, the thesis aims to do the following:

1. Describe and analyse the links between history and health policy in selected countries of Asia
2. Consider the implications for health policy making of the intersections of health policy and historical trajectory.

The geographic focus of the study is Asia, with main case study countries being DPR Korea, the Union of Myanmar, and Cambodia. The thesis is supplemented by two additional regional studies that, along with the above mentioned countries, also consider the historical development of health systems and policies in Mongolia, Bhutan, the Philippines and Timor Leste.

There were a number of reasons for selecting countries in the same geographic region.

The first, and most obvious reason, is that these countries have been the locations of the authors experience with health policy and planning over a 20 year period (with varying periods of experience for individual countries).
The second reason was to develop a regional perspective on health policy evolution. The advantage of the regional perspective is that it enables an overview for application of regional policy, whether it is in highly technical areas such as communicable disease control, or more managerial policy areas such as health financing and human resources management. One of the challenges of regional approaches is to adapt regional strategy and policy approaches to specific country settings.

An additional advantage of the regional approach is to pick up on the comparative “dynamics” of health policy and social transition. This is outlined in Paper 1 in particular, where the experience of 7 countries with policy and social transition places countries at specific stages of transition along a continuum of administration (ranging from highly centralised to decentralised and then more open organisational models). The advantage of this approach is that it enables the building up of a regional view of health policy and social transition that picks up on the direction of the reform trajectory as outlined above.

This is not to say that the approach is entirely descriptive. In Paper 5, the regional analysis of the intersection of health policy and political history in Asia analyses the reasons for variable pace and direction of reforms in many of these countries. This is attributed to the variable impact of three post transition shocks – these are post conflict rehabilitation, free market reform and governance reform.

The final reasons for selection of countries from the same region are that many of them are subject to the same impacts of globalised market and conflict settings. Case studies from Mongolia, the DPRK, Cambodia, Myanmar and Timor Leste all testify to the dominance of regional conflict in shaping political change and subsequent health policy reform and health sector rehabilitation pathways. Similarly, and with the exception of the DPRK, the influence of globalized market and governance reforms “spill over” national borders into movements of private sector development, civil society emergence, economic growth and widening inequalities and the subsequent policy struggle for Universal Health Coverage.

In summary, the main strengths of the approach are that by selecting countries that are in a similar geographic region, it is possible to pick up on regional trends and themes in both historical and health systems development. This has enabled me to identify what I describe in the conclusion as a “health policy arrow of time”, which clearly identifies the trend away from centralized monolithic state based health service provision towards the development of more open, multi provider, decentralised and pluralistic models of health administration.

If there is a weakness in this approach, I would say that by selecting countries that are in close geographic proximity, it may be more difficult to make generalizations about other global health regions (ie. findings may be specific to the region). In order to address this gap, I recommend (see Figure 14 in the conclusion) future research of similar case studies in health policy and political history in other regions of the globe (for example the African and South American States).

**Knowledge gap to be addressed**

Through presenting in depth case studies of history, health and health system development from selected countries across the region, I develop and apply a social transition analytic framework in order to determine the extent to which health systems and policy boundaries are related to the forces of social and political transition, and consider the implications these findings have for the approach to health policy analysis. In doing so, I address the knowledge gap identified by health policy and institutional analysts.
with regard to the lag of health policy behind social transition (Grundy 2011), and in particular, on the lack of attention to history in the determination of health policy trajectory (Walt, 2008). These knowledge gaps are elucidated in Section 1 Chapter 1 (Literature Review)

3. Structure and Organization of the Thesis
I have structured this thesis into four main sections. The first section of the thesis consists of an introduction and methods section, and in depth literature review which covers four main topics of health policy, systems thinking, transition and policy change.

The second and third sections then contain eight papers on the subject of health policy and social and political transitions and the political determinants of health, of which seven have been published.

For the published papers, I have included the following:

1. The title and authorship of the paper, including an internet link to the PubMed or Social citation index site;
2. A linking paragraph describing how the paper fits into the overall direction of the thesis;
3. The specific research question addressed by each paper; and
4. The published abstract.

The published papers are then followed by the final section (section 4). This is a conclusion that summarizes the main findings and considers implications for health policy analysis. Annex 1 references other papers I have published with colleagues that are relevant to health policy and health systems function in Asia.

The detailed breakdown of sections is as follows:

In Section 1, “Introduction,” outlines the literature review and methods.

In Section 2, “Observations,” includes a chapter on observations on social transition and health systems evolution more generally in Asia (Paper 1). This sets the scene by comparing and contrasting rates of political and health policy change in the Democratic People’s Republic of Korea (DPR Korea), Mongolia, Myanmar, Cambodia, Bhutan, Timor Leste and the Philippines.

In Section 3, “Case Studies of Health Systems and Social Transition,” more in depth country studies are undertaken of health policy change in relation to historical and political change. The case study from Cambodia analyses health policy and systems change using the social transition analytic framework that is applied in subsequent studies (Paper 2). The second case study reviews political and health policy change in the Union of Myanmar from independence up until 2012 (Grundy et al, 2014) (Paper 3). The DPR Korea case is then described, with particular reference to the capability of making technical policy innovations in the context of the political and historical determinants of health (Paper 4). This section concludes with an overview of the intersection of political history with health policy reform in Asia, documenting the cases of DPR Korea, Myanmar, Mongolia, Cambodia and the Philippines (Paper 5).

In Section 4 “Synthesis and Policy Implications,” I address the “so what” aspect of the research question by considering implications of the main findings regarding the intersection of history with health policy.
In the analysis of health equity in Asia (Grundy et al 2013) (Paper 6), I construct a framework for public health analysis of political policy. This framework of public health critique is then applied to the analyses of international aid and foreign policy in DPR Korea and Myanmar (Grundy et al 2012) (Paper 7) and then to the public health analysis of defence policy (Paper 8).

The final chapter (conclusions) summarizes the main findings, as well as making recommendations for future research centered on the political determinants of health and the related approach of public health critique of political policy.

The overall structure of the thesis is outlined in figure 3. More detail of the thesis structure (including the location of the published papers in the overall flow of the argument) is described in Figure 4.

**Figure 3 Structure of the thesis**

<table>
<thead>
<tr>
<th>Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>To what extent is regional diversity and change in health system organization and policy direction attributable to historical evolution in the socio-economic and political order?</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and Methods</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations of Health System Change from Asia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Studies in History and Health Policy Change from Cambodia, Myanmar, DPR Korea, Mongolia, Timor Leste, Bhutan and the Philippines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Implications – Public Health Analysis of Political Policy</td>
</tr>
</tbody>
</table>

**4. Analytic Framework**

In this thesis I propose an analytic framework to guide policy makers and development specialists in making more prompt and effective health policy responses to social transition. I propose three analytic categories that can be applied against a wider theoretical background of complex adaptive systems and which view health systems as a system component of a wider social, economic and political order.
The first analytic category *historical trajectory* addresses the issue of trajectory in health policy analysis based on the evolution in macro-economic, social or political conditions. The second identifies *policy positions*, which considers the issue of responsiveness of policy actors to social or political transitions. The third analytic category *policy boundaries*, re-examines the scope for future policy action based on analysis of trajectory and current positions. When considering application of the policy analysis categories, due attention will be provided to those applications which are *generalizable* across all transition settings.

The selection of this framework is guided by the findings in the literature which indicate a lack of historical and development perspectives in policy analysis, particularly as articulated by Walt in 2008 and Bloom in 2011. Both of these analysts (in particular Walt (2008)) critique the lack of a historical perspective in policy analysis, and in the case of Bloom (2011), the path dependence of policy development linked to social and economic reform. This analytic framework is intended to address the gaps in analysis by introducing notions of historical trajectory, positioning and policy scenario building into a single “health policy landscape” which I elucidate in the case studies in sections 2 and 3.

The limitations of current approaches are that, although broader historical and development frameworks have been posited as being highly influential in shaping the trajectory of health policy, examination of detailed cases of the connections between health and history are limited in the literature. In the literature review, case studies and conclusion sections, I will compare and contrast this historical and political approach to health policy analysis with more conventional health systems analysis approaches, which largely consider health policy technical content and dynamics in terms of the internal workings or “building blocks” of the health sector (WHO, 2007).

The historical framework for health policy analysis is also guided by an emerging literature on the theoretical underpinnings to health policy and systems change, which points to a wider system or ecological perspective as to why health systems and policies reform in the way they do (McMichael 1999, Capano, 2009). A systems perspective for example views policy change in terms of feedback loops between various technical subsystems such as health information, health financing or human resource systems, the interactions of which constitute the particular character of health systems (WHO, 2007). An ecological perspective in contrast takes a wider angle view, and considers a health system itself as a subsystem of wider political and social field of influence that is shifting through time. In this thesis, the ecological view underwrites the case study analysis (including the analytic categories outlined above) in order to systematically articulate the manner in which health policy and systems evolution is inextricably entwined with, and shaped by, a social and political field of influence that is transitioning through historical time.

The analytic categories of historical trajectory, current policy positions and policy boundaries are detailed in the Cambodia case study on health and history (*Paper 2*, Grundy et al,2014), and is subsequently utilized for the Myanmar (*Paper 3*, Grundy et al 2014) and the Asia regional case studies (*Paper 5*, Grundy et al 2014). Application of these three analytic categories in a particular setting comprises a health policy landscape. All of these country studies utilize health and history timelines to pinpoint the intersection of political and health history, and the related turning points in health policy directions.
5. Collection of Papers for Examination

The following set of eight papers has been submitted for examination. At the time of writing, seven of eight papers have been published, and one paper remains unpublished. This list of papers are as follows:


PAPER 2: Grundy J, Hoban E, Allender S “History and Health Policy Turning Points: The Case of Cambodia 1975-2014.” Unpublished manuscript submitted for publication

PUBLISHED PAPER 3: Grundy J, Annear P, Ahmed S, Biggs BA, Adapting to Social and Political Transitions - The influence of history on Health Policy Formation in the Republic of the Union of Myanmar (Burma) Published online Feb 10 2014 *Social Science and Medicine* 2014 [http://dx.doi.org/10.1016/j.socscimed.2014.01.015](http://dx.doi.org/10.1016/j.socscimed.2014.01.015)


PUBLISHED PAPER 5: Grundy J, Hoban E, Allender S, Annear P “The Inter-Section of Political History and Health Policy in Asia – The Historical Foundations for Health Policy Analysis” *Social Science & Medicine* Volume 117, Pages 1-162 (September 2014)


Figure 4 outlines the publications in the context of overall thesis structure.
Figure 4 Publications in Context of the Overall Aims and Structure of the Thesis

**OBSERVATIONS**

PAPER 1 Observations from Asia
What are the main historical determinants of health policy change in Asia?

**CASE STUDIES**

PAPER 2 Health & History Cambodia
How do we analyse health policy responses to social change 1975-2013?

PAPER 3 Health & History Myanmar
How have political reforms shaped health policy change 1950-2013?

PAPER 4 Health & History DPR Korea
What technical space is there for health systems strategy development in DPR Korea?

PAPER 5 Health & History Asia
How have political reforms shaped health policy change in Asia 1950-2013?

**IMPLICATIONS**

PAPER 6 Critique of Political Policy
What are policy implications of persisting health inequities in Asia?

PAPER 7 Critique of Political Policy
Who has the responsibility to protect the health of vulnerable populations?

PAPER 8 Critique of Political Policy
What is the role of public health in the analysis of defence policy?
6. Rationale for Journal Selection

High impact journals were selected where possible. As this thesis is principally concerned with the intersection of social sciences and health policies and systems, I targeted draft publications to social science journals and those with a trans-disciplinary focus.

The original plan was to integrate my existing published papers into a PhD thesis. After discussion with my supervisors, this plan was revised and a new analysis was undertaken of case studies in history and health policy. These more recent publications have however built on my previous published work (which is therefore frequently quoted throughout the thesis – see Annex 1 for details of these previous publications). As a result of this revised structure, six out of eight papers in the thesis were prepared since commencement of my Doctoral Candidature, and two of the papers were published before 2012 prior to commencing my Doctoral Degree. Neither of these two previously published papers has been used for the attainment of another higher degree.

7. List of Contributions to Journal Articles

Most of the papers in this selection are co-authored by either my academic supervisors or professional colleagues. In all cases, I developed the concepts, undertook the research and analysis, and drafted the articles. My colleagues then critically reviewed the articles and provided recommendations on structure and content and journal targets. My main supervisors, Associate Professor Elizabeth Hoban, and Professor Steve Allender in the School of Health and Social Development, Deakin University contributed to two of the articles in this manner. Associate Professor Beverley Ann Biggs at the School of Medicine University of Melbourne undertook a contributor’s role, as did Associate Professor Peter Annear at the Nossal Institute for Global Health, University of Melbourne.
SECTION 1. LITERATURE REVIEW AND METHODOLOGY

1. Literature Review

Background and Problem Statement
One of the main challenges in health policy analysis is the significant variation in political and socio-economic structure across the Asia region. In addition to the technical determinants of health policy making, it is arguably this rich contextual background in politics, socio-economic structures, culture and history that is the main driver of health policy and system diversity. This diversity presents itself in a number of ways, including the degree to which systems are decentralised, the way in which health systems are financed, and in particular, the level of participation of civil society and the private sector in complementing the public health service delivery system. This diversity has important implications for the practice of health policy development, implementation and analysis.

Through the development of case studies in DPR Korea, Myanmar, Mongolia, Cambodia, the Philippines, Timor Leste and Bhutan, this thesis will compare and contrast health system designs and the degree to which they mirror and respond to the forces of socio-economic and political change (social transition), and consider the implications these findings have for the practice of health policy making.

In order to achieve the objectives noted above and to assist identify theoretical frameworks, I will critically review the main trends in public health reasoning and practice across four conceptual domains:

1. The Processes of Health Policy and Institutional Analysis;
2. Concepts of Systems Thinking and Health System Strengthening;
3. Concepts of Health Transition and Social Transition; and
4. Policy Change and the Political Determinants of Health

By reviewing the processes of health policy and institutional analysis, I propose to reach a better understanding of the dynamics of health policy making across a range of contexts, and assess the extent to which the tactics of health policy making and processes are generalizable across diverse social and institutional settings.

In terms of concepts of systems thinking, I propose to conceptualize systems thinking not only in terms of the sub components of health systems, but more importantly, how health, as a sub system of a broader social system, reflects the current organizational paradigms of the political order.

By comparing and contrasting concepts of social and health transition, I propose to reach a deeper understanding of the impacts of economic, social and political change on health and health organization.

Finally, by describing and analysing concepts and theories of policy change (including the political determinants of health), I will identify the main threads in the current debate on why health policies change in the directions they do, and what implications this has for the approach to health policy analysis.

Figure 5 represents the framework for organization of the literature review of this thesis.
1.1 Health Policy Analysis

Theories, Frameworks and Critiques of Health Policy Making

Health policy itself is defined as the courses of action that affect the set of institutions, organizations, services and funding arrangements of the health system (Buse, 2005). In analyzing approaches to health policy analysis, Walt (2008) divides the approaches into theories and frameworks. In terms of these frameworks, Walt identifies main frameworks that include “the stages heuristic”, the “policy triangle”, and “network frameworks.” The stages heuristic is a public policy framework which divides the policy making process into four stages and they include, agenda setting, formulation, implementation and evaluation. Walt (2008) argues that this framework has been critiqued due to its linearity which lacks match with reality, and which fails to demonstrate causality.

The “Policy Triangle” framework, first described by Walt and Gilson in 1994, is grounded in political economy approach and considers how context, actors, technical content and process interact to shape the making of policy. This forms the basis for Walt’s later assertions that current policy analysis is insufficiently cognisant of power and position (Walt et al 2008). The authors also argue that health policy analysis should be organized in such a way that represents a situation and assists to explain it.

It is not only the type of actors and technical content that sets the backdrop for investigation of health policy processes. Power itself, particularly in relation to the specific organizational and social setting in which it operates, is also an area of investigation. Erasmus et al (2008) argue that the exercise of power can vary according to implementation settings, whether they are in hospitals, clinics or in local bureaucracies. The authors argue that to understand and shape policy formulation, judgments need to be made about the existence of power and how it influences policy implementation. Lower middle income country policy making processes are shaped by systems of politics, socioeconomic, institutional capacity and international relations, which remain a consistent theme throughout the cases studies explored in this thesis.

Bloom (2011) adopts the notion that health systems are highly path dependent as a result of the accretion of learned behaviors and cultural norms. Bloom’s study of health policy in China (2011) argues for the importance of the links between health systems reform and broader development policy, particularly in
the context of the guiding political narratives of political elites in shaping this pathway. In a similar vein, Sturmberg et al (2012) indicates that health policy reform agendas are shaped by “attractors”, which are defined as the shared values which pre-determine the directions which reform takes.

Hence, in being socially constructed or at the very least socially influenced (Sheikh et al 2011), health policy processes (and the institutions in which they are embedded) are subject to historical forces. That is, it is health policy making processes, and not only the technical content of the policies, that are subject to these influences and hence represent a moving target for policy analysis. Policy process shifts not only across contexts at any single point in time, but even more importantly, and as we shall see in the case studies presented in this thesis, within single contexts and through time (Grundy et al 2009). Gilson (2008) argues that policy analyses frequently neglect any assessment of historical influences on experience.

The main critique therefore of existing approaches to health policy analysis that, although it has significant explanatory power in terms of understanding the complexity and causal links in policy development at any single point in time, it is essentially non-historical in its stance and tends to ignore the contributions of the social sciences to health system research (Bennett et al 2011). For this reason, health systems and policy analysis often lacks explanatory power in determining the trajectory for implementation and the associated future scenarios for policy or systems reform.

**The Role of Social and Historical Context in the Shaping of Health Policy**

The main point of the historical frame of reference is its consideration of the concept of a context specific health policy trajectory, from confirmed historical origins that have an influence on current positions, towards a set of probable policy and planning boundaries for action. It is possible to commence from the current time and propose forward health planning scenarios in the form of a set of alternative futures, a technique of which has been applied to the projection of scenarios for pandemic planning (Neiner et al, 2004). Other analysts suggest that through longer-term analysis of social phenomenon it is possible to construct a policy implementation trajectory (Walt et al 2008). Taking into account what others have referred to as the path dependence of policies and systems (Altenstteter et al 2005, Bloom 2011) it is conceivable to develop a set of probable futures for policies and systems. The contextual and historical basis of policy formation is also evident in the lack of universal formulas for pathways to universal health coverage (Carrin et al, 2008) and highlights the degree to which the cluster of values surrounding the evolution of the political and social systems sets the scene for the construction of different universal health coverage pathways.

In her review of the role of history in health policy analysis in Britain, Berridge (1999) points out that “health policy specialists have pointed to a failure to learn from experience as one of the main reasons for organizational failure in health.” Given that evidence based medicine is seen as a fundamental principle for guiding policy and practice, history is another way of contributing to the evidence base by shaping policy based on lessons learned from historical experience.

But history is not necessarily viewed as a science, particularly if viewed through the lens of ideology. Ideologies (whether political, economic or religious) have been described as “strong beliefs based on untestable assumptions” and can be viewed as the antithesis of science, which is reported to reveal plausible truths based on testable hypotheses. Milio (2005) laments the dominance of ideology over
science in the setting of public investment priorities in the USA during the Bush administration era. Yet it still remains the case that, in order to fulfill a political agenda, governments must make value judgments about the allocation of public investment, including make critical decisions regarding relative investments in sectors including defence, education, social safety nets and health. In fact, values and political ideologies can be central to policy directions through providing a window of opportunity for change, particularly during political electoral cycles (Lavis et al 2009). It is in this sense that public policy making can be central to political policy. Public policy making has been defined as “the process by which governments translate their political vision into programmes and actions to deliver outcomes - desired changes in the real world” (Nutbeam 2004)…..

Based on this interpretation, public policy making is the art of uniting the best available scientific evidence with the value judgments of political leadership. In contrast, the public health scientist who adopts the ahistorical and apolitical stance runs the high risk of isolating evidence based decision making from the real world of history and politics. This real world of history and politics and its impact on health is most explicit when it is considered that it is society that “distributes material resources and creates opportunities for participation among its citizens” (Jones et al 2006).

Another way to view this interweaving of science and policy is to view both science and policy as being “multi-layered, with hierarchies of power, spatial webs and cascades, and economic engines or brakes operating to enhance or impede interactions” (Berridge and Stanton, 1999 Page 1133). The additional layer is history, which provides the dynamic perspective to these hierarchies of power and their related guiding ideological and political narratives that operate to enhance or impede interactions between science and policy through time. In a study of the comparative history of the BCG vaccine introduction in Scandinavia, Britain and the USA between 1920 and 1961, Bryden (1999) found that that “while debates centred on the scientific value of BCG, they were underpinned by ideological differences and different approaches to disease prevention and health and welfare policies.”

Similarly, an examination of public health efforts to prevent and manage the problem of hookworm in the 1920s found that even though the main agency involved in this effort (Rockefeller Foundation) was committed to doctrines of scientific neutrality, it in fact applied many political criteria in its decision making in order to engage the support and interest of politicians, bureaucrats, physicians, business interest and the peasantry. This led the analysts to conclude that there was a coexistence and even inseparability of the worlds of science and politics and international health policy (Birn et al 1999).

The development of health policy making in India highlights the extent to which the twin forces of epidemiological and social transition shape both the health policy making process and the health policy making agenda. Peters et al (2003) highlight the fact that India's health system was designed in a different social era, whereas the new era is dominated by shifts in epidemiology, demography and social aspects of health. Disparities and diversities across India require that national health policy needs to accommodate the needs of specific states and districts, thereby opening the way to innovation and local accountability. The rise of the non-communicable disease epidemic in some state settings, and the persistence of more traditional public health challenges in other states invariably relate to the level of state development and its status along the spectrum of social and epidemiological transition. This social transition, associated with the rise of the private sector and decentralisation, calls on central policy makers to support development of local management capacities rather than directly managing public health issues through
central program management. Trends of economic development, privatization, decentralisation and democratization in India shape the content of health policy and the way it is developed and implemented.

A review of the impact of politics on health policy making in Pakistan (Khan et al 2007) concluded that frequent changes of national government led to over centralization, poor resourcing, and lack of wider participation in the health policy making process. The authors concluded that rather than politics facilitating health policy and development, the overall effects of politics on policy were negative. This highlights the risk of approaching health policy without an overall strategy for engaging effectively with political power.

In Lao, a study of policy making processes (Jonsson et al, 2014) found that the pace and scope of policy change is driven by the interests of a wide range of policy actors. These include government, client demands, market changes and by pressures from external relations. The “boundaries for agency” are therefore effected by the interest of these stakeholders as well as by domestic implementation capacity.

The vast literature on decentralisation also supports the findings of the disengagement of health professionals from local government, and the subsequent negative effects this can have in terms of the minimal engagement by local government in tackling public health issues at a municipal level (Collins et al 2010). The disengagement from political process is also evident in the USA, where it is argued that the limited conceptualization of health, principally in the form of a clinical model of health, has resulted in an overemphasis on disease control and technological responses to health problems, resulting in escalating health care costs, poor health outcomes, and increasing disparities in health (Peters et al 1998).

A review of the development of health policy in Fiji found that understanding the policy process can assist to improve the quality of policy development (Negin et al 2010). The authors conclude that there has been a disregard for the process of policy development in Fiji and policies have, in some instances, been imposed by external donors with a corresponding lack of ownership over policy development by the Fiji Government. The authors conclude by highlighting the risk of policy imposition, and call for a deeper analysis of the political economy and cultural factors shaping the health policy environment.

These perspectives are consistent with a political economy view of the determinants of health. Political economy perspectives view determinants of health with socially and politically mediated exclusion from material resources (Szreter 2003). A review by Calikoglu (2009) of health reforms since the 1980s found that the political character of the country was associated with the level of private sector funding in health care. Goddard et al (2006) make the point that health priority setting in recent years has been dominated by concepts and practices of economic evaluation, but that in fact much of this priority setting is shaped by the values and perceptions of electorates. What constitutes rational decision making may not therefore be solely based on economic or scientific principles, but rather on the agency of specific interest groups. Whether in examining trends in HIV (Webb 1998), tobacco control (Chantornvong et al, 2001) or even access to nephrology care (Rettig et al, 2000), the policy landscape is often dominated by the intertwining of politics with economics, resulting in a bias of investments in response to the exercise of political power, events or vested interest.

Szreter (2003) goes beyond specific diseases or programs, to an examination of social capital in the light of the political economy perspective and concludes that the evolution of social capital is closely related to
the policies and practices of the state. Szreter contrasts transition thinking with political economy approaches, by suggesting that transition thinking is primarily concerned with the examination of social or economic exposures. The point of the political economy approach is that differences in population health can be better explained by the political and ideological stance that results in differing access to health related material resources including housing, neighborhood amenities and health services. The transition to a market based economy in China provides a clear example of ideological and politically driven reform resulting in access inequities, as the country has sought to introduce market incentives and liberalise physician payments and hospital finance, while at the same time trying to reduce out of pocket expenditures and maintain affordable basic care for the population (Daemmrich, 2013).

A common theme in these country analyses of policy processes and the political economy perspective is the dominance of politics in framing the context for health policy making, and the risk associated that health policy makers isolate themselves from political dialogue. The risk this isolation presents is that of over reliance on medical and technological approaches to problem solving in public health, at the expense of maintaining focus on the political and administrative interventions aimed at reduction of disparities and wider public ownership of public health agendas.

**The Dynamics (Actors) in Health Policy Making – the Concept of Position**

From a theoretical perspective, the concept of “position” derives in part from the qualitative research concept of reflexivity, which acts to prompt reflection on one’s own position in the context of health and policy development (Finlay, 2002). The “position” of the various actors and institutions in the context of a country’s historical development determines what policy trajectories are feasible and what are not. Policy networks, as sub systems of a wider complex adaptive social system have a past that then become co-responsible for present behaviours (Gatrell, 2005). The co-responsibility of current behaviours with the past relates to the notion of *habitus*, whereby the construction of a specific political and social order instructs the durable disposition of individuals within a specific period of social time (Bourdieu, 1977). This is a critical issue in development and policy practice, where negotiation and mutual awareness of policy options and related behaviours are taken from the standpoints of “insider” knowledge of the path of history and the networks of the current organizational structure, as well as of the “outsider” knowledge of actors with wider exposure to alternative policy pathways and histories (Buse et al 2005).

Policy making processes can be shaped by networks of influence, whereby the position of a policy maker within a decision making community can work to determine the approach to policy. The structure of the network describes positions of influence and where people are situated within this network. It is this “position” of the individual who influences policy that determines what the person considers to be important. Therefore, policy networks are also social networks.

In her analysis of the context of policy making processes in the civil service in Victoria Australia in the 1980s, Lewis (2006) found that key “positional groups” including an inner core of political and bureaucratic leaders were centrally positioned to provide the most influence over health policy making. Similarly, an analysis of the role of health consumer groups in policy processes was undertaken in the United Kingdom (Jones et al, 2004). This study found that consumers do have a role in shaping health policy, and that consumer groups have established networks with peers, health professions and politicians in pursuit of the health policy agenda. However, unequal power relationships were considered to be a
barrier to participation in the policy process, with the political agenda and lack of resources being identified as two of the main constraints (Jones et al., 2004).

One analysis of maternal health policy making in Vietnam, China and India (Green et al. 2011) demonstrated that policy processes are slow, inadequately coordinated and opaque to outsiders. By and large, a wide range of policy actors are not involved in policy processes. The authors argue that an opening up of the policy process will lead to stronger policy development and greater ownership by national governments, even though the process may be more difficult to co-ordinate. In a related study of policy making processes addressing maternal health in Vietnam, Ha et al. (2010) highlight the slight opening up of policy making processes, associated with the emergence of civil society, which is a result of the “Doi Moi” market economic reforms of the 1980s and 1990s. As is the case with India discussed above, the Vietnam situation illustrates the extent to which wider political and social context sets the scene for the acting out of the policy process by opening the stage to a new set of policy actors (Ha et al., 2010).

Buse (2005) discusses the extent to which policy making in the last 10 years has shifted, due to the involvement of a larger array of actors in the policy making process. Actors on the outside or on the edges of State boundaries (such as private sector and civil society) are now more active in health policy making processes. This hints at the role of historical forces, including constituency emergence in reshaping social context, and in turn, reshaping health policy making processes and agendas (Buse et al. 2005). The issue of policy direction and constituency emergence is a common theme in the case studies in this thesis, particularly in the transitional economic and political contexts of Mongolia, the Union of Myanmar, and the Kingdoms of Cambodia and Bhutan. In particular, the case of Cambodia supports the argument made by Buse (2005) in relation to policy processes, constituency emergence and the level of socio-economic development.

An analysis of mental health policy processes was undertaken in Cambodia in 2002 and 2003. Based on interviews with key informants in the policy development process, this study identified the role of the Ministry of Health as a “driver” of policy development, and highlighted the impact of the post conflict context on the development of health policy. The paper also highlights the power differentials between leadership and the community, and how the community of stakeholder interests was still in the formative stage in terms of being able to advocate for its own interests (Stockwell et al. 2005). Similarly, an analysis of mental health policy development processes in four countries in Africa (Ghana, South Africa, Zambia, and Uganda) found that the limited power of stakeholder groups affected the process and outcomes of policy development. Compounding this problem is the stigma associated with mental health conditions, and the low political priority accorded to mental health by government.

1.2 Health Systems and Systems Thinking

Health System Strengthening

In recent years, the literature on systems thinking and health system strengthening has expanded significantly. This literature has emerged in response to the challenge of managing a proliferation of vertical disease control programs (Marchal et al. 2009, Brugha, 2008). This is the case in relation to the critique of international health programs implemented through Global Health Initiatives (GHIs) in particular. Key elements of this critique include over emphasis on financing vertical disease control
initiatives, distortion of national agendas through imposition of external agendas, and the establishment of parallel management and information systems. The analysis by Buse et al (2007) identifies “poor habits” of the GHI policy which include skewing of national priorities by imposing external policies, depriving specific stakeholders of a voice in decision-making, inadequate governance practices, poor harmonization and insufficient resources to implement programs (Buse et al 2007).

The WHO definition of ‘health system building blocks” is illustrative of the underlying theories of systems analysis. Through effective interactions between such management system categories of human resources, essential medicines and logistics, service delivery models and financial management systems, an overall health system, of which these components form a part, are designed to operate at a higher level of performance. In contrast, a system “building block”, when viewed in isolation, is unable to encapsulate a vision of the wider architecture of a health system (WHO, 2011).

This reflects the interdependence of components and programs in the effective functioning of an overall system. Along with the concept of a hierarchy of system levels, this “interconnectedness” of sub components of a system is a central feature of systems thinking (Kreps 2009, Leischow et al, 2006). For a skilled, capable and motivated workforce to be in place, finance systems are required to reward performance and resource operations, and concurrently, infrastructure development and logistics and supplies must be provided to ensure quality and availability of services.

This interconnection of sub components of a system and the communication and coordinated endeavor that is required to support this connectedness can be viewed as a measure of the collective capability or intelligence of an organization (Kreps, 2009, Naaldenberg et al 2009). The issue of organizational comprehension and social learning is underscored by the distinction between “systems thinking” and “systematic thinking.” The latter pays attention to each sub component of a system, whereas a systems thinking approach analyses the overall interactions between various sub components and the impact of this interaction on the capacity of a system to learn and innovate (Naaldenberg et al 2009).

Systems theory views innovation as an outcome of confrontational dialogue between actors within a system who have diverse notions of structure, meaning and perceptions of power (Naaldenberg et al 2009). The important role of communication of diverse perspectives in innovation, furthermore underscores the important distinction between the capabilities of individuals within an organization, and the collective capacity of organizations to solve problems and generate solutions. In developing country settings, Sen (1999) has clearly articulated the distinction between income poverty and poverty of capability and its relationship to development. The processes of health system strengthening strategy development have demonstrated the potential in a number of case studies to increase the organizational capability of health systems through more structured dialogue between system planners and program planners (Tin et al 2010, Grundy et al 2008). In fact the tense relationship between health system planners and vertical program managers outlined in these case studies, and the policy innovations these tensions generated, is, as Naaldenburg (2009) suggests, an insightful illustration of the outcomes of dialogue between actors with diverse notions of structure and meaning in health policy implementation.

In the following section I will outline the main theoretical models underlying systems thinking including complex adaptive systems and complexity theory.
**Complexity and Systems Thinking**

A closely related concept to systems theory is that of complex adaptive systems. Complex adaptive systems (CAS) are defined as being characterized as an open state with poorly defined boundaries. Other characteristics of complex adaptive systems include continuing self-organization and involving a large number of non-linear interactions and multiple feedback loops. In complex adaptive systems, all interactions are focused on a system’s attractor or shared vision (Sturmberg et al 2012).

Complexity theory is a category of systems thinking that emerged from paradigms in the physical sciences, particularly in relation to quantum physics. The theory is based on the assumption that there are patterns of organization in both nature and society. A complex adaptive system has been defined as actions that are not always totally predictable and whose actions are interconnected (Holden, 2005). An alternative definition is that complexity refers to the phenomenon of order emerging from complex interactions among the components of a system.

Complex adaptive systems involve continuing self-organization and reformation with attention paid to the interactions and connections (Kreps 2009, Leischow et al 2006) focused on a system’s attractor or shared vision (Sturmberg et al 2012) or guiding principle (Thrift, 1999). In contrast to static thinking, which generally imposes a linear logic and which focuses on conditions at a single point in time, system approaches frame a problem as changing over time (Adam et al, 2012). Peter Hill (2011) applies complex adaptive systems theory to an understanding of global health. He argues that the range of diverse players, relationships and interactions, and the quantum of initiatives mean that global health shares many of the characteristics of complex adaptive systems. Hill argues that, despite the range of complexity, insight can be provided by this theory into the current dynamics of governance and can assist with development of an understanding of the whole context of global health. More importantly, he argues that it can also open up ways of accessing this complexity through local points of engagement (Hill, 2011). In other words, understanding of complexity is not necessarily presenting a scenario that is in any way more difficult to solve. By acknowledging the social and physical reality of complexity, we advance our comprehension of the way the world really is, and in doing so, enhance our capability to engage with it and change it.

In an analysis of the Australian Health Sector, Sturmberg et al (2010) applies the metaphor of the vortex, which is stated to embody the “self-organizing power” that is inherent in the system around the common attractor. The common attractor in the Australian context is postulated to be financial controls linked to disease outcomes. In an ideal state, the attractor should be patient needs, which is the main indicator of the responsiveness of the system (in terms of being patient centered). Sturmberg et al (2010) argues elsewhere that health care reforms should be more targeted at shifting the main attractor from cost containment and disease to health attainment. This critique is insightful, in so far as it suggests a values rather than a strictly scientific or economic basis to health policy making.

Gatrell (2005) argues that there is added value in complexity theory, as it emphasizes relations and networks, which contrasts with the linearity of reductionist perspectives. Gatrell also points out that there are several important characteristics of complexity theory. The first is that interactions may be short range but relations across networks can mean that influence can be wide ranging. The second, and the one most pertinent to this thesis, is that, as complex systems have a history, the past then becomes co-responsible for present behaviours. As discussed in the case studies, the co-responsibility with the past not only illuminates present behaviours but can also cast a shadow over potential future policy directions.
The linkage between complexity theory and systems thinking highlights limitations of the systems approach in two areas. Firstly, in analyzing the technical “building blocks” of a health system, complexity theory suggests that a health system itself is a sub system of wider social and political construction that is evolving through time. Secondly, given the particular pattern that history confers on systems evolution, the concept of trajectory is critical to reaching an understanding as to where patterns of health and health organizations are evolving from, and consequently, the possible paths they are evolving towards. The concepts of health systems as subsets of social systems, and the notion of trajectory, are two consistent themes running through this thesis, and will be expanded upon in detail in the Cambodian, Myanmar, North Korean and Asian regional case studies.

Applications of Systems Thinking
Having considered theories of systems thinking and complexity, I will now consider how these systems theories can be applied to an analysis of health systems development.

One review of the application of systems thinking to mental health (McCubbin et al 1999) concluded that the mental health system should be viewed as a social system influenced by the political and economic order, and not simply as a delivery system that is scientifically constructed in a normative manner. By adopting this perspective, along with all of its associated dynamics and complexities, McCubbin et al (1999) argue that strategic reforms may become more feasible. This perspective is instructive in a number of ways. Firstly, it enhances our comprehension of the extent to which social determinants shape both the character of the delivery system and also how it influences the strategic priorities that can enable better results. Secondly, the application of systems theory to organizational analysis goes beyond the organization itself and identifies a service delivery system as a sub-component of a wider social system.

Other writers apply systems thinking to assist them to better understand the dynamics of the internal management of the sector. For example, Warwick et al (2007) argue that the impact of management interventions on changes of behavior within the sector can be understood by a systems model to assess these changes. Livingood et al 2011 propose a fundamental shift in research approach from one that emphasizes identifying specific universally applicable interventions to one that promotes deeper understanding of systems thinking and the science of application. It is argued that such approaches would be more sensitive to complexity, interactivity and the context of local area and practice settings.

Bina (2008) applies systems thinking (particularly analysis of context) to an understanding of environmental health planning in China. The author identifies six aspects of context which assist to explain the shortcomings in environmental health assessments. The six aspects are policy, society, environment, institutions, organizations and actors. Based on this contextual framework Bina (2008) argues that it is possible to make incremental changes to the way in which environmental impact assessments are conducted (Bina et al, 2008). This approach is suggestive of the explanation provided by Hill (2011), who used complex adaptive systems theory to not only understand the whole but also more critically to identify points of engagement to manage the complexity of organizational change (Hill, 2011).

Naaldenberg et al (2009) apply the notion of systems thinking to health promotion practice. The authors argue that contextual specificities of the structure of a system, the meaning of actions and the power
relations between actors are all critical to an understanding of how systems function can be influenced. They argue that a system thinking approach increases our insight into the way relationships function between actors, and thereby facilitates social learning and innovation.

Although systems thinking can be a source of innovation and change, it can also inform our understanding of how change can be resisted. The ability to bring about system change can be constrained by social power. Social power is often exercised through the development and dissemination of ideology. Christens et al 2007 argue that in fact ideology, as an expression of social power, can also undermine or inhibit a systems thinking approach. Mills (1959) concept of the sociological imagination was based on the observation that both systems and individuals continually shape each other. Individual conceptions of systems, and the way that systems in turn shape these conceptions, is said to constitute the sociological imagination. It is this connectedness and interaction between individuals and the wider society that is characteristic of the complex adaptive systems approach.

But many questions remain unanswered, such as how does this connectedness and interaction between systems and individuals operate both within and beyond State borders, and most importantly, how it changes through time. What are the main pressures internally that shapes the evolution of health and health organization? Is social power bounded by the Nation State, and if not, what are the main attractors in the international social and political system that are shaping the directions in evolution of health systems and policies?

For the most part, the literature on health system strengthening is silent on these issues. These omissions reflect in part the current critique of health policy analysis, which describes the a-historical and non-reflexive character of much of this analysis. I argue in the thesis that the omission of a historical perspective acts as a major constraint in developing a deeper understanding of policy dynamics and trajectory. It is for this reason that I will turn to the literature on health and social transitions, to determine what evidence there is to link social change and history with health policy and organizational change directions.

1.3 Health and Social Transitions

In analyzing the spread in typology of health systems, and the impact this might have on health policy making processes and health outcomes, it is essential to apply the systems thinking approach to the analysis of social factors that contribute to the diversity of typologies and outcomes. In recent years, a significant body of work has developed around the concept of social epidemiology and the social determinants of health. Building on the earlier observation by Durkheim (1997) that there are in fact social rates of suicide, more recent analyses have extended this observation to analyze health outcomes and risk behaviours against the background of social and economic exposures including location, class and educational status (Marmot 2005, Wilkins 1996). This approach has fostered the development of a research methodology of social epidemiology, which analyses the frequency and distribution of diseases in communities according to social variables in contrast to behavioral or biological exposures. The awareness of the social impacts on health and disease has also accelerated in recent years the explanatory model of the social determinants of health. This analytic approach seeks to explain the frequency and distribution of health and illness in terms of the daily conditions in which people live and work (WHO, 2008).
This global health agenda has been driven in part by the evidence of persisting inequities in health care access and outcomes, despite decades of investment in universal health coverage and primary health care strategies. Recent World Health Assembly Resolutions on the Social Determinants of Health, (WHO, 2009) the Political Declaration on the Social Determinants of Health (WHO, 2011) and a revitalized vision of primary health care (WHO, 2009), testify to the broadening of perspectives beyond the intellectual borders of behavioral risk and biological and physiological determinants towards a social vision of health.

One of the limitations of the social determinants and social epidemiology approaches is their tendency to analyse health conditions at one point in time. Although it is true that social epidemiology has the capacity to examine trends in exposures to social and economic variables over time, the model lacks deeper explanatory power to uncover the main sociological or historical reasons that determine why these patterns of social health alter through time. The second limitation, particularly in regard to the subject of health systems and systems policy, is their limited explanatory power to determine the evolution of health systems and policies. That is, if there are social and political determinants of health and illness, are there also social and political determinants of health organization? If so, what is the implication of this for health planners and policy makers?

It is here that I will turn to the literature on health transition and social transition, in order to identify theoretical models that seek to describe and analyse the reasons for diversity in states of health and in types of health organization.

The Health and Organizational Impacts of Social Transition
A review of the world’s two largest transitional economies of Russia and China, so called for their radical reforms in marketization of economic systems, indicated that there were impacts on both health and health systems as a result of this transition (Liu et al 1998). Deterioration in health status was noted to be much more severe in Russia than in China, where political and market reforms were more radical. Nevertheless, the authors report common problems in both countries, particularly in relation to the detrimental effects of marketization on health care access. In particular, mental and social health problems such as suicides and alcohol abuse have been on the rise in both countries (Liu et al 1998). Similar conclusions were reached for post-communist Poland, where it was concluded that systemic political transformation had resulted in beneficial and detrimental effects on the well-being of society (Kolodziej et al 2007).

The Chinese State has undertaken radical reforms in the health care system since the Deng Xiao Peng economic liberalization in the post Maoist era from 1978 onwards (Jin Ma et al 2008). The health care system was initially highly centrally planned, totally state owned and universal in terms of access to health care. Commencing in 1978, China reformed its health system to a market-based model, resulting in a significant proportion of the population being unable to access health care due to financial barriers to health care access on the demand side, and a decline in the availability of primary health care personnel on the supply side (Jin Ma et al, 2008).

Diederichs et al (2008) trace the evolution of the health care system in Germany and provide a clear illustration of the main thesis, by demonstrating the extent to which health and history have co-evolved over two centuries from the 19th century to modern times. The authors conclude that the evolution of the
health care system through history is less influenced by the conceptions of medical and other health care professionals, but more by changes to the economic, political and societal context (Diederichs et al, 2008).

South Africa also presents an interesting case where radical political reform, in the absence of radical economic reforms, did not produce substantial changes in health outcomes. Unlike the situation in Poland, China and Russia, the reforms were not centered around marketization or change from a centrally-planned to a free-market economy, but instead focused on ending the political system of apartheid and the related disenfranchisement of 30 million non-White people in South Africa. Cameron et al (2003) examined the effect of post-apartheid economic and social transition on the growth and development of urban children and found that the growth of white children continued to be superior to that of their non-white peers. This finding led the authors to conclude that changes at the national political level had not yet resulted in improved child physical growth. This finding hints at the likelihood of radical transitions in economic structure (rather than political structure) as being the main determinant of the negative impacts on population health during social transitions (Cameron et al 2003).

The experience of countries in the Asian Region that have undertaken similar social, economic and political transitions in recent years demonstrate links between reforms to the economic and political order and shifts in direction in health policy. Systems that loosen controls in the areas of politics or economics frequently substitute systems of decentralised rule and regulation for the previous management practices of centralized command and control. This is characteristic for example of the health contracting models trialed in Cambodia following the political openings after the United Nations sponsored elections in 1993 and the subsequent program of health system reform (Schwartz et al 2004, Soeters et al 2003). In the Philippines and Indonesia, health sectors struggled to manage the complexity of decentralised institutional arrangements in the post centralist Marcos and Suharto eras respectively (Laksminarayanan 2003, Espino et al 2004, Heywood et al 2010). Specific areas of complexity include human resources management, financing arrangements, and the role of local government and the private sector. A main feature of many of these post transition analyses is the extent to which health policy makers are confronted by the challenge of addressing a health policy lag behind an accelerated macro-policy shift in the economic or political order.

Bloom (2008) argues that the key lessons for other countries to learn from China’s health sector experience are in relation to the challenge of institution-building in the context of rapid change. In order to manage this complexity, actors in the policy making process co-construct new institutional arrangements and rules to manage this complexity (Bloom 2011). These new rules need to be understood not only as an outcome of technical dialogue, but also as an outcome of dialogue with other aspects of the economy and society. In this way, health systems should not be just understood as “technical assemblages,” but should also be understood as knowledge economies located in a specific context (Bloom 2011 Page 2085).

The larger national stories detailed above uncover several themes that I will re-examine in the case studies in this thesis. The dominant theme is the role of social, economic and political reform in resetting the agendas for health policy making. The second is the emergence of inequities of health care access and outcomes, and the associated lag in health policy response to the effects of these transitions. The
following sub section describes some of theories that account for the determinants of health and social transitions, and how these two patterns of transition are linked.

**Contrasting Health and Social Transition**

One of the theoretical models developed in recent years to explain the changing patterns of health and illness through time is that of the health transition. This approach explains how the changing pattern of health is driven by shifts in epidemiology and demography. This in turn is reported to contribute to a change in the disease profiles of populations. In demographic terms, changes in birth and death rates, the aging of populations and urbanization will mean that by the year 2020, non-communicable diseases are expected to account for seven out of every ten deaths in the developing regions, compared with less than half at the current time (Boutayeb et al 2005). This has implications for the delivery of health care systems that will need to adapt its traditional emphasis on infectious disease and maternal and child health towards prevention and control of non-communicable diseases (WHO, 2012).

By analyzing shifts in social exposures such as urbanization, health transition analysts are able to quantify the level of risk that populations are exposed to at any point in time. However, it should be noted that the main subject of measurement is transition in health, rather than transition in society or organization. In one study of the impacts of urbanization on health risks in Thailand (Yiengprugsawan et al 2011), it was found that urbanization was a risk factor for poor overall health and depression, with the researchers concluding that programs and policies should focus on risk factors such as smoking, drinking, low social trust, and poor psychological health. In other words, the focus of the perspective with health transition studies is principally on changes in frequency and distribution of behavioural risk factors and disease in response to pressures of social change.

Health transition, with its focus on health, principally views the problem through the lens of the basic sciences of public health – namely epidemiology and demography. Changes to patterns of mortality and fertility result in shifts in the frequency, etiologies and distribution of disease in populations. In contrast, viewing health from a social transition perspective means we are analyzing states of health and health organization through the lens of history, economics and politics (see figure 6). From this perspective, patterns of mortality and fertility not only respond to changes in epidemiology and demography, but also from changes to the pattern of organization in society, and in particular the distribution of power and resources. Therefore, states of health are not only biologically determined states that emerge in response to changes in social conditions, but they are also social states responding to forces of history mediated by the way economic and political power is exercised and distributed both within and between societies.

From a social transition perspective, health is both a biological and social state that changes through time. Health is viewed in terms of the distribution of power and resources in society, or in Sen’s (1998) terms of the distribution of capabilities in populations, instead of the distribution and frequency of disease in populations. What this altered perspective offers for health policy making, is a different but complementary approach to guiding actions on disease prevention and control. This complementarity suggests the importance of exploring the interrelationships between social science and natural science disciplines in policy analysis.

O’Connor (2009) views the sustainability of social systems as being a result of complex interactions between the realms of systems science (including economic-environmental modeling), and a second
realm of the political and social spheres. It is the “interference” between these two spheres that signifies
the governance problem of coordinating actors and institutions with diverse interests. The drivers of
public health, as is evident in the discourse on the social and political determinants of health and health
equity, are a result of this interference between natural science and social science spheres of influence.

The complexity of the inter-action between the two worlds and the two knowledge systems makes it
difficult to dissect problems and analyse them at a single point in time and from the standpoint of a single
world view. Health states and health organization, though examined as “cross sections” or “building
blocks” depending on the discipline, are not experienced this way. Rather than pieces of still life that can
be excised and examined solely through the sharp focus of a natural science lens, they are in contrast
dynamic social constructs that are constantly changing shape in response to shifts in wider political and
social conditions. Rather than being viewed solely as one vast natural experiment, organizational systems
are in reality a social experience. As a social experience, they have their own system and policy dynamics
and trajectories that are grounded and move through specific time periods along with their connected
social, cultural and geographic spaces.

In many ways, the interaction between the two knowledge systems or world views (social sciences and
natural sciences) is highly analogous to the uncertainty principle of quantum theory, which posits that the
sub atomic world behaves as if it were both a particle and a wave, and that the very act of observation
changes the state being observed. Viewing the natural state in these dichotomous terms enriches
understanding of the way the natural world behaves, particularly in terms of understanding the probability
of events. In a similar vein, in public health the dichotomy between natural science and social science
world views mixes and contrasts a still point with a moving picture perception of health in history.
Arguably, this mixing of the two world views leads to a more enriched understanding of the probabilities
and trajectory of the twin tracks of health and history through time.

As an illustration of this point, the introduction of history into public health analysis introduces a higher
measure of complexity into policy and planning scenarios, particularly when linked to evidence from
demography and epidemiology. However it can generate a set of more realistic probabilities for policy
analysis and health planning. An effective social transition theory therefore should attempt to
accommodate both world views into a more comprehensive model guiding not only an analysis of past
and present conditions, but more importantly for practice, guide an analysis of the trajectory (origins and
probabilities) of health policy and organization through time. In this way, it should aim to set more
realistic policy scenarios, and increase the reflexivity and resilience of societies and organizations as they
adapt to social, economic and political transitions (reactive health policy). It will also aim to refigure
social, economic and political conditions towards states of organization that are the most beneficial for the
health of populations (proactive health policy or public health critique of political policy).

Viewed from this perspective, the evolution of health organization could be seen as the interference
between the natural forces of epidemiology and demography and the social forces of political and social
change. The term “interference” captures the sense of the inherently unstable organizational state of two
knowledge systems in continual negotiation as to the best way to organize systems in response to the
pressures of social change and epidemiological transition. In the health literature, analysts are reporting
that the “interference” in the real world between the natural science and social science spheres is largely ignored (Atkinson 2002, MacKian 2003).

**Figure 6 Contrasting Health and Social Transition Analytic Perspectives**

The study by Atkinson (2002) in Brazil highlighted the linkages between local health system organization and the political culture in Brazil. In Brazil, social organization and political culture are characterized by paternalism, favoritism and personal links. From a cultural perspective, public provision of social services becomes a favor rather than a responsibility (Atkinson, 2002). Atkinson (2002) maintains that these perspectives are largely ignored in policy analysis. MacKian (2003) points out that many studies ignore the social complexity of the interaction of individual, society and health care systems in the patterning of health care seeking behavior. In other words, although there is an individual or household level element to health decision making, the local area patterning of the decision making processes reflect collective forces or influences determining patterns of health seeking behavior. These cultural perspectives, as is the case with historical analyses, reinforce the notion of trajectory or path dependence (Bloom, 2011) in policy making by locating the impetus for action within indigenous frameworks, rather than external technical constructs or imperatives.

It is not only the intra state political and indigenous cultural forces that establish the path dependence of organizational states and health policy agendas. The vicissitudes of international relations have also contributed to reshaping the health policy context. The forces of globalization and international relations can create the conditions by which nation states, communities and health systems are subject to pressures for change. Impacts of globalization include movement of human resources, migration, pandemics, and the impact of trade on food security. In the field of international relations, the global financial crisis, foreign policy, trade policy, conflict and the policies governing overseas development assistance have demonstrated impacts on the health of populations. In recent years, the practice has emerged of “soft diplomacy” in international relations, as a counter weight to the hard power diplomacy traditionally.
implemented through the exercise of economic and military power (Kickbusch et al 2007). Soft power diplomacy is exercised through such means of exchange as cultural contacts, environmental protection measures and overseas development assistance. The exercise in soft power has achieved some breakthroughs in health policy and health impacts in challenging foreign policy settings. These breakthroughs have occurred because of the emergence in recent years of Global Health Initiatives and regional health mechanisms, which have bypassed the tensions evident in bilateral relations between donor countries and such states as The Union of Myanmar and DPR Korea (Grundy 2012).

1.4 Health Policy Change and the Political Determinants of Health
The interaction between national politics and international relations with turning points in health policy history brings us to the central theme of this thesis. The relationship between policy and history will be analyzed in depth in the Cambodia, Myanmar, and DPR Korea case studies that follow. The regional overviews (Paper 1 and Paper 5) will analyze these themes more broadly and develop the evidence base to demonstrate the intersection of political and health policy history.

Theories of Health Policy Change
A number of analysts have theorized the connections between health and history, and the role these connections have in the reformation of the health policy landscape. Capano (2009) mapped out theories of change that include organic models of change, whereby the direction of reform is stated to be linear, but broadly linked to wider contextual determinants of the body politic. “History means that policies are contextualized in a place that they come from a past that they have taken up time.” (Capano 2009 page 27).

Capano (2009) also categorizes the dynamics of policy development. Policy development can be evolutionary, in so far as it is a process of continual adaptation. Conversely it can be revolutionary, characterized by discontinuous and radical breaks from the past. In considering these breaks from the past, epistemological choices also need to be made regarding whether policy directions are reversible or not. Non-linearity can also mean that change in any one factor may lead to changes in the behavior of a whole system. In contrast, linearity means the presence of a set of logical sequence of steps, for which there is no turning back.

The linear sequence in policy development can be open to interpretation, in so far as the cause effect and sequential steps that are consistent with this approach is assessed retrospectively rather than prospectively. Retrospective coherence is a concept that interprets linearity and is always in the past tense. That is, linearity is only detectable retrospectively. In a prospective sense, this linearity is of course far more nebulous. What I will argue in this thesis is that heightened awareness of such retrospective coherence generates the sociological imagination required for the specification of more probable health systems and policy futures.

Nevertheless, this concept of more probable health system and policy futures must also be balanced against the reality of unexpected events. Embedded within ideas of complex systems is the occurrence of such unexpected events, which no amount of retrospective analysis or scenario base planning can predict (Kurtz and Snowden 2003). It is for this reason that we can look at Sen’s ideas of the prominence of maximization of choice in contributing to the quality of management and decision making, in so far as the process of choice can contribute to what is actually chosen (Sen 1997).
Another conceptual framework to assist in understanding such complexity is the ecological model of change. Ecological models consider change as a product of proximal biological and distal socio-economic determinants (McMichael, 1999). Freeman (2010) traces the difficulty in classification of health care systems and policies to the complexities of national context, and suggests that understanding this complexity could be deepened through description and analysis of policy change through more natural science terms such as ecosystems. This idea of the ecology of policy making is closely related to the concept of institutionalisation. In contrast to neo-classical notions of rationalist thought, institutionalists stress the importance of culture, custom and habit in understanding change (Park, 2001, Bourdieu 1977). It is in this sense that history matters (Arrow, 1998) in highlighting the trajectory of political thought and the related set of institutional rules that set the scene for the acting out of policy behaviors and formation.

In considering reforms to the Australian health sector, Sturmberg et al (2012) adopts the view that wider market or politically shaped ideas act as a “grand attractor” which tilts reforms in a specific direction. Similarly, Glass et al (2006) describes the role of political and social conditions in acting as “control parameters” for the setting of health policy.

The above theoretical discussion infers a field of political and social relations and ideas within which health policies and systems are embedded. However, the specification of what this field of social and political relations actually constitutes is a challenging question. Social network theorists come closest to defining the nature of social and institutional reality, and the specific set of ideational forces and related behavioural dispositions that they generate. Berkman et al (2000) argues that specific societies have specific structures, which mediate a specific flow of resources and ideas which determine access to opportunities and which also act as constraints on behaviour. In other words, the regulation of behaviours and ideas stems from the macro-structure outwards towards the patterns of behaviour and thinking of individuals.

The centre of the social network (an individual or central network) is the "stone in the pond,” after which ideas and resources flow out in a specific pattern and which have a set boundary of influence. To continue with this metaphor, social and political cataclysms are essentially "other stones in the pond”, creating the characteristic wave turbulence and confrontation of ideas and social groupings (including the establishment of new networks and ideational boundaries) that is characteristic of societies and political systems in transition.

This is the phenomenon observed by Szreter (1999) in his comparison of industrial England and modern China, whereby rapid economic growth is said to have contributed to the “4 Ds” of deprivation, disruption, disease and death (Szreter 1999). It is once again consistent with sets of ideas corresponding to a wider ecology of political and social ideas, whereby the dis-equilibrium created by rapid social and political transition is re-stabilized as policies and systems struggle to adapt to changes in the overarching political and social context (Grundy et al 2014). In contrast to this macro-level perspective, shifts in the network of ideas results in shifts in individual behaviours through the four primary pathways of provision of social support, social influence, social engagement and attachment and access to materials and goods (Berkman et al, 2000).
The literature also hints at the manner in which individual or technical concepts are mediated by the influence of a ruling social or political set of ideas or structures. For example, this notion is inherent in Thomas Kuhn’s (1962) concepts of scientific revolutions, whereby new observational evidence clashes with the authority of ruling scientific traditions, contributing to a new cycle of scientific orthodoxy in subsequent generations. In Hannah Arendt’s (1966) studies of the psychology of totalitarianism, she views the dominance of totalitarianism in the mid twentieth century as a failure of leaders and populations to comprehend reality, where comprehension is defined as the ability to confront reality and change it. This concept, though seemingly very simple, is highly insightful in terms of challenging policy makers to come to grips with wider social and political reality in which they are located, in order to grasp the opportunity for leadership for change. Amartya Sen makes the careful distinction in planning between culminating outcomes of plans (what is intended to achieved) and planning comprehension, which refers to the capability of planners to understand and sustain actions over time (Sen, 1997).

C Wright Mills (1959) notion of the “sociological imagination” sees the individual located in a world of social ideas which is the outcome of a continuous dialogue between individual thought and the dominant ruling set of social and political ideas. Imagination in Mills concept is not only “picturing” a possible or alternative social reality, but also comprehending the existing nature of social reality by demonstrating the capacity to be aware of how the self and society interact in this way. His view of science deals with problems of biography and history and their intersection with social structure. The notion of the intersection of individual thinking (in this case of the policy maker) with history and social structure was also a finding of E H Carr (2008) in his analysis of the links between sociology and history. He considered that for sociology and history to be intellectually productive, they must move from the unique to the general to set forward propositions as well as consider the links between the unique (or individual) and the general in terms of the dynamics of history or, as he puts it, of a society that is never at rest.

What these theories and concepts highlight is a complex web of interaction between individual ideas and a social and political boundary of influence within which the individual thought is located. Comprehension, viewed from the perspectives of Thomas Kuhn (1962), Amartya Sen (1997), E H Carr (2008), Hannah Arendt (1966) and C Wright Mills (1959), is the capability to confront this broader reality, reflect upon it, and then change it. It is the dialogue between an individual policy maker and society, or more specifically, the intersection of health policy and history that will be a repeating theme in the case studies presented in this thesis. Of particular interest is the notion of comprehension, which by inference, does not infer that individuals, who are embodied within a wider social or political network that is being propelled through history, are in some way passive recipients of ruling ideas. In fact, as the historical work of Thomas Kuhn (1962), Hannah Arendt (1966) and C Wright Mills (1959) testifies, comprehension is by nature confrontational and imaginative and involves acknowledging and confronting this broader field of ideas either to understand or change it.

In contrast, the cost of the non-imaginative and non-confrontational approach is high, as outlined by Arendt’s (1966) analysis of totalitarianism and E H Carr’s (2008) philosophy of history. As Carr points out, the “unconscious apologist of the static society” is hardly in a position to question, comprehend and thereby change it (Carr 2008, Page 59). In this thesis I will view health policy analysis as a dialogue between the individual policy maker and a political and social superstructure that is transitioning through time.
The Political Determinants of Health

More recently, literature has started to emerge on the way in which social networks are politically patterned, which brings us to a discussion of the political determinants of health. If population health outcomes can be analysed according to social exposures including wealth, education status and location, then inevitably, analysts will be led to a consideration of the political causes that contribute to the distribution of wealth and education status in societies. In fact, a school of thought referred to as “political epidemiology” is emerging, which has been defined as “the study of the impact of welfare regimes, political institutions and specific policies on health and health equity” (Pega et al, 2013). This definition is an offshoot of the social determinants of health discourse. The WHO Social Determinants of Health framework includes analysis of health outcomes according to political context (governance and policy), as well as the downstream social determinants level of neighborhood analysis (Commission for the Social Determinants of Health CSDH 2008, Pega et al 2013).

Pega et al (2013) identify three main strands of thought in political epidemiology. These are the welfare stream approach, the political approach and the individual approach. The welfarist approaches classifies societies and analyses population health on the basis of the degree to which the state reduces the reliance of individuals on market mechanisms to access health care (de-commodification). The political approach adopts a higher level macro view, and analyses trends in population health according to ecological shifts in the political order. Finally, the individual policy approach examines the impact of specific social policies on population health outcomes. Pega et al (2013) argue that the individual approach is the most effective and practical, in so far as this approach can contribute to evidence based policy that can be implemented, and in doing so, responds to the call to make social determinants of health analysis more pragmatic. In contrast, from the political or ecological perspective, causation is very difficult to establish, thereby making it extremely difficult to specify such pragmatic policy interventions.

In a study of the relationship between political history and life expectancy in Europe between 1900 – and 1980, Mackenbach (2013) found that the formation and dissolution of states often went together with convergence or divergence of life expectancy. What the study found was that democratically governed states had higher life expectancies generally than authoritarian ones, although the gaps substantially narrowed between 1920 and 1960 when both noncommunist and communist authoritarian societies rapidly caught up on life expectancy due to successful implementation of programs to control communicable diseases. Mackenbach (2013) theorizes that politics shapes population health through a number of collective decision making areas, including education, social security, housing, economic policy, public health measures and through conflict decision making. Mackenbach (2013) is careful to distinguish notions of “causality” from notions of “plausible influence” in order to link changes in political conditions with changes in population health status. There are of course a significant number of confounding variables, the not least of which is the endogenous character of political conditions such as the economic, social and cultural context in each national setting.

This point is at the core of Pega et al’ s (2013) critique of the political approach in political epidemiology, which they claim, due to the problem of causality, fails to identify pragmatic individual and evidence based policy interventions. Mackenbach responds to this critique by indicating that the purpose of the political approach is to identify the political institutions that are more or less conducive to public health (Mackenbach 2013); Mackenbach is concerned with identifying how political institutions can work best
for public health gains (the political approach). This is a different, and yet complementary question about how health and social policies can work best within any given political framework (the individual policy approach).

To get politics to work for public health, then we are inevitably led down a parallel but connecting analytic road. This is the public health analysis of the distribution and exercise of political power (Grundy, 2013). The public health analysis of political power considers the pattern of distribution of decision making in society including its pattern of resource allocation. This approach is distinguished from equity analysis, which considers the ethical dimensions (fairness) of distribution of health outcomes and health access. It is also distinguished from social determinants of health, which considers the distribution of health access and outcomes according to patterning of social and economic exposures.

This perspective corresponds with the observation of Kickbusch (2006), who considers that global health crises can be better understood as crises of governance (the way power is exercised) rather than of crises of disease (the way disease is distributed). The Lancet Commission on Global Governance for Health (2014) considers that these governance processes involve decision making around the distribution of economic, intellectual, normative and political resources. The commission argues that the effect on health of these decisions inevitably leads to an analysis of power. Economic crises, knowledge property, foreign trade, food security, transnational corporate activity, migration and armed conflict are considered by the Commission to be areas of political decision making requiring analysis of power, particularly with regard to the asymmetries of power between social actors in decision making processes. Areas of governance dysfunction identified by the Commission include poor representation of civil society and public health in politics, poor transparency, power disparities, inadequate policy space for health, and weakness of international institutions.

What will be argued in section 2 (observations) and section 3 (case studies) is that political history has shaped the formation and direction of health systems and policies in Asia in the 20th Century. I will then consider the implications of the political determinants of health systems development for 21st Century health policy analysis in section 4, particularly with regards to repositioning health policy analysis as a driver of politics rather than a passenger of politics.

**Social Policy, Health Policy and the Political Determinants of Health**

Some may take the view that the political determinants of health (in both theory and practice) may represent an extreme end of public health theory and practice. A more moderate approach is to situate health within a social policy framework. Instead of directly addressing issues of political power that gives rise to health inequalities, a social policy approach in contrast aims to be more pragmatic in addressing the intermediate social and economic exposures that give rise to these health inequalities. The social policy approach is more akin to the concept of the welfarist or individual approaches to analyses of population health, and seeks to examine the impact of specific social policies on population health outcomes (Pega 2013).

One of the attributes of a social policy approach is that it attempts to analyse the causes of inequalities and propose pragmatic solutions to address them. In a critique of Picketty’s analysis of capital in the 21st century (Picketty, 2014), Piachaud (2014) argues that analyzing social states in terms of distribution of
income can fail to provide adequate explanations for how this distribution is correlated with social factors including gender, race, disability and social orientation. This analyst stresses that the important role of social policy analysis is to describe determinants and trends in inequalities and propose policies to ameliorate social conditions.

Social policy can also be proposed as a way of government addressing issues of population health and wellbeing. Survey data from the UK's Office of National Statistics in 2010 (Deeming, 2013) illustrate that the population's sense of wellbeing is not evenly distributed, with factors co-related with this wellbeing including age, gender, ethnicity, employment, household composition and health. This study recommends emphasis in policy making on the "social." These findings are insightful in so far as they situate health within a wider everyday living context rather than from a sectoral perspective.

The challenge with an exclusive focus on social policy as an instrument for population health is that it can ignore the overwhelming pressures of historical transitions in political power in reshaping the directions for health and social policy. In China, one review has found that the post market reform since the 1980s, various social insurance reforms (poverty benefits, social health insurance etc) were introduced very late in the reform process and represent a distinct urban bias in emphasis. Political systems, particularly through one party rule, fiscal decentralization, and low rural per capita GDP have been one of the dominant drivers of social policy (Duckett, 2003). In an analysis of corporate power and social policy in relation to the activities of transnational Tobacco companies, Holden et al (2009) establish that these transnational agencies have relied on political agency to reassert their positions.

Part of the reason as to why political agency directs social policy may be attributable to vested interest. It may also be partly attributable to lack of knowledge and understanding of links between social and economic policy and public health. In their study of how income tax credits links to social support and improved health access for vulnerable groups, Amos et al (2009) contend that there needs to be a much better understanding of the links between social policy and improved public health.

A case study by Agyepong et al (2008) from Ghana places establishment of the Ghana national health insurance scheme in the context of public social policy. This case study illustrates how the direction of technical policy development is shaped not only by generation of evidence, but also by the power of the various actors involved in social policy making. The imbalance between powerful political players and advocates for social policy reform in the civil society sector means that social policy advocacy also needs to consider and address imbalances in power (and not only the technical questions) in order to resolve policy questions effecting less powerful and vulnerable groups. Beyond the impact of political power in shaping decisions about social policy, Jones et al (2006) also illustrate the role of upstream influences of ideology, culture and values on policy developments in Sweden and England.

The primacy of politics in shaping social policy outcomes have been also illustrated in two recent cases studies from South Africa and China. In South Africa, health equity initiatives since transition to democratic government in 1994 have been hampered by weak macroeconomic policies (related to the need to reduce budget deficits) and lack of coherence in social policy programming. This is despite the implementation of a wide range of health programs targeting the vulnerable (McIntyre et al 2002). These analysts conclude that to improve social policy implementation it is necessary to consider the central role of disadvantaged populations in policy priority setting. Similarly, in a review by Duckett et al (2013) of
coverage by media of health system reforms in China, it was found that the media adopted a wide range of positions, with the main narrative focusing on market and state roles in health. Pro State positions tended to be speaking for “the people” rather than giving them a direct voice. There was very little evidence in this case of a rights approach or of calls for greater public participation in policy making.

Experience with movement towards universal health coverage in previously lower and middle income countries such as the Republic of Korea (Kwon, 2009) and Thailand (Tangcharoensathien et al 2014) would suggest that decision making on health investment is in the end (amongst other things) driven by political decision making to invest in health in order to legitimize political power and sustain democratic ruling elites. If anything, the vote buying power of universal health coverage is a testament to the overwhelming forces of the political determinants of health.

Despite the potential therefore for social policy to embrace a wider social view and analyse social determinants of health inequities (as well as to suggest pragmatic solutions to address them), it nonetheless remains the case that social policy outcomes are still dependent on the dominant values and directives of ruling political elites and on the capacity of disadvantaged groups to successfully challenge the dominant political narratives that exclude or ignore them.

2 Conclusions and Summary Analysis
It is difficult to explain the gap in knowledge regarding the links between political and health policy history, without reference to the staggering success of the basic health sciences (particularly epidemiology and demography) in determining the frequency, distribution and causation of disease in populations at any one point in time. Epidemiology has an almost surgical precision in terms of pinpointing frequency, distribution and causation. It is as if the dazzling findings of epidemiology have culminated in a social and historical “blind spot” with regards to the public health analysis of states of health and states of health organization that are for the most part in constant states of organizational transition.

A number of issues confront the analysis of health systems in social transition settings and they are:

1 Lack of trans-disciplinary perspectives on health: Most health development efforts, particularly in low income settings, result from the need for post conflict reconstruction and rehabilitation. And yet, despite the kernel of public health method being “primary prevention” there is very little emphasis by the public health community on public health analysis of defence, foreign policy or international relations that would inform such preventive approaches

2 A Narrow Perspective on Systems Analysis: Systems analysis is applied in the context of health management systems, and less in the context of social systems, of which they form a part. A good example of this is the health systems “building blocks” which are often scrutinized in isolation from the social system blocks of which they form a part.

3 A-Historicism: Policy analysis literature is critiqued for its a-historical and non-reflexive stance. This reinforces the limitations of many theoretical models in so far as they tend to be static and ignore the impacts of history and position in shaping the contours of current health profiles and health organization, and the related probable trajectories of health policy and social change.
(4) The Health Policy lag Behind Social Transition: The renewed but welcome emphasis in global health on the social determinants of health and universal health coverage is a delayed response to health inequities post Alma Ata Declaration (WHO, 1978). In reality, most policy analysis is playing “catch up” to widening socio economic gaps both within and between countries. This is evident in the delayed responses of health sectors to administrative decentralisation and to the social protection questions surrounding the expansion of free market economics in particular. It is also evident, as stated above, in the dominance of public health in post conflict emergency response and recovery, in contrast to a primary role in conflict prevention (Grundy, 2008).

(5) A failure to unite Public Health Science with Political Science Perspectives: The recent development of a perspective of the political determinants of health has resulted from observation of persistent inequities in health care access and outcomes. The failure of public health planners and policy makers to engage in public health analysis of political policy has resulted in an accepted role of health policy makers in playing ”catching up” to political transitions, rather than being situated more confidently and systematically as a political stakeholder or at least analyst of political change.

The principal reason for this policy lag is the failure to unite and apply social (historical) and natural science systems of knowledge to the understanding of the determinants of states of health and of states of health organization. It is this social transition theory, and its application to the understanding of health systems and health policy in transition in Asia, that will be the main subject of this thesis. Detailed case studies of historical change and health systems and policies will be considered in the regional Asian context (Papers 1 & 5) as well as exploring specific cases studies of health systems and policies reform in Cambodia, Myanmar and DPR Korea (Papers 2,3,4). Based on these findings, I will examine the implications for the approach to the construction of health policy in the final section of this thesis (Papers 6, 7, 8).
2. Methodology

2.1 Sources of Data and Information

The main sources of data for the thesis are published reports, peer reviewed publications and observations undertaken during field work in nine countries of the Asian Region between 1993 and 2013 (Cambodia, Myanmar, Vietnam, Lao, the Philippines, Timor Leste, Bhutan, DPR Korea and Mongolia). My main development role over these years was to work with Ministries of Health, universities and non-government organisations in country settings to develop health policy, conduct research and evaluation, develop national plans and strategies, and mobilize resources through global health initiatives, NGOs and development partner agencies.

For most of the published papers, the author has sourced information through publicly available data sources such as national government websites, and international health data bases such as the WHO Global Health Observatory on health and system statistics (WHO Global Health Observatory 2012) and Demographic Health survey data bases (Macro International, 2012).

Table 1 Summary of Data Bases used in Country case Studies

<table>
<thead>
<tr>
<th>Topic</th>
<th>Data Base</th>
</tr>
</thead>
</table>

These data sources, methods, analyses and observations of health system strengthening have previously been analyzed and reported in the peer reviewed literature between 2001 and 2013 and are documented in detail in the seven published papers and one unpublished paper included in this thesis, as well as in the publications listed in Annex 1.

These papers identify the following sources of information and methods of data collection:

1. International peer reviewed literature;
2. National health sector and program documentation sources;
3. Secondary analysis of Demographic Health Survey data and other statistical data bases;
4. Observations and participation in policy and planning development in these institutional settings 1993 – 2013 in areas such as national immunisation, pandemic, disaster recovery and health sector planning; and
5. Direct participation in program design and implementation including preparation of national program plans, management of program implementation, and research and evaluation of program impacts.

Table 2 Search terms used to review the literature

<table>
<thead>
<tr>
<th>Search Term</th>
<th>Search</th>
<th>Search Engine</th>
<th>No of Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Policy Agenda</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>69</td>
</tr>
<tr>
<td>Health Policy Analysis</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>69</td>
</tr>
<tr>
<td>Health Policy Process</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>39</td>
</tr>
<tr>
<td>Priority Setting Criteria</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>20</td>
</tr>
<tr>
<td>Priority Setting Decisions</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>38</td>
</tr>
<tr>
<td>Systems Thinking</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>231</td>
</tr>
<tr>
<td>Social Transition</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>25</td>
</tr>
<tr>
<td>Social Transition &amp; Health Systems Asia</td>
<td>All fields</td>
<td>Pubmed</td>
<td>95</td>
</tr>
<tr>
<td>Social Policy and Health</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>153</td>
</tr>
<tr>
<td>Health Policy and History</td>
<td>Title/Abstract</td>
<td>Pubmed</td>
<td>85</td>
</tr>
</tbody>
</table>

An in-depth review of the literature was conducted using the Pubmed and social science citation database using search terms outlined in Table 2. Social scientific data bases were also searched for historical backgrounds to countries and on social transition theory. For most search categories, the search was made for terms in either the title or the abstract. Figure 7 summarizes some of the main methods of data collection from each of the country settings.

For details of methods, research questions and hypotheses to be tested in each country setting, I refer the reader to each of the published works, which provides a detailed description of the methods of data collection and analysis for each study.

Due to the trans-disciplinary approach of this study, as well as the diverse geographic setting for development of case studies, it was not possible to develop “exclusion criteria” or "exclusion criteria" for literature, given the need to cut across diverse disciplines such as social and economic history, politics, social science theory and public health (including country specific health system history). Following a review of the abstracts and literature sources, articles were purposefully selected in order to best elucidate the specifics of health policy history and to explore how it intersects with economic, social and political history.
**Figure 7 Some Examples of Approaches to Data Collection and Analysis from Case Studies**

| **Paper 1: Asia** | Literature was searched on health and history from seven countries in the region (DPR Korea, Mongolia, Myanmar, Bhutan, Timor Leste, Cambodia, and the Philippines). Information was classified for each country according to four management domains (decentralisation, human resources management, financing model and constituency emergence) and then cross referenced with four stages of transition over the last 40 years (centralization, early reform, reform commitment, and plural administration). |
| **Paper 2: Cambodia** | The primary source of information was publicly available literature on health and history in Cambodia between 1975 and 2013, which was purposefully selected to focus on health policy change and the political events associated with these changes. Literature was sourced from health, historical and political readings, as well as on theories of policy change. Health and history timelines were constructed to analyse intersections of health and history, with the narrative framed around historical trajectory, current policy positions and probable policy directions. |
| **Paper 3: Myanmar** | Data was sourced from country level participation in policy and planning 2006 – 2013 in relation to immunisation, health systems strategy, health financing and post disaster recovery planning, complemented by literature review and analysis of survey data bases. Health and history timelines enabled analysis of intersections of health and history, with the narrative framed around historical trajectory, current policy positions and future directions. |
| **Paper 4: DPR Korea** | Data sources included country level participation in development of multi-year plans, financial analyses and health system strategy and review of national and international literature on public health, health systems development and health systems strategy in DPR Korea. Information was classified according to the health systems strategy framework, located in the context of DPR Korea history and international relations. |
| **Paper 5: Asia Regional Studies** | Literature was reviewed of health and history in five countries of the region. The studies are based on direct participation in policy and planning in these countries between 1993 and 2013, many of which are documented in existing case studies published by the author (see Annex 1). Examination was undertaken of existing demographic, health and health financing data bases of the WHO, OECD and Macro International (2012). Health and history timelines were constructed to analyse intersections of health and history, with the narrative framed around historical trajectory, current policy positions and policy directions. |
| **Paper 6: Asia Equity Analysis** | Review and secondary comparative analysis of Demographic and Health Survey data bases was undertaken. Literature on health equity/inequities in the region was reviewed, and data was analysed with reference to an analytic framework based on the political determinants of health. |
| **Paper 7: Public Health Critique of Foreign Policy** | Literature was reviewed on health and history in Myanmar and DPR Korea and on the issue of foreign aid and health human rights. Analyses and cross referencing of health and development assistance data bases of WHO and the OECD was undertaken. Cases were analysed based on equity and responsibility to protect analytic frameworks. |
| **Paper 8: Public Health Critique of Defence Policy** | Literature was reviewed on public health and war. Analysis of information was based on principles of injury epidemiology and the social determinants of health. |
2.2 The Rationale for the Case Study Approach

The case study approach has been adopted for a number of reasons. The principal reason for selection of the case study approach is to manage the complexity associated with linking health or organizational exposures to specific health policy directions and linking organizational and policy development to exposures that are external to health and health systems – that is to the social and political system as it changes through time. Case study approaches are recommended in such situations where the “web of causation” needs to be investigated in complex social situations (Holmes, 2006). Case study approaches are also referred to as the “study of the particular” for its thorough investigation of real life situations in context (Rosenburg et al, 2007). The use of social theory to guide analysis of case studies can assist researchers to extrapolate findings to groups wider than the ones in which the research was conducted (Willis, 2007). Case studies are also considered to be an appropriate research design for examination of processes and organizations when it is considered important to view the problem from multiple perspectives (Payne et al, 2007). The case study approach has limitations and they are detailed below.

Limitations 1: The Risk of Bias in the Case Study Approach:

Case studies, as a form of qualitative research, have a focus on the subjective reality of the social world in contrast to the objective nature of the physical sciences. As Dew (2007) indicates the social world deals with subjective experience not only at a single time, but also through time in multiple contexts. The flexibility in methodology and the “web of causation” alluded to above can increase the risk that observations will be biased by the authors own assumptions on the nature of social reality. In order to minimize the risk of bias, several inclusions are recommended to increase the rigor of the case study approach and they include: (a) posing a clear research question that is consistently applied across the cases being examined; (b) refining information from cases through a single analytic filter; and (c) verification of theoretical propositions through systematic presentation of case study information (Rosenburg et al 2007).

This risk of bias will be managed in this thesis through a number of approaches. A single analytic filter for examination of case studies will be applied as much as possible (the social transition framework for the in depth case studies). A consistent set of research questions across the various case studies will be asked in order to focus the argument on the political determinants of health (see section 3) and conversely, the health determinants of politics (see section 4). I will test the theoretical proposition of health systems as a sub system of a wider social and political order (that is shifting through time) through systematic development and examination of health and history timelines for eight countries of the Asian region.

Limitations 2: A Wide Ranging Landscape Method Lacking Micro-Level Policy and Systems Focus

One rationale for undertaking this thesis was to attempt to synthesize a wide set of published observations and analyses on health policies and systems evolution. This is for the purpose of developing a coherent framework that can be applied to enable health policy makers and planners to better meet the health policy and system needs across a highly diverse set of national contexts.

The width and breadth of these observations and analyses (the landscape approach) precludes the specification of detailed and consistent micro-measures explaining why policies and systems change across all settings, and why they take the directions they do in a specific setting. Due to the inherent
complexity of this exercise, I have relied on the selection of “macro-measures” to test hypotheses of the intersections between history and policy and systems change. The methods (described in detail in Papers 2, 3 and 5) are as follows:

1. A narrative of the political and health policy history and how these narratives intertwine.
2. The specification of health policy turning points and directions that is consistent with political and social change.

At a micro-level, these measures are inexact (for example, explaining why a specific policy x changed at a specific time in setting x). This requires a step by step approach across the policy terrain of a much narrower band of technical interventions that requires a correspondingly narrower focus and view. This is the limitation of the landscape approach. Conversely, the advantage is the capacity to locate micro-policy and planning on a wider map of social and political relations. As I will argue in the case studies ahead (and particularly in the concluding section), this will enhance capacity to specify health policy and planning trajectories in specific settings. It enhances what C Wright Mills (1959) would refer to as the “sociological imagination” of the health policy maker, by clearly delineating the intersection of biography, social structure and political history.

Specifically, I will demonstrate in published papers on health policy turning points that the wide angle landscape approach enables policy makers, planners and development specialists to specify more feasible policy boundaries (edges of policy terrain) delineated by the existing trajectory of political and social history (Papers 1, 2, 3 and 5). Reflections on this health policy landscape (past, present and probable futures of health policy and social history), particularly in terms of the political determinants of health policies, systems and status, sets the scene for the public health critique of political policy in the final section (Papers 6,7 and 8).

2.3 How data was analyzed: Use of Analytic Frameworks

The case studies were constructed based on three analytic categories of historical trajectory, current policy positions, and health policy boundaries or directions. In each case study, the political and health history of each country was documented in order to establish the trajectory of health systems development. The current positions of national and international actors in health were examined, in order to elucidate the shifting of health strategy in response to historical forces. Both trajectory and position were then examined with a view to setting health system and health policy boundaries. While cognizant of the forces of history in shaping the evolution of health systems and policies, the framework also takes into account the extent to which implementation of some public health applications are generalizable across all contexts. These analytic categories were then combined into a health policy landscape for each country case study.

I undertook the following to collect data that resulted in the development if the analytic framework that was then applied to each country case study:

1. The historical literature was reviewed for each country setting, including secondary historical data on the development of health systems.
2. A "health and history timeline" (see Figure 8 as an example from one of the case studies)) was constructed in order to compare and contrast developments in both health and political history.
The narrative was then built around these timelines in order to elucidate the links between history and health policy.

3. Each case study then was described and analyzed according to the three analytic categories of historical trajectory, current policy position and policy boundaries.

4. These three analytic categories were then brought together into a health policy landscape, which articulate the most probable and feasible health policy options based on an analysis of historical trajectory and current position.

In analyzing the links between health and history, the thesis applies some of the underlying theoretical concepts on policy change and the political determinants of health outlined in the literature review. In the observational study (Paper 1), the political history of eight countries in the region are reviewed and are compared and contrasted with health policy history. What this “dynamic” view presents is a moving picture of how health systems and policy evolves through time from centralized command and control structures to decentralized complex administrative arrangements with a wider set of providers, constituencies and financing sources. These observations set the scene for a country by country analysis of the dynamics and trajectories for policy change. The same approach is undertaken in the examination of Cambodia and Myanmar's health policy reforms (Papers 2 & 3), as well as with the five Asian case studies that address the intersection of health policy and political history (Paper 5). For example, this latter study analyses these intersections by utilizing the three analytic categories of historical trajectory, political reform and health policy directions.

**Figure 8 Examples of a Health and History Timeline – the Republic of the Union of Myanmar**

(Paper 1, 2014)

In the final section of the thesis (synthesis), the case studies will provide the background information for analysis of health policy application in the context of political policy.

The analysis of the political determinants of health was undertaken in the following way.
In Paper 6, (Grundy et al 2014) through analysis of existing Demographic and Health (DHS) data sets in Asia (see Paper 6 for details of data collection and analysis methods) I develop a theoretical model for understanding the political determinants of health. The political determinants of health are understood in terms of the analysis of distribution or exercise of power and resources and its impact on health, in contrast to the analysis of the fairness of distribution of health (equity analysis) and distribution of health and illness according to the social or economic characteristics of populations (the social determinants of health) (Grundy et al 2013). In Papers 7 and 8 (analyses of foreign and defence policies from a public health perspective), a number of analytic frameworks were adopted. In Paper 7, the responsibility to protect doctrine, including health equity analyses, were applied to compare and contrast international development assistance paradigms for the Union of Myanmar and DPR Korea. I examined data bases on foreign aid (through the OECD) in order to provide analysis of the volume and type of development assistance provided to these two countries. The findings are used in the discussion to highlight strategies to reorient public health towards a more rigorous critique of foreign policy from a responsibility to protect and health equity perspective. Finally, in Paper 8, I apply social determinants and injury epidemiology analytic frameworks in order to critique current public health approaches to the analysis of war and defence policy.

2.4 Scope, Limitations and Risk Management

This thesis is a study in comparative health systems analysis and is therefore wide in scope. By adopting a country by country case study approach, it is by no means the intention of the author to compromise this width of scope by lack of depth. Rather, by analysing the impact of social transition on health system development across a range of diverse settings, it is proposed that the in depth case studies will enable cross country analysis using the analytic framework described in the previous section.

The other limitation is the challenge of undertaking a critical literature review and data analysis across a range of disciplines including history, social science, health system strengthening and public health. The main problem with such trans-disciplinary studies is the lack of depth in any one discipline may compromise the overall integrity of the trans-disciplinary approach.

A number of approaches have been undertaken to manage this risk. The first approach is to source literature as widely as possible to ensure that all possible linkages between disciplines have been explored. The second approach is to try to establish “new connections” between knowledge domains such as those of history, politics, and history and health policy analysis. It is this triangulation of information from health and history disciplines in particular that I will argue makes for a more powerful case for a rigorous explanation of the evolution of states of health and states of health organization. Finally, the third approach is to adopt methodological rigour in the case study approach as outlined above, particularly with respect to consistency of application of the research question and the analytic filter.

Notwithstanding these efforts to minimize bias and ensure rigour with scientific methods, and as a work of health systems research, it remains subject to the standard critique of such works. That is, social science is a relativist paradigm of knowledge that is not subject to the same level of certainty of knowledge as is the positivist knowledge paradigm associated with the natural sciences. However, as indicated by Gilson et al (2011), health policy making and health systems are complex social phenomena that are created through human behaviour and interpretation (Gilson et al 2011). Gilson argues that such knowledge paradigms frame views of reality and what constitutes validity in research.
Concepts of “causation” in epidemiology generated through controlled experimentation set much higher standards for the assessment of validity, with the clinical trial as the gold standard for truth in this discipline. But given that health policies and systems are complex social phenomena that are socially constructed and are open to interpretation, concepts of validity in the natural sciences are not automatically transferable to the social sciences.

This limitation is the essence of the critique of the political approach in political epidemiology. The impact between macro political changes on health polices and systems and outcomes are so difficult to establish in what is an intricate web of physical, behavioural, social, and political determinants, that such analyses are incapable of yielding evidence based pragmatic health interventions (Pega et al 2013). The counter response to this argument is that the limited capability to tie down causation as in a natural experiment is a recognition of the way social reality is – that is, it is a mix of socially constructed and natural phenomena with highly complex and multi layered webs of causation. The way I have chosen to manage this challenge is to recognize the limits of social science in tying down and pinpointing specific causes for social phenomena, and instead point towards the reasonable influences of macro level events on micro level actions, which I will hereafter refer to as “intersections” of political history and health policy. Whether in fact such an attempt is useful in the discipline of public health that is founded principally on natural science (epidemiology) will be the subject of analysis and discussion in the final sections of this thesis.

2.5 Ethics
This thesis utilizes publicly available data or data previously published by the author. Written advice from Deakin University indicates that as this study will access only publicly available ethics approval is not required. I attended the research integrity course which was conducted online and completed on 21 December 2012, as a requirement of the Deakin University Human Research Ethics Committee.
SECTION 2 OBSERVATIONS OF HEALTH SYSTEMS AND SOCIAL TRANSITION

In the section, the first case studies are presented of health policy and social transition. The aim of this section (of which there is only one paper) is to set the scene for the development of the thesis by making observations of history and policy change in six countries of the Asian region. The point of these observations is to classify countries at different stages of transition, and then where possible track their movements through different stages of transition over the last 40 years. These observations provide the raw material for more in depth analysis of the intersections of health policy and history in the subsequent section.

There is one published paper in this section. For copyright reasons the journal article cannot be published in this thesis. The journal articles are accessible on line and abstracts and links to the article are presented below.
2.1 Observations of Health System Typology in Asia

Published paper: Published in Health Systems Journal

J Grundy, E Hoban, S Allender The social and political construction of health-care systems – historical observations from selected countries in Asia Health Systems, (8 August 2014) | doi:10.1057/hs.2014.14
Health Systems (2014), 1–14


Linking Text

This paper, through examination of case studies of health system development in six countries, makes observations of the manner in which health system development tracks social and political change over the last 40 years in DPR Korea, Mongolia, Bhutan, Timor Leste, Myanmar and Cambodia and the Philippines. It demonstrates the manner in which various health systems have evolved from centralized monolithic administrative orders towards more complex organizational arrangements with a diverse set of providers, managers, constituencies and funding sources. The paper considers various theoretical perspectives of health policy change, and makes the fundamental observation that health systems, as sub systems of a broader social and historical order, inevitably track the direction of political and social change.

Paper Specific Research Question

To what extent are health systems politically and socially constructed institutional arrangements?

Abstract: Case Studies of Health Systems and Policy Change – Historical Observations from Selected Countries of Asia

Across the Asian region, models of health administration vary from centralized management arrangements to more open decentralised systems. Utilizing an historical perspective, this review compares and contrasts health systems transition in seven countries (DPR Korea, Myanmar, Timor Leste, Bhutan, Mongolia, Cambodia, and the Philippines) against the background of macro political and economic reform, and then considers implications of these findings for approaches to health policy analysis. Four management areas are presented to demonstrate variation in health system design over the last 40 years (decentralisation, human resource management, health financing and public private partnerships). The historical record illustrates that these functions have evolved through political reform eras of centralist, early reform, established reform and pluralist models of administration, with the main driver of system change being periodic historical shifts in the design of the macro political and socio-economic order. The findings in these case studies call for a more nuanced classificatory system for health systems and policy analysis, that unites a technical perspective with a wider social and political field of vision, and, in doing so, builds a more comprehensive picture of the way in which health systems function in the real world.
SECTION 3 CASE STUDIES IN HEALTH SYSTEMS AND SOCIAL TRANSITION

This section provides case studies of health and history in the Asian region. The case studies build on the links developed between political change and policy change described in Section 2. Utilizing a social transition framework for policy analysis outline in the first case in Cambodia, case studies are also elaborated for Myanmar, DPR Korea, Mongolia, Cambodia and the Philippines in the subsequent three papers. These case studies follow a similar approach, including use of health and history timelines to illustrate the intersections between history and the formation of health policy. The exception to this is the case of DPR Korea in Paper 4, where the evolution of health system strengthening strategy is examined within the context of a centralized socialist state administration. The final paper in this section (Paper 5), “The intersection of History and Health Policy in Asia”, applies a consistent analytic framework of social transition and policy change in order to make a comparative analysis of health policy development against the backdrop of political history.

In this section, only the unpublished paper on Cambodia is here presented in full. The other 3 papers are published journal articles and for copyright reasons cannot be published in this thesis. The journal articles are accessible on line and abstracts and links to the article are presented below.
3.1 Analytic Frameworks of Health and Transition: the Case of Cambodia

Unpublished Paper

“Turning Points in Political and Health Policy History: The Case of Cambodia 1975 – 2014.”

Submitted to Social Science and Medicine

J Grundy, E Hoban, S Allender

Linking Text

This paper outlines a framework for policy analysis in transition settings, and applies it to an understanding of health and history in Cambodia from 1975 – 2012. After examining the Cambodian situation in detail, the study also refers to comparable cases in the Asian region. The framework identifies three main analytic categories for analysis of health systems in transition – these are the historical foundations for reform, the current positions of policy actors, and the feasible boundaries for policy reform. Together these three analytic terms comprise a health policy landscape. The framework also takes into account generalizable technical solutions that in given situations can override historical and political pressures. This is the central analytic frame for the thesis, which subsequent case studies will elucidate through reference to other cases in the Asian Region.

Paper Specific Research Question

What analytic categories are best suited to assist policy makers to develop flexible and timely health policy responses to social change?

Abstract: Turning Points in Political and Health Policy History: The Case of Cambodia 1975 – 2014

Across the Asian region there is a wide variety of political and social structures with a complex variety of health system organisational arrangements. A major challenge this diversity presents is the lag of health policy and health systems behind social transitions, as demonstrated by persisting health access and outcome inequities in transition settings. In response to these challenges, we present a framework for the analysis of health policy and systems in transition settings in Asia, taking Cambodia as a starting point for analysis. Three analytic categories are proposed for framing a wider health policy landscape; these are historical trajectory, current policy positions, and feasible boundaries and directions for policy reform. Utilizing these three analytic categories, this paper charts events in health policy history in Cambodia that were contemporaneous with major turning points in political history between 1975 and 2014. The case study demonstrates the interconnections of health and history, the shift in policy positions in response to political and economic reform, and the subsequent resetting of health policy directions. Taking such an historical view has the potential to enhance the capability of policy makers to understand the configuration of policy dynamics within a given context, as well as assisting to anticipate and respond more flexibly to a probable set of health policy and system futures.
1. Introduction

Across the Asian region there is diversity in social and political structure with a correspondingly complex variety of health system administrations. These arrangements extend from highly centralized health administrations in the Democratic Peoples Republic of Korea (North Korea), to reform trajectory countries of Myanmar and Mongolia, to more open and pluralist systems in Indonesia, Cambodia and the Philippines. Geography, history, demography and culture drive such diversity (Chongsuvivatwong et al 2011). Historical analyses of transition settings in the early industrializing United Kingdom and in modern China highlight the changing role of the central state, as it shifts its functions through history from command and control to legislator and regulator of an increasingly complex social and institutional context for health administration (Szreter, 1999). Globally in transition contexts, analysts have identified the policy challenge of responding to persisting inequities in health care access (Boerma et al, 2008), as countries undertake major policy initiatives in response to free market or large scale political reforms. Mongolia (Lhamsuren, 2012), Cambodia (Grundy 2011 et al) and China (Bloom 2011, Liu 1998) demonstrate such innovative health policy responses to free market reform. In other settings, decentralization linked to political reform has also presented significant health policy challenges, as the cases of Indonesia (Heywood 2010) and the Philippines demonstrate (Lakshminarayanan, 2003).

Analysts have attempted to address the issue of policy change by emphasizing the need to explore links between broader development policy and health systems reform (Bloom 2011). Some emphasise the central role of context and process in the construction of health policy (Walt 1994, Naaldenberg 2009) while others highlight lack of consideration for reflexivity and history in the formulation of health policy (Walt 2008 and 1994). These findings point to the need for more conceptual breadth and depth in reaching an understanding of the ways in which health policy is shaped through time and across historical and institutional contexts. The hypothesis of this case study in health and history is that there are intersections between political and health system history that illustrate the origins of current policy dynamics and dilemmas, as well as point to more feasible boundaries for future health policy actions. In this paper, we describe and analyse the intersection of health policy and political history in Cambodia between 1975 and 2013 and reflect on the implications these findings have for health policy analysis in similar transitional settings.

2. Methods

2.1 Sources of data

The primary source of information was publicly available literature on health and history in Cambodia between 1975 and 2014. As this is a trans-disciplinary study, incorporating readings of health, history and politics, no systematic search of the literature was undertaken using consistent search terms. Rather, literature was purposefully selected to focus on health policy change and the political events associated with these changes. Additional readings were sourced through the JStor and google search engine, particularly for material relevant to the Khmer Rouge and Republic of Kampuchea periods. Information on health from the Democratic Kampuchea period 1975-1979 was also sourced from the Documentation Centre of Cambodia archives (DCC 2014).

The case of Cambodia was selected on the grounds that it has transitioned through three distinct political periods between 1975 and 2014 and because the first author participated in health policy and planning initiatives in this country between 1994 and 2014. This being the case, this study provides an important
opportunity for testing of the proposition of the intersection of health policy with political history, and for
the further exploration of how such historical analysis can contribute to the development of more realistic
policy scenarios.

2.2 Details of Analytic Framework
We apply three analytic categories to classify and analyse the intersection of health policy and history
which are historical trajectory of health and political systems, current policy positions, and feasible
boundaries for future health policy action. In order to analyse the intersections between health and
history, a health and history timeline was constructed, highlighting major political and health policy
turning points between 1975 and 2014 (Figure 1). Findings are then contrasted with the record of regional
political and health policy reform, in order to consider the degree to which these findings can be
generalized for other settings.

Historical and Health Policy Trajectory: Analysts suggest that through longer term analysis of social
phenomenon a policy implementation trajectory can be detected (Walt 2008). Along with this trajectory,
it is possible to identify specific turning points in political history. Taking into account what analysts have
referred to as the path dependence of policies and systems (Altenstetter 2005), it is also conceivable to
develop a set of probable futures for policies and systems based on the existing trajectory. By taking an
historical perspective, it is possible to determine potential policy pathways and to gain a deeper
understanding as to how policy change can be resisted. In this way, the traditions of a specific political
and social order instructs the “durable disposition” of individuals within a specific period of social time
(Bourdieu, 1977). Cambodia is a case in point where policy positions have been continually redirected
and renegotiated over the last 40 years as the country transitioned through totalitarian, centralist and neo
liberal reform eras.

Health Policy Boundaries and Directions: The concept of “boundaries” derives in part from the notion
of scenario based planning, which considers anticipation of a set of alternative futures based on the
analysis of the current epidemiological or demographic state (Neiner, 2004). In a similar vein, the
alteration of political and social conditions serves to act as control parameters for health policy formation
(Glass 2006). Others refer to these control parameters as the grand attractors which shape the overall
direction of system reform (Sturmberg 2012). As we will see in the Cambodia case study below, policy
parameters were being continually reset in response to the “attractor” effects of historical changes to the
macro-political or economic order as Cambodia transitioned through three distinct political periods.

The theory underpinning this historical perspective on health policy analysis is systems related, in so far
as a health system itself can be viewed as a sub system of a wider social and political order that is
transitioning through time. This approach has much in common with the complex system perspectives on
policy change, which views policy development and reorientation as a product of the interaction between
various operating systems (in this case health systems and political systems) working at various levels of
influence, yet interconnecting through networks of influence or command (Grundy 2014, Hill 2011). In
keeping with this systems approach, we will view political ideology as the grand attractor that redirects
health policy along particular historical pathways, with historical changes in this ideology marking the
turning point for the redirection of health policy.
3. Results – Health and History in Cambodia 1975-2013

3.1 Historical and Health Policy Trajectory in Cambodia 1975-2014

Figure 1 demonstrates the co-evolution of health and political policy in Cambodia between 1975 and 2014.
Figure 1 Overview of Health and Political History Timelines in Cambodia 1975 to 2014

**Political History**

1975-1979 The Totalitarian Turning Point

Totalitarian Rule 1975-79
Collectivized Agriculture
Closure of markets, schools, health facilities and abolition of monetized economy
Ideology of class struggle and self-reliance and doctrine of revolutionary morality

1980-1989 The Socialist Turning Point

Establishment of Peoples Republic of Cambodia and Vietnamese occupation 1980-89
Centralised administration and State ownership of means of production
Reintroduction of monetized economy and opening of schools, markets, health care facilities
Persisting focus on internal security in dealing with Khmer Rouge resistance
Sustained economic sanctions and reliance on significant aid flows from Eastern Bloc
Constitutional amendments for private property rights in 1989

1990-2014 The Free Market Liberal Turning Point

Establishment of Transitional State of Cambodia regime in 1990, with gradual movement to private sector economy
Conducting of UN sponsored general elections, boycotted by the Khmer Rouge
Establishment of Royal Government of Cambodia and commencement of rule of Cambodia Peoples Party (CPP) in 1993
Rapid expansion of international development, civil society and private sector participation
Enactment of Constitution in 1993 establishing a democratic liberal form of rule
Civil conflict between contending parties to 1997 elections, and dissolution of Khmer Rouge movement
Expansion of free market economic model and administrative decentralization
Sustained economic growth and declining poverty rates, but concerns regarding transparency and corruption and governance

**Health History**

1975-1979 Revolutionary Doctors

Re-establishment of Health Administration
Re-opening of Hospitals
Destruction of Health Care Facilities/ equipment
Closure of Hospitals
Access to modern medicines restricted to party elites
Absence of International support
Over 1.7 million deaths from sickness, starvation and execution

1980-1989

Re-establishment of Commune Clinics
Commencement of re-training of health workforce in Cambodia
External training of health cadre in Eastern Bloc countries and Soviet Union
Commencement of International Development assistance (recovery and rehabilitation) through Eastern Bloc Countries and selected UN and NGO agencies
Improving but very high maternal and infant mortality rates, and heavy reliance on traditional medical sector, particularly for delivery services

1990-2014 Expansion of private sector, civil society and international development assistance from State of Cambodia onwards
Establishment of sector coordination mechanisms in the early 1990s
Expansion of immunisation and communicable disease programming in the early to mid-1990s
Commencement of birth spacing services in 1994
Launch of Health Finance charter in 1996 to offset impacts of user fee introduction
Development and implementation of a Health Coverage plan to reconstruct the health care system according to principles of health sector planning
Launch of health sector and operational planning and information systems from the early 2000s
Scale up of health financing initiatives including hospital equity funds in order to correct inequities of access
Rebuilding of health care workforce staffing and facilities networked across the country
Achievement of MDG goals 4 & 5 by Cambodia (2/3rds reduction in maternal and child mortality from 1990 levels)
**Historical Trajectory:** Cambodia was embroiled in a turbulent civil conflict from the 1960s, during which leftist resistance to the Sihanouk royalist regime commenced while at the same time the Vietnam conflict shifted across borders into the Cambodian countryside. Infiltration of North Vietnamese forces and the secret bombing of Cambodian by the United States accelerated the state of internal insecurity of the Cambodian civil conflict. Subsequent to the military coup of the republican Lon Nol administration in the early 1970s, the rural uprising of the Maoist Khmer Rouge under the leadership of Pol Pot gathered strength. Following the establishment of the revolutionary government on April 17, 1975, and the forced evacuation of residents from the urban centres of Cambodia into the soon to be collectivized countryside, a radical programme of agrarian totalitarian rule was established (Chandler 2000, Kamboly Dy 2007).

The totalitarian nature of Khmer Rouge rule was characterized by the creation of "mass rule" under the dictatorship of the Party Centre termed as “Angkar” (“The Organisation”). The main feature of the totalitarian perspective on power is the reduction all relationships and ideas to the dominance of ruling ideology, reinforced by the systemic use of terror as an instrument of control (Arendt, 1966).

"……ideology was the key factor in implementing the political line as well as the organizational line. Ideological party building was done in two ways: by destroying incorrect ideological standpoints and by building up the correct ideological standpoints of the party.” (DCCa, 2014)

In this speech by the Deputy Secretary of the Communist Party of Democratic Kampuchea in 1978, the “correct ideological standpoints” were stated to be class struggle, party rule, the mass line and nationalist revolutionary politics. Revolutionary morality was based on the idea that “morality of the revolution must be based on the interests of the revolution” (DCCb, 2014). Systematic attempts were made by the party to recreate society through this “morality” by eradicating and eliminating vestiges of the old regime, its culture and ruling class, including its religion, social structure, family relations and economic relationships. This provided the rationale for elimination of the people who constructed these ideas and structures. Amongst these people were the educated classes including teachers, doctors and nurses. In support of the totalitarian objectives, schools were closed, money and markets abolished, work cooperatives established, and families deliberately separated and sent to work in the cooperatives in the newly established administrative zones (Chandler 2000, Kamboly Dy 2007).

**Health Policy Trajectory:** As far as can be ascertained, there was no published health policy, and the constitution of the Democratic Republic of Kampuchea (1975-1979) makes no mention of individuals' or the State's rights or responsibilities in relation to health (DCCc 2014). Reports of health systems function rely on the observations and narratives of survivors. The overarching political ideology of Democratic Kampuchea shaped definitions of illness, patterns of service delivery, access to care, the training of health providers, and in the end, the health and survival of the Cambodian population. In terms of illness definitions, failure to obtain a cure was defined as a “consciousness illness.” Hospitals did remain open, but more often than not, trained medical and nursing staff were replaced by very young Khmer Rouge trained staff with minimal medical skills. Even in the terror prison of S-21 in Phnom Penh, it was 15 and 16 year old youths on the prison staff who were targeted for medical training (DCCd 2014). Hospitals were stripped of their equipment and many were shut down, with existing medical staff executed or forced into the countryside (Vilim, 2012). In support of the reigning doctrine of self-reliance, modern medicines were shunned for the majority of the population, and the health staff and patients increasingly relied on use of traditional medicines. Consistent with the totalitarian logic, appointments were based on
political rather than technical criteria, with Directors of Health in the new administrative zones were former militants who had the power to influence organisation (Guliou, 2004). The association of the medical professions with the “New People” (middle and upper urban classes) resulted in only 50 doctors out of 600 from the previous regime surviving the excesses of Democratic Kampuchea (Hill et al, 2007). Absence of effective health care, forced work, starvation and execution resulted in 1.5 million deaths (out of 7 million) between 1975 and 1979 (Kiernan, 1982, Kamboly Dy 2007), with generational aftershocks on human health, demographics and social development.

Periods 2: The Republic of Kampuchea (PRK) 1979 – 1989

**Historical Trajectory:** In 1979, Vietnamese forces, backed by resistance forces to the Khmer Rouge, entered Cambodia and pushed the Khmer Rouge forces westward to the border with Thailand. Populations fled across the border in the west (see map in Figure 2) and re-settled in Thai border refugee camps. The Government of Vietnam recommenced State building efforts in Cambodia. Residents returned to Phnom Penh and urban centres in order to re-establish their lives and where possible re-connect with their families. The Republic of Vietnam was a socialist republican State built on socialist models of governance (as opposed to the radical agrarian Maoist doctrines of the Khmer Rouge). The State for example maintained its stance on collectivised forms of agriculture, despite the collapse of the Khmer Rouge large scale cooperatives after 1979 (Kiernan, 1982). These large scale cooperatives were replaced by much smaller “Production Solidarity Groups (“Krom Samarki”) of 10 to 15 families of which there were 95,000 groups in 1981. There were commitments to rebuild social sectors along centralist administrative lines, with the State intended to be the sole provider of health care services alongside existing traditional health care practices. Post conflict studies in rural Cambodia have demonstrated the resilience of Khmer traditions, with villages returning quickly to pre totalitarian traditions of pagoda-based social activities, extended family relations and religious ceremonies which closely mirrored the pre conflict period (Colletta et al 2000). Other studies suggest that despite the persistence of tradition, bonds or “horizontal social capital” were somewhat eroded. Monetized relations for example, were considered more important than mutual assistance (Downie et al 2001). Despite the almost total fracturing of the vertical social capital between the State and society by the Khmer Rouge state directed genocide, studies from this period indicate health and education services were amongst the first public services to reconnect at village level in the post conflict period (Colletta et al 2000).
Figure 2 Map of Cambodia (UN 2004)

Insecurity was also a common feature of this second period in modern history, where ongoing pockets of Khmer Rouge resistance spotted across high risk districts (Kiernan, 1982) which hindered re-development efforts. Isolation from international assistance was also exacerbated by almost 10 years of internationally applied economic sanctions between 1979 and 1989. Against this backdrop of occupation and economic sanctions the Vietnam Government sustained regular dry season offensives against Khmer Rouge resistance (with estimated forces in the 1980s of 30,000-35,000) that retreated to the remote west along the Thai border (Slocomb, 2001). This resulted in an ongoing flood of Cambodians across the border into refugee camps in Thailand (Schier, 1986), and a predominant focus of the Vietnamese occupation on maintenance of internal security.

Health Policy Trajectory: The period of the 1980s and the Republic of Kampuchea period witnessed the commencement of the long road to health sector and population health recovery. In this period, District hospitals re-opened and resident midwives were located in administrative communes. At this time, child mortality remained very high, nonetheless declined from 242 per 1000 live births in 1978 to 115 per 1000 in the mid-1980s (DHS 2000). Deliveries by traditional birth attendants were up to 70% to 80% of all deliveries. Along with immunisation programs, non-government agencies (NGOs) supported the government to establish select disease control programs for malaria and TB control. Due to the ongoing international sanctions this support was limited and nationwide immunization coverage was difficult to achieve. In this period the International Federation of the Red Cross (IFRC) commenced limited programming for TB services (Hill et al, 2007), and UNICEF commenced immunisation services with the Ministry of Health in 1986 (Soeung et al, 2007). Although the government, supported by Vietnamese advisers, tried to train large numbers of health workers, the quality of the training programs was not
accredited to international standards. Health facilities were in a state of disrepair and were often without water, electricity, equipment and essential medicines (Mam Bun Heng et al, 1995)

Overall, the health policy and system development context was shaped by the urgent need for assistance with humanitarian and rehabilitation of the health sector which was in turn was shaped by foreign relations in the absence of formal international recognition of the Republic of Kampuchea. Under these conditions, international aid could only be provided through a humanitarian window of support, which impacted on the volume and type of aid provided. In addition to United Nations agencies and IFRC and a narrow selection of international agencies, additional humanitarian support was provided through the Communist governments of the USSR, German Democratic Republic and Vietnam (Scoville 1985). Between 1980 and 1983, 47% of all aid was from Communist States. Consistent with the humanitarian crisis post Pol Pot genocide, priority was given by the Republic of Kampuchea to food aid (Kiernan, 1982).


*Historical Trajectory:* In 1989, the PRK regime transformed itself into the State of Cambodia. Between 1990 and 1993, there was a political interregnum and the State of Cambodia functioned as a transitional government, as contending political forces negotiated a peace settlement and prepared for the country's first democratic elections. In this period, the country was administered by the United Nations Transitional Authority in Cambodia (UNTAC), which brought to an end the single-party political system in Cambodia (Downie et al, 2001). Following the signing of the Paris Peace Accord in 1991 between contending forces, UN sponsored elections were conducted in 1993, after which the political system was opened to civil and parliamentary participation and the expansion of the free market economic model. The preamble to the 1993 Constitution defined the State as a “multi-party liberal democratic regime” (Slocomb 2006 Pg. 390). Subsequent to the elections, and after a brief resumption of conflict, the Khmer Rouge resistance collapsed. Despite ongoing internal civil conflict between contending royalist and government political groupings and military forces, a peace was established after a brief conflict in 1997, and has been sustained up until the present day.

This third period post 1993 was characterised by fundamental changes to the macroeconomic and political order that included a transition from war to peace, from single-to multi-party political system, from a repressive to open social systems, and from economic underdevelopment to the emergence of economic growth. Facilitating factors were the UN transitional interventions, the enactment of a new constitution, opening up of international assistance and the termination of conflict (Downie et al, 2001). Parliamentary elections have been conducted regularly since 1993. A decentralisation Law was passed and commune level elections adopted in 2002 (Men et al, 2000). There has been an emergence of trade unions, media and NGOs active in health, education, and human rights advocacy. Private investment and economic growth have also been dominant characteristics of the new Cambodia, with steady rates of economic growth, internal and international migration, development of tourism and textile industries and increasing urbanisation.

Yet despite the development in the economic, social and political sectors, a substantial historical overhang shadows the development agenda in Cambodia. Consistent with the tragedy of civil conflict, close links are maintained between the security sectors and the administration of the State. In the absence of traditions or adequately developed systems of law and civil administration, and in the context of
command and control rule handed down through systems of monarchy, feudal rule, military rule and then totalitarianism, systems of political patronage have dominated the post UN election era. Cambodia is listed 160 out of 177 countries on the Global Transparency Index (Transparency International, 2014). The patronage systems are continually challenged and tested by the emergence of an independent civil society as well as by the decentralization and constitutional rule agenda of an emerging multi-party democracy. It is in the context of the tense standoff between indigenous traditions of command and control, and the emergence of a more open society with a decentralised administration and private sector and civil society constituencies, that the new health policy and systems trajectory has emerged.

Health Policy Trajectory: There are a number of notable themes and turning points in health policy history in the transitional “State of Cambodia” period that followed the political and civil reforms post UN elections in 1993. The first critical turning point was the opening up of the system of international relations and improvements in the security situation, which resulted in increased development assistance and exposure to a wider agenda of health policy options. It was in the interregnum or “State of Cambodia” period (1990-1993) that civil society started to emerge, with NGOs increasing in number from 87 in 1992 to 105 in 1993. The private sector began to emerge, partly due to double job holding by public health officials in response to very low public sector salaries (Mam Bun Heng, 1995). These developments increased the pressure on the government to improve sectoral coordination, which resulted in the establishment of the Coordination Committee (CoCom) for health in the early 1990s (Lanjouw et al 1999) and the formation of Medicam, an NGO umbrella organisation (Medicam 2013).

One of the key policy innovations in this period was the introduction of family planning services (referred to as birth spacing in the Cambodian context) initially through small scale support from NGOs from 1991, and afterwards through government channels via technical partnerships with the United Nations Population Fund from 1994 (Vong Srey Touch, 2006). By 1994, services for communicable disease control were reinvigorated and the TB program was re-established and active in 10 out of 24 provinces (Hill et al, 2007). Post 2000, immunisation policy and services were significantly expanded, again through partnerships with the Global Alliance of Vaccines and Immunisation, with the introduction of new vaccines for control of hepatitis and pneumonia and meningitis (Soeung 2007). These developments were facilitated by the improvement in the security environment which enabled easier movement of the populations and expanded access by health workers to previously insecure regions of the country.

The second critical turning point was related to administrative and free market economic reforms, particularly decentralisation and constituency emergence. Although pressures for centralized authority remained, the political momentum was set in motion and a train of health reforms that led to increasingly complex institutional arrangements for health system management and service delivery were established. This complexity of administration and service delivery is evident in the development of a variety of health contracting models (Jacobs 2009), the proliferation of private sector service providers and civil society actors (Meesen 2011), as well as through expansion of decentralized health planning (Men 2005, Okamoto 2009) and the diversification in financing sources and demand side financing initiatives (Noirehomme 2007).

The free market reforms established in this period led to the emergence of a private medical sector in the early 1990s and the introduction of user fees initiatives for the public health sector (Heng 1995). As a result, there has been rapid growth in utilization of the private medical sector, with this sector being the
first option for primary care contact for 32.9% of the population in the year 2000 (NIS 2000), compared to 48.2% in 2005 (NIS, 2005) and 56.8% of the population in 2010 (MOP 2010). Consistent rates of economic growth, coupled with a reduction in in poverty rates, have highlighted the wide health inequities in access and outcomes, creating significant policy pressures for the introduction and scale-up of demand side health financing initiatives (Bigdeli, 2009). There have been steady increases in urbanization, from 12.6% in 1990 to 20% in 2010 (ESCAP 2012), as well as the emergence of urban slum communities with entrenched pockets of health and social disadvantage (Soeung 2012).

The health policy position has shifted to accommodate the speed of the transitions, which is reflected in the various policy reforms undertaken since 1993. In 1996 a Health Financing Charter degree was enforced to regulate the user fee charges post free market reforms (Jacobs 2010). In 2002 a health planning system was designed (MOH 1996, MOH 2002) and district health contracting models were scaled up from the late 1990s (Schwartz 2004) in order to accommodate the emerging political climate for decentralization. In order to offset the challenge of health inequities and lack of financial affordability of health care services associated with economic reforms, policies and procedures were put in place to expand social protection through demand side health financing initiatives (Bigdeli, 2009). In response to the need to accommodate the increasing diversification of health providers, policy and procedures were put in place to strengthen coordination mechanisms and regulate private public partnerships in some public health areas including immunization (Soeung 2008), malaria (Littrell 2011) and tuberculosis control (Bell, 2012). Pressures from the development community to improve coordination of the sector and its diverse sources of finance and provision also increased, resulting in the development of sector wide coordination and funding mechanisms in such areas as health and operational planning systems, pooled funding mechanisms and the development partner coordination systems (MOH, 2008).

3.2 Policy Boundaries and Direction
The boundaries (horizons) for health system reform are continually being reset by policy actors subsequent to political and economic reforms, with decentralized health planning, health sector coordination and demand side health financing reforms taking precedence in the post UN elections period from 1993. Based on this trajectory, health policy makers are still playing “catch up” to macro political and economic reforms, as economic growth, decentralization, urbanization and private and civil society growth continue to test and push the boundaries of health policy reform and systems development (Grundy 2009). These policy boundaries and directions are reflected in the Health Sector Plan 2008-2015, which focuses on areas of institutional development including health contracting, health regulation and social protection (MOH 2008). By 2010, there was a network of 90 hospitals (of varying functional capacity) and over 1049 primary health centres, in addition to a wide network of private and civil society providers (MOH 2012). From a baseline of 50 surviving doctors (and an unknown number of surviving nurses and midwives) post the Pol Pot genocide era, the health workforce had expanded to over 18,045 by 2010 (MOH, 2012). This health policy and systems outcome has recently demonstrated significant health impacts, as evidenced by the Millennium Goal targets of two thirds reduction in child and maternal mortality by 2015 (see Figures 3 and 4).
The political reform trajectory in Cambodia post 1993 has opened up a significantly wider health policy landscape. This landscape is dominated by the need for health policies to respond to the increased institutional complexity and social diversity that is characteristic of rapid transition settings (Szreter 1999, Bloom 2011). Dominant features of this new health policy landscape are as follows:

A. **Economic Growth**: Steady economic growth in Cambodia and the persisting health inequities associated with the growth rates require acceleration of social protection measures to mitigate the
effects of the wide socio-economic gaps in health outcomes as the country steps towards Universal Health Coverage.

B. **Decentralisation:** The continuing trend to political decentralization and related health policy initiatives in health contracting and health planning will require substantial investments in middle and facility level management systems development.

C. **Constituency Emergence:** Following the emergence of private health sector provision, the institutional arrangements for regulation of this sector remain very weak raising serious concerns about the quality of care in the private sector in areas such as immunization services and malaria treatment. The growth of civil society will require a higher level of responsiveness of the health systems to consumer voice and participation.

D. **Health & Demographic Transition:** The current health and demographic transition, and related trends of aging, population migration and urbanization, will require significant policy anticipation for the modelling of health practice for non-communicable disease prevention and control, environmental protection and urban poor health strategies.

4. **Discussion and Conclusions**

4.1 **Themes in Health Policy History**

**Health Policy Turning Points**

The most striking aspect of the health policy trajectory of Cambodia between 1975 and 2014 is the extraordinary sharpness of the political turning points as the country transitioned through totalitarian, centralist occupation, and neo liberal and pluralist periods. These are nothing short of radical political, social and economic transformations that refigured the way policy makers viewed health illness, structured health organisation, and resourced health services delivery. Both states of health and states of health organisation have shifted radically in this time and are testament to the degree to which health policy intersects with political change, resulting in fundamental resetting of health policy directions. In the totalitarian era it was revolutionary morality that governed the approach to illness, treatment and organisation. In the Republic of Kampuchea period, socialist models of governance and the pattern of international relations governed the scope and speed of health sector reconstruction. And in the most recent pluralist and free market era with an open system of international relations, the politics of market morality, decentralisation, and constituency emergence are reshaping health policy directions.

**Historical Trajectory**

In addition to the radical historical and health policy turning points, the second striking aspect of the historical perspective is the sense of “distance travelled” that such a long term picture of health policy transformation generates. This distance travelled relates to not only the passage of time, but more importantly to the multiple intersections and turning points of health policy and history, which reflects the degree to which health policy is shaped by the guiding narratives of successive political elites. This is of particular relevance to indigenous policy makers who are learning institutional behaviours in their own context. It is also of importance to development specialists, who often are reliant on outsider technical knowledge to support policy innovations, but who have limited knowledge of the “habitus” of indigenous
institutional arrangements and policy networks (Bourdieu 1977). What the longer term historical perspective provides are insights into the durable dispositions of institutional behaviours. It also provides a deeper understanding of the impact on policy implementation of the destruction of vertical social capital between the State and Society as a result of these successive catastrophic historical upheavals. Seen through an historical lens, Cambodian health sector rehabilitation is an extraordinary case of resilience, innovation and recovery. This has been demonstrated by policy innovations in such areas as decentralisation (Men et al 2005, Okamoto et al 2009), social protection (Bigdeli et al 2009) and civil society partnerships (Medicam 2012).

**Tradition and Policy Change**

Cambodia is reported to have a dual political heritage, consisting of the deva raja or “god king” royalist era, and subsequently the supremacy of the party in the Marxist Leninist era of the Khmer Rouge regime 1975-1979, and to a lesser extent by the Republic of Kampuchea period (1980-1990) (Downie et al 2001). According to these traditions, power is centralised and personalized, and in the extreme case of the Khmer Rouge, individuals are atomised into an almost uniform mass identity. Post 1993 democratic elections, the country has veered to the other extreme, particularly in relation to the expansion of the free market economy and the monetizing of relations. However, the traditions or “habitus” of institutions persist, as efforts are made to recentralise and personalize decision making through a system of patron client relations. There are a number of symptoms that maintain this political tradition, particularly with regard to the personal “beneficent” dispensing by politicians of public schools and clinics to populations and the reluctance of the government to accept political opposition (Downie et al 2001) and the widespread procurement of public office. In this manner, history intersects with health policy, where the negotiation of policy direction is not only reliant on the technical content and direction of the issue at hand, but also on the requirement to accommodate the interest and networks of client patron relations and the ideologies of ruling elites. The value in being aware of this intersection is in deepening our understanding of the configuration of policy dynamics that is specific to context (Capano 2009), and the insights such understanding provides for determination of more realistic health policy boundaries.

4.2 Health and History – The Cambodian Experience in Regional Context

The observations of health policy in transition mirror health policy transformations across the region. In many cases, there is increasing pressure for institutional development in order to manage the complexity driven by reforms to the economic or political order. China is responding to the complex institutional challenges of adapting the health system to protect populations from the shocks of free market reforms that were initiated in the early 1980s (Bloom 2011). Mongolia in the early 1990s shifted political course from centralised party rule to liberal democratic reforms, triggering major health reforms to the primary health care and health financing systems (Hindle 2009). In the Philippines and Indonesia in the last two decades, a centralized political system has transitioned towards a devolved and decentralized system of health administration. This reform was subsequent to neo liberal and administrative reforms, presenting formidable challenges in health program delivery, financing and health management at the local government level (Heywood 2010). In Bhutan, the absolute monarchy has recently democratized and decentralized, opening up political space for health policy initiatives in the areas of decentralization and limited private sector participation (RGoB 2012), while in Myanmar, political and constitutional reforms in 2012 have built momentum for exploration of social policy options including decentralization, universal health coverage and social protection (UNIC 2012, Grundy 2014). The sense of “distance
travelled” that we observed in the Cambodia case study is also evident in the regional countries noted above, where in a number of countries (Mongolia, the Philippines, Indonesia), the State has transitioned from centralised administrative and political rule to decentralised systems with emerging multiple constituencies, which required highly adaptive health policy responses.

Conclusions

The Cambodian case study and examples from countries in the Asian region, illustrate the shifting health reform context as countries transition through political periods. The regional context is characterised by a form of administrative complexity, whereby health organization transitions away from monolithic centralized institutional arrangements towards more diversified systems of administration, financing and service provision. These arrangements open up significantly wider and more challenging health policy landscapes that are visible in Cambodia and elsewhere in the region. It is by identifying the intersection of political change with health policy reform that policy makers, planners and development specialist can identify entry points (Hill, 2011) to assist them navigate the complexity of contemporaneous political and health system reform.

There are limitations to historical frameworks for policy analysis that should be taken into account. Not all health system applications and interventions are subject to the deterministic influence of external political, social and economic forces. In fact, some public health interventions have wide applicability across contexts, as demonstrated by universal gains in immunization and communicable disease control across the region. Policy makers and developments specialists should therefore question the degree to which interventions are generalizable across contexts, while at the same time demonstrating the knowledge and awareness of history in tailoring policy and strategy to local conditions (Carrin 2008).

But despite these limitations, the power of political and economic reforms to reset and outpace the health policy and system agenda calls for a more activist and imaginative health policy tactic, that instead of reacting or “playing catch up” to the health effects of social change, more rigorously anticipates and shapes it. The historical view facilitates this sense of both policy distance travelled and policy anticipation through awareness of how health policy boundaries and directions are being continually reset and extended by the grand attractor of macro reforms to the political and economic order (Sturmberg 2010). As is evident in the Cambodia case study and in other countries in the region, periodic political transformations are contributing to the redirection of health policy, as new ways of managing, delivering and financing health care systems emerges. It is by deepening our understanding of the historical view that the vision of policy makers and development specialists can be expanded to incorporate a wider health policy landscape. Such a landscape encompasses not only an analysis of the current scientific basis for health interventions. It also incorporates a deeper understanding of the historical and political determinants of health and health policy change that has the potential to enable policy makers and development specialists to anticipate a more probable set of health policy and system futures.
3.2 Health and History in the Union of Myanmar

**Published Paper:** *Social Science and Medicine February 2014*

Adapting to Social and Political Transitions - The influence of history on Health Policy Formation in the Republic of the Union of Myanmar (Burma): Grundy J, Annear P, Ahmed S, Biggs BA, Published online Feb 10 2014 *Social Science and Medicine* 2014 [http://dx.doi.org/10.1016/j.socscimed.2014.01.015](http://dx.doi.org/10.1016/j.socscimed.2014.01.015)

**Linking Text:** This paper examines health and history in Myanmar between 1960 and 2012. Based on analysis of political and health policy trajectory, the paper presents the idea of a health policy landscape utilizing some of the analytic concepts described in the analytic framework of the Cambodian case study. The paper commences by providing a background of the historical development of the health care system in Myanmar, and links these developments with major milestones in political and social history from the post-independence period up until 2012. On the basis of these findings, the study projects forward the boundaries for health reform, with particular reference to decentralisation, health financing, public private collaborations and international development partnerships.

**Paper Specific Research Question**

To what degree have periodic macro reforms to the system of socio-economic and political relations contributed to key turning points in health policy history in Myanmar from the post-independence period to 2012?

**Abstract:** *Adapting to Social and Political Transitions - The influence of history on Health Policy Formation in the Republic of the Union of Myanmar (Burma)*

The Republic of the Union of Myanmar (Burma) has a long and complex history characterized by internal conflict and tense international relations. Post-independence, the health sector has gradually evolved, but with health service development and indicators lagging well behind regional expectations. In recent years, the country has initiated political reforms and a reorientation of development policy towards social sector investment. In this study, from a systems and historical perspective, we used publicly available data sources and grey literature to describe and analyse links between health policy and history from the post-independence period up until 2012. Three major periods are discernable in post war health system development and political history in Myanmar. The first post-independence period was associated with the development of the primary health care system extending up to the 1988 political events. The second period is from 1988 to 2005, when the country launched a free market economic model and was arguably experiencing its highest levels of international isolation as well as very low levels of national health investment. The third period (2005 – 2012) represents the first attempts at health reform and recovery, linked to emerging trends in national political reform and international politics. Based on the most recent period of macro-political reform, the central state is set to transition from a direct implementer of a command and control management system, towards stewardship of a significantly more complex and decentralised administrative order. Historical analysis demonstrates the extent to which these periodic shifts in the macro-political and economic order act to reset the parameters for health policy making. This case demonstrates important lessons for other countries in transition by highlighting the extent to which analysis of political history can be instructive for determination of more feasible boundaries for future health policy action.
3.3 History, Politics and Public Health in DPR Korea

**Published Paper:** *International Journal of Health Planning and Management*


**Linking Text:** This paper analyses the current and historical health situation and considers the scope for development of health system strengthening (HSS) strategy in DPR Korea. The case study outlines current health system strengthening barriers, and outlines recent initiatives in HSS to alleviate the health conditions of women and children through global health initiative partnerships. The specific contribution that this paper makes to the overall thesis is the manner in which technical solutions have demonstrated the capacity to override national and international political and historical forces which have been dominant in shaping the evolution of the health care system and the health destiny of the population. The paper makes the case that, despite the dominance of socialist ideology and a centralist political philosophy and administrative system in shaping the overall direction of health policy, it is still feasible to technically innovate in order to achieve public health impacts, even in the most constrained governance contexts.

**Paper Specific Research Question**

Is there room within the governance and health policy context of DPR Korea (that is dominated by the social and political determinants of health) for the design and implementation of technical public health interventions that can alleviate the health and social conditions of the population?

**Abstract: An Approach to Health System Strengthening in the Democratic People’s Republic of Korea (North Korea)**

**Background:** The Democratic People’s Republic of Korea (DPR Korea), under the leadership of the Ministry of Public Health (MOPH), undertook the development of a Health System Strengthening (HSS) proposal through the support of the Global Alliance for Vaccines and Immunisation (GAVI). The aim of this paper is to outline the approach to the development of the HSS strategy in DPR Korea, and describe opportunities and challenges associated with its development and future implementation. Sources of information for this review have included national programme plans, in country social sector reviews, information generated through HSS proposal developments and the international literature. **Findings:** Updated assessments in DPR Korea indicate some recent improvements in the health situation for women and children, but there remain ongoing concerns regarding health management, human resource and physical infrastructure barriers to health services access. In response to this situation, the DPR Korea developed a health system strengthening strategy, the main elements of which are the strengthening of health management and service delivery systems at the implementing agency levels of county (district) and Ri (sub district). Three success factors were associated with the reaching of consensus on HSS strategy in DPR Korea. These were partnerships formed between system planners and programme planners, the identification of an overall health sector strategic framework, and high-level leadership of the MOPH. **Conclusion:** Although DPR Korea is in the very early stages of health system reconstruction,
there are significant and new opportunities to alleviate the health conditions of women and children in DPR Korea, through implementation of health system strengthening strategies that are nationally coordinated and internationally supported
3.4 History and Health Policy Change in Asia

**Published Paper:** Published 2014: Social Science and Medicine


**Linking Text:** Through historical case studies from Myanmar, DPR Korea, Mongolia, Cambodia, and Timor Leste, in this paper I make comparative observations and analyses of the evolution of health systems and policy in the context of social and political transition. Through use of health and history timelines, the paper illustrates how the pace and direction of reform has been affected by two contextual parameters. The first parameter is the direction of reform which is periodically reset by major political and historical events. The second parameter is the capability of State to absorb and manage the three post transition shocks of post conflict rehabilitation, free market reforms, and altered governance context. The paper concludes with a discussion of the implications of findings for the approach to health policy analysis, particularly in relation to the links between health policy, history and political change.

**Paper Specific Research Question**

What is the pattern of health policy change in Asia, and to what extent is this pattern shaped by macro-level political and economic reforms?

**Abstract:** The Inter-Section of Political History and Health Policy in Asia – The Historical Foundations for Health Policy Analysis

One of the challenges for health reform in Asia is the diverse set of socio-economic and political structures, and the related variability in the direction and pace of health systems and policy reform. This paper examines the main drivers of this policy diversity and variable pace of change, and the implications these findings have for health policy reform in transitional contexts. We adopt an ecological model for analysis of policy development, whereby health systems are considered as dynamic social constructs shaped by changing political and social conditions. Utilizing historical, social scientific and health literature, timelines of health and history for five countries (Cambodia, Myanmar, Mongolia, North Korea and Timor Leste) are mapped over a 30 – 50 year period. The case studies compare and contrast key turning points in political and health policy history, and examines the manner in which these turning points sets the scene for the acting out of longer term health policy formation. Findings illustrate that the direction of health policy reform is shaped by the character of political reform, with countries in the region being at variable stages of transition from monolithic and centralized administrations, towards more complex management arrangements characterized by a diversity of health providers, constituency interest and financing sources. The pace of reform is driven by a country’s institutional capability to withstand and manage transition shocks of post conflict rehabilitation and emergence of liberal economic reforms in an altered governance context. These findings demonstrate that health policy analysis needs to be informed by a deeper understanding and questioning of the historical trajectory and political stance that sets the stage for the acting out of health policy formation, in order that health systems function optimally along their own historical pathways.
SECTION 4 IMPLICATIONS FOR HEALTH POLICY APPROACH

This section outlines the implications for the approach to health policy making of the main findings of the case studies. The central finding of the case studies is that the direction and pace of health policy reform are controlled by periodic shifts in social and political conditions. Three case studies in health policy analysis are presented, in order to illustrate ways in which health policies, rather than simply responding to the changes in social conditions, can be more active in creating the social conditions that are conducive to improved public health. This involves the establishment of an emerging school of public health analysis focused on public health critique of political policy (or the political determinants of health).

The three examples are as follows:

1. Public Health Critique of the Political Determinants of Health Inequities in Asia
2. Public Health Critique of International Aid and Foreign Policy
3. Public Health Critique of Defence Policy

Sections 2 and 3 have made the case that the directions of health systems and policy reform have been driven by the trajectory of political history, which has reshaped the directions of health policy reform in a number of critical directions. These directions include health and market reform, the governance challenges of decentralisation and multiple constituencies, and the challenges of rebuilding institutions and human resources post conflict. As I have documented in the case studies, invariably, there has been a delay in health policy response to these transitions, leading to significant health access and outcomes inequalities both within and between nations.

Given that health policy and system reform is politically determined, this section considers the implications of these findings (the political determinants of health), particularly with regards to how health agendas can reshape politics for better public health (the health determinants of politics).

The first paper examines trends in health inequities in the Asian region, and develops a framework for public health critique of political policy. The second and third papers undertake a public health critique of international aid (foreign policy) and defence policy. Having established in section 2 and 3 that politics drives health, in section four I make a case for how health in the 21st Century can work to drive politics for health.

The three papers in this section are published journal articles and for copyright reasons cannot be published in this thesis. The journal articles are accessible on line and abstracts and links to the article are presented below.
4.1 Public Health Critique of the Political Determinants of Health Inequities in Asia

Published Paper:


Available at:

Health Policy and Planning Journal: [link]
Pubmed: [link]

Linking Text: Through analysis of demographic and health survey data and related case studies on health inequities, this paper outlines health access and outcomes inequities in transition settings across Asia. The findings focus on an analysis of immunisation, nutrition, maternal health and child mortality outcomes and the relationship of these outcomes to social and economic exposures. The discussion section focuses on policy approaches to the management of post transition shocks of the free market reform and considers the implications of these findings for global and national health policy, particularly in relation to the linking of health and political policy. This paper takes the thesis one step further from the health reform analysis in the previous paper, by making linkages between epidemiology, the social determinants of health, equity and the political determinants of health. The paper concludes by calling for a more rigorous public health critique of the social and political policy that shapes the direction and pace of health policy reform.

Paper Specific Research Question

Do current trends in Asia demonstrate that average health is improving and that health inequities are narrowing, and what implication do these findings hold for health policy making?

Abstract

Background: Following a period of rapid economic and social change across Asia in the 1980s and 1990s, there have been persisting reports of public sector health systems decline and worsening health inequities within countries. Many studies and analyses in the region have indicated that these inequities are socially determined, leading to questions regarding the adequacy of current health policy approaches towards addressing the challenge of persisting health inequities. Methods: Utilizing published data from Demographic Health Surveys (DHS) and case studies and reviews on health inequity in the Asian region, this article aims to describe the existing patterns of inequity of health access both within and between countries, focusing on immunisation, maternal health access, nutritional outcomes and child mortality, with a view to recommending health policy options for addressing these health inequities. We compare the gap in access and outcomes between the highest and the lowest wealth quintiles, as well as cross reference these findings with case studies and surveys on health inequities in the region. Results: In Asia, while in terms of aggregate health more of the poor are being reached, the reduction in the gap between
social groups in some cases is stagnating, particularly for maternal health access and childhood stunting. Inequity gaps for immunisation are persisting, and remain very wide in large population countries. For child mortality, more of the poor are surviving, although the rate of mortality decline is more rapid in higher than lower socio-economic groupings. **Conclusions**: Both a strategic shift towards public health critique of social and political policy and operational shifts in health management and practice will be required to attain improvements in distributive health in Asia.
4.2 Public Health Critique of Aid and Foreign Policy in DPR Korea and Myanmar

Published Paper


Available at:

Asia Studies Review


Linking Text: This paper examines the impact of international relations and foreign policy on maternal and child health access and outcomes in Myanmar and DPR Korea. The paper backgrounds theories for humanitarian aid assistance and foreign policy, and how these theories can be applied to provide a deeper analysis of the approach to international health assistance. The track record of international health assistance in both Myanmar and North Korea is illustrated. It demonstrates the links between patterns of aid and the exercise of foreign policy, and the historical impacts this has had on maternal and child health. Rather than viewing international aid as an instrument of foreign policy, this paper makes the case for a public health critique of foreign policy to ensure that international aid is targeted towards attainment of human security objectives, and not only the security of the State.

Paper Specific Research Question

In the event of failing political and health systems, who has the responsibility to protect the health of vulnerable populations?

Abstract: Inequities in international aid flows to Myanmar and the Democratic People’s Republic of Korea and their impact on maternal and child health

The Union of Myanmar and the Democratic People’s Republic of Korea (DPR Korea) are the most disadvantaged aid recipients in Asia. In this paper we describe and analyse the inequities in international aid flows to these countries from a health equity and “responsibility to protect” perspective. Review of public health and health systems literature and examination of international aid flows reveals that countries with a comparable gross national income receive total aid flows 11 to 12 times larger than do Myanmar (Burma) and DPR Korea (North Korea). Although the issue of aid effectiveness in these governance contexts remains a significant challenge, there is nonetheless a joint national and international responsibility to protect women and children through the careful targeting of health humanitarian aid and development programs
4.3 Public Health Critique of War and Defence Policy in Asia

Published Paper

Published Paper: “A Conceptual Framework for Public Health Analysis of War and Defence Policy”

Available at:
International Journal of Peace Studies:
http://www.gmu.edu/programs/icar/ibps/vol13_2/IJPS13n2%20GRUNDYetal.pdf

Social Citation Index:

Linking Text: This published paper and book chapter applies frameworks for public health analysis to a critique of defence policy. It puts forward the case for more rigorous public health critique and engagement with defence policy, in order to project forward more accurate scenarios of the public health impacts of conflict decision making. It reinforces the central focus of this thesis of the dominance of politics in shaping health policy directions and outcomes, and of the related need for the health policy community to more rigorously question and critique politics from a public health perspective. This paper pre-dates the Lancet Commission call for ending the marginalization of public health in the determination of political policy (2014), particularly with regard to public health participation in policy relating to armed conflict.

Paper Specific Research Question

What is the role of public health in the analysis of defence policy?

Abstract: Balancing National Security with Human Security: A Call for Comprehensive Pre-Event Public Health Analysis of War and Defence Policy

Concepts of national security and human security can be tenuously balanced in any assessment of the risks and benefits of defence development. In order to ensure an effective balance is maintained in the interests of both human and national security, new paradigms and research agendas for pre-event public health analysis of war and defence policy should be applied. This paper discusses traditional approaches to war and public health, and considers the benefits of a shift in public health focus from post-event emergency relief to pre-event analysis of war and defence policy. Three concepts of public health are applied to the analysis of defence policy – injury epidemiology, public health surveillance and social epidemiology. We conclude that a refocus on pre-event analysis will strengthen the role of public health in contributing to prevention of war and in the reorientation of defence planning towards the protection of human security, and not only the state.
SECTION 5 CONCLUSIONS – Health Policy, History and Politics

5.1 Summary of Findings
In this thesis I have explored the intersection of political and historical change with health systems and policy reform. Through examination of countries in the Asian region that are undergoing political and health policy reform, this thesis answers in the affirmative the research question regarding the causal linkage between political and historical change and the resetting of health policy parameters.

The principal findings are described in Figure 9. Firstly, I have established that health systems and policy reform track social transitions (section 2). Secondly, the character of these political and historical transitions sets the parameters and directions for health policy reform (section 3) and finally, these findings have significant implications for the practice of health policy analysis (section 4).

Figure 9 Principal Findings of Thesis

A. Health and History: Health Systems and Policy Reforms track social and political transitions, effecting both the pace and direction of health reforms (section 2)

B. The Political Determinants of Health: The directions and pace of health policy and systems reform is shaped by the character of these political and historical transitions, and the capability of health and social systems to respond to them (section 2 & 3)

C. The Health Determinants of Politics: If health policy and systems formation are politically determined, then the implication should be considered as to how health policy can act to set political agendas for public health benefit. A starting point for this approach is more rigorous public health critique of political policy (section 4)

The objective of this final section is to summarize the main findings, and then to consider the implications for innovations in health policy research and analysis.

Finding 1: Health and History
Health Systems and Policy Reforms track social and political transitions, effecting both the pace and direction of health reforms (section 2)

A principal finding is that the character of socio-economic and political transitions impacts on the direction and pace of health policy reform.

These findings are described and analysed with respect to a set of observations of social transition and health system reform in Asia (section 2.1 Paper 1). This review illustrates that, over the last 20 – 50 years (depending on the setting), health systems in the region have generally evolved from centralist/socialist administrations dominated by a public sector monopoly of financing and provision,
towards diverse and complex models of decentralised administration with multiple providers (public, private and civil) and sources of finance. As outlined in Paper 5, this is particularly applicable to the cases of Mongolia, Cambodia, and the Philippines. It is a probable policy future confronting Bhutan, the Union of Myanmar and Timor Leste in terms of the anticipated policy need to adapt to increasing decentralization, and civil and private sector emergence. This post transition context is dominated by significantly more complex governance arrangements, requiring a much higher level of sophistication of health policy making and health system regulation.

The case of Cambodia (see Paper 2) adequately illustrates this point (see also Grundy et al, 2009 see Annex 1). In 2009 study, policy changes were tracked from the Khmer Rouge period which began in 1975 (finished in 1979) up until 2008. What is described here are movements for reform in four main management system areas including decentralisation, health planning systems, health financing reform and public private collaborations. Through illustration of Demographic and Health Survey data, the paper demonstrates that, despite a track record in policy innovation in the neo liberal reform era post 1993, health policy reform has nonetheless failed to keep track with social transition, as judged by the persisting health inequities in health care access and outcome.

These findings are further elucidated in the three case studies in section 3. In the first case study of Cambodia (Paper 2 see section 3.1), health and history timelines between 1975 and 2012 illustrate the way in which health policy formation can be understood in the context of social transitions. Three specific analytic categories are specified for this purpose. These are historical trajectory, which sets the broad parameters for health reform, the current position of policy actors, and finally the boundaries for health policy reform that are shaped by the preceding factors. Together these concepts are unified into a single health policy landscape.

This landscape approach is adopted in the following case study in the Union of Myanmar (Paper 3 section 3.2), where post second world political history up until the current time is compared and contrasted with the evolution in health care systems and policies through a succession of regime changes. In Paper 5, a broader cross section of countries from the region is selected to illustrate and analyse the extent to which politics resets health policy parameters. All of these cases illustrate the way in which key turning points in health policy formation were precipitated by periodic shifts in political and social conditions or by, in the case of DPR Korea, ebbs and flows in the system of international relations. The DPR Korea case (Papers 4, 5 and 7) illustrates the degree to which, despite the overwhelming pressures of national and international political determinants of health, there still remains a narrow policy making space for technical policy innovations.

**Finding 2: The Political Determinants of Health**

The directions and pace of health policy and systems reform is shaped by the character of these political and historical transitions, and the capability of health and social systems to respond to them (Section 3)

The implication is that for theories of policy change and related health policy strategy and operational tactics, more attention needs to be given to developing an understanding of the role of historical trajectory and the exercise of political power in the analysis of health policy formation.
In Paper 5 Section 3.4, “The Intersection of Political and Health Policy History” in Asia reviews the evolution of health systems against the backdrop of national history in five countries of the Asian region (DPR Korea, Mongolia, Myanmar, Cambodia, and Timor Leste). Though the use of health and history timelines, I explore the linkages between macro-political change and health systems and policy reform. What the analysis identifies are key turning points in health reform. Invariably these health reform turning points are the aftershocks of seismic shifts in the political order. These shifts substantially alter the parameters for health policy making, as judged by the radical ways in which policy makers rethink policy directions in terms of financing health care systems, the way human resources are managed, and the way alternate constituencies are engaged in health care management or delivery.

Based on the findings in this set of case studies, the implications for theorizing about policy change are explored. Rather than being viewed as an inert set of interacting technical constructs or “building blocks”, health care systems and the policies they generate, are in fact organic social constructions that are interwoven with the reshaping of the body politic as it transforms itself through time. This has important implications for theory, in so far as a logical extension of the theory of systems thinking is that the health sector itself, as a sub set of a broader social and even global health order, is subject to the parameters of a super set of changing political and social conditions. In this sense, health care systems and policies become technically constructed within the confines of a broader socio-political boundary.

These broader social and historical constructions (of which health systems form a part) constitute the “ecology” of health systems and policy formation. This ecology, referred to throughout the case studies as a “health policy landscape” incorporates historical trajectory, the current positions of policy actors and the associated feasible boundaries for action. This ecological view has much in common with a systems or complexity view of policy change, in so far as it describes interconnections between moving parts (in this case the health system with socio-economic and political system). In line with models of complexity science, feedback loops between social systems and health systems has the capacity to generate change and innovation.

But there is a sense in which an ecological perspective of health systems and policy change differs in character and content from systems analysis. The added value of the ecological way of viewing policy and systems change is the perspective of the “organic.” As an organic evolution, ecology consists of a living environment with its own particular systems and policy terrain that has evolved through time in response to historical events and hence travels along unique spatial and temporal pathways. The “habitus” of the institutional and organizational arrangements that constitute this systems and policy terrain contributes to the durability of institutions and their behaviors (and their resistance to change) (Bourdieu 1977, Fukuyama 2012), as well as their capability to respond to post transition shocks. It also contributes to the unique national character of health policies and systems, particularly as measured by the highly variable time frames and policy pathways for achievement of universal health coverage (Carrin, 2008).

Capano (2009) makes the observation that policy analysis is not only related to the analysis of change, but also to the analysis of the stability of systems. As has been demonstrated in the case studies, the notions of durability and stability of institutions is a fertile area for policy analysis, particularly given the variable time frames at which countries transition from centralized to decentralised and open models of both political and health sector governance.
The ecological perspective enables a contrast of the metaphors of ecology (living organism) and system (machine like connections of parts). With systems, the idea is to engineer change. This is reflected in the language of systems thinking, with reference to such terms as "parts", "interconnections" and "installation". In contrast, the ecological perspective takes note of the fact that technical engineering of systems works within the specific control parameters of social and political conditions which evolve through time and within which these systems are located. These conditions are alternately referred to as the grand attractor of health system reform (Sturmberg, 2012).

The contrasts between systems thinking and the ecological perspective do not infer that the perspectives are contradictory or mutually exclusive. In fact they are complementary. That is, health policy and system solutions are technically engineered in the context of the ecology of the social and political environment, which sets the parameters (policy directions) for how these system solutions can be engineered (policy boundaries).

This is particularly relevant to the non-medical aspects of health policy, which are highly subject to the influence of the overarching management arrangements of the political system (see Section 2.1 Paper 1). What the case studies have demonstrated is the way that a health system is financed and its human resources are managed, including the scope of participation of middle level management, civil society actors and private sector actors in health, is dictated to by the core values of the overarching political superstructure. This superstructure sets the rules of the game regarding decision making, and the role of the market, local government and civil actors in social service provision and participation. The awareness of the ecological and historical foundations of health policy making, upon which systems solutions are built, points towards a fundamental rethinking of the approach to health policy analysis. That is, given the political determinants of health systems evolution and policy directions, it begs the question as to the potential role of the health policy maker in setting the rules of the game, instead of only reacting, adapting or conforming to them.

**Finding 3: The Health Determinants of Politics**

If health policy and systems formation are politically determined, then the implication should be considered as to how health policy can act to set political agendas for public health benefit, rather than just responding to the impacts of social and political transitions

The third main finding is that, given that health policy is politically determined, more consideration needs to be given by health policy makers and development specialists to the critique of political models from a public health perspective. It is only one step from equity analysis (the analysis of fairness of interventions, exposures or of outcomes) for health policy makers to move towards an analysis of the distribution and exercise of power that gives rise to these inequities in the first place (refer to Figure 10, also Paper 6).

Traditional models of managerial public health analysis have tended to focus on technical system solutions, in contrast to analysis of upstream political and historical determinants of health. The discourse on the social determinants of health in the last 10 years, particularly in reference to causal relationships established between the social distribution of health and access to power and resources, inevitably points analysis towards public health critique of social and political policy. As evidenced in the analysis of health inequity in Asia, particularly in terms of inequitable distribution of chronic malnutrition and child mortality across social classes, equity analysis moves the critique of the exercise of power to the very centre of health policy analysis (see Section 4.1 Paper 5).
Figure 10 The Political Determinants of Health (Grundy, 2013)

This is particularly the case in relation to the delay in policy response to the impacts of social and political transitions. There is evidence for variable capability of nation states to respond to post transition shocks of conflict, free market reform and altered governance context (Section 3.4 Paper 5). There is an inevitable offshoot of the observations that health policies and systems track social transitions and that the probability of maternal and child survival is linked to location and social class in Asia. That is, an analysis of the frequency and distribution of disease in populations (the domain that is traditionally considered to be the basic science of public health). The location of political science (including history and sociology) as being central analytic tools of health policy and systems analysis opens up new horizons for public health analysis and action.

In the analysis of health reform over the last 50 years in 7 countries of Asia, the set of case studies (see Paper 5 Section 3. 4) documents the evidence for reformation of health systems and policy based on periodic impacts of major socio-economic and political transitions on both the direction and pace of health reform. Based on the historical evidence of these impacts and key turning points in policy and systems development associated with them, the review generates three important themes from the case studies and categorizes them into three post transition shocks that include post conflict rehabilitation, adaptation to post market reforms and capability for response to a radically altered context for health management.

The central underpinning of a public health critique of social and political policy is an historically and ecologically informed assessment of the macro level parameters for reform, which set the stage for the acting out of health policy formation and the related identification for feasible boundaries for policy action. This “front foot” approach involves subjecting political policy to public health critique. As Figure
11 demonstrates, by subjecting foreign and development policy to health policy analysis, it is more feasible to identify the political policy roadmaps by which to reverse entrenched international health inequalities. This reinforces the notion of Kickbusch (2006, 2007) that the fundamental problem with global health is that of governance and not of disease.

This approach is also taken up in the analysis of health inequities in Asia (Grundy, 2013 see Paper 6 Section 4.2), where data from successive DHS surveys are analyzed to depict social class based distribution of chronic hunger and child survival rates in Asia. This analysis established that the health policy landscape outlined in section 3 is dominated by the terrain of political and economic power. The analysis calls for more comprehensive frameworks for analysis of health inequities, including more in depth analysis of how inequitable distribution of health access and outcomes is causally related to inequitable distribution of political power and resources. This finding therefore locates public health critique of political power as central to health policy and systems analysis, in much the same way that epidemiology (frequency and distribution of disease), sociology (social distribution of disease) or ethics (health inequities) is (see Figure 11).

This approach to health policy analysis takes the social determinants and health inequity argument one step further by demonstrating the logical chain in reasoning between epidemiology, sociology, ethics and politics. That is, the distribution of health and illness is economically and socially patterned, leading to ethical considerations regarding the fairness of the distribution. The links between social patterning of disease (the social determinants question) leads to a questioning of the related distribution of the decision making process around how these resources are allocated (the political question). The social patterning of chronic malnutrition in Asia (in the form of childhood stunting, see Figure 12) as an appropriately framed public health enquiry becomes a political question of the distribution of power and capabilities between social classes. Equity analysis demonstrates lack of fairness and a social determinants analysis will uncover exposures. Epidemiological analysis determines frequencies and biological causation and evaluates interventions. But it is only the political question that can address the underlying determinants of the social patterning of chronic malnutrition in children in modernizing societies in Asia.

The case studies in policy and systems development in Asia also testify to the manner in which health policy has become an afterthought of political decision making processes, rather than being a rationale for political action. As reported in the case studies, political reforms have been initiated, after which Ministries of Health scramble to develop the appropriate post transition policy responses. Responses are developed for post market reforms, usually in the form of universal health coverage or social protection strategies. Policies are also adapted to the needs for post conflict rehabilitation, usually in the form of strategic human resource development and planning, or health facility reconstruction and the re-building of institutions. Finally, responses are also required for the radically altered governance context precipitated by historical movements and political change. These responses are reflected in health agency endeavors to manage the complexities of decentralisation and devolution, or the emergence of civil and private sector actors and multiple sources of financing of health care.
It is the delay in these responses that I argue have contributed to the persisting and wide inequities in health access and outcomes across the Asia region. It is as if public health is an afterthought of political decision making (i.e. adapting to effects), instead of a rationale for political action (leadership for change).

This is the argument at the centre of the critique of defence and foreign policy, where the public health community is observed to be highly subservient to the security needs of the State, thereby relegating human health security as a lower order policy and resource allocation priority (Papers 7 - 8). It is central to the critique of health reform, where reforms are reported to belatedly track social and political transitions across Asia (Papers 1 – 5).

The issue of conflict and defence policy is critical to the issue of health reform, as one of the major challenges confronting 20th Century health systems policy makers has been the redevelopment of health institutions and human resources capacity post conflict. There are very firm historical foundations for the assertion that conflict and its politics have shaped health history for 40 to 50 years post event. In fact, conflict is the dominant thread running through the health and history narrative presented in the case studies. This being the case, more attention needs to be given to how health can drive politics and history, in contrast to the multi-generational public health “clean up” model of post event recovery, rehabilitation and development strategy.

The cases of Cambodia, Myanmar, Timor Leste and DPR Korea demonstrate this point. Myanmar has amongst the longest running civil wars on the globe, with deep pockets of under development in the peripheral State regions bordering China and India. In Cambodia and estimated 1.5 million died during
the genocide (Kamboly Dy 2007) and only 50 doctors survived this period (Hill 2007). Following the exodus of Indonesian professionals post referendum, Timor Leste has now committed to a long term plan to rebuild its indigenous health workforce following 25 years of conflict (see Paper 5). DPR Korea, since the 1953 armistice, has been on a constant war footing, and with the system of national priority setting and international relations resulting in the isolation of its health workforce from most forms of international development (see Papers 4 and 7). The history of conflict dominates the health policy landscape in these settings, and its impacts reverberate across multiple generations, reshaping the policy terrain as nations struggle to rebuild institutions, economies and social sector workforces.

Figure 12 Public Health Analysis of Political Policy – The case of Defence Policy (Grundy, 2008)

Again this rationalizes the argument for a more rigorous public health critique of war and defence policy. This issue is taken up in the public health analysis of defence policy (see Paper 8 Section 4.3). In this scenario of public health analysis of political policy, the traditional approach of public health emergency response to conflict is contrasted with the core primary prevention paradigm of public health. Through application of injury prevention and social determinants frameworks, the paper makes the case for pre-event public health analysis of war decision making (see Figure 12), in order that public health effects of defence policy are projected in much the same way that the economic, legal or political consequences of conflict are injected into the conflict decision making process. This observation points towards a more proactive and primary prevention analytic standpoint that locates politics and defence policy as core business for health policy analysts. The main lesson in this approach is that effective public health analysis of war and defence policy (and its translation into political action) can change the course of public health and development.
This is demonstrated in Figure 13 (sourced from Paper 8), which illustrates the various stages of public policy intervention in conflict from the pre-event period through emergency assistance to rehabilitation and then onwards to long term development assistance (which can be multi-generational). The point I am making here is that early intervention through effective critique of defence and war policy has the potential to prevent or mitigate the health, social and demographic impacts of conflict on populations (see Paper 2 on Cambodia).

Similarly, in “Responsibility to Protect: The impact of international aid on maternal and child health in Myanmar and DPR Korea” (see Paper 7 Section 4.2) links are established between the exercise of foreign policy and how doctrines of hard power clash with the stated humanitarian aims of international aid programs. Based on observations of inequitable aid flows and the manner in which aid policy is subsumed under the umbrella of foreign policy, this review recommends strategies that are based on the responsibility of the State to protect doctrine and to place health and human security (and not only State security) at the centre of foreign policy formation and policy critique.

**Discussion**

**Public Health Science and the Historical Imagination**

My observations, description and analyses of the intersections of health policy and political history has been revealing from a number of perspectives. The advantage of the historical perspective is to develop a moving picture of how both political structures and health policy evolve in parallel through time, and intersect at major political and health policy turning points. The systems and ecological perspectives have enabled me to observe, describe and analyse in more depth the nature of this intersection, and the impact it has had on policy directions. The conclusion I have reached is that health policy has become a passenger of politics and history, and is being swept along by a tide of events that are driven by strong undercurrents of history and political power. It is within the boundaries of this political power and its related historical trajectory that the administrative rules governing such domains as centralization and decentralisation, human resources management, financing and constituency emergence (see Paper 1), and that serve to shape and direct the contours and directions of health policy. It is in this first paper that I describe and analyse the direction of health policy reform in Asia. Figure 13 below summarizes the findings in Paper 1, which are echoed thereafter in the detailed case studies for Myanmar, Cambodia, DPR Korea (Papers 2-4) and other countries in the regional review including Bhutan, Mongolia, Timor Leste and the Philippines (Paper 5).

Paper 1 describes how health systems from seven countries of Asia have transitioned over the last 40 years from highly centralized State governed administrations to highly complex systems that are decentralized and which provide and fund services through a number of constituencies (state, private and civil). Countries are now at various stages of transition along this policy arrow of time, but with a direction that seems to be consistently moving to the right.
This model of social transition and health policy reform not only enables the classification of a country's policy position at any specific point in time. More importantly, it allows us to track the policy pathways of countries through stages of transition over 25 to 50 year periods. It remains the case that within this time frame, countries such as Mongolia, Cambodia and the Philippines have moved across this historical terrain from highly centralized political and health system models to highly complex, decentralised and diversified systems of administration. Other countries are in the early or middle transitional stages, while only DPR Korea retains in the centralist stance. If anything, DPR Korea highlights the impact of the intersection of health and history on policy direction, through retention of a consistent centralist socialist model with a narrow yet viable technical space for policy innovation.

There are several critical observations emerging from this analysis. The first (and most important for practical purposes) being made here is that the trajectory of reform points to health policy possibilities and probabilities in context, that would not otherwise be readily visible in the absence of the historical imagination. The second observation is that the policy arrow of time points away from centralist models of monolithic administration governed by a central state, towards highly complex administrative arrangements characterized by multiple providers, actors and financing sources. In DPR Korea (as was historically the case with Cambodia, Mongolia and Myanmar and Bhutan and the Philippines to varying degrees), the Central State governs, finances and administers all. There is one centralist system of command, one funder, and one system of publicly funded provision. Transition in contrast decentralizes command, and diversifies financing and provision into multiples sources and constituencies, respectively. The arc of the health policy arrow of time points to a direction best captured by the physical science metaphor of entropy, which describes the transition of physical states through time from states of simplicity to states of high levels of complexity and organization, and that this complexity always points to the future tense.
In this sense, this directional character of health policy reform reflects a linear perspective in policy development (Capano, 2009), particularly given the fact that there is limited evidence of large scale reversing of policy directions. On the other hand, there is evidence of non-linearity, in so far as there are clear feedback loops between change in political and economic states and changes in the directions of health policy.

In a similar vein, there is evidence of both revolutionary and evolutionary characteristics of policy change. Policy change is revolutionary, in the sense that sudden and discrete breaks are required from the past in order to accommodate radical transformations in political and economic systems. The Philippines post Marcos policy reforms of devolution is clear evidence for this (Grundy et al, 2003), as is the policy endeavor to establish national health insurance systems in Mongolia post-Soviet era (Hindle, 2006). But equally, policy change is evolutionary, in so far as countries may take decades in order to plan and achieve the elusive policy goals of universal health coverage, as the long term struggle in Thailand clearly demonstrates (Wibulpolprasert et al, 2011). In this regard, health policy change displays the hybrid characteristics of multiple theoretical perspectives. What does stand out however, is the uni-directional and for most part irreversible character of the policy direction. Although not predesigned, there is nonetheless a sequence and direction, which I argue can be highly instructive for assessment of policy scenarios.

As well as providing information on the direction of health policy, the historical perspective (particularly the observations of intersections of health policy and political history) enables us to observe how health policy has been highly reactive and often delayed in its response to the impacts of social and political transitions (see Paper 2 and Grundy et al 2009). Despite this observation, it nonetheless remains the case that the ability of policy makers to “scan” the wider historical and political horizon, and specify points of entry for redirection of policy, is a critical leadership function for health planners and policy makers. In fact, this capacity to scan the horizons of the health policy landscape can be a source of extraordinary policy innovation and adaptation to context, as planners and policy makers reestablish systems equilibrium post economic, social and political transition. Post-Soviet Mongolia, the emerging democratic governance of Bhutan, the newly independent state of Timor Leste, initial steps to democratic decentralised governance models in Myanmar, post Marcos Philippines and post totalitarian Cambodia all illustrate the extraordinary reflexivity of policy makers to the forces of economic, social and political change.

The Health Determinants of Politics

In making observations on the political determinants of health, and the need for health policy to manage the effects of social and political transition on population health, the question inevitably arises as to whether health policy can be more proactive in shaping politics for health benefit (instead of just responding to its impacts).

As pointed out in the literature review, comprehension of reality is the capacity to confront it and change it (C Wright Mills 1959, Arendt 1966). C Wright Mills idea of the sociological imagination best captures this sense of confrontation with reality, by concluding that “a social study that does not come back to the problems of biography, of history and of their intersections within a society has completed its intellectual journey” (C Wright Mills 1959). It parallels E H Carr’s observation (2008) that history is never at rest,
and that therefore we should never fall into the trap of becoming an unconscious apologist of a static society.

In contrast, it is awareness of the momentum of political history, and its intersection with our technical struggle to make sense of it through redirection of health policy, that we become more conscious actors in the redirection of both health policy and political history rather than unconscious apologists of it. The observational evidence presented in the case studies on health policy and political history is overwhelming and in my view presents the case that it is the trajectory of history and politics that is shaping the design of health systems and directions of policy, whether of devolution in the Philippines, centralization in DPR Korea, civil society emergence in Cambodia, or social insurance laws in Mongolia. In Thomas Kuhn’s terms, this emergence of observational evidence should serve to “crack” the orthodoxy of much of current health policy analysis, which views the exercise principally as a within sector technical struggle for priority interventions (World Bank 1993) and packages of activities (Unger 1995) or coherence of technical system building blocks (WHO 2010).

I argue for a more thorough interrogation and public health critique of this policy context and process, through a more willing and focused exercise of the sociological and historical imagination. Although the term of imagination conjures up the notion of “fantasy” or “fiction”, it is anything but fiction or fantasy when applied to an understanding of health systems and policy evolution. Rather, it is an attempt to vision and understand reality, through scanning the health policy landscape and taking in its historical trajectory on one horizon, our current health policy and political positions, and then forward to a future policy terrain shaped by the political and social policy trajectory. It is the ability or quality of mind to shift from one perspective to another, from the individual to the world and back to the individual again (C Wright Mills, 1959), that enables a much clearer vision of the probabilities of health policy and system futures (see Paper 1). It is confrontation with social reality, with the way the world is (Arendt, 1966), and the way it is more likely to become.

The quality of mind that C Wright Mills associated with the capacity to perceive the intersection of biography with society generates terms such as “imagination” in order to draw our attention toward realization of the breadth of perception that such a vision requires. This terminology is also consistent with the use of metaphor in emerging policy analysis and policy change literature. The notion of a “path” of development history and its impact on health policy in China is a case in point (Bloom 2011). So too is Sturmberg’s metaphors of the “vortex” and the “grand attractor,” which refers to an overarching economic or political principle guiding the direction that health reform takes in Australia (Sturmberg 2012). The use of the term policy terrain by Gilson et al (2007) also highlights the breadth of perception required in order to integrate understanding of politics, process and power into the study of health policy.

Capano (2009) highlights the risks associated with using metaphors in policy analysis, and challenges policy analysts to question the theory and empirical foundations underlying its use in policy analysis. In writing this thesis, I was aware of this risk and attempted to manage it in several ways. Firstly, I grounded the landscape or ecological perspective in empirical observations of health and history. This has enabled me to exercise the imagination required to test propositions regarding the intersections of health policy and political history.

Secondly, I managed the risk through the use of classification. As Freeman (2010) notes, classification is the basis for comprehension. This is particularly relevant when taking into consideration the complexity
associated with intersections of health and history, and the requirement to reduce this complexity to manageable dimensions (Real-Dato, 2009). Classification of management areas and stages of transition (see Paper 1), construction of health and history timelines, and the dissection of the health policy landscape into three dimensions of trajectory, current position and policy direction (Papers 2,3,5) have all been attempts to manage the complexity through classification.

Now I would like to emphasise one limitation of the landscape view. As demonstrated by the cases of DPR Korea and Myanmar, even in the most constrained and static of governance contexts, it is still possible to cut through the forces of history and politics and implement universally applicable scientific interventions and health program strategies. Gains in immunisation and tuberculosis and malaria control in recent years in these two countries are testimony to this fact (see Paper 7). Nevertheless, what the landscape view offers is a deeper understanding of the determinants of current health system structure and policy, and the possibilities and boundaries for future public health interventions and impacts. It points to health policy possibilities even in highly challenging governance contexts such as DPR Korea and Myanmar that may not have been otherwise visible.

The landscape view is therefore not an intellectual surrender to the seemingly overwhelming forces of history and political power. It is in contrast an intellectual questioning of it, and in the most challenging contexts such as Myanmar and DPR Korea, a means of negotiating a path through it (see Paper 7).

**Future Research Pathways for Health Policy Analysis**

A reorientation of health policy analysis to a social transition and landscape viewpoint can put health policy makers and interest groups at the centre stage of the main health challenges of the 21st Century such as adaptation to climate change, conflict prevention and urbanization. The dominance of these political, social and environmental determinants in shaping the frequency and distribution of disease and patterns of life expectancy requires not simply the advent of instrumental measures including new vaccines and technologies or expanded networks of industrial medicine. It will also require fundamental shifts in the way political power is exercised with respect to resource allocation and conflict prevention in the light of increasing scarcity of resources and the competition for them. A health policy approach that does not include an analysis of power will be left pondering how to respond to the decisions that others have made for it. This is a finding which is glaringly obvious in the late 20th Century, where case studies illustrate innovative but yet belated policy responses to the impacts of conflict, liberal economic reforms, and radical transformations in the way political power is exercised.

Figure 14 below outlines a potential research agenda (or set of research questions) for furthering public health critique of political power.
**Figure 14 Recommendations of Research Questions to Expand Knowledge of Public Health Critique of Political Power**

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent are the findings on the “Health Policy Arrow of Time” (see figure 13) generalizable to other global health regions? (The need to conduct similar case studies in health policy and political history in other regions of the globe, for example the African and South American States)</td>
</tr>
<tr>
<td>What are the main approaches to public health critique of political power? What public health methodological tools are feasible to describe and analyze the impact of the exercise of political power on health care access and outcomes?</td>
</tr>
<tr>
<td>What would constitute public health modelling of the impacts of defense policy and war decision making on population health? How could such modelling be used to shape or influence political policy?</td>
</tr>
<tr>
<td>What would constitute a public health critique of foreign policy, with a particular view towards balancing human and national security interests in policy formulation?</td>
</tr>
<tr>
<td>What would constitute a public health critique of economic policy, and how might such a critique shape options for both political and health policy directions?</td>
</tr>
<tr>
<td>What would constitute a public health critique of environment policy, and how might such a critique shape options for both political and health policy directions?</td>
</tr>
<tr>
<td>What is the nature of the intersection of the field of political and social relations with actors and institutions involved in the formulation of health and social policy?</td>
</tr>
<tr>
<td>What is the evidence to support the claim that health and social policy analysis can shape political policy, rather than just be reactive to it?</td>
</tr>
<tr>
<td>What are the main cultural and organizational factors that constrain engagement of policy makers and public health academia with public health critique of political policy?</td>
</tr>
</tbody>
</table>

Many of the questions in figure 14 above suggest a new line of enquiry to expand upon traditional directions in social determinants, political economy or development policy analysis. In the above approach, the starting point for analysis is not society, economic relations or the particular character of the political power being exercised. The starting point is in fact the public health community and professional elite itself, and how it views (or does not view) the social and political order through a public health lens. It is nothing more than the application of the concept of primary prevention outside the traditional science and systems of public health to the wider field of political and social relations. An extensive body of work has been developed now on the social determinants of health. The conclusion from this analysis that health inequalities are primarily attributable to the neighborhood effects of inequitable distribution of resources and power in societies (which is a political question) provides an overwhelming rationale for public health critique of the way this power is exercised.
In the critique published by Bloom (2014) of Paper 6, the point was made that cross referencing political and health history, and the pinpointing of turning points in health policy history related to political events, provides the opportunity to open up new research pathways. The exploration of pathways in Myanmar, Cambodia, DPR Korea and other countries explored in this thesis have the potential to be replicated in other settings. The expected outcome of a research program that explores the intersections of health policy and political history would provide a deeper understanding of the relations between health policy formation and the field of social and political relations within which this policy is created and implemented. In this manner, it is possible for policy makers and development specialists to tackle the problems of public health from both the perspective of disease prevention and control and from the perspective of governance.

Despite these insights, there are unresolved questions as to how political events in specific contexts contribute to health policy pathways (see critique by Bloom, 2014). In other words, more research is needed on the theoretical underpinnings of the approach that attempts to describe the health policy trajectory based on the evolution in social and political systems. More specifically, deeper theoretical thinking is required regarding the field of social and political field of relations within which health systems and policies are located, and how this field determines specific health policy directions.

This thesis has attempted to accommodate the theoretical gap by reference to three critical theoretical perspectives of systems thinking, complexity and policy change theory. All of these theories adopt notions of interconnections of subsystems for the purpose of achievement of wider organizational aims. The summation of these theories is that systems function in complex environments that are transitioning through time. One way to navigate the complexity and the change is to exercise sociological and historical imagination, and specify points of entry (Hill 2011) for policy analysis that inform health policy and system futures. In exercising this imagination, it is important to make health systems and policy complexity more comprehensible by classifying systems into manageable dimensions of policy analysis (Real-Dato, 2009). The classification of four management areas and four stages of transition in Paper 1 was one such approach, as was the classification of the health policy landscape into three distinct categories of historical trajectory, current positions and future policy directions in the country case studies (Papers 2, 3 and 5).

In addition, such classifications recognize the fundamental social reality of health systems function and policy development, and thereby tackle health policy as a problem of governance, and not only of disease (Kickbusch, 2006). This is not to say that disease specific interventions do not have an effect. By widening the conceptual net to perceive the historical, social and political nature of public health policies and systems, it will be possible to make a wider catch of both disease control and governance solutions for persisting and future health problems.

In contrast, the absence of an awareness of the way health systems and policies function in the real world illustrates that in many cases we undertake social and professional functions without being fully aware of them. In this way, we are carried forward by the sweep of history and politics and react to it, rather than influence it. In contrast, if policy makers and development specialists are more aware of the social reality determining the contours of systems and policies, they will be in a stronger position to steer policy towards tackling the main governance challenges that are driving the social and political determinants of health.
In conclusion, this thesis has established that there is an intersection of political and health history that has contributed to major turning points in the way health systems are designed and policies are shaped. In many cases health policy has been highly reactive, with significant delays in responses which have contributed to persisting health inequities and limitations in health systems performance. This will require a more proactive and politically informed approach to health policy analysis. Although health cannot always be a master of politics, neither should it be its ready instrument. A more questioning and balanced science of health policy analysis will systematically interrogate the means by which power is exercised for equitable and sustainable public health benefit, and the manner in which the power shapes the pattern of health care access, resource allocation and outcomes.

It is feasible for such an approach to open up new lines of research and knowledge in health policy analysis. In depth case study analysis of the intersections of health and history can provide more guidance for health policy makers and development specialists of the viable trajectories for health systems reform. Public health critique of political policy, particularly in such areas as economics, agriculture, environment (climate change), and defence and foreign policy, will allow public health planners and policy makers to locate health and human security at the centre of political power, rather than at the margins of it. In becoming a driver of politics rather than a passenger of it, new skills, partnerships and analytic methods will need to be developed and applied.

Global health challenges of the 21st Century calls for a reformation in public health thinking and practice that posits as its basic science the analysis of patterns and trajectories of political power, and not only the analysis of patterns and trajectories of disease.
ANNEX 1 – PUBLISHED PAPERS BY THE AUTHOR RELEVANT TO THIS THESIS

Regional

   http://heapol.oxfordjournals.org/cgi/reprint/czp047?ijkey=nZHmx8zzQaPZPGd&keytype=ref

2. **John Grundy**: Peter Annear; Anne Marie Chomat; Shakil Ahmed; Beverley-Ann Biggs Improving average health and persisting health inequities--towards a justice and fairness platform for health policy making in Asia *Health Policy and Planning* 2013; doi: 10.1093/heapol/czt068
   http://heapol.oxfordjournals.org/cgi/reprint/czt068?ijkey=F6sP3n9XGziN5wx&keytype=ref


   http://www.routledge.com/books/details/9780415671040/

   http://www.gmu.edu/programs/icar/iips/vol13_2/IJPS13n2%20GRUNDYetal.pdf

Philippines


DPR Korea (North Korea)


Cambodia


Mongolia


Union of Myanmar (Burma)


Bhutan

Australia


ANNEX 2 PUBLICATION CO AUTHOR SIGNATURES
School of Health and Social Development, Deakin University
Thesis by publication

Declaration for author contributions

Paper Number: 1

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers


Declaration by candidate
In the case of paper [1] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>85</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission based on inputs from co authors</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liz Hoban</td>
<td>Review and revise</td>
<td>7.5%</td>
</tr>
<tr>
<td>S Allender</td>
<td>Review and revise</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Candidate’s Signature

Signature Redacted by Library

Date
6/10/14
**Declaration by co-authors**

The undersigned hereby certify that:

(1) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.

(2) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

(3) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

(4) there are no other authors of the publication according to these criteria;

(5) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature Redacted by Library</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature Redacted by Library</td>
<td></td>
<td>6/10/14</td>
</tr>
</tbody>
</table>

(Add more rows as necessary)
Declaration for author contributions

Paper Number: 2

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers

John Grundy, E Hoban, S Allender “Historical Frameworks for Health Policy Analysis – the Case of Cambodia 1975-2013” (Unpublished Paper)

Declaration by candidate
In the case of paper [2] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>80</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liz Hoban</td>
<td>Review and Revise</td>
<td>10</td>
</tr>
<tr>
<td>S Allender</td>
<td>Review and Revise</td>
<td>10</td>
</tr>
</tbody>
</table>

Candidate’s Signature: [Signature Redacted by Library]  Date: 6/10/14

Declaration by co-authors
The undersigned hereby certify that:

(6) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.
(7) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(8) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(9) there are no other authors of the publication according to these criteria;
(10) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>[Signature Redacted by Library]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>[Signature Redacted by Library]</td>
<td></td>
</tr>
</tbody>
</table>

(add more rows as necessary)
School of Health and Social Development, Deakin University

Thesis by publication

Declaration for author contributions

Paper Number: 3

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers


Declaration by candidate
In the case of paper [3] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>85</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Annear</td>
<td>Review and revise</td>
<td>5</td>
</tr>
<tr>
<td>S Ahmed</td>
<td>Review and revise</td>
<td>5</td>
</tr>
<tr>
<td>BA Biggs</td>
<td>Review and revise</td>
<td>5</td>
</tr>
</tbody>
</table>

Candidate’s Signature

[Signature Redacted by Library]

Date 6/10/14

Declaration by co-authors
The undersigned hereby certify that:
(11) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.
(12) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(13) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(14) there are no other authors of the publication according to these criteria;
(15) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature Redacted by Library</td>
<td>06/10/14</td>
</tr>
</tbody>
</table>

(16) there are no other authors of the publication according to these criteria;
School of Health and Social Development, Deakin University
Thesis by publication

Declaration for author contributions

Paper Number: 4

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers

Declaration by candidate
In the case of paper [4] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>90</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Moodie</td>
<td>Review and Revise</td>
<td>10</td>
</tr>
</tbody>
</table>

Candidate’s Signature

Signature Redacted by Library

Date
6/10/14

Declaration by co-authors
The undersigned hereby certify that:

(16) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.
(17) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(18) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(19) there are no other authors of the publication according to these criteria;
(20) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature Redacted by Library</td>
<td>6/10/14</td>
</tr>
</tbody>
</table>
Declaration for author contributions

Paper Number: 5

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers
John Grundy, E Hoban, S Allender, P Annear “The Inter-Section of Political History and Health Policy in Asia – The Historical Foundations for Health Policy Analysis” (Accepted for Publication) Social Science and Medicine 2014 (in press)

Declaration by candidate
In the case of paper [5] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>85</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liz Hoban</td>
<td>Review and Revise</td>
<td>5</td>
</tr>
<tr>
<td>S Allender</td>
<td>Review and Revise</td>
<td>5</td>
</tr>
<tr>
<td>P Annear</td>
<td>Review and Revise</td>
<td>5</td>
</tr>
</tbody>
</table>

Candidate’s Signature

Signature Redacted by Library
Date
6/10/14

Declaration by co-authors
The undersigned hereby certify that:

(21) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.
(22) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(23) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(24) there are no other authors of the publication according to these criteria;
(25) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Signature Redacted by Library</td>
<td>6/10/14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-Author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Signature Redacted by Library</td>
<td>6/10/14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Signature Redacted by Library</td>
<td>6/10/14</td>
</tr>
</tbody>
</table>

(add more rows as necessary)
School of Health and Social Development, Deakin University
Thesis by publication

Declaration for author contributions

Paper Number: 6

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers

John Grundy; Peter Annear; Anne Marie Chomat; Shakil Ahmed; Beverley-Ann Biggs Improving average health and persisting health inequities—towards a justice and fairness platform for health policy making in Asia Health Policy and Planning Oct 2013; doi: 10.1093/heapol/czt068

Declaration by candidate
In the case of paper [6] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>80</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Analyse and report on DHS data</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Annear</td>
<td>Review and revise</td>
<td>5</td>
</tr>
<tr>
<td>AM Chomat</td>
<td>Review and revise and comment on data analysis</td>
<td>5</td>
</tr>
<tr>
<td>S Ahmed</td>
<td>Review and revise</td>
<td>5</td>
</tr>
<tr>
<td>BA Biggs</td>
<td>Review and revise</td>
<td>5</td>
</tr>
</tbody>
</table>

Candidate’s Signature [Signature Redacted by Library] Date 6/10/14
**Declaration by co-authors**

The undersigned hereby certify that:

(26) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.

(27) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

(28) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

(29) there are no other authors of the publication according to these criteria;

(30) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td></td>
<td>6/10/14</td>
</tr>
<tr>
<td>Co-Author</td>
<td></td>
<td>6/10/14</td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-author</td>
<td></td>
<td>04/10/14</td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co author</td>
<td></td>
<td>06/10/14</td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Add more rows as necessary)
School of Health and Social Development, Deakin University

Thesis by publication

Declaration for author contributions

Paper Number: 7

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers


Declaration by candidate
In the case of paper [7] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td>85</td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
<tr>
<td>Finalize draft for publications submission</td>
<td></td>
</tr>
</tbody>
</table>

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Annear</td>
<td>Review and revise</td>
<td>5</td>
</tr>
<tr>
<td>K Bowen</td>
<td>Review and revise</td>
<td>5</td>
</tr>
<tr>
<td>BA Biggs</td>
<td>Review and revise</td>
<td>5</td>
</tr>
</tbody>
</table>

Candidate’s Signature

[Signature Redacted by Library]

Date
6/10/14

Declaration by co-authors
The undersigned hereby certify that:
(31) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.

(32) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

(33) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

(34) there are no other authors of the publication according to these criteria;

(35) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td></td>
<td>6/10/14</td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td>6/10/14</td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td>06/10/14</td>
</tr>
</tbody>
</table>

(add more rows as necessary)
School of Health and Social Development, Deakin University
Thesis by publication

Declaration for author contributions

Paper Number: 8

Publication Details: Author/s, year, title, journal/publisher/volume/page numbers


**Declaration by candidate**
In the case of paper [1] the nature and extent of my contribution to the work was the following:

<table>
<thead>
<tr>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake Literature review</td>
<td></td>
</tr>
<tr>
<td>Develop Concept</td>
<td></td>
</tr>
<tr>
<td>Initial draft</td>
<td></td>
</tr>
</tbody>
</table>
| Finalize draft for publications submission |                           | 80

The following co-authors contributed to the work and the nature and extent of their contribution to the paper, book chapter or book are as follows [add more rows if necessary]:

<table>
<thead>
<tr>
<th>Name</th>
<th>Nature of contribution</th>
<th>Extent of contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA Biggs</td>
<td>Review and Revise</td>
<td>5</td>
</tr>
<tr>
<td>P Annear</td>
<td>Review and Revise</td>
<td>5</td>
</tr>
<tr>
<td>S Mihrshahi</td>
<td>Review and Revise</td>
<td>5</td>
</tr>
</tbody>
</table>

**Candidate’s Signature**

[Signature Redacted by Library]

**Date**
6/10/14

**Declaration by co-authors**
The undersigned hereby certify that:

(36) the above declaration correctly reflects the nature and extent of the candidate’s contribution to this work, and the nature of the contribution of each of the co-authors.

113
(37) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(38) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(39) there are no other authors of the publication according to these criteria;
(40) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit.

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature Redacted by Library</td>
<td>06/10/14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature Redacted by Library</td>
<td>06/10/14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-author</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Signature Redacted by Library</td>
<td>06/10/14</td>
</tr>
</tbody>
</table>

(Add more rows as necessary)
References


Agarwal S, Taneja S, 2005, All slums are not equal: child health conditions among the urban poor. Indian Pediatr. 2005 Mar; 42(3):233-44


Asia Pacific Observatory Mongolia. 2013 Health Systems in Transition Vol. 3 No.2 WHO Geneva

Asia Pacific Observatory The Philippines, 2011 Health Systems In Transition Vol. 3 No.2 2011 WHO Geneva

Atun, R., 2012 Health systems, systems thinking and innovation. *Health Policy Plan*. 27 (Suppl. 4), iv4eiv8

Babaar 1999, History of Mongolia Monsudar Publications Ulaanbaatar


Bloom D, Canning D & Weston M, 2005 The Value of Vaccination *World Economics* Vol. 6 No. 3 July–September 2005

Bloom G, 2011 Building Institutions for an Effective Health System: Lessons from China’s Experience with Rural Health Reform *Social Science & Medicine* 72 1302e1309


Burau V, Blank R, 2006 Comparing Health Policy: An Assessment Of Typologies Of Health Systems *Journal Of Comparative Policy Analysis: Research And Practice* Volume 8, Issue 1


Butwell R, 1972 Ne Win's Burma: At the End of the First Decade Author(s): Asian Survey, Vol. 12, No. 10, pp. 901-912


Capano G, 2009 Understanding Policy Change As An Epistemological And Theoretical Problem Journal Of Comparative Policy Analysis: Research And Practice, 11:1, 7-31


Cook I, Drummer T, 2003 Changing Health in China; re-evaluating the epidemiological transition model Health Policy 67 (2004) 329-343


DCCa Documentation Centre of Cambodia 2014, Statement of the Communist Party of Kampuchea [CPK] to the Communist Workers' Party of Denmark, July 1978

DCCb Documentation Centre of Cambodia 2014 2014, Communist party of Democratic Kampuchea Standing Committee Minutes, March 11, 1976

DCCc Documentation Centre of Cambodia 2014, The Constitution of the Democratic Kampuchea


Dieleman, M., Cuong, P. V., Anh, L. V, Martineau, T 2003, Identifying factors for job motivation of rural health workers in North Viet Nam. Hum Resour Health, 1, 10.


Finlay L, 2002 “Outing” the researcher: The provenance, process, and practice of reflexivity. Qualitative Health Research, 12, 531-545.

Freeman R, Frisina L, 2010 Health Care Systems And The Problem Of Classification Journal of Comparative Policy Analysis, Vol. 12, Nos. 1–2, 163–178, February–April


Gilson L, Hanson K, Sheikh K, Agyepong I, Ssengooba F, Bennett S, 2011 Building the Field of Health Policy and Systems Research: Social Science Matters August 2011 | Volume 8 | Issue 8 | e1001079 Page 1


Global Fund 2012, The Global Fund To Fight Aids, Tuberculosis And Malaria, DPR Korea Country Portfolio


Govt. of DPRK CBS ICN National Nutrition Assessment Report of Survey Results, 2005 February (quoted in UNICEF Report on the situation of Women and Children)


Huntington S, 2006 Political Order in A Changing Societies Yale University Press

ICG, 2011 International Crisis Group Myanmar: Major Reform Underway Asia Briefing N°127 Jakarta/Brussels, 22 September


Jin Ma, Mingshan Lu, and Hude Quan, 2008 From a National, Centrally Planned Health System to a System Based on the Market: Lessons from China, Health Affairs (Project Hope) 27, no. 4 (August 2008): 937–948.


Kay A, 2005 A critique of the use of path dependency in policy studies. Public Adm. 83 (3), 553e571.


Kranti S, Vora1, Dileep V. Mavalankar1, Kv Ramani 2009 Maternal Health Situation In India: A Case Study. J Health Popul Nutr April; 27(2):184-201


Lanjouw S, Macrae J, Zwi A Rehabilitation of Health Services in Cambodia: the Challenges of Coordination in Chronic Political Emergencies Health Policy and Planning 14 (3) 229-242


Marmot M, 1999 Social Determinants of Health, Oxford University Press.


http://www.wpro.who.int/health_services/cambodia_nationalhealthplan.pdf [accessed 12th December 2012]

MOH 2012 Health Service Delivery Profile Ministry of Health Phnom Penh

MOH Cambodia, 1996 Health Financing Charter MOH Phnom Penh

MOH Cambodia, 2002 Planning Guidelines MOH Phnom Penh

MOH GTL, 2013 Ministry Of Health Timor Leste National Strategic Health Sector Plan 2011-2013 Page 32

MOH Health Sector Working Paper 2008 MOH Nay Pi Taw


MOH Ministry of Health Cambodia, Health Planning Guidelines DPHI Phnom Penh 2002

MOH Ministry of Health Cambodia, Health Planning Guidelines DPHI Phnom Penh 2002

MOH Ministry of Health Health Sector Plan 2008 – 2015  
http://www.wpro.who.int/health_services/cambodia_nationalhealthplan.pdf [accessed 12th December 2012]

MOH Mongolia, 2006 Health Sector Plan 2006 – 2015 MOH Ulaanbaatar  

MOH Mongolia, 2011 Health Service Delivery Profile  
www.wpro.who.int/health_services/service_delivery_profile_mongolia.pdf [Accessed 10th October 2013]

http://english.moh.mn/index.php?option¼com_content&view¼article&id¼76&Itemid¼110 [accessed 05.07.13.].

MOH Myanmar, 2008 GAVI Health System Strengthening Proposal WHO Yangon


MOP DHS 2001. Demographic and Health Survey Cambodia 2001  

MOP Ministry of Planning Demographic Health Survey Cambodia 2010  

MOPH DPRK, 2007 The State of Health in DPRK MOPH Pyongyang

MOPH Govt. DPRK GAVI HSS Proposal 2006

MOPH WHO Improving Women's and Children's Health in DPRK: Framework for Multi Year Assistance. WHO Pyongyang 2006


MOPH, 2004 Financial Sustainability Plan for Immunisation MOPH Pyongyang and GAVI Geneva
www.who.int/entity/immunisation_financing/countries/prk/dprkoreafsp.pdf [accessed July 2007]

MOPH, 2006 Mid Term Immunisation Strategic Plan DPR of Korea (2007-2011) MOPH


Myanmar Ministry of Health 2010, Grant Report Global Fund 2010

Myanmar Ministry Of Health (2012) Health In Myanmar SEARO WHO Available At


Myanmar NGO Contingency Working Group, 2011 Private Sector and Humanitarian Relief in Myanmar. Available At:

Nations on Line, 2013 Administrative Map of the Union of Myanmar (Burma) [Accessed 30th October 2013]


NIS National Institute of Public Health and National Institute of Statistics
Demographic and Health Survey 2005 Phnom Penh, Cambodia

NIS National Institute of Statistics Demographic and Health Survey, 2000

NIS National Institute of Statistics, 2010 Phnom Penh Cambodia Demographic And Health Survey
[www.measuredhs.com](http://www.measuredhs.com) [Accessed May 2012]


Norheim OF, Yukiko Asada, 2009a, The ideal of equal health revisited: definitions and measures of inequity in health should be better integrated with theories of distributive justice *International Journal for Equity in Health* 2009, 8:40 doi:10.1186/1475-9276-8-40


NSO DHS, 2008 Philippines Demographic and Health Survey
http://www.measuredhs.com/Pubs/Pdf/Fr224/Fr224.Pdf [Accessed May 19 2013]


Nutbeam D, How does evidence influence public health policy? Tackling health inequalities in the UK


OECD, 2007 Development Cooperation Directorate Recipient Aid Charts
http://www.oecd.org/countrylist/0,2578,en_2649_33721_25602317_1_1_1_1,00.html [Accessed on the web June 2007]

OECD, 2012 Query Wizard For International Development Statistics


Pak, S., Schwekendiek, D, Kyoung, Hee, 2011. Kim Height and living standards in North Korea, 1930se1980s. Econ. Hist. Rev. 64 (S1), 142e158


Ri Yong Hwa, 2007 Strengthening the Community Based Health Workforce in DPR Korea NIPA Pyongyang 2007


Rossabi M, 2005 Modern Mongolia: From Khans To Commissars To Capitalists University Of California Press


Scoville O 1985, Relief and Rehabilitation in Cambodia The Journal of Developing Areas 20: 23-26


Sen A, 1999 Development as Freedom Oxford University Press


Sheikh K, Gilson L, Agyepong I, Hanson K, Ssengooba, Bennett S, 2011 Building the Field of Health Policy and Systems Research: Framing the Questions Plos Medicine August 2011 | Volume 8 | Issue 8 | e1001073


Soeung SC, Grundy J, 2006 Financial Sustainability Planning for Immunisation Services in Cambodia Health Policy and Planning Vol 21 No.4


135


Stein Kr, Purwo Santoso, 2006 Surviving decentralisation?- Impacts of regional autonomy on health service provision in Indonesia Health Policy 77 (2006) 247–259


Taylor R, 2009a The State In Myanmar NUS Books Singapore


The Tripartite Core Group, 2008 Post Nargis periodic review, and Post Nargis preparedness and recovery plan Yangon.

Three Disease Fund, 2010 Myanmar [Online]. Available at: [http://www.3dfund.org](http://www.3dfund.org) [Accessed 20 September 2012].


Tobgay T, Tandin Dorji, Dorji Pelzom, Gibbons R, 2011 Progress and Delivery of Health Care in Bhutan, The Land Of The Thunder Dragon And Gross National Happiness *Tropical Medicine And International Health* Volume 16 No 6


UN General Assembly, 2005 Sixtieth session Items 48 and 121 of the provisional agenda “Follow-up to the outcome of the Millennium Summit Draft resolution referred to the High-level Plenary Meeting of the General Assembly by the General Assembly at its fifty-ninth session

UNFPA
Pyongyang

Unger J, Criel B, 1995 Principles of Health Infrastructure Planning in Less Developed Countries in

UNHCR, 2012 UNHCR country operations profile - Myanmar. UNHCR. Available at:


UNICEF, 2003 Overall and cause Specific Mortality Survey Myanmar 2003 UNICEF Yangon


UNICEF, 2009 Situation Analysis of Children And Women In Mongolia. Ulaanbaatar: UNICEF

UNICEF, 2010 Health Service Access among Poor Communities In Phnom Penh


Vilim L 2012, Keeping Them Alive, One Gets Nothing; Killing Them, One Loses Nothing: Prosecuting Khmer Rouge Medical Practices as Crimes against Humanity Summer 2010 Legal Associate with the Documentation Center of Cambodia J.D. candidate 2012, Georgetown University Law Center


WHO, 2005 World Health Assembly, WHA58.33 Sustainable health financing, universal coverage and social health insurance World Health Organization, Geneva


WHO, 2009 Primary health care, including health system strengthening SIXTY-SECOND WORLD HEALTH ASSEMBLY A62/8 Provisional agenda item 12.4 9 April 2009


Yo Han Lee Seok-Jun Yoon Young Ae Kim, Ji Won Yeom, In-Hwan Oh, 2013 Overview Of The Burden Of Diseases In North Korea *J Prev Med Public Health;*46:111-117

Index of Tables

Table 1 Summary of Data Bases used in Country case Studies
Table 2 Search terms used to review the literature

Index of Figures

- Note: Figures from unpublished paper 1 and from various submitted published journal articles are not included in this list

Figure 1 Overview of Findings
Figure 2 Specific Research Questions from Published and Unpublished Papers
Figure 3 Structure of the thesis
Figure 4 Publications in Context of the Overall Aims and Structure of the Thesis
Figure 5 Mapping of Transitions, Organizational Systems and Policies
Figure 6 Contrasting Health and Social Transition Analytic Perspectives
Figure 7 Some Examples of Approaches to Data Collection and Analysis from Case Studies
Figure 8 Examples of a Health and History Timeline – the Republic of the Union of Myanmar
Figure 9 Principal Findings of Thesis (repeat of figure 1)
Figure 10 The Political Determinants of Health (Grundy, 2013)
Figure 11 Childhood Stunting According to Wealth Quintiles in 4 Countries of Asia -3SD from the mean of the reference population Last DHS Surveys
Figure 12 Public Health Analysis of Political Policy – The case of Defence Policy
Figure 13 The Health Policy Arrow of Time
Figure 14 Recommendations of Research Questions to Expand Knowledge of Public Health Critique of Political Power