Geography of Crime in China since the Economic Reform of 1978

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A Multi-scale Analysis

By

Yijing Li

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I would like to dedicate this book to my dearest son, Hengyi,
my husband, Liang, and the world's greatest parents.

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PREFACE

From a geographer's point of view, this book has been produced against the background of the rapid social change in China since the economic reform of 1978. The research for it undertook spatial-temporal analyses of crime in China on different geographical scales, utilising both quantitative and qualitative data, and applying GIS (Geographical Information System) and spatial data analysis approaches, and provided the opportunity to test relevant theories developed in western countries in the context of China.

Despite a general increase trend on crime being observed, there are obvious effects of scale, either spatial scale or temporal scale, were considered a crucial precondition in analysing crime changes and relevant influential socioeconomic conditions during the social transition in China since the economic reform. Some indicators turned out to have consistent effects on crime as suggested by criminological theories, either criminogenic or crime-mediating, while some others did not due to the variations from spatial scale and temporal scale. It is suggested that the adaptation of the relevant theories to China needs to take into thorough consideration the targets' contextual features.

A unique contribution of this book is the attention to describe the crime change during social change in China top-down. Another hallmark of this interdisciplinary book is that it analyzed and displayed the social environmental conditions relevant to crime change from a spatial view. Overall, it provides a holistic view on the crime issues in China by both statistical way and case studies in detail, which could serve as both a reference and a good example to follow.

The potential audiences who might be interested in this volume could be either academic researchers doing criminological studies, spatial data analysts, and sociologists; general readers who are interested in the topic of social transition in China since the economic reform; investigators trying to follow the similar procedures in other neighbourhoods; police officers hoping to get references from this book on local crime control and prevention, or local officials or policy makers hoping to derive illuminating information on policy making.

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INTRODUCTION

This study was proposed against the background of rapid social change in China since the economic reform of 1978. It undertook a spatial-temporal analysis of crime in China from a geographical perspective, applying GIS (Geographical Information System) and spatial data analysis approaches, and provided the opportunity to test theories developed in western countries in the context of China.

This work firstly investigated the changes in crime levels and types in China since 1978 on different environmental scales (national, provincial and city scales), using official statistical data and quantitative analysis techniques. It found that crime levels in China have, on average, increased dramatically, regardless of scale, and that crime patterns have varied by region over time.

Secondly, it examined the on a macro scale the relationships between crime levels (rates) and sets of selected social, economic, demographic and cultural indicators, as suggested by different criminological theories, using statistical techniques including co-integration tests and regression. Based on the results, some indicators turned out to have consistent effects on crime, as theories suggested, whether they be criminogenic or crime-mediating, while others did not, and their influences varied by region, spatial scale and temporal scale.

Thirdly, it conducted a comparative study on a micro scale in selected neighbourhoods in Shenzhen city, and an in-depth case study in a particular neighbourhood (named TL), using primary data and a combined methodology using both qualitative and quantitative techniques. The results indicate that residents' victimisation experiences, their perceptions on neighbourhood safety and their responses to crimes are related to their individual and neighbourhood characteristics. Through the case study in TL, important disparities between official and unofficial crime data were detected, and crime hotspots varied both spatially and temporally by land-use function.

CHAPTER ONE

INTRODUCTION

1.1 Economic Reform in China

China is now the 2nd largest global economy, with GDP increasing from 268.3 billion (US dollars) in 1978 to 10,355 billion in 2014, that is, by more than 38 times (National Bureau of Statistics of China, 2015). This big leap is thought to have been the achievement of the economic reform introduced in 1978. In the years before 1978, the planned economy was thought to be the hallmark of China due to its great contribution to China's economic recovery and primary development from the 1950s up to 1978. Nevertheless, the maladjustment between economic policy and social development became more and more obvious as time went by. In order to adjust the policies on development, Deng Xiaoping proposed a Reform and Opening-up Policy in 1978, which was composed of internal reform and external opening-up. It placed great emphasis on economic development to enhance people's income levels and living standards. The policy addressed problems associated with weak central planning whilst encouraging enterprise and foreign investment. The internal reform was first tried out in 1979 in the vast rural areas and the Special Economic Zones (SEZs), with Shenzhen city as the most significant representative. The opening-up to the outside world was also started in the special economic zones, allowing them to take priority in foreign trade. Later, in 1984, another 14 cities, including Guangzhou and Shanghai, were selected as foci for international business. The pilot reform in rural areas saw great success, followed by the reform in urban areas, which started in 1985 and was further adjusted in 1992. Essentially, this economic reform was a reversal of Mao's policy of economic self-reliance; however, the planned and centralised management of the macro economy was applied indirectly and depended on market mechanisms.

Over the course of 30 years, the Reform and Opening-up Policy has helped China become a modern, industrial socialist nation with distinct Chinese characteristics. The rigid state controls over the economy established after the Communist Revolution have been relaxed, and

market mechanisms have been encouraged (Zhuo and Messner, 2008). China's economy has abandoned its former isolation in favour of deep engagement with world markets (Rawski, 2008), and this socialistic market economy reform attracted more and more foreign investment, advanced technologies and management experience. China has evolved from a closed country, with more than 200 million people living in poverty, to a thriving and prosperous economic entity tightly linked to the global economy. China's successful transition from planned economy to market economy has brought about immense changes in its economic strengths and international status. China's economic strengths have been continuously enhanced by achieving the number one outputs of economic products, dramatically solving the shortages of many necessities. Between 1978 and 2008, the import and export trade also saw a hundredfold increase, from 20.6 billion (US dollars) to 2,174 billion, resulting in China becoming the world's third largest trading country. In the meantime, Chinese domestic living standards have improved and many people are now leading a more comfortable life, supported by the guarantee of a better welfare system. The GDP per capita has increased from 381 (US dollars) to 3,381, with per capita income increasing from 190 (US dollars) to 2,360. Meanwhile, the Engel index has decreased from 57.5% in urban and 67.7% in rural areas, to 36.3% and 43.1% respectively (China Statistical Yearbooks 1978-2008). The basic characteristics of China have been permanently altered (Deng and Cordilia, 1999), and the changes are profound, complex, and far-reaching. In all, China has experienced momentous shifts, from poverty to growing prosperity, from village to city, from planned economy to market economy, from public toward private ownership, and from isolation to global engagement (Rawski, 2008).

1.2 Social changes in China during the economic reform

As economic reforms have been implemented, massive and protracted social change has transformed China from an underdeveloped nation into a growing economic power, with obvious consequences in every aspects of social life: economy, society, politics, culture and demography.

First of all, economic reform has stimulated a dramatic economic upsurge in the past three decades, and the introduction of a market economy has encouraged the reform of national enterprises and the introduction of foreign capital. This has led to a rapid shift from state-owned to private enterprise, accompanied by an ever-larger class of entrepreneurs. These newly emerged elites are business owners or managers with high positions in private and joint venture enterprises

(Duckett, 2001; Ding, 2000). They are able to enjoy a high standard of living owing to their high level salaries. At the other end of the social hierarchy, a new urban poverty stratum is emerging from laid off and retired labour (Bian, 2002), as well as disadvantaged people (e.g. migrants). These two extremes aggravate the inequality problem in urban areas.

Social achievements under the policy of Reform and Opening-up are also remarkable: infrastructure and public services have been improved significantly; people's living standards have risen dramatically; urban areas have grown as more people are drawn to them. In the meantime, the social structure has changed profoundly from Mao's pre-reform stratification system, which advocated egalitarianism, homogeneity and minimal socioeconomic inequalities. The new social order has redefined the composition of social strata, and social inequality is becoming more severe as the gap between rich and poor widens. When the economic reforms began to take hold in cities in the mid-1980s, urban residents' incomes surged ahead of peasants'. At the same time, authorities in rural areas reduced peasants' benefits, driving them to abandon their farms and migrate into cities to seek employment. Together, this resulted in mass migrations from rural to urban areas. In the meantime, since the mid-1990s, market-oriented policies have forced thousands of state-owned enterprises to close down, leading to tens of millions of workers being laid off without welfare protection. In 1997 alone, 10 million workers were laid off (Cai et al., 2008), hence high rates of unemployment. The mass migrations, redundant workers and reduced employment opportunities have worked together to worsen the urban unemployment situation, and further aggravate inequality. Overall inequality has unambiguously risen in China since 1987, and it is suggested that rising inequality is driven by income differences between localities, as some provinces are better situated to take advantage of market liberalisation and the reforms related to foreign trade and investment (Benjamin et al., 2008).

Politically, China's one-party political system and its tradition of centralised government are well known. During the economic reforms, China began its transition to a market economy under a hierarchical political system, which itself has been reshaped in response to the forces unleashed by economic transition (Naughton, 2008). A"bottom up" political reform, started in the late 1970s, introduced steady changes into the political and legal system. Mao's pre-reform rural people's communes collapsed; central control and bureaucratic planning proceeded in the form of reorganising ministries and state-owned enterprises; more democratic and "objective" decisions were demanded by academics and reformers,

and social control became a unique mix of Chinese tradition and a formalised legal system. Legal reform has emerged since the government's recognition of "the structural strains in China's socio-legal system" (Li, 1996). It stemmed from the institutional mismatch between a developing market economy and a one-party political monopoly. Attention has been drawn to the need for judicial independence, protection of individual rights, and judges' exercising of power in sentencing and punishment. In this sense, educational levels and cultural values have had dramatic effects on political and legal debates.

Traditionally, Chinese society is influenced by the religious heritages of Buddhism, Confucianism and Taoism. Chinese culture emphasises collectivism, family, shame, informal codes of conduct, and respect for authority (Anderson and Gil, 1998; Ren, 1997; Clark et al., 1989; Zhang and Messner, 1995). Since the economic reform, the invasion by western culture in technology, films, fast food, literature and, most importantly, ideas, has challenged traditional beliefs despite governmental control. Now "getting rich" has become an important goal in modern Chinese society, and the advocating slogan "to be rich is glorious" motivates the way people behave towards economic interests. Traditional morals have given way to a series of money-based bonus systems (Dutton, 2005), allowing pecuniary orientation to permeate all aspects of society. Meanwhile, in order to meet the higher demand for technological development, the general education level has been enhanced. Intellectuals have helped to introduce advanced knowledge and updated information from the western world, contributing a lot to the technological reform necessary for economic development.

Despite dramatic changes in the aforementioned four aspects, demographic change due to rapid urbanisation should also be mentioned. In pre-reform periods, the implemented registration system limited population mobility by giving each urban citizen a registration card, held by neighbourhood police stations (Cheng and Selden, 1994). However, economic reform has placed great pressure on this system due to the large labour surpluses in rural areas and the need for more labour in the growing cities. As a response, the Chinese authorities have loosened restrictions on mobility, and reduced migration control has allowed people to move freely across administrative boundaries. Together with increasing economic liberalization, this has led to millions of peasants moving into cities hunting for opportunities and new life-chances, creating a new category of migrants called the floating population, which accounts for the rapid increase in the overall volume of migrants. According to statistics, the proportion of the urban population in China has grown from 20% to nearly

50% of the total, and is especially high in some developed areas. Taking Shenzhen as an example, its urbanised population proportion had reached 100% as early as 1995. However, migration rates and directions varied among cities according to the level of their development. For example, in some more developed cities, such as Beijing, Shanghai and Guangzhou, wealthy people moved out of the city centres to nearby rural areas. On the other hand, in most of the other cities the direction of migration is from rural areas to urban areas. As for interprovincial migration, the predominant movement is from the periphery (central and western regions) toward the core (eastern region). Between 1995 and 2000, for example (Fig. 1-1), interprovincial migration showed a significant concentration into a single province, Guangdong. Of the 30 largest interprovincial streams, 11 went to Guangdong, including all the top six flows (Chan et al., 2001).

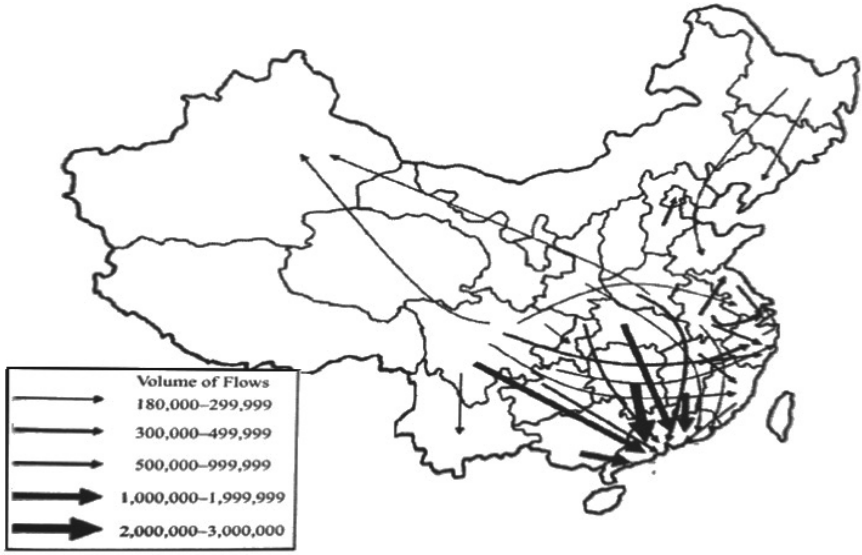

Fig. 1-1 The largest interprovincial migration streams 1995-2000 (Chan, 2001) (Source: based on data from the State Council and National Bureau of Statistics, 2002).

1.3 Crime changes in China since the start of the economic reform

1.3.1 Crime levels (rates)

Economic reform has stimulated economic development and migration, creating an unprecedented rise in the living standards of the Chinese people (Liu, 2001), widened the inequality gap and driven reforms in the political and legal systems. These changes are partly attributed to the emphasis on and promotion of the idea that "it is good to be rich". In such an environment, some people are tempted to "get rich quick" by whatever means available, even if it involves criminal behaviours, which can be seen in soaring crime levels. Pre-reform China enjoyed very low crime rates and had earned the reputation of being a "crime free" society (Fairbank, 1987; Rojek, 1996). According to Dutton (1997), China had exceptionally low crime rates from 1949 to 1979, before the economic reform, with less than 0.5 million criminal offence cases registered every year. This can mostly be attributed to Mao's "mass-line" policy (Rojek, 2001), in that crime control was not merely the responsibility of the police and government; it was meant to be the outcome of cooperation through voluntary guardianship by the masses, and the pervasive socio-political control of the Communist Party (Dutton, 2005).

Since the implementation of economic reform and the open-door policy in the late 1970s, crime has been on the increase in China (Liu and Messner, 2001; Deng and Cordilia, 1999; Rojek, 1996). According to statistics, registered annual criminal offences proliferated six times to more than three million by the late 1990s. By the start of the 21st century, the relatively high level of criminal offences had levelled off at over four million per year - a figure approximately 80 times the rates observed in the 1950s and 1960s (China Law Yearbooks, 1983-2009). Based on official statistical data, the change in crime rates from 1950 to 2003 is shown in Fig. 1-2. A general rising trend can be seen from the graph, especially since the late 1980s, when the achievements of the economic reform became more apparent and established. Crime rates in pre-reform China were on average less than 10 per thousand population, and this low level had earned China a reputation for being a low crime society. The fluctuations from the 1950s to the mid 1960s should mostly be ascribed to certain historic events, such as the suppression of counter revolutionaries between 1951 and 1953, the initial completion of socialism, the era of the "great leap forward" and the "great natural disaster" from 1958 to 1962.

Since the initial implementation of economic reform in 1978 and its

wide spread in the early 1980s, crime rates have surged, but increases have been neither steady nor uniform. Crime rates did not go up steadily in line with the development of China; instead, there were two stable periods, in the second halves of the 1980s and the 1990s. The first peak in crime rates appeared around 1991, after a sudden increase from five per thousand to more than 20 per thousand, although it fell back quickly to 13 per thousand in 1994. Another steep increase occurred in 1998 after a stable period at 13 per thousand, and then they rose to more than 35 per thousand in 2003. It is hard to explain this abnormal increase, and the underlying socioeconomic conditions need to be considered to get a better understanding of this issue. For example, demographic conditions partly explain the surge in crime in the early 21st century. The birth boom in the late 1980s contributed a lot to the increase in juveniles in the early 2000s, who are a disproportionately crime-prone cohort (particularly males). But this cannot tell the whole story behind rising crime levels, and further study into the contribution of other social and economic changes is needed.

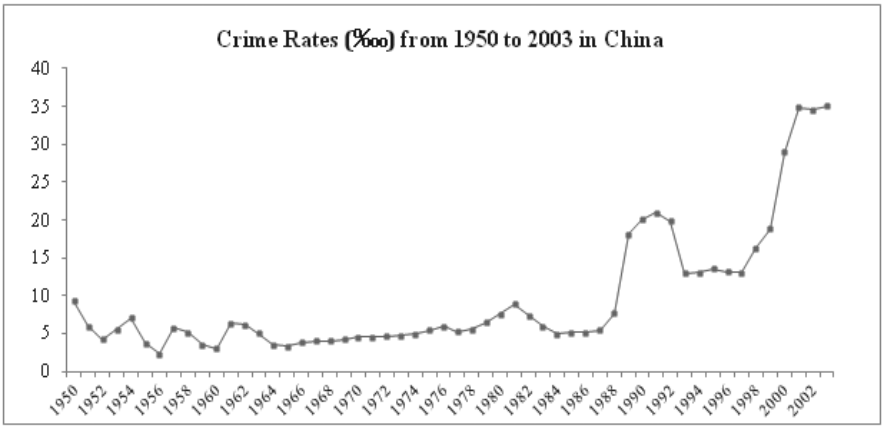

Fig. 1-2 The crime rate from 1950 to 2003 in China

1.3.2 Crime types

According to the "Criminal Law of the People's Republic of China", the main crimes in China are categorised into Criminal Offenses and Public Security Cases by the degree to which they break the respective laws. There are specific criteria to decide if an offence is regarded as "criminal" or "minor". The former category defines serious offences consisting of, for example, homicide, assault, robbery, rape, abduction,

larceny, fraud, and smuggling. The latter category defines less serious crimes as minor offences. The crime types analysed in this research are larceny, acquisitive crimes (robbery, fraud, abduction, and smuggling) and expressive crimes (homicide, assault, and rape).

In the past 30 years, it has been argued that acquisitive crimes and assault constitute the bulk of offences recorded by the police. Bakken (2000) shows that robbery and rape have been on the rise in China, while the homicide rate has been increasing slightly. Theft of various properties was top of the list for offences, including theft of cars, theft of facilities, industrial materials, oil-field or power supplies, and petty theft in crowded locations, such as marketplaces and at tourist locations. There have also been reports of thieves operating from motorbikes, carrying out, for example, street robbery and purse seizing, which are rampant in the cities, especially Guangzhou and Shenzhen. In addition to the rise in common types of crime, corruption has become a growing concern to the Chinese public and the government. Violent crimes are thought to be linked to financial motivations, extortion, and personal conflicts. During the rapid urbanisation process, violent crimes have become more and more common (Chen, 1997; China Law Yearbooks, 1986-1997). It is believed that the high rates of violent crime could be attributed to increased opportunities and targets brought about by urbanisation and migration.

Organized crime (or "gang crime") is a growing problem in China, and it can be summed up in one phrase: "crime perpetrated by highly involved local evil forces" (Zhao et al., 1997). The present socio-economic conditions in China make gang crime attractive. Chinese police statistics and other sources indicate that 72.7% of the criminal groups identified are still engaged in conventional crimes like theft, robbery, burglary, murder, rape, human smuggling and extortion; 16.3% are involved in prostitution, gambling, and drug abuse, while 11% specialise in smuggling and drug trafficking. Organised crime is still in its primary stage and has not developed on the scale of the Triad in Hong Kong or Macau; however, similar criminal organisations are taking shape in the southeastern coastal areas and border provinces (Zhao et al., 1997).

Drug-related crimes have re-emerged and gradually spread nationwide in China since the late 1970s. This has been ascribed to the decades long history of drug use and the weakening of regulation and control. Some synthetic drugs are popular among the young, and are often sold and consumed at entertainment locales such as nightclubs and karaoke bars. This situation has become increasingly serious, and drug-related crimes such as theft, robbery, and prostitution have also been on the increase.

As the market-oriented economy took hold in China, the last few years

have seen defrauders committing white-collar crime or corruption by finding loopholes and imperfections in the economic development and market administration. Yu (2008) used western concepts and theories to analyse China's white-collar crime, and drew on materials from the media, in order to investigate the historical and institutional roots of corruption.

As for the characteristics of offenders, it is reported that the majority are laid-off workers and members of transient populations, largely migrant rural labourers (Dutton, 1997). It is said that more than 50% of the criminal cases in some cities are committed by migrants from the countryside (Chen and Yu, 1993). It seems that, as China's economy develops, the disparity among social classes is expanding, and exacerbating the crime problem in terms of both its level and type. If we want to propose a comprehensive and systematic strategy to deal with China's crime problem, the integration of punishment and prevention strategies should be considered, especially focusing on the grassroots level to nip crime in the bud. The ultimate goal of crime prevention is to encourage social stability, which also underpins economic reform.

1.4 Aims of the research

This study was proposed against the background of rapid social change in China since 1978, when the Reform and Opening-up policy was launched. Since then, tremendous changes have been experienced in China's demography, economy, social order, culture, politics and legal system. These changes are believed to have had significant impacts on crime levels and types in the following three decades. Research on the links between economic reform and crime in China has mostly been undertaken by sociologists and criminologists (Kong, 2005a, b; Liu, 2001; Deng and Cordilia, 1999), and comparatively, research in this field from a geographical perspective is lacking.

The general goal of this study is to undertake a spatial analysis of crime in China from a geographical perspective. This involves investigating the changes in crime levels and types in China since 1978 on different geographical scales; developing an understanding of the relationships between crime rates and various demographic, social, economic and other independent variables in different geographical contexts, and finally bringing forward pertinent suggestions on crime control to policy-makers and governmental agencies based on well-founded analysis.

Within this context, the following objectives are going to be met in order to achieve the overall goals:

1) Undertake a spatial-temporal analysis of crime levels (rates) and types in China on national, provincial and city scales using official statistical data and quantitative analysis techniques.
2) On different geographical scales (national, provincial and city scales), examine the relationships between crime levels (rates) and selected social, economic, demographic, cultural and political indicators, as suggested by theory, using statistical techniques including regression. The aim is to identify those variables that best explain the spatial and temporal variation in rates of different crimes at specified scales. The size of China, and in particular the differences in the way different parts of the country have changed since 1978, make it an interesting case to study.
3) Carry out a case study in selected neighbourhoods in Shenzhen city, Guangdong Province. Using primary data and a combined methodology of both qualitative and quantitative techniques, the aim is to better understand the effects of social cohesion and criminogenic conditions on neighbourhood crime levels and to assess residents' views on crime in relation to official views and official data.

The first objective focuses on the changing levels of different crime types. Time-series analysis will be utilised on each geographical scale, followed by comparisons among provinces or cities. GIS will be used for visualisation. The statistical data required at these macro scales (national, provincial, and city) will be secondary data, obtained from public sources such as the Statistical Yearbook and Law Yearbook.

The second objective is to explore the relationships between crime levels of each type and selected variables at provincial and city levels. The questions I aim to answer are: what variables can best explain crime patterns at specific time points? Do the explanatory variables stay significant over time? Spatial cross-sectional and space-time series regression analysis will be the main techniques used. The data used for this objective will be secondary data from public statistical sources, e.g. China Statistical Yearbook and the Local Statistical Yearbook of each province or city.

The last objective is to explore the effects of criminogenic conditions and social cohesion in selected neighbourhoods in Shenzhen. Using qualitative techniques (interviews and focus groups) and a quantitative technique (questionnaire survey) I will obtain individual-level primary data on residents' perception and experiences of crime in their neighbourhoods. The question I propose to assess is: To what extent are the factors and issues that are highlighted in western criminology found to be relevant with respect to insecurity levels at the neighbourhood level in Shenzhen?

The whole project aims to examine crime in China since 1978 from a geographical, rather than sociological or psychological, perspective. It will also be innovative in applying GIS and spatial data analysis methods to criminal issues in China. It further provides the opportunity to test theories that have been developed in western countries in the context of China. The expected significance of the research is as follows:

1) Historically, research into crime change during the post-1978 period in China has mainly been carried out by sociologists and psychologists; this research is conducted from a geographer's perspective, using GIS and spatial data analysis approaches.
2) Comparative criminological studies (Bennett, 2004), have mostly been based on cross-national data (Bennett, 1991) to analyse the relationships between crime rates and social change (Lafree, 1999; Neapolitan, 1997) among nations or provinces (states) in developed countries. There is a lack of comparisons across provinces, cities or neighbourhoods in China.
3) Theories in this field were developed in western industrialised countries (Farrington, 1999) using data geographically biased towards western developed countries (Neapolitan, 1997). China, in this sense, has almost been neglected, which renders the theories incomplete. This research provides an opportunity to test these theories in a different society.
4) Guangdong Province had been ranked as quite a dangerous place in China, especially the cities of Shenzhen, Dongguan and Guangzhou, which are considered the most dangerous cities in China. It is essential to do a case study in one of these cities to understand this abnormal phenomenon in-depth. The results from this part of the research may also provide useful support for local crime control.

To sum up, this research will analyse changes in crime levels and types in China since 1978, and discuss their relationships with sets of social, and economic indicators on four different geographical scales (national, provincial, city and neighbourhood). Moreover, it will not only test existing theories in the context of Chinese society, it will also address criminal issues from a geographical perspective and provide a research-based reference point for crime control measures applicable at the local level.

1.5 Structure of the book

The book has been divided into eight chapters, and brief introductions of each chapter are given below.

1.5.1 Chapter 1: Introduction

This chapter briefly introduced some background information about China's economic reform and the social changes, as well as the crime changes, that have been associated with the process. It also listed the research problems, my research motivation and aims, the objectives that will advance knowledge in the field of the geography of crime, the methodology that is going to be applied, and the structure of the book.

1.5.2 Chapter 2: Theoretical background

This chapter will present relevant areas of the literature on the geography of crime and environmental (spatial) criminology, mainly developed in relation to western society and discussed in the literature on criminogenic and crime-mediating conditions. Based on the conclusions drawn from the previous research results, as well as the reality of Chinese society, a practical framework of selected variables will be proposed as a guide for undertaking research. This chapter also summarises the research aims and lists the hypotheses that need to be tested in the following chapters.

1.5.3 Chapter 3: Data and methodology

This chapter describes the study areas on each scale to help build up a general impression of each target before going into the specifics of the research. It lists the data used at each level and provides the data sources where appropriate. As stated, both secondary data from official statistical sources and primary data collected through qualitative and quantitative methods will be used as the basis of analysis for this research, and the data quality issues that are of importance will be discussed further. This chapter justifies the combined methodology, both quantitative and qualitative, with which I will explore my research, but detailed descriptions of how I actually carried out the research will be given in the corresponding chapters.

1.5.4 Chapter 4: Analysing and modelling crime change on a national scale

After a brief introduction to the crime problem on a national scale in China since the economic reform, data sources and their availability for this piece of research are discussed. On top of this, the research design and

analytical methods used in this part of the work are explained, followed by the results obtained at the national level and concluding with a discussion of results.

1.5.5 Chapter 5: Analysing and modelling crime change at the provincial scale

On a provincial scale, general knowledge on China's administrative system and the registration and judicial systems is necessary in order to understand the results in this section. The structure of this chapter follows a similar pattern to that of Chapter 4, starting with an introduction to the target areas, particularly the selected case study provinces, and followed by the accessible data for this part of the research. It applies similar methods to those used at the national level in four selected provinces: Beijing, Shanghai, Guangdong and Henan. Results for these provinces are presented both individually and comparatively.

1.5.6 Chapter 6: Analysing and modelling crime change on a city scale

The structure for the city scale analysis follows a similar pattern to that in Chapter 5. It is scaled down; four cities in Guangdong province were chosen as the target areas for study. After a brief introduction to the target areas, data used for this part of the research are provided in this chapter as necessary information. The four selected cities are Guangzhou, Shenzhen, Dongguan and Foshan. Regression results for each city, as well as comparisons among these cities, are presented.

1.5.7 Chapter 7: Crime at the neighbourhood level- A case study in Shenzhen city

The neighbourhood level study takes Shenzhen city and chooses three neighbourhoods, labelled TL, HL and HB, as case study areas.[1] Based on primary data collected through a questionnaire survey, three models have been built (one of residents' victimisation experiences, one of their perceptions on neighbourhood safety and one of their responses to crimes) to identify the explanatory variables. Furthermore, the TL neighbourhood

[1] Under the confidentiality agreement with the interviewees in selected neighbourhoods, I was only allowed to use these labels as representatives for their names.

was chosen for an in-depth investigation into the similarities and disparities between official crime data and residents' fear of crime. This was done by comparing the spatial pattern of recorded crimes and residents' mental maps of unsafe places.

1.5.8 Chapter 8: Summary and conclusions

This chapter summarises the findings from all of my research; not only the main findings, but also the potential problems incurred by data and methodology limitations. It concludes by evaluating how the results extend the current literature and answering the hypotheses listed at the beginning. It also discusses the implications of these results and the future direction for research in this field.