Compliance as process: Work safety in the Chinese construction industry
Li, N.

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Chapter 6 Compliance as Personal Choice

1. Introduction

By going inside the regulated organisation in Part II of this book, we got an opportunity to explore what actually happens in the day-to-day practice of safety compliance on the construction site. We saw some failures of internal compliance management because frontline managers were unable to go through the fragmented internal structures and to take effective control of behaviours of the work teams or the individual workers. Construction workers who were affiliated with various teams conducted their jobs with comparative independence, which however constituted poor compliance performances of the organisation.

It becomes necessary, thus, to go further, besides studying regulatory enforcement and organisational compliance management, to look at the behaviours of an individual. As scholars have argued, the study of organisational compliance should not only examine the organisation itself as a unitary unit of analysis, or only give priority to the manager/management. The individual employee within an organisation could have various values, perception, as well as actions, which play a role in shaping meanings of an organisation (Parker & Nielsen, 2011; Tyler, 2011; Gray & Silbey, 2011).

Furthermore, besides the consideration of relations between the organisation and the individual employee within it, the study of individual compliance needs to be stressed here, because the group of construction workers itself has been directly targeted by safety laws. According to the Construction Safety Law of China, the construction worker is treated, in terms of work safety, as both the subject of safety rights and the subject of safety responsibility.177 Such a dual-role design in the health and safety law can also be found in the regulatory studies, such as factory workers in Canada (Gray 2006,

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2009), railway industry in Britain (Hutter, 2001), in which scholars found that policy seeks to make the individual within an organisation responsible for work safety. In other words, individual construction workers have been involved in the process of safety regulation and compliance by acting as 'the protected', 'the regulated', as well as 'the managed'. The relations between the individual, the organisation, and the law can be illustrated in Figure 6.1:

**Figure 6.1 Relations between the individual, the organisation, and the law**

| Safety Law | Regulatory Enforcement | Individual Workers | Organisational Management |

On the whole, the law could, theoretically, impact the individuals within the organisation in at least three ways: (a) law impacts the individual directly; (b) law makes connection with individual through regulatory enforcement; (c) law makes connection with individual through internal organisational management (i.e. inner self-regulation).

Part III of this book (i.e. chapter 6) analyses the compliance of individual workers in the construction industry, and linking this with discussions in the previous two parts of this book, which together contribute to developing a comprehensive understanding of safety compliance in the construction business. The current chapter discusses: *How do individual workers behave? Why do they behave in certain ways? And to what extent or in what way does the study of individual’s behaviour contribute to further understanding organisational compliance?*

The analysis of individual compliance in this chapter is made through empirical research on behaviours of 183 individual workers who were working in the three construction projects discussed in Part II. The study starts with an observation of actual compliance behaviours, which has not been fully employed in compliance studies
due to some methodological limits. The discussion about why people behave in certain ways, as well as what causes individual behaviours of compliance or non-compliance, is carried out based on in-depth qualitative interviews in the fields. More details about the research approach are introduced in section 2. What the empirical case tells is presented in subsequent sections 3, 4, 5, and 6, where deterrence, social norms, or personal belief of duty to obey the law were not dominant factors explaining individual’s behaviour. The interviewed construction workers made their behavioural choices mainly due to personal preference. A short conclusion is then made in the last section, discussing what we can learn from the individual process of compliance.

2. Why People Obey the Law: Theory and Methodology

There are many theoretical and empirical studies aiming to explore ‘why people obey the law’, or ‘what causes compliance’, which greatly broadens the insight of my study here. This section introduces how I conducted an empirical study of individual compliance, which includes both a discussion of methodological approaches and the analysis of theoretical development.

(1) Exogenous-based compliance study

Parker and Nielsen (2009b, 2011), in their review of current empirical compliance research, categorised two main approaches: one is ‘compliance-exogenous research’ (also called ‘objectivist research’) that focuses on explaining what produces compliance; the other is ‘compliance-endogenous research’ (or called ‘interpretive and social constructionist research’) that aims to discuss how compliance is understood and conceptualised. According to Parker and Nielsen, in the former type of research, ‘compliance’ is predefined and used as a fixed variable. Researchers then recognise various variables that could explain compliance by showing causal relations. This type of research serves to measure compliance or test and build explanatory theories. In the second type of research, the very notion of ‘compliance’ could be problematised. Regulatory encounters are seen
as social practices to be understood from different perspectives and in the context of other meaningful social practices.\textsuperscript{178}

My research falls in the exogenous camp, as I analyse specific compliance behaviours of individual workers (in this way, I actually predefine what compliance is), and understand what causes it. In this study, compliance is generally understood as ‘a situation in which behavior comes to be in accordance with a legal norm’\textsuperscript{179}. Accordingly, the individual’s behaviour is identified as compliance or non-compliance according to some regulatory criterion.\textsuperscript{180} Then I analyse what causes such behaviours.

\section*{(2) How to collect data?}

For those exogenous researchers that aim to measure compliance or to build/test explanatory theories, the operationalisation of compliance includes both identifying what data the researcher seeks to find, and deciding the methods for data collection. This subsection will introduce how my study collected empirical data, inspired from existing literature, but also greatly influenced by specific features of the study itself as well as some advantages in methodology. In general, the study focuses on actual compliance behaviours, which has not been fully employed in compliance studies due to some methodological limits. The data was collected mainly through observation and qualitative interviews, which eventually made it possible to conduct both deductive and inductive analyses of compliance behaviour.

\textbf{a. Focus on actual compliance behaviour}


\textsuperscript{179} This conception was inspired by an working paper of Van Rooij (2013).

\textsuperscript{180} Specifically, behaviours could be judged as compliance or non-compliance based on the industry standards that are made through legal document of the central construction regulatory authority.
As Parker and Nielsen (2009b, 2011) pointed out, compliance-exogenous research generally faces a challenge of operationalising compliance by reference to actual compliance behaviour, because in practice direct observation of compliance and non-compliance by researchers is generally impractical. As a result, studies that rely on this method of data collection are extremely rare.

Most researchers, thus, focus instead on attitudes and motivations of the regulated actors, or on the policy goals that the regulated actors should meet. In this sense, data can be collected through surveys, interviews, self-reports, or quasi-experiments. Sometimes researchers can also make use of databases or records of regulatory agencies.181 But, there is little opportunity to verify what really happens, whether the assumed connection between measures (i.e. variables), data and actual behaviours does exist.

This study, hence, becomes a novel and useful trial as it focuses on actual compliance behaviours. Due to unique access to three construction projects, I was able to stay in the construction sites for a lengthy period. As an intern staff, I was free to go around construction sites without being an outsider. Also because of my identity as intern staff, people generally did not treat me as real managerial staff, which made mutual communication more natural and relaxed. It, hence, became practical to study actual compliance by means of participant observation and qualitative interviews. In other words, I was able to observe actual behaviours, and then link it to interviews conducted after observation to obtain meaningful associations/causations, which, to some extent, makes this study unique and valuable.

b. Observation and qualitative interviews

As mentioned above, participant observation and qualitative interviews were practical in this study. I first observed how an individual worker worked and made a judgement about whether his behaviours were compliant or not. Next, I tried to conduct an interview with him in order to collect information about how the

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181 Parker and Nielsen have made a wonderful summary on this theme, please also refer to Parker & Nilsen, 2009, 2011.
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individual explained his behaviours. The observation of behaviours was made publicly owing to my staying on the construction sites in a natural way. In the meantime, all interviews were conducted voluntarily, and taking notes during the conversation was permitted by the interviewed worker.

When considering a problem, as Parker and Nielsen mentioned (2011), even with adequate access, the researcher will need highly specialised knowledge and even specialist technology to accurately detect and identify legally compliant and non-compliant behaviours, and also considering the limit of the research cycle and the impossibility to cover all categories of individual behaviours existing on the construction sites, I made some selections of behaviours for observation as well as interview. First, the selected types of behaviours should be easy to make a judgement (i.e. detect and identify), to be discussed and to be coded later. Secondly, the type of behaviour should commonly exist on the construction site. Taking the behaviour of operating tower crane as an example, normally there will be no more than 5 cranes working together in a middle-sized construction project. In other words, it only requires a maximum of 15 workers for the job. The possible data will be limited if choosing such type of behaviour. Thirdly, the type of behaviour should be practiced regularly and repeatedly so that general factors shaping the compliance performance could be figured out. Finally, the violation in the selected types of behaviours should not be highly sensitive so that it can naturally and openly be discussed. In brief, the behaviours will be routine activities, which are executed as standard practice.

According to the above criteria, this study selected three types of compliance-related behaviours: the use of helmet, the use of safety rope, as well as the use of electricity (see Table 6.1).182 All these behaviours generally existed in the daily operation of a construction project.

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182 According to the safety operation provisions of construction project.
Table 6.1 Three selected individual behaviours

<table>
<thead>
<tr>
<th>Type of Behaviour</th>
<th>Legal Requirement</th>
<th>Target groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wearing safety helmet</td>
<td>Everyone who enters into building site should wear safety helmet.</td>
<td>Everyone</td>
</tr>
<tr>
<td>Wearing safety rope</td>
<td>Everyone who is conducting work high above the ground should wear a safety rope.</td>
<td>People who are conducting work high above the ground</td>
</tr>
<tr>
<td>Use of electricity</td>
<td>People are not permitted to connect electricity privately.</td>
<td>People whose work needs to use electricity, mainly operation of electric tools or machines</td>
</tr>
</tbody>
</table>

The selection of behaviours does not mean that this study simply aims to explain and understand these three types of behaviours. It is actually an approach of ‘making it specific’: the research needs some concrete behaviours as objects in order to firstly judge the existence of compliance or violation to further explore the reason or logic of such behaviours. The ultimate goal, however, is to analyse the possible general factors or conditions contributing to shape the individual’s compliance behaviour.

3. Adoption of both deductive and inductive methods

The focus on actual compliance behaviour, as well as the adoption of participant observation and qualitative interviews with a certain sample allows for: on the one hand, seeking to understand what influences compliance in which can test certain dominant factors derived from the literature; on the other hand, developing inductive learning as I got an opportunity to discuss behaviours, and open questions that could lead to all kinds of answers from the perspective of the others, which do not necessarily exist in the existing theories or hypotheses. These two types of methods are introduced in detail in the following two sub-sections.

(3) Deductive analysis

A multitude of compliance research is concerned with understanding and explaining what factors motivate or shape
behavioural choice of compliance, which contributes many useful variables. These variables help to develop analysis of compliance in a deductive way.

From an instrumental perspective (Tyler, 1990), individuals are driven mainly by pursuit of self-interest, and will make rational calculations of cost and benefit of obeying rules. There thus exist both positive and negative incentives. Most scholars have focused on the negative incentives of enforcement namely deterrence. Accordingly, it is believed that the existence of appropriate threat of legal/regulatory negative consequences could motivate compliance behaviour if the regulated actor had fear of detection and legal punishment, or the costs of compliance were lower for instance through subsidies (Becker, 1968; Bentham, 1988; Kagan & Scholz, 1984; Sutinen & Kuperan, 1999; Winter & May, 2001; Thorton et al., 2005; Gunningham et al., 2005; Kagan et al., 2011).

From a normative perspective (Tyler, 1990), however, compliance commitment is determined by the internalised values of the individual (Winter & May, 2001). It could be one’s personal sense of what is morally right or wrong. When legal rules are in line with such morality, people more easily behave in compliance (Tyler, 1990; Winter & May, 2001; Schwartz & Orleans, 1967; Grasmick & Green, 1980; Sutinen & Kuperan, 1999). It could be a generalised sense of duty to obey laws. In other words, people believe that rules should be obeyed simply because they are rules (Tyler, 1990; Winter & May, 2001; Vandenbergh, 2003; May, 2005b; Parker & Nielsen, 2011). A normative factor could also be a belief of legitimacy. People are motivated to comply with the law because they perceive legal authorities and institutions are procedurally just and appropriate (Tyler, 1990; Winter & May, 2001; Sutinen & Kuperan, 1999; Sunshine & Tyler, 2003; Vandenbergh, 2003; Braithwaite, 2003; Parker & Nielsen, 2011).

Scholars also added a third perspective from the social milieu to analyse what shapes compliance of the individual. They argued that compliance results from various social influences, for example, the
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desire to earn approval and respect from others (Grasmick & Bursik, 1990; Sutinen & Kuperan, 1999; Winter & May, 2001; Vandenberghe, 2003; Lee, 2008; Nielsen & Parker, 2008; Parker & Nielsen, 2011). Cialdini and his colleagues identified two types of social norms shaping behavioural choice of compliance: one is descriptive social norms. Actors are more likely to comply with laws when they believe others do similar things ('descriptive social norms') (Cialdini, 1990, 2007; Cialdini & Goldstein, 2004; Cialdini & Trost, 1998). For example, when a taxpayer believes that most other people pay tax, his/her motivation of paying tax in accordance with the law could be increased (Scholz & Lubell, 1998). Another variable is injunctive social norms. Actors are more likely to comply with laws when they perceive others think it is the correct way to behave (Cialdini & Goldstein, 2004).

Some scholars also argued for compliance capacity. There are at least two factors that influence such capacity of obeying laws: one is the amount of knowledge. The behaviour choice might be constrained by the extent they know or clearly know the norms of the law, or know the requirements of the regulator (Kagn & Scholz, 1984; Hutter, 1997; Lange, 1999; Kim, 1999; Winter & May, 2001, 2002; Spence, 2001). Another factor is people's ability to obey. Actors might lack the necessary resources such as financial support, technical expertise, or human resources (Kagn & Scholz, 1984; Winter & May, 2001; Huisman, 2001; Van Rooij, 2006, 2012; Dasgupta et al., 1998).

In general, a variety of variables have been used to explain why people obey laws. The academic findings are too fruitful to be completely summarised in one paper. Furthermore, considering reliability and validity of data collection, it is impractical to test all or too many variables in one empirical study. As Parker and Nielsen (2011) pointed out, the range of factors that are hypothesised to influence compliance are so complex and interrelated that it is very difficult to holistically test all aspects. It seems more practical and realistic to develop partial theories and hypotheses that can be tested individually in each study.
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Coming back to my study, some practical issues were considered: first of all, as interviews were conducted during the working process (so the researcher could first observe actual behaviour), the time was usually limited to about 30 - 40 minutes so that the interviewed workers did not feel their work was interrupted. Otherwise they will lose interest in talking. Second, the group of construction workers was a bit different, as they were not ready to accept the asking-answering style (which is usually employed in questionnaires), nor were they ready to give an immediate reply to a great number of questions. Consequently, the number of questions could not be too high, and questions (even based on a designed list) have to be communicated in an open way; the third, the pilot study showed that the workers only have positive reactions towards the questions that they feel are closely relevant to their real life or work experience. In other words, they generally found it difficult to understand or discuss questions that were relatively abstract or required them to imagine assumed situations. Under these circumstances, they easily became upset or lost interest in further communicating. Considering these practical matters, and also in order to make data collection comparatively reasonable, accessible, and reliable, I planned to analyse a limited number of variables, use limited questions and conduct interviews in a short amount of time.

This study adopted three core variables that are recognised by the existing literature as important drivers of complying with the law, i.e. deterrence, descriptive social norms, and duty to obey laws. Before the main study was conducted in 2014, a pilot study was conducted in other three construction projects of M City (not the cases discussed in Part II), where about 50 workers were interviewed based on a list of questions. The list of question was developed based on 9 variables from the literature, including deterrence, utility calculation, morality, duty to obey laws, procedural justice, descriptive social norms, injunctive social norms, legal knowledge, ability to comply. The researcher finally found that the interviewed workers felt puzzled or confused by some questions, for example, question about procedural justice, morality, injunctive social norms, the ability to comply. Under such circumstances, they easily became upset or lost interest.

This study does not adopt ‘competence’ as a variable because the three targeted behaviours are generally routine practices. So the possible variations in terms of compliance or not will mainly derive from variations in motives rather than variations.
The first variable examined in this study is deterrence. Although we know that, according to Part II, relational distances exist within the organisation, and managers actually have little direct control over individual’s behaviours, it is still unclear whether the internal self-regulation has any deterrent impact, and if so, in what way such impact functions in individual workers. Furthermore, as mentioned above, the group of workers is legally targeted as another kind of regulated actor. And it is also unclear to what extent the deterrence from legal regulatory authority can influence compliance behaviours of the individual worker. Consequently, this study takes deterrence as the first variable of analysis. Specifically, the study focuses on analysis of subjective perceived deterrence by the interviewed workers (cf. Grasmick & Bryjak, 1980; Grasmick & Green, 1980; Paternoster et al., 1982; Thoronton et al., 2005; Ban Rooij, 2013; Yan, 2014). Compared to studies of objective deterrence that seek to analyse the relationship between enforcement activity and behavioural performance of the regulated actor (Becker, 1968; Stigler, 1970; Ehrlich, 1972), the studies of subjective deterrence are more concerned with examining deterred threats: detection probability, sanction impact, or other risks of violating the law from the perspective of the regulated actor (Paternoster & Simpon, 1996; Simpon & Rorie, 2012; Winter & May, 2001; Parker & Nielsen, 2011; Thoronton et al., 2005; Van Rooij, 2013, 2015; Yan, 2014). This study follows the subjective approach and refers to deterrence as detection probability and sanction impact. In addition, this study focused on general deterrence from both state regulation and internal self-regulation (cf. Thoronton et al., 2005; Van Rooij, 2013, 2015; Yan, 2014). Subjective deterrence was operationalised by asking the interviewed workers about the following questions: Is there anyone coming to the site and inspecting your work and behaviour? How high is the probability that a violating behaviour (in the specific dialogue, it refers to ‘not wearing helmet’, ‘not earing safety rope’, or ‘connecting electricity privately’) can be detected? What would
happen if such a behaviour was detected? (Follow-up questions: Have you ever heard of any punishment for such (illegal) behaviour? What was the result of this punishment?)

The second core variable was descriptive social norms as this study also seeks to investigate possible social influence upon individual’s behaviour. I found that, in the pilot study, the workers more readily talked about ‘how others behave (a similar behaviour or not)’ (i.e. ‘descriptive social norms’) rather than ‘how others think (about a specific behaviour)’ (i.e. ‘injunctive social norms’)’ (cf. Cialdini, et al., 1990; Cialdini, 2001, 2007; Cialdini & Goldstein, 2004; Cialdini & Trost, 1998). It seemed a bit weird for some interviewed workers when the researcher wanted to discuss how others think about some specific behaviour. Accordingly, this study focused on descriptive social norms. And in the interview, the researcher normally first discussed with the worker a specific behaviour that he was conducting (in an inductive way, as introduced in next subsection), and then only asked a single open question about descriptive social norms, that is, how about others?

This study also seeks to analyse a normative variable that is recognised by many studies as a dominant driver for obeying laws (see above discussion). The analysis was on a ‘general duty to obey laws’ that was perceived by the interviewed workers. Here I feel it necessary to explain a bit more about the selection of this variable. In the pilot study, the researcher found that the discussion about a personal sense of what was morally right or wrong (i.e. variable of morality) easily made the interviewed workers feel upset or sensitive. They perhaps felt it was to force them to make a value judgement and were reluctant to respond. In addition, the interviewed workers were easily puzzled or absent-minded when the researcher attempted to discuss legitimacy of legal institution as well as procedure (i.e. variable of procedural justice). Under these two types of situations, the entire interview was implicitly affected and I hence doubted the reliability of information that the workers supplied during the subsequent talk. The question about duty to obey laws was relatively
direct and clear; and more importantly, it seemed that this question would engender a response. Thus this study examined duty to obey laws as a third variable. Following Tyler (1990) and Vandenbergh (2003) who examined this variable, this study defined it as a personal belief that one should obey legal rules regardless of the content of the rules or circumstances at hand. In the interview, the researcher then asked the interviewed worker ‘do you agree with the following statement: people should obey laws, even if it is a bad law, or even if it is not enforced?’ And the researcher also used some follow-up questions to ask for further comments.

In sum, in order to develop a deductive analysis of what influences compliance, I used three core factors from the literature (i.e. deterrence, descriptive social norms, and duty to obey law) and measured them in an empirical study. Although some key questions were developed based on operationalisation of variables, they were used in an open way (i.e. as a dialogue guide) rather than survey, in order to develop a connection with the inductive analysis that was also employed in this study.

(4) Inductive analysis

In general, this study empirically analyses how individuals behave and how they explain their behaviours in their own way (and what actually shapes the behaviours of the individual). The deductive analysis mentioned above contributes to seeing possible relations between proposed variables and compliance behaviours. But this is not the whole story, as variables measured in one empirical study are limited, and also because explanations given by the individuals for their behaviour might go beyond assumed theories or hypotheses. It, thus, becomes valuable to develop an inductive understanding in order to see more situational factors or conditions that shape actual behaviour. Inductive analysis might help to discern missing parts in the deductive analysis, or it can strengthen the understanding of the deductive analysis.

For an inductive approach, I collected information in an
open-ended way. A ‘dialogue approach’ was thus employed in this study. Van Rooij (2015), in his study on Chinese lawyers about tax evasion and compliance, gathered data with in-depth dialogue interview technique. For example, he did not predefined where risks of violating the law come from, but first discussed daily practice with the studied actors. When a discussion flew naturally to illegal behaviour, the actors were asked whether such behaviour was risky. Further the actors were asked to describe the nature of such risk. The short, open-ended, and follow-up questionsfunnelled the discussion from general answers to the much more detailed description and broad interpretation. Van Rooij stated that this qualitative approach allowed for the richness of data necessary to understand the perspectives of the interviewed in the most open and truthful way.185 Inspired by such a dialogue interview technique, this study conducted every conversation with the worker in an open way: starting from work history and shifting to how the worker does his job. The dialogue then naturally went to one of three types of behaviours (i.e. wearing helmet, wearing rope, or use of electricity), asking respondent to explain the detailed reasons for why he adopts such a behaviour rather than asking ‘why do you comply or why do you violate?’ When the respondent mentioned one of the three variables (i.e. deterrence, descriptive social norms, and duty to obey laws), the follow-up dialogue then proceeded to the questions designed for deductive analysis (see prior section), and ended by asking whether the actor had another explanation. In the case that the explanation given by the respondent was something different from the three variables, the follow-up dialogue first asked him to give more details about his answer. In the end, the respondent was also asked for his opinions about the other three variables (using questions developed in the prior section). In general, such a dialogue interview allowed for learning things that were related to the existing theories, but also

185 For more details of ‘dialogue approach’, please also refer to: Van Rooij, Benjamin. 2015. Weak Enforcement, Strong Deterrence: Dialogues with Chinese Lawyers about Tax Evasion and Compliance. Law & Social Inquiry. (Published early view online)
learning new things through an inductive method.

(5) Implementation of research

a. Case selection and data collection

With an eye towards maintaining conformity throughout this entire research process, individual workers were targeted from the same construction projects studied in Part II. In this way, the individual, the construction company and project, as well as the regulatory authority can be discussed within the same discourse. Moreover, the study mainly targeted the worker conducting one of the selected three types of behaviours when the observation and interview were initiated. Furthermore, only the worker who voluntary agreed to the interview, and provided a smooth and complete conversation were eventually included in the sample. As a result, 183 workers in total from three construction projects were successfully interviewed, in which 152 workers were observed as compliers, while 31 workers were observed as non-compliers.

b. Data analysis

With respect to data processing and analysis, the raw material from the field was firstly analysed based on the text: A raw table was developed in which several important aspects were discerned; for each aspect, a summary was made according to the respondent's answer and description. The second step was coding. For each interview, the summary for every aspect in the raw table was coded as positive, negative or 'don't know'. The process of coding enabled calculating relevant percentages of answer. However, as this study did not rely on a quantitative approach, the content of the interview was analysed in depth in the third step, in which the particular cases and

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186 A smooth and complete conversation refers to an interview that was conducted fluently and all aspects planned through the analytical framework were covered. Only such an interview could be included in the final analysis. In the fieldwork, the researcher actually conducted many more interviews than the number (183) used in the paper. However, some interviews were interrupted or the worker withdrew consent halfway through, or some interviews failed to go deeper and cover all aspects. In order to make sure that the final data, to some extent, could be compared and generalised, these incomplete interviews were excluded.
illustrative quotes were discerned. The process of text coding, scoring and analysis did not particularly differentiate between the types of work, or the types of behaviour. Although the study selected three types of behaviours as objects (wearing helmet, wearing safety rope, as well as the use of electricity), in practice, the workers interviewed on the construction sites were at random. Thus it is hard to make sure that the number of interviewees for each type of work or each type of behaviour were the same. Moreover, as mentioned above, selection of three types of behaviours function as the specific medium to develop the analysis of compliance. The main research goal was a focus on the factors or conditions shaping compliance. Hence, it did not make much sense to distinguish specific behaviours and types of work in the final analysis. The most significant differentiation existed between compliance behaviour and violation behaviour.

(6) A brief summary of research design

Table 6.2 Overview of research design

<table>
<thead>
<tr>
<th>Targeted Behaviour</th>
<th>Interviewee</th>
<th>Observation</th>
<th>Qualitative interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wearing Helmet</td>
<td>183</td>
<td>Compliant Behaviour OR Non-compliant Behaviour</td>
<td>Deductive: three main variables to measure compliance OR Inductive: open questions</td>
</tr>
<tr>
<td>Wearing Safety Rope</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Electricity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 6.2 summarises, the study in Part III employed an exogenous way to develop an understanding of individual compliance. It first focused on actual compliance, and thus three types of daily behaviours were targeted. The study began with an observation of each specific behaviour and made a judgement as compliant or
non-compliant. Qualitative interviews were designed and conducted based on a mixed adoption of both deductive and inductive methods. For the deductive analysis, three core variables were picked from the existing literature and were operationalised for the purpose of the interview. For the inductive analysis, open questions based on a dialogue approach were used to ask respondents to explain their behaviours in their own ways. Adoption of inductive and deductive analysis allowed me to both test some existing theories and discover new ideas.

In some sense, this study contributes to the methodology of compliance research as it has a unique focus on actual compliance behaviour, and a unique adoption of both inductive and deductive methods. However, regarding research limitations, for instance, bias exists in terms of selection of behaviours, selection of interviewed actors, as well as selection of variables to be measured. As Parker and Nielsen pointed out (2009b), a limited number of information sources might result in limited understanding and interpretation of compliance, although this problem exists in any type of empirical data collection. In addition, even though the interview was conducted in open way, there still exists some risk that the interviewed workers just gave an immediate response or told the researcher some direct feelings without going in depth. Of course, such risk also exists in structural or semi-structural interview, in which the respondents give answers that they perceive the researcher wants to hear.

3. Plural Personal Explanations for Actual Behaviour

The research began with an observation of actual behaviours. 83 percent (n=152) of the population were observed as compliers, while the remaining 17 percent (n=31) were non-compliers. The following qualitative interviews were conducted individually. Starting with open inductive question, the people were asked why they behaved in a certain way. Thus it was possible to see plural personal explanations for individual behaviours. This section will first present findings from the open-ended questions. In general, the interviewed
workers explained their behaviours mainly referring to various personal preferences, but seldom stressed factors of deterrence, social norms, or moral duty.

(1) Interpretations from the observed compliers

For the entire study, I first found that the majority of the sample (152/183) were observing practices in line with safety provisions. This subsection analyses how these compliers (n=152) explained their behaviours.

**Safety concerns.** 86.2 percent (n=131) of the respondents pointed out they behaved for their own safety or self-protection. For example, the workers explained why they always wore a helmet: ‘It helps to protect the head. With our job it is easy to get hurt. Look, there are many scratches on my helmet,’ ‘it can prevent falling objects, you need to take good care of yourself’. ‘It’s terrible even just a little stone falling down from above’. ‘It’s for your own safety, and also for the sake of all (family)’. ‘if you wear it, you will feel relieved when working under the shelf or rebar’. 187 Some workers also mentioned ‘to be honest, wearing a helmet is sweaty. But you have no choice as the helmet still provides protection’. 188

Some workers explained why they wore a safety rope: ‘When working in a high place, it is protection to wear a rope in case a high wind is coming, or you fall down accidentally’. 189 The workers also stressed the safety benefit by obeying the usage stipulation of electricity: ‘if you just casually take electricity, who can guarantee that you won’t get an electric shock?’ 190

Obviously, this group of people was willing to conduct compliance behaviour because they were greatly concerned with physical safety.

**Habitual practice.** Seven workers (4.6%) indicated that the (compliance) behaviour was just due to a habit. As some respondents

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188 Interview W-C35.
189 Interview W-B14.
190 Interview W-A20.
explained, ‘I got used to doing work in this way. Otherwise I will feel a bit odd’. Some also said, ‘I know (wearing a helmet) has little effect actually. For example, it doesn’t work if the falling thing is big or heavy. However, it has become a habit to wear’.\footnote{Interviews W-A02, W-A59, W-B08, W-B57, W-C29, W-C33, W-C38.} For this part of the interview, behaving in compliance was not due to a clear utilitarian purpose but just a kind of habitual practice. This was an interesting finding, which implies that compliance can become a habit. It also raises attention to the unconscious aspect of compliance that some studies have uncovered (e.g. Cialdini, 1984, 2001; Arielly & Norton, 2010). However, this theme cannot be fully examined in this study due to limited available information.

**Compulsory rule.** 7.2 percent (n=11) of the interviewed workers reported that they behaved in a certain way because it was required by the rules. When asked to explain their behaviours, they all directly answered ‘there is some requirement (from the company/the project)’.\footnote{Interviews W-B09, W-B39, W-B43, W-B47, W-C05, W-C20, W-C21, W-C23, W-C27, W-C31.} One even remarked, ‘(wearing a helmet) might be useful, otherwise why is it required?’\footnote{Interview W-A51.} For this group of interviewees, behaving in compliance was actually due to a compulsory rule. It was then linked to the third variable this study sought to analyse, which assumes personal duty to obey the law could influence compliance behaviour (Tyler, 1990; Winter & May, 2001; Vandenberghe, 2003; Parker & Nielsen, 2011). This is further discussed in the subsequent section about ‘behaviour and duty to obey laws’.

**Sanction probability.** As an exception, three workers (2%) explained their behaviours by referring to the probability of getting punished. They gave the same answer, ‘you should wear a helmet. Otherwise you will get a fine’.\footnote{Interviews W-A37, W-A56, W-B30.} Such an explanation implies a deterrent effect upon behaviour. So the follow-up talk in these cases turned to detection probability and sanction impact and is discussed in the next section.
In short, for the majority of the compliers interviewed in this study, they attributed the behaviour motives to personal safety concerns. They realised the importance, or the benefits of conducting compliance behaviours. This was actually a cost-benefit analysis: the benefits of compliance outweighed the costs. In my case, it particularly indicates that personal interests were aligned with the law, which accordingly promoted better compliance. While for those regarding compliance as a habit, it had become an internalised norm that functioned in daily practice. For those referring to obligation or deterrence, the paper will further assess this in the subsequent sections.

(2) Interpretations from the observed non-compliers

For the rest (n=31) of the sample, the workers were observed violating at least one of the three targeted behaviours. The qualitative interviews then were conducted asking the respondent to explain their behaviours. Fortunately, most of the interviewed workers could openly talk about their (non-compliance) behaviours, in which various interpretations were given.

Temporary action. Over one-third (35.5%, n=11) of the workers described their current (violating) behaviour as temporary. As some explained, ‘It’s just very hot, there is so much sweat in the helmet. So I just take it off for a while’.195 ‘Sometimes people just take it off for a moment when it’s sweaty. It’s normal. It doesn’t mean he wants to violate’.196 In two interviews, I witnessed that the respondent was sitting on his helmet, but the workers still claimed, ‘I always wear a helmet’.197 In brief, this group of non-compliers tended to define the current violation as a temporary behaviour, and thus innocuous. However, such interpretation actually implies that the perceived benefits of non-compliance by the workers were high.

Inconvenience. A few workers (9.7%, n=3) gave a more realistic

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196 Cf. Interview W-C12.
197 Cf. Interview W-A57.
reason—it was not convenient (if following the safety stipulations). As an example, workers not wearing a safety rope explained, ‘The requirement does not always conform to the reality. If I’m moving up and down, it’s necessary to wear a rope; whereas if my work needs to move horizontally on a work platform, wearing a rope will bring many inconveniences. How could it be possible that I have to keep on untying the rope and fixing to a new place all the time when working?’

For this group of non-compliers, they believed that the reasons (for violation) existed objectively and should be acceptable. Accordingly, it was conceivable that, if these workers were required to take the opposite behaviours (i.e. the compliance behaviours), they may instead feel it was unreasonable. In other words, the costs of compliance were actually high in their perceptions.

**Situational judgement.** Over half (54.8%, n=17) of interviewed workers claimed that they could make judgements about what behaviour should be taken in a specific situation. In other words, it was not necessary at the moment to comply. Some respondents stressed that they were able to distinguish the risks: ‘I would put on the helmet if I were in the process of moving. However, currently I am in a safe place’. ‘There is no danger at all while working on the inward shelf’. ‘Connecting electricity is very simple. I can do it by myself. Why should I wait for the electrician?’

Some workers even tried to convince me by giving their own technical and formalistic interpretation of the norms: ‘I’m taking a break. I will behave according to the requirement when at work’. ‘It’s not necessary to act (according to the requirement) during a break. The requirement refers to working.’

I witnessed a case when a worker was walking on a floor under construction. A safety manager asked him to wear a helmet. The worker however had a tiff with the manager and then walked away. Later, I found this worker and asked for the cause of the dispute. He

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answered, ‘...at that time, I was not at work at all but had something else to do’.201

In brief, although the interviewed non-compliers gave various explanations for their non-compliance behaviours, there were still some common factors: they were actually concerned with practical benefits or costs of compliance. For those claiming ‘violation was just a temporary action’, they possibly perceived the high benefits of non-compliance; for those claiming ‘compliance practice was inconvenient’, they might perceive the high cost of compliance; for those claiming ‘who could determine what action to take’, they perhaps just perceived that the benefits of compliance at the moment were low.

(3) Key finding: operational cost-benefit analysis

Owing to an inductive qualitative interview, plural interpretations for actual behaviours emerged. Generally speaking, the workers explained their behaviours mainly based on some personal preferences: for the compliers, it was about safety concerns (personal interests), while for the non-compliers, it was inconvenient, uncomfortable, or unnecessary. The data actually indicated that the interviewed workers weighed the benefits or costs of compliance and violation in daily practices. In other words, cost-benefit calculation matters for compliance.

Turning to the literature, analysis of amoral calculation as a dominant factor to motivate compliance can be traced back to the early stage of compliance studies. For example, Kagan and Scholz (1984) conceptualised a type of regulated actor as an ‘amoral calculator’. Besides the calculation of likelihood of detection or the likelihood of sanction (Winter & May, 2001; Becker, 1968; Bentham, 1988; Sutinen & Kuperan, 1999; Thorton et al., 2005; Gunningham et al., 2005; Kagan et al., 2011), the regulated actors would also maximise their own economic or material utility (Parker & Nielsen, 2011). Consequently, they would calculate certain monetary or

201 Cf. Interview W-A60.

In an empirical study of pesticide compliance by Chinese farmers, Yan, Van Rooij and Van der Heijden (2015) inductively analysed how the sampled farmers understood costs and benefits. Particularly, they focused on the immediate operational costs and benefits of both violation and compliance rather than eventual costs of violating the law, as the former occurs within everyday practices. They generally found that such operational cost-benefit calculation mattered for compliance, and costs and benefits were both situational and subjective.

Although my study never aimed to measure cost-benefit decision-making in relation to compliance (while the study did analyse the deterrent effect later), and I did not ask the workers how they calculated the benefits or costs in terms of specific compliance/non-compliance behaviours, the data indicated a similar finding to Yan et al. (2015). Most interviewed workers explained their behaviours, not referring to the law, deterrence or other factors, but addressing immediate operational costs and benefits they perceived. For the majority of compliers, they valued benefits of compliance (i.e. safety protection). While for the non-compliers, they perceived either high costs of compliance, or high benefits of non-compliance, or low benefits of compliance. In my study, the costs and benefits that the workers were concerned with were not financial or economical (Parker & Nielsen, 2011), but much more practical and precise. They made judgements mainly based on personal preference or experience in daily life: being dangerous or not, being convenient or not, being reasonable or not. This possibly refers back more broadly to Bentham’s original idea (1988) that our behaviour stems from pleasure and pain, not necessarily related to economic or monetary utility. Such an old idea can even be traced back to Aristotle and Plato,
as well as the ancient Chinese philosopher Han Feizi. However, such immediate operational costs and benefits cannot be purely captured through deductive analysis.

Here I would also address the possible limitations of inductive qualitative interviews. Although open questions help to open a door for the interviewee to give personal explanations of behaviours, the inductive method faces at least some risks. For instance, the respondents just gave immediate responses or told the researcher some direct feelings without going into depth. Besides, as I first asked the inductive questions and then the deductive questions, the answers to the inductive questions could have shaped the answers to the deductive questions. To overcome such limitations, the deductive questions could be asked first also in a dialogue structure, which leaves as much open and free space as possible for the workers to give their own explanations without necessarily linking to the prior question. Second, during data analysis, an overall text analysis on the interview transcript would help to check for general validity; third, these answers could be verified with other interviews with relevant actors, for example, the managers as well as the regulators.

4. Deterrence and Behaviour

The inductive dialogue at the beginning of the qualitative interview indicated that the workers mainly addressed some practical benefits or costs of their behaviour. In order to develop a broader understanding of individual compliance, this study also employed a deductive method, i.e. to analyse three core variables in relation to compliance: deterrence, descriptive social norms, and duty to obey the law.

This section first presents empirical findings about deterrence and compliance behaviour. As mentioned in the research methodology, this study operationalised deterrence by mainly referring to perceived detection probability and sanction impact, and analysed the association between deterrent effect and compliance behaviour. In the field, the workers were asked: Is there anyone
coming to the site and inspecting your work and behaviour? How high is the probability that a violating behaviour (in the specific dialogue, it referred to ‘not wearing helmet’, ‘not wearing safety rope’, or ‘connecting electricity privately’) could be detected? What would happen if such a behaviour was detected? The data generally indicated that the deterrent factor did not successfully explain behavioural choice of either the complier or the non-complier.

(1) Manager as main source of deterrence

When discussing deterrence, I first asked the workers (N=183) ’who will come to inspect?’ The majority (68.3%, n=125) of the respondents identified the manager of construction project as the main subject. A few (n=4) also mentioned it was the boss who takes charge.

Looking at the literature, scholars argued that there (should) exist plural sources of deterrence outside of state regulatory authority (Van Rooij, 2015; Yan, 2014; Gunningham, 2011; Gunningham & Grabosky, 1998). But in my study, it was not as plural as expected, because none of the respondents ever mentioned the state regulator as a deterrence source. This was in line with Gray’s research (2006) saying that the state regulator sometimes is absent. It was also consistent with findings from my participant observation of safety inspections in Part I and safety management in Part II: on the one hand, the safety regulators rarely had direct contact with the workers when they conducted inspections on the construction sites; on the other hand, it was the manager who dealt with state inspection. Consequently, the workers did not experience the state as a regulator, and in their day-to-day activities, they dealt with the manager of the construction project or their direct employer (i.e. the headman or the labour contractor), who was the most likely inspector.

There was some variation, however, for some workers (16.4%, n=30) they did not indicate a clear answer, ‘I don’t know who might come and examine our work’, ‘I have no idea if there is anyone taking charge of this (i.e. safety inspection)’. While 13.1 percent (n=24) of the respondents definitely reported that nobody would come to check
their work.

(2) Variations in detection probability

The dialogue then continued to ask about the perceived chance that a violating behaviour (i.e. 'not wearing helmet', 'not wearing safety rope', or 'connecting electricity privately') could be detected. For those saying they had no idea about inspectors (16.4%, n=30), they of course could say nothing about detection or sanction. And for those reporting the nonexistence of any inspector (13.1%, n=24), they also indicated a negative answer for detection probability. These two groups of respondents (29.5%) actually had already given general negative remarks for the deterrent effect on behaviours.

There were 11 respondents (n=6%) who acknowledged the existence of an inspector, but denied detection probability. As some respondents indicated, 'It is very occasionally that managers will really come to check. At least I’ve never experienced this myself'.

'The construction site is such a big place, how could anyone always keep watch?’ ‘Yes, it is true that someone is in charge of (inspection). But nobody actually knows when he could come, or how often he could come’.202

For the remaining 64.5 percent (n=118) of the interviewed workers, they reported a positive answer to the probability of actual detection, including the three workers (see section 3) who explained their compliant behaviours by mainly referring to probability of getting punishment. As some workers explained clearly, 'Of course it (i.e. the violating behaviour) is easily found. The guy who is in charge of safety stays on the site every day. He can see what you’re doing, and he might also do other things, such as taking photos (of the behaviour), giving a fine'.203

In general, the data indicated a comparatively high percentage confirming detection probability. However, the analysis of deterrent effect should consider sanction impact at the same time.

203 Cf. Interview W-A12.
(3) Variations in sanction impact

When asked about ‘what would happen if such a behaviour was detected’, the answers given by the respondents showed some variations.

a. There exists a high detection probability vs. low sanction probability.

In the sample, only 25 workers (13.7%) gave a positive reply in terms of sanction probability, of whom 3 interviewees reported that they had real experiences: ‘You might get a punishment. At one time, I went to the toilet without wearing a helmet, the safety manager then gave me an oral warning’ ‘I received a punishment on another construction site. I was installing a water pile through a wall at the moment. Because the hole is small, I took off my helmet. But it was found by a safety manager, he immediately gave me a fine of 50 RMB’ ‘I was fined in another city. It was hot, 40 degrees Celsius and I was so sweaty, so I took off my helmet. Then I got a fine’.204

For the other 22 workers, they reported that had heard about the situation of punishment. Interestingly, 15 of the above respondents indicated that their impression of punishment came from previous experience: ‘I knew that someone was punished when I worked at another construction project, but haven’t heard of the sanction situation in this project’.205

Furthermore, examining data of detection probability against the data of sanction probability revealed some interesting variations (Table 6.3):

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204 Interviews W-A05, W-A20, W-A56.
There was a notable decline in the positive perceived detection probability to positive perceived sanction probability. Specifically, although 118 workers (64.5%) perceived that violations could be detected, only a few (n=25, 13.7%) confirmed the certainty of punishment. This partly echoed Van Rooij’s study on tax compliance of Chinese lawyers (2015), finding a high risk perception for violating the law, without a clear indication of what punishment is doled out. It also showed that detection is not yet punishment and that certainty has multiple aspects.

This comparison implies a situation that is similar to the finding in Part II (organisational process of compliance), where we saw that, in reference to external safety regulation, the managerial staff of construction projects generally perceived that even when state regulators came to inspect, nothing was really going to happen. Now concerning internal safety inspection, we see some similar perceptions from the regulated actors (i.e. the workers), that even if violating behaviours could be detected, nothing was really going to happen.

In addition, this comparison revealed a fact that also has been recognised in the Part II: the relational distance between the manager and the workers. In the last part, we found that those project managers generally perceived they had no substantial control over the workers. Most of the interviewed workers did not necessarily perceive that managers could take substantial action towards violations, although they acknowledged the existence of inspection
and detection.

**b. Weak or vague notions of sanction probability.**

27.9 percent (n=51) of the interviewees reported a negative answer to sanction probability. As some workers explained, ‘It’s said that (violation) will get a punishment. But to be honest, who knows if it will really happen.’ ‘Manager might come and find your (violating) behaviour. He possibly educates you to correct, but punishment? I guess they are just talking.’ ‘In my experience, I’ve never seen or heard of any real sanction happening.’

Moreover, over half (58.4%, n=107) of the interviewees were vague about what would happen should a violating behaviour be detected. Some workers replied they had no idea about whether or how the inspector would take action, and some reported that they did not know whether sanctions existed. The answers from these two groups actually revealed that for many workers, the perceived sanction probability was weak or very vague. Even though some admitted the existence of sanction, they had vague ideas about proximity of the threat.

**c. The impact of sanction severity is uncertain.**

Referring to sanction severity, as only 25 people (i.e. 3 had personal experiences, and 22 had heard about punishment) gave positive answers to sanction probability, the follow-up questions were asked for them. For the three workers who reported experiencing punishment, one of them just received an oral warning, and two got a fine. For those workers who had heard about sanction cases, two of them said it was an oral warning, eleven said a fine, while nine people mentioned both oral warning and fining might happen. Concerning the amount of the fine, most of the interviewed indicated that it was 50 or 100 RMB yuan.

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207 The amount of money was the price when this study was conducted. The price has risen since then.
How can we understand how such sanctions would impact people? Two respondents mentioned this during their talks. One worker explained, ‘I was fined 50 yuan. Of course I was unhappy, after all it was a loss of money. But generally speaking, it’s not a big deal. I can earn 200 yuan per day. And a fine does not often happen.’

Another worker said, ‘I was fined for 100 yuan on another site. It was a bit severe, as normally people get a fine for 50 yuan. At the moment I felt the manager was making a fuss. But the fine was not paid directly but deducted from my salary, and I ignored this fine when getting my salary by the end of the month.’

This was exactly the point Williams and Hawkins (1986) make about the need for studying perceived impact rather than just the amount of fines or imprisonment. The remaining respondents were rather vague about how such a sanction would impact people as they just heard about cases of sanction without knowing more details. When these respondents reported the existence of sanction, especially when they said it was a fine of about 50 or 100 yuan, they talked about it as a very common thing. I tried to imagine the severity of fine by comparing it with average income of the workers. The handyman, as the work type with the lowest income, earns 80 yuan daily, while the skilled worker such as the carpenter, the crane operator, can earn 200-400 yuan daily. There might be some cost-benefit calculation concerning sanction severity. However, this study cannot develop a further analysis due to limited information available from the interviews.

In general, when talking about deterrence, the project manager was perceived as the most likely inspector. Although nearly two-thirds of respondents reported a high probability of detection, only a few (13.7%) of them confirmed the probability of sanction, while most were vague about sanction impact. For the rest, they either denied the probability of detection and sanction, or actually

208 Interview W-A20.
209 Interview W-A56.
had vague notions of detection or sanction. This implies a weak deterrence impact on compliance in general. However, such assumptions are analysed further by linking to actual behaviours.

(4) Perceived deterrence and behavioural performance

Table 6.4 Association between workers’ perceived deterrence resources and compliance behaviour

<table>
<thead>
<tr>
<th>Deterrence Resources</th>
<th>State Regulator</th>
<th>Manager</th>
<th>Boss</th>
<th>None</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance (n=152)</td>
<td>0</td>
<td>102</td>
<td>2</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>67.1%</td>
<td>1.3%</td>
<td>13.2%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Non-Compliance (n=31)</td>
<td>0</td>
<td>23</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>74.2%</td>
<td>6.45%</td>
<td>12.9%</td>
<td>6.45%</td>
</tr>
</tbody>
</table>

Table 6.5 Association between workers’ perceived deterrence and compliance behaviour

<table>
<thead>
<tr>
<th></th>
<th>Detection</th>
<th>Sanction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Compliance (n=152)</td>
<td>95</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>62.5%</td>
<td>19.1%</td>
</tr>
<tr>
<td>Non-Compliance (n=31)</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>74.2%</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

As the tables show, when comparing the subjectively perceived deterrence of the interviewed workers to their actual behavioural practice, it indicated the following:

a. There was not much difference concerning answers between compliers and non-compliers.

Here we see a fact again that the state inspector was not necessary. In both compliance and non-compliance cases, it was the manager who was most often perceived as the possible inspector by
the interviewed workers. And in both cases, the presence of manager was about 70 percent. In both cases, about ten percent of the sample reported the non-existence of any inspector. Concerning deterrence probability, we also see a similar percentage in both cases: two-thirds of the sample reported a negative answer. Moreover, generally sanctions between compliance and non-compliance were not necessarily different.

In brief, the data simply showed that there was not much difference between compliers and non-compliers in the amount of deterrence they experienced/perceived.\textsuperscript{211} What does this mean? It shows that deterrence probably does not successfully explain variation between compliers and non-compliers. When perceiving similar deterrence, some people chose to behave in line with the law while others did not. Accordingly, there must exist other factors that explain the behavioural choice of individuals, which has partly been discerned in the prior inductive analysis. In addition, no significant difference in terms of perceived amount of deterrence between compliers and non-compliers implies an asymmetric relation between deterrence and behaviours.

\textit{b. It might imply an asymmetric relation between deterrence and behaviour.}

In their study of pesticide compliance among Chinese farmers, Yan, Van der Heijden, and Van Rooij (2015) applied crisp set qualitative comparative analysis (csQCA) to gain insight into compliance motivations and behaviours of 101 farmers. The study identified a non-symmetrical relationship between deterrent effect of sanctions and compliance: experienced deterrence was not a necessary condition for compliance, but absence of experienced deterrence was a necessary condition for non-compliance. The authors hence argued that this finding challenged our thinking about the assumed compliance-non-compliance dichotomy in the literature.

\textsuperscript{211} Of course some dichotomy between complier and non-complier may exist because compliers might be non-compliers in situations I had not observed and vice versa.
It indicates that motivations for non-compliance are not necessarily the opposite of those for compliance. In my study, I did not employ csQCA or other quantitative analysis, but the data also implies some asymmetric relations between deterrence and behaviours.

i. For those compliers \((n=152)\), deterrence was not a necessary condition for compliance. In other words, they complied with the law even without the existence of legal/regulatory deterrence.

13.2 percent \((n=20)\) of the compliers thought there was no actual inspector or inspection in practice, while 18.4 percent \((n=28)\) had no clear idea about it. In other words, almost one-third of respondents gave a negative answer to the existence of the inspector or inspection.

Moreover, even though 62.5 percent of observed compliers indicated a positive probability of detection, only a few of them \((14.5\%)\) reported a probability of sanction. For this group of respondents, except three workers who in the inductive talk explained their behaviours by referring to the probability of receiving punishment, most expressed in the follow-up dialogue that ‘those violations were the business of other people’. Nobody confirmed that they had any fear of such sanctions (this point is discussed further in the next section: social norms and behaviour). On the contrary, 25.7 percent \((n=39)\) of observed compliers indicated that there would not be any actual punishment at all, and the other 59.9 percent \((n=91)\) actually had vague notions of sanction.

In general, for those who perceived the non-existence of inspector, nonexistence of detection/sanction, or had very vague notions of detection/sanction (who were actually the majority of the sample in this study), they still behaved as compliers. For those observed compliers in this study, the compliance behaviour was not necessarily motivated/shaped due to the fear of punishment. Deterrence does not explain their behaviours.

\(^{212}\) For the details of such csQCA analysis, please also refer to: Yan, Huiqi, Jeroen van der Heijden, & Benjamin van Rooij. 2015.

\(^{213}\) Cf. Interview W-A22.
ii. With regards to non-compliers (n=31), deterrence might act as a contextual element of non-compliance.

Similar to those compliers, most observed non-compliers perceived less deterrence or had vague notions of deterrence (rather than saying ‘there is no sanction’) in practice. It might be naturally assumed that non-compliers tended to violate the law as they perceived low costs of violation. But my interviews and the data did not supply strong evidence that those non-compliers were motivated due to less deterrence. From the qualitative interviews, for those non-compliers, they explained their behaviours by referring to many practical reasons and showed some operational calculations for benefits or costs of specific behaviours. In particular, for those who had vague notions of deterrence, they behaved as non-compliers not because they clearly knew about the absence of actual deterrence. It seemed that they just did not pay attention to the deterrence resources or impact. In this case, it is hard to assume that deterrence was a significant variable to explain behaviours. In the meantime, in some sense, non-compliers just expressed similar feelings about deterrence as compliers, i.e. they had less pressure from possible deterrence, or they did not realise the deterrent effect at all. So if the absence of deterrence does not influence behavioural choice of compliers, does it in reverse necessarily influence behavioural choice of non-compliers? This may require sophisticated studies on the psychological process of individual. Regrettably my research methodology and available data are unable to further address this.

But deterrence may act as a contextual element: as those non-compliers had less fear, or had no experience of fear, about punishment or loss of practical benefits, they were free to make decisions of behaviour mainly based on personal preference. This can be partly shown from Part II. Due to the existence of fragmented internal structures, various work teams acted independently in daily practice. As a consequence, individual workers owned comparative freedom to act: those compliers freely chose to behave in line with the law, those non-compliers also felt free to do what they wanted
under the circumstance that less possible influence/pressure was created by regulatory or managerial authority.

**Short summary**

In sum, in the discussion of deterrence and compliance, the majority of the interviewed workers identified the project manager as the most probable inspector, while the state authority was not a deterrence resource. Although a high percentage of respondents reported detection probability, sanction probability was perceived as very low, and sanction impact was not obvious. In particular, the data showed that there was not much difference between compliers and non-compliers in the amount of deterrence they experienced/perceived. For observed compliers, deterrence was not a necessary condition for compliance. For observed non-compliers, their violating behaviours were not necessarily motivated due to the absence of deterrence. In general, the data from this study did not supply strong evidence that deterrence was a dominant variable to explain individual (compliance or non-compliance) behaviour. This is not surprising given previous findings where we saw that external enforcement had limited impact on organisational practice and the organisation had a weak influence upon individual workers.

**5. Descriptive Social Norms and Behaviour**

Above, deterrence was not a main variable that explained individual (compliance or non-compliance) behaviour. In practice, construction workers actually had less contact with deterrence resources. This section analyses to what extent social factors impact individual’s behaviour. It is well known that, in China, the majority of the work force in construction industry comprises migrant workers. Some sociological literature has argued that the surplus rural labour force flows to towns and cities normally through the network of relatives, friends, or fellow-villagers (e.g. Wang, et al. 2011; Zhang, Liande. 2010). It then easily brings an assumption: construction workers are inclined to behave in the way most other people do or most other people think should (Cialdini & Goldstein, 2004) within
their tight knit small social network.

This section discusses the social factor in relation to compliance. Following the concept of social norms by Cialdini (cf. Cialdini, 1990, 2007; Cialdini & Goldstein, 2004; Cialdini & Trost, 1998), this study operationalises the social factor by mainly referring to descriptive social norms (‘how others behave’), and seeks to discuss the association between descriptive social norms and compliance behaviour. In the field, dialogue started with an open discussion about how and why an individual acted a certain way and then asked: how about other workmates? The data indicated that, in general, the impact of descriptive social norms upon behaviour performance of individual worker was not as strong as anticipated.

Table 6.6 Workers’ perceived descriptive social norms and compliance behaviour

<table>
<thead>
<tr>
<th>How about other workmates?</th>
<th>Compliance (n=152)</th>
<th>Non-compliance (n=31)</th>
<th>Total N=183</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Others will obey</td>
<td>Someone will violate</td>
<td>Don’t know</td>
</tr>
<tr>
<td></td>
<td>NO.</td>
<td>%</td>
<td>NO.</td>
</tr>
<tr>
<td>Compliance</td>
<td>49</td>
<td>32.2%</td>
<td>73</td>
</tr>
<tr>
<td>Non-compliance</td>
<td>2</td>
<td>6.5%</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>27.9%</td>
<td>89</td>
</tr>
</tbody>
</table>

(1) Social norms and behaviour performance of the observed compliers

For the 152 compliers, 48.1 percent (n=73) indicated that other people might violate the law. They also expressed opinions towards violations in various ways. The first idea held that it was personal choice, for instance: ‘on the construction site, everyone should be responsible for his own safety’, ‘everyone needs to mind your own business’, ‘some behaviours are of course unsafe, but it’s personal choice’, ‘some might violate, because everyone has his own idea and
value. For me, I think it’s a danger not wearing it’.

The second opinion held that people had some understandable or acceptable reasons to violate. For example, ‘they took off safety helmet perhaps because it’s too hot; ‘some people might feel it’s inconvenient to wear helmet or safety rope, ‘in some situations, they possibly think those (safety stipulations) are unnecessary, because they can make judgements about whether it’s a danger or not’. The third idea was that violations just occurred occasionally, ‘such (violating) action does not happen often. It’s not necessary to pay much attention to it’. The fourth opinion, on the contrary, held that similar violations happened very often. ‘It’s not surprising to see the (violating) behaviours’.

In brief, this group of compliers (48.1%, n=73) acknowledged the existence of violation by other workmates, and some even expressed their understanding of such violation as personal choice, but, obviously, they still behaved as compliers. In other words, they made their personal choice of acting in line with the law.

In addition, 19.7 percent (n=30) expressed that they had no idea about how others behaved, for example, as one worker clearly explained, ‘I should only mind my business, I do not care about what others do’. For this group of people, it seemed that they were indifferent to the external world, or maybe even resisted possible social influence.

In general, for about two-thirds (67.8%) of the observed compliers, their compliance behaviours were not necessarily influenced by descriptive social norms. Nonetheless, 32.3 percent (n=49) of the observed compliers reported that other people also complied with the safety law. They normally answered: ‘we are all working in a similar way’, ‘others also behave like me’. In some

sense, such perception might play a positive role of reinforcing/promoting individual's compliance behaviour. But considering that, in the qualitative dialogue, most of the compliers attributed their behavioural choices to personal concern with safety, and none ever referred to the social factor; only after being asked 'how about others', they confirmed that ‘others are like me’, the dialogue implies that the workers put individual willingness first. And of course, they perceived descriptive social norms positively.

In sum, we can see some variations concerning perceived descriptive social norms by the observed compilers: some viewed positive social norms and others did not see compliant social norms and yet resisted it. But in general it was hard to prove that, based on the data in this study, compliance behaviour of individuals was significantly motivated/shaped by descriptive social norms.

(2) Social norms and behaviour performance of the observed non-compliers

Variations also appeared for those observed non-compliers (n=31). On the one hand, about a half of the population (51.6%, n=16) indicated that other workmates did not comply with the law. They typically expressed ‘we all might be similar (i.e. behaving as a violator)’. As the following dialogue shows, 220

(The prior dialogue was about how this scaffolder did his job...) I: Given that you often need to work in high places, do you take any measures for safety protection?

Worker: You won’t feel dangerous if you just get used to it.

I: I noticed that you didn’t use a safety rope.

Worker: No, I didn’t. It depends on the working conditions. Like the place we are standing, it's not high, and there is no need to wear a rope, and it’s bothersome. You need to wear a rope only when working at a high or risky place.

I: How about your workmates? Do they use a rope or not?

Worker: (They are) similar to me. Wearing it sometimes, or not

220 Interview W-A25.
wearing it sometimes.

For this group of respondents, descriptive social norms, i.e. other people did similar (violating) thing, might play a role in influencing the decision-making of the individual. Here again some asymmetric relation between the variable and behaviour emerged (Yan, Van der Heijden, & Van Rooij, 2015): for the majority of the observed compliers, their compliance behaviours were not necessarily influenced by descriptive social norms, while for some non-compliers, such a social norm might have an influence. But the prior discussion of inductive dialogue also showed that people (non-compliers) made decisions based on personal preference (i.e. operational cost-benefit analysis). So a possible situation might be that: personal preference and descriptive social norms (i.e. we are all similar) functioned together, or people actually made a decision mainly based on his personal willingness, while descriptive social norms functioned as some contextual factor (like deterrence): people just felt free from social pressures when in violation.221

On the other hand, 41.9 percent of observed non-compliers (n=13) seemed to deny the possible impact from descriptive social norms. They generally answered 'I don't know what others do'. As the following dialogue shows, 222

I: So you always connect electricity from that distribution box?

Worker: Yes. It's actually quite easy. Besides, there are only two electricians in this project. How can you always wait for them? It's a waste of time.

I: How about others? They also connect the line by themselves.

Worker: I don't know. Maybe someone is afraid? I don't know. For me, it's not dangerous. Anyway, safety is controlled by the individual.223

In another interview, the worker explained similarly, I'm just

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221 This case was different from Cialdini (2007) who found that when asking people about why they conserve energy, they provided all kinds of reasons but not the behaviour of others, and when he examined how they responded to behaviour of others, this was the strongest influence.
222 Interview W-A61.
223 Interview W-A38.
working under a preventive shelf, it's unnecessary and inconvenient to wear a helmet. If working elsewhere, I will wear (it)’ (How about other workers?) ‘People must have their own reasons to wear or not. How can I tell?’

The answers from this group of observed non-compliers, however, implied that descriptive social norms might not have a significant impact upon individual behaviours as anticipated. In brief, we saw some variations in terms of descriptive social norms in relation to non-compliance. Some confirmed that they all behaved in a similar way, while others were rather vague about what others did.

(3) Data implies existence of social distance

Further, about one-fifth of compliers and two-fifths of non-compliers all reported that they knew little about how others behaved. In addition, almost half of the compliers indicated that violation by others did not necessarily affect them. In other words, for about two-thirds of the total population in this study, there was no strong connection between personal behaviour and descriptive social norms. Of course, social norms may function largely unconsciously (cf. Cialdini, 1984, 1987, 2001), and my data from the interviews just did not identify it. Here, I would address another fact deriving from the fieldwork: there might exist some social distance among individual construction workers.

As mentioned in Part II, the majority of the labour force in construction industry are migrant rural workers. Migrant workers in China generally have some particular types of social network. They leave the ‘acquaintance society’ in the countryside, where close interpersonal relationships are shaped by blood and geographical elements. But in the city, they fail to enter into a relatively formal

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and fixed organisational structure, partly because the country carries out a dual administrative/governance model towards the urban and the rural (the identify of migrant worker still belongs to the rural), and partly because migrant workers often change jobs or places (especially for construction workers, they change more frequently due to the construction projects) so that many migrant workers are not staying in a fixed or stable social network.

Accordingly, when we discuss to what extent social norms have an influence upon individual, we cannot ignore this social context. In the pesticide compliance study of Chinese farmers by Yan (2014), vegetable farmers might be concerned with deterrence from 'the third party', or concerned with what other farmers do, because they generally stay in a stable life of the acquaintance society. In the study of tax compliance of Chinese lawyers by Van Rooij (2015), behaviour choice of the lawyer can be influenced by the culture and institutions of the law firm. We should realise that lawyers, as a white-collar employee, generally stay in a formal and fixed organisational structure. Also they are highly professionalised and socialised. But in my case, it is a question to what extent those construction workers can stay in a stable social relationship as well as social disciplinary mechanism. As Part II revealed, a construction project is fragmented internally, and fragmentations exist not only between the managerial layer and operational layer, but also between different work groups at a parallel level. So, maybe social norms still influence the individuals, but probably in a complicated way. And regrettably, it cannot be fully explored in this study. However, recognition of social distance in practice contributes to understanding why a great number of interviewed workers reported that they paid no attention to others. In this sense, the case study here is more likely to echo the findings by Gino, Ayal and Ariely (2009). They argued that an important factor might influence the degree to which people are affected by the behaviours of others around them: the degree to which they identify with others. When identification is strong, the behaviours of others will have a stronger influence on observers’ social norms. But this
was not the case in my study owing to social distance.

6. Behaviour and Duty to Obey the Law

The third variable in this study was ‘duty to obey the law. As some literature pointed out, normative belief of duty to obey might be motivating compliance (Tyler, 1990; Winter & May, 2001; Vandenbergh, 2003; Parker & Nielsen, 2011). This section looks at how the interviewed workers perceived such duty to obey, and how such perception was linked to actual behaviour. The study operationalises it following Vandenbergh (2003): it is a personal belief that one should obey legal rules regardless of the content of the rules or circumstances at hand. In the interview, the researcher asked the interviewed worker ‘do you agree with the following statement: people should obey laws, even if it is a bad law, or even if it is not enforced?’225 And the researcher also used some follow-up questions to ask for further comments. The data indicated that, in general, there was no clear association between this variable and actual behaviours. Moreover, we should reconsider to what extent this variable can be tested/proved correctly in the empirical study.

(1) There was not much difference concerning answers between compliers and non-compliers.

Table 6.7 Workers’ perceived duty to obey the law and compliance behaviour

<table>
<thead>
<tr>
<th>Statement: “Do you agree that people should obey laws, even if it is a bad law, or even if it is not enforced?”</th>
<th>Agree</th>
<th>Disagree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO.</td>
<td>%</td>
<td>NO.</td>
<td>%</td>
</tr>
<tr>
<td>Compliance (n=152)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>55.9%</td>
<td>41</td>
<td>26.9%</td>
</tr>
<tr>
<td>Non-compliance (n=31)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>45.2%</td>
<td>7</td>
<td>22.6%</td>
</tr>
<tr>
<td>Total N=183</td>
<td>99</td>
<td>54.1%</td>
<td>48</td>
</tr>
</tbody>
</table>

225 This measure was developed by Van Rooij, Benjmin and also used in Yan’s study (2015) and in his study of tax evasion (2015).
As Table 6.7 shows, on the one hand, perception of duty to obey could not fully explain why people behaved as compliers: although 55.9 percent of the observed compliers gave a positive answer to statement, 26.9% percent gave opposite remarks, and 17.2% did not give a clear answer.

On the other hand, perception of duty to obey neither fully explained why people behaved as non-compliers: 45.2 percent of the respondents also gave a positive answer to statement (but behaved as non-compliant), and 32.2 percent indicated a vague idea about the question.

Moreover, there was not much difference concerning answers between compliers and non-compliers. In both compliance and non-compliance cases, the presence of positive answer was about half of the population, about one-fifth answered negatively. But with a similar percentage, some tended to comply with the law, while others did not.

In general, the data in Table 6.7 did not show a clear connection between the proposed variable and actual behaviour. There were cases in which negative views still yielded compliance while positive views yielded non-compliance. In other words, the duty to obey did not successfully explain variations of individual choice of compliance or non-compliance.

(2) It implies some discrepancy between abstract belief and contextual situation.

Further, the qualitative interview revealed that there might be some discrepancy between abstract belief (how people perceive such obligation) and contextual situation (how people behave). Except 11 workers who had explicitly explained their compliance practice by referring to it as ‘required by some rules’ at the beginning of interview, for others, it seemed that, in the dialogue, the interviewed workers did not necessarily link their answers to legal duty with their actual behaviours. For instance,

- Dialogue with a rebar fixer (observed complier) who gave a
positive answer: 226

I: Do you agree with the following statement……?  
Worker: Yes, I agree. All laws must have been examined by the state. No bad law will be published.

I: You have such a belief, so you always wear helmet?
Worker: Oh, this action (i.e. wearing helmet) is just for self-protection, falling things might hit the head.

-Discussion with a carpenter (observed complier) who gave a negative answer: 227

I: Do you agree with the following statement……?  
Worker: Not really. I think some small aspects are unnecessary to regulate, for example, to issue a fine for not wearing a helmet. This job is not easy.

I: But I see that you are wearing helmet.  
Worker: It’s because personally I’m afraid of being hurt by a falling object. It is a personal choice for self-protection.

-Discussion with a carpenter (observed non-complier) who gave a positive answer: 228

I: Do you agree with the following statement……?  
Worker: Yes, I agree. We just need to obey laws even if it is bad. Then if something bad happens, you can say that I’ve already done things the law requires. Otherwise, you cannot make sure of the result.

I: Then why you did not wear a helmet?
Worker: you mean this (behaviour)? Oh, this has nothing to do with the law. I just took it off for a while.

-Discussion with a rebar fixer (observed non-complier) who gave a negative answer: 229

I: Do you agree with the following statement……?  

226 Interview W-A10.  
227 Interview W-A07.  
228 Interview W-A03.  
229 Interview W-A13.
Worker: Not really. I think the law should be people-oriented (‘yi ren wei ben’) [which means the law should be made fully considering people’s needs and interests—explained by the researcher]

I: So you connected electricity without permission, because you don’t think the law should be obeyed?

Worker: Ah, this (action) is different from what I said. I connected electricity by myself because it’s quite easy to do. Concerning your question, I mean the law should protect people’s actual interests. They are different things.

From these dialogues, we can see that some workers did not link their perceptions of duty to obey the law with their current behaviours. Of course, it might be argued that variations in action derive from limited knowledge of law (cf. Kim, 1999), which might be true. But here I would argue that, variations in my data may imply a distance between abstract moral belief and actual behaviours at the micro-level. \(^\text{230}\) Personal moral duty to obey the law generally belongs to an abstract level of perception. Not only for the interviewed workers in this study, but also for most of us, if asked whether you perceive a duty to obey the law, I guess that a great number of people would agree, and I believe people do express a true belief at the moment. However, such belief does not always link to specific behaviour, because actions in practice might be subject to various situational conditions.

In a study of sanctions for cartels conducted in Australian business, Parker (2012) argued that business people’s knowledge about the law was less important than their relationship with (or distance from) the law. So it is important to understand people’s experience of the law. This argument also partly supported the findings in my study: the workers’ answers indicated that they did not link behaviour with the law. Their perceptions about legal duty

\(^{230}\) This finding may also be a criticism on the often used theory of planned behaviour by Ajzen (1991, 2002; also Ajzen & Fishbein, 1977). It belongs to the domain of social-psychology and this paper thus does not go further.
did not derive from their experiences or interactions with the law. Discrepancy then appeared. Accordingly, my data could not successfully prove a connection between duty belief and behaviour.

In brief, empirical data revealed some variations about individual’s perceptions of duty to obey the law. Moreover, there was not much difference concerning answers between compliers and non-compliers. In addition, it may imply some challenges in actually measuring a perceived duty to obey the law, and proving how moral belief interacts with people’s experience in practice.

7. Discussion: individual process for understanding safety compliance

The third part of this book explored safety compliance practice of the individual worker in the selected construction projects, who is legally the object of state regulation as well as of organisational self-regulation. It explored how individuals within the organisation behave, and what factors/conditions contribute to shape such behaviours as well as how possible empirical findings in this part could help to develop our understanding for the prior two parts (i.e. regulatory enforcement process as well as organisational compliance process), and to develop understanding for the overall research of business compliance.

The study focused on actual compliance of the individual, and adopted both inductive and deductive methods to collect data: it started with an observation of specific behaviour, and qualitative interviews were conducted from inductive open dialogue where the interviewed workers explained their behaviours in their own ways. Subsequently, the respondents were also asked some semi-structural questions which served to measure three variables in relation to compliance. Adoption of inductive and deductive analyses allowed for both testing some existing theories and discovering new ideas.

The empirical data generally showed that individual’s behavioural decision was greatly influenced by a broader operational cost-benefit analysis: what is beneficial or not. Few referred to
punishment or behaviours of others, and no one had strong moral
tones. The study then provided some findings for understanding
compliance and enforcement:

(1) Compliance due to personal choice. This study presented a
kind of case that how individuals make choices outside the context of
enforcement and social norms. The data showed a type of
private-dominant logic of action: to comply with the law was
motivated by the value of the individual—personal safety, while the
practice of non-compliance relied on those most familiar, convenient,
or practical ways of thinking and acting. In general, individuals made
some broader rational choices. Some literature examined compliance
as an amoral rational choice (for example, Kagan & Scholz, 1984;
Becker, 1968; Winter & May, 2001). However, my study showed that
such a choice was not so much about deterrence or shame or duty,
but from operational costs and benefits in daily life: the benefits or
costs of safety behaviour, and benefit of violating practice. This
immediate and practical calculation of costs and benefits might be
overlooked in regulation and compliance studies.

Moreover, this was the case when the law was in line with
personal interests: safety concerns. Of course this also had a lot to do
with the type of rule: these were safety rules meant to target the
workers and help them, so there was a win-win, namely that workers
will be safer if they comply. Accordingly, it brings forth some policy
implications: voluntary compliance or a high level of compliance
performance might be achieved as long as the core value and interest
established by the law are in line with the value and interest widely
agreed or accepted by the public. In this sense, the popularisation of
law should not be confined to the textual spread of legal knowledge,
or the blind propagation of abstract value of the law. Legal norms,
more or less, could really enter into the world of the actors by virtue
of various mechanisms of social norms and personal norms. Taking
the Ban of Drunk Driving in China as an example, the rules have
functioned promptly and effectively since enacted. It was not just due
to strong legal deterrence at the beginning, but because the danger of
drunk driving (disclosed by media reports and legal cases) produced a strong resonance in society and with the individual. The public was thus willing to constrain the behaviour of the self, condemn the irresponsible, and have faith that deviance could be regulated effectively.

This study contributes by adding an empirical finding by understanding compliance (non-compliance) as an individual choice. It also draws attention to how to enhance compliance performance of the individuals whose behavioural choices are greatly affected by personal factors. The modern risk society (Beck, 1992; Adam, Beck & Van Loon, 2000) has high expectations for regulatory laws. But, besides the strategy of strong enforcement and deterrence, it might also be wise to develop policy of legal education that can substantially draw from the concerns of the individual, which are more likely to motivate respect for rules and behaviours in accordance with the law.

(2) **Compliance without enforcement.** The study presented a legal phenomenon, that is, in the field of social life, the practice of complying with the law was not necessarily linked to implementation of legal norms. Compliance existed without enforcement. Looking at the practice of construction workers, they had few contacts with the enforcers, and many were rather vague about possible deterrence (for example, who the inspector is, detection probability, sanction impact). They even did not necessarily link personal belief about law to actual behaviours in practice. The real influence that laws, norms or punishments have upon the workers was not typical. Legal risk did not have a strong influence on the workers’ risk perceptions. As a result, behavioural choice of compliance or violation was not necessarily the output of law enforcement.

This empirical finding then has some practical implications for law enforcement policy. In general, strategies of simply strengthening legal deterrent effect or enhancing law enforcement do not

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231 In theory, they might be indirectly influenced by enforcers, when their managers experienced deterrence by law enforcement and therefore the managers stimulate the workers to comply. But in my research, this was not the case.
necessarily achieve the desired policy goals. For instance, in the study of banning smoking in American states, Kagan and Skolnick (1993) found cases of compliance without enforcement, which occurred when legal enactments can transform norms that are only partly or tentatively institutionalised at the social level into more authoritative and widely institutionalised social norms. So it may be advisable for a regulatory agency to differentiate between conditions that shape compliance performance, in view of different action logic in different regulatory fields. It may help to allocate enforcement capacity (e.g. resource, time, energy) more strategically to reduce the cost of law enforcement but also promote compliance. For instance, as scholars pointed out, when identifying operational costs, and benefit and deterrence are at play, it is helpful for a regulatory agency to target those situations in which considerable enforcement activity is necessary as the operational costs and benefits of compliance are negative, while in less critical situations, the agency might stop redundant enforcement (see: Yan, et al., 2015).

(3) Individual compliance as a part of compliance process of the organisation. This empirical study revealed that for many interviewed workers, to comply with the safety law or not was a kind of individual choice. However, such autonomy does not necessarily mean that the individual workers have great power. On the contrary, they might stay at a low level of the hierarchy of the construction organisation (Gray & Silbey, 2014; Gray, 2009). Consequently, the analysis of how and why individual workers behave in a certain way should be added to the overall understanding of compliance process of the organisation.

When examining the individual’s compliance practice in the compliance process of construction business, some relational distances emerged: regulatory distance, management distance, as

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232 Theoretically there is only a rough conception of relational distance currently. Oliver Ibert conducted a review in his study: Ibert, Oliver. 2010. "Relational distance: Sociocultural and Time-Spatial Tensions In Innovation Practices", Environment and Planning. A. Vol. 42: 187-204. However, this study developed its own categories and understanding based on the empirical materials.
well as social distance.

(i) Regulatory distance. Construction workers did not have obvious pressures from external safety inspection since they rarely had contact with the state enforcer. This was in line with studies in other fields (Gray, 2006).

(ii) Management distance. As discussed in Part II, a construction project is internally fragmented. The workers were not affiliated with the construction company. The managers of the project also hesitated to keep close contact with the workers. In this individual study, besides interviews about the specific behaviours, the researcher also asked each respondent to describe his occupational environment as well as management status of the current construction project. Of all 183 workers, only 24 persons pointed out one or two problems, for example, ‘the construction site is messy’, or ‘the preventive facility is in poor quality’. Thirty-one workers were unable to give a clear answer, while the rest of the interviewees answered: ‘all of the building sites are similar’. This implies that individual workers actually do not show much concern with the environments surrounding them. Management distance exists within the organisation.

(iii) Social distance. As a migrant worker, people working on the construction sites may generally have a long distance from the society where they are staying. Due to the identity of ‘rural people working in the city’, as well as the nature of work that needs to change places or affiliations a lot, construction workers are generally unable to stay in a stable social network, or get strong social supports from around (e.g. labour union, associations). In the meantime, even within a construction project, fragmented internal structures also cause a situation where workers in different work teams have no chance of becoming familiar. Social distances exist between the worker and his surroundings.

The existence of these relational distances reminds us: seemingly, the construction workers have less general fear of state authorities and employers, have less pressure from social network,
and have more freedom to make decisions about individual behaviours. However, these may imply that the individuals have a disadvantage: they, to some extent, are isolated from formal systems so that have no choice but to take responsibility for themselves and make decisions individually. This is an unintended social consequence (Gary, 2006).

Furthermore, the existence of relational distances also implies that, from a bottom-up perspective, an individual worker is unable to function as the whistle-blower within the organisation (Feldman & Lobel, 2011), as they lack sufficient knowledge, capacity as well as motive and willingness to act as monitor or pusher. Linking this to the discussion in Part II, where, with a top-down perspective, we saw that managers, more or less, also attributed safety violations as well as management failure to relational distance with the workers. This appears to be a deadlock, which may worsen the work environment and be unfavourable to the overall compliance practice of the construction business.

(4) Methodological implications. This study shed some new insights for compliance studies. Firstly, it focused on actual compliance behaviours, which has not been fully employed in compliance studies due to some methodological limitations. Empirical data was collected mainly through participant observation and qualitative interviews. The whole analysis in this chapter benefited from such methodology, as it created a chance to verify what really happened, whether the assumed connection between measures (i.e. variables), data and actual behaviours existed (Parker & Nielsen, 2009b).

Secondly, a ‘dialogue approach’ was employed in the interview. In other words, the researcher had conversations with the interviewees in an open way. As Van Rooij (2015) remarked, the dialogue way of in-depth qualitative interviews allows for the richness of data necessary to understand the perspectives of the interviewed in the most open and truthful way.

Third, due to unique access in the field, and adoption of in-depth
 qualitative interview technique, it was possible to employ both inductive and deductive methods within one study, to analyse what hypothesised factors (variables) influence compliance and learn new things from the perspectives of the interviewed. Moreover, the deductive findings and inductive findings could be verified, interpreted, as well as supplement each other.

In general, the adoption of the above mentioned approaches allowed for uncovering some new things beyond prior assumptions, for obtaining some clues that pave the road for in-depth analysis, and for capturing contextual and background information to understand the issues. In the compliance-exogenous research, when recognising and analysing various variables that could explain compliance, researchers might need to always ask if they missed some key things during the process of data collection as well as the process of data analysis.

Of course, the indicated research methodology in this study itself inevitably has limitations: focusing on actual compliance behaviour did not necessarily overcome the risks of data bias. In addition, the open interview did not necessarily overcome some risk that the interviewed workers just gave an immediate response or told the researcher some direct feelings without going in-depth. Besides, this study can be methodologically questioned as it had a limited sample, targeted limited behaviours, and measured limited variables, which probably just created some partial and limited understandings and interpretations of compliance, although this problem exists in any type of empirical data collection.

For future compliance research, we can probably benefit from more empirical studies that attempt to link analysis to actual practice, from studies that innovatively employ both inductive and deductive methods, and from studies that are able to conduct lengthy investigation on the experience or background of the studied actors in order to verify more valuable elements to explain compliance.