



# Good methods for good farmers? Mapping the language of good farming with “diligent farmers” in Hong Kong

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## ABSTRACT

This paper explores two questions facing the use of the concept of the ‘good farmer’ in rural studies: what are the most appropriate methods to understand good farming; and what is the relevance of the concept in non-western countries? The paper explores these issues in the context of pig farmers’ biosecurity decisions and daily disease management practices in the New Territories of Hong Kong. Specifically, we argue that to broaden the relevance of the good farming concept, we need to devise specific methodologies to capture the relational practices among farmers, non-human life forms and substances that construct the ‘good farmer’ meaning in different cultural contexts. Firstly, we consider the language of ‘good farming’, its possible translations, potential meanings and alternative phrases used amongst Chinese-speaking farmers. Secondly, we develop a farmer-oriented methodology to analyse how these locally specific translations of good farming are constructed and used in relation to the management of animal disease. Drawing on 12 farmers’ mapping and their interview discussion, we develop a narrated mapping methodology in which the creation of farm maps acts as a device to illustrate and talk about biosecurity and good farming. This visual method triangulates the graphical data with subsequent interview data of farmers’ maps. From this we show how the idea of the ‘diligent farmer’ has much stronger resonance in Hong Kong than good farming. Farm maps identify specific symbols of diligence, highlighting values of productivism, environmentalism and social relationships. The mapping methodology also reveals the performative work involved in becoming a diligent farmer. In conclusion, the paper considers the broader methodological implications for the concept of good farming, suggesting that cultural linguistic differences need to be recognised in the concept, and arguing for further methodological advancement.

## 1. Introduction

The concept of the ‘good farmer’ and ‘good farming’ has been used to explore farmers’ behaviour and decision-making across a range of different farming practices (see [Burton et al., 2020](#)). The increasing popularity of this concept, however, raises two important questions. The first is methodological: how can researchers best elicit accounts of who is a good farmer or what counts as good farming? Surprisingly, there has been little methodological discussion of the best means to study good farming. [Burton et al.’s \(2020\)](#) detailed explanation of the concept provides a helpful guide to the theoretical heterogeneity of good farming, but it says much less about potential methodologies. Whilst there has been some limited discussion of useful interview questions ([Sutherland, 2021](#)), debate and critique of the kinds of methods used in analogous concepts such as ‘farming styles’ ([Vanclay et al., 2006](#)) is not

present within the good farming literature. The impression is that a set of semi-structured qualitative interviews is enough to investigate and write about the good farmer. This paper, by contrast, seeks to encourage a wider methodological debate by proposing and examining the use of a specific visual method to analyse good farming.

The second question is geographical: to what extent can the concept of the good farmer be meaningfully applied to countries and agricultural contexts other than the western countries in which it was developed? As the architects of the concept themselves recognize, the focus of good farmer research has primarily been in the global north, not least because of the cultural significance of productivist agriculture in these locations ([Burton et al., 2020](#)), whilst also understanding that what counts as good farming is based on ‘social and colonial exclusions, the destruction of many ways of knowing [and] the radical flattening and erasure of nuance, difference and contextual existence’ ([Burton et al., 2020](#)). This

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paper therefore joins their call for a broader search for and understanding of good farming in other locations and the need for specific research bridges that can traverse boundaries.

The purpose of this paper is to explore these questions, through an analysis of farmers' biosecurity decisions and animal health practices in Hong Kong. Specifically, the paper develops and applies a farmer-led narrated mapping methodology. Drawing on previous approaches to participatory mapping in risk management (Klonner et al., 2021) and participatory epidemiology (Catley et al., 2012), we develop a narrated mapping methodology to elicit information on how ideas of good farming are connected to the relational configuration of farms in Hong Kong. We begin the paper by briefly reviewing the language of good farming, before discussing the methodological instruments associated with the good farmer concept. After describing our narrated mapping methodology, we show how its use with 12 farms in Hong Kong allows us to explore meanings of good farming and its relationship to the material, spatial and sensory aspects of biosecurity. In doing so, the paper shows how rather than good farming, the idea of diligence and the diligent farmer has much stronger resonance in Hong Kong than good farming. Farm maps identify specific symbols of diligence, highlighting values of productivism, hard work, environmentalism and social relationships. The methodology also reveals the performative work involved in becoming a diligent farmer. In conclusion, the paper considers the broader methodological implications for the concept of the good farmer, suggesting that cultural linguistic differences need to be recognised in the concept, and arguing for further methodological advancement.

## 2. The geography of good farming

The concept of the 'good farmer' is a useful lens to examine how farmers' identities and behaviours are shaped by social norms, symbolic capital and cultural scripts. Broadly, the values of good farming include the capability to produce healthy animals (Commandeur, 2006; Saunders, 2016), productivity and growth (Burton and Paragahawewa, 2011; Egoz et al., 2006), maintaining a clean and tidy environment (Oreszczyn and Lane, 2000), the value of hard work as opposed to bureaucratic paperwork (Silvasti, 2003) and the practical skills of farming (Escobar and Demeritt, 2017). Good farmers may also be recognizable by their participation in local community activities and social practices such as being a good neighbour (Enticott et al., 2021a).<sup>1</sup> One challenge in defining good farming is its lack of 'conceptual ownership' and theoretical heterogeneity (Burton et al., 2020). In short, the idea of the good farmer is neither theoretically nor conceptually distinct. Whilst the emergence of good farming studies is often traced back to Burton's (2004) description and use of Bourdieu's concepts of habitus and symbolic capital, other studies predate this birthdate and employ different theoretical tools (Egoz et al., 2001; Oreszczyn and Lane, 2000; Seabrook and Higgins, 1988; Silvasti, 2003). Indeed, the very definition of good farming bears similarity with another concept – farming styles – whose popularity has waned whilst good farming's has risen. Thus, whilst Burton et al. (2020) define the good farming approach as concerned with a 'cultural repertoire of normative and strategic ideas about what constitutes good practice', so does Van Der Ploeg (1993) define the farming styles approach as concerned with a 'cultural repertoire [of] normative and strategic ideas about how farming should be done'.

The geography of good farming research is less diverse than its theoretical underpinnings. Research using the theoretical tools of good farming can be mainly found across Europe, North America, Australia

and New Zealand. There is some evidence that these and similar concepts are being applied in the global south (see for example, Chan and Enticott, 2019; Veisi et al., 2022), but the vast majority of studies are located in the global north. Nevertheless, good farming research focuses on a range of different kinds of farmers, including small-scale crofters (Sutherland and Calo, 2020) to farmers focused on production at scale (Franklin et al., 2021; Haggerty et al., 2009). The focus of much good farming research has been on farmers responses to reforms to productive agriculture, particularly in relation to agri-environmental schemes (Burton, 2004; Thomas et al., 2019). However, more recently studies have also addressed other issues facing farmers such as biosecurity and animal health (Enticott et al., 2021a; Naylor et al., 2018; Shortall et al., 2018).

### 2.1. The language of good farming

The growth in the application of good farming raises two methodological challenges. The first relates to the very words good farming, and the extent to which it can be translated given the preponderance of good farming studies based in the global north. In short, are the very words 'good' and 'farmer'/'farming' understood in the same way in different places? In fact, this linguistic challenge applies to rural studies as a whole, with some of its key words and concepts struggling to maintain their meaning and relevance in different cultural contexts. Halfacree (2008) for instance refers to the extent to which the concept of counterurbanisation can 'travel', such that its application has become 'geographically selective and biased'. Similarly, the word rural itself has long been held to be problematic, performing a 'terminological duplicity' such that 'our thinking is snared by our own words' (Copp, 1972). More recently, Wang (2022) has pointed to the performative role of the language of the rural and its volatility. Similarly, Gkartzios et al. (2020) point to the diversity of terms used in Greece and Japan that broadly align with the anglophonic 'rural'. The danger, they argue, is not so much whether rural, like other academic and geographic terms is 'untranslatable' (Lomas, 2018), but the way the uncritical use of anglophonic terms effaces nuance, affecting the quality of debates (Gkartzios et al., 2020).

The problems translating the rural also face words such as farming. Gkartzios et al. (2020) point to Lowe's (2012) discussion of the false equivalence between the English 'farmer' and French 'paysan'. In this sense, if 'le bon paysan' were to exist, its meaning would likely differ to the English 'good farmer'. In fact, whilst pointing to potential equivalence between 'good' and 'real' farmers in Finnish (Silvasti, 2003) and Belgian research (de Krom, 2017), Sutherland (2021) notes that translational issues are not considered in good farming papers despite the importance of 'situated understanding of the specific terms utilized in interview questions. Thus, despite reviewing good farming research from different European countries, Burton et al. (2020) skirt around these linguistic nuances, choosing not to refer to the 'peasant' despite its cultural appropriateness. Indeed, they argue that the academic popularity of good farming relies in part on not referring to the peasantry: the term is not conducive to a nuanced debate about identity, as well as good farming being defined more by practical actions than thoughts or words (Burton et al., 2020).

In non-western contexts, the language of farming also reveals a diversity of words and phrases that belie any simplistic translation of the farmer. In China the word farmer (*nongmin*<sup>2</sup>/*nongfu*<sup>3</sup>/*nongjia*<sup>4</sup>/*nongren*<sup>5</sup>) can be interpreted as both 'peasant' or 'farmer' (Cheng, 2019; Lou, 2017; Schneider, 2015). Geographical variations also exist: in Hong Kong, for instance, 'Nongfu' explicitly refers to individuals who grow

<sup>1</sup> Burton et al.'s (2020, p.8) description of the concept of the good farmer points to the practices and behaviours both on and off the farm as being important, although research may emphasise on-farm practices. In this paper we consider both aspects, hence our use of good farming and good farmer throughout the paper.

<sup>2</sup> The Chinese word 'nongmin' is written as '農民'

<sup>3</sup> The Chinese word 'nongfu' is written as '農夫'

<sup>4</sup> The Chinese word 'nongjia' is written as '農家'

<sup>5</sup> The Chinese word 'nongren' is written as '農人'

vegetables and fruits (Lou, 2017), but neither would people associate them with farm animal breeders such as pig farmers (*zhunong*<sup>6</sup>) and chicken farmers (*jinong*<sup>7</sup>). More generally, '*nongmin*' may refer to someone living in a rural area. Other farming research reveals that there are different types of linguistic translation of farmers including urban farmers (*dushi nongfu*), organic farmers (*youji nongfu*) and leisure farmers (*jiari nongfu*) (Lou, 2017). In Taiwan, there is a generational difference in using the word farmer: older generations are described as '*nongfu*'; whilst younger farmers like to be described as '*qingnong*<sup>8</sup>', or even '*nunong*<sup>9</sup>' for female farmers, because the term '*Nong Fu*' is regarded as male-oriented (Liao, 2021). In fact, Schneider (2015) identifies at least 13 different categories or uses of *nongmin*, which include a broad occupational use referring to a farmer, but other political and social uses which generally refer to the low status of subsistence farming. Indeed, Cohen (1993) argues that the notion of '*nongmin*' emerged from the Chinese cultural and class division between urban residents (*jimin*) and rural peasants (*nongmin*). The Chinese word of '*nongmin*' is associated with Marxist background and collective production which is more than just a western perception of 'peasants'. Thus Schneider (2015) shows how '*nongmin*' is deployed within Chinese political discourses to define small-scale farmers as an 'agrifood problem' for which further capitalist industrialization is posed as the inevitable 'solution'. Simply put, the translation of good farming to '*hao nongmin*' belies the complexity of the language of farming in Chinese.

## 2.2. Good farming methods

The second question is what are the most suitable methodological instruments with which to explore how good farming identities are constructed. A healthy methodological discussion in applications of good farming is important for four specific reasons. Firstly, as pointed out above, good farming is not a theory in itself, but draws upon a range of different theoretical approaches. Methodological discussions can contribute to debates between these perspectives, helping to either delineate between them, or pointing to similarities. Developing specific methods can also contribute to the application of new theoretical approaches. Secondly, a specific challenge in the good farming literature is understanding the longevity of good farming identities and how they change over time. Beyond longitudinal approaches such as those by Riley (2016) (which are not without their own challenges), addressing this challenge has been limited to theoretical rather than methodological considerations. Thirdly, the normative and moral dimension to good farming research poses a significant challenge to understanding the role of good farming. Good farming may act as a 'moral resource' to deploy within accountability settings like farm meetings or research interviews (Enticott and Vanclay, 2011). Finally, Burton et al. (2020) suggest that non-representational approaches to understanding good farming will need methodological development if they are to represent a fruitful line of theoretical enquiry.

Attending to these methodological challenges is vital for good farming research, but there is little evidence that good farming research has paid much attention to them or sought to develop what might be referred to as a good methodology for good farming. Burton et al. (2020) suggest that good farming research has broadly relied on qualitative methods yet good farming papers rarely provide substantive details of the methods used. Research seeking to show longitudinal changes in good farming tend to broadly rely on documentary analysis, oral history and narrative interviewing (Cusworth, 2020; Haggerty et al., 2009; McGuire et al., 2013). Riley (2016) supplements this with additional ethnographic observation. More recently, Sutherland (2021) has sought

to stimulate methodological reflection on good farming by considering what an interview about good farming should look like. In examining appropriate 'good questions' for 'good farming', Sutherland suggests that questions about what constitute a good day may be more effective in eliciting affectual information relating to farming skills. Nevertheless, as Burton et al. (2020) reflect, the continued reliance on interviews in good farming research conflicts with the visual nature of good farming, arguing that the development of visual methods could represent a step forward in good farming research.

## 3. Visual methods as a good farming methodology

If visual methods represent one future for good farming research, what are they? Burton et al. (2020) give no indication as to what these methods might be. Others have pointed to farmers' use of social media to visually represent their work and constitute good farming identities (Riley and Robertson, 2021, 2022). Other candidates include the use of drawing, photography, film and computer games: Sutherland (2022) for instance explores how computer games enact particular narratives of farming. Another way could involve employing the principles of participatory mapping. Participatory mapping sits within the range of techniques commonly used in approaches to rural development (Chambers, 1994) and participatory epidemiology (Catley et al., 2012). The general aim of participatory mapping is to 'make visible the association between land and local communities by using the commonly understood and recognised language of cartography' (International Fund for Agricultural Development, 2009). For example, Basupi et al. (2017) use participatory mapping with pastoralists in Botswana to reveal traditional land tenure patterns not accounted for in official maps, and the effects of new agricultural policies upon livestock grazing. Similarly, participatory mapping has been widely used in attempts to help prevent and manage the impacts of environmental hazards such as flood management to incorporate community perceptions of flooding within geographical information systems (Klonner et al., 2021).

Techniques used in participatory mapping vary considerably. Some methods may use formal representations of space – scaled maps, 3D models and geographical information systems – to elicit comments from the public which can be used to further refine these representations. Other approaches such as 'mental mapping' and 'sketch mapping' (Boschmann and Cubbon, 2014) are not restrained by formal representations and allow participants to explain and describe phenomena in their own way, choosing to emphasise what they consider to be important and defy conventional cartographic procedure (Kitchin and Dodge, 2007). In practice, these forms of 'hands-on' (International Fund for Agricultural Development, 2009) mapping can take different forms, and confusingly, be described by different terms. Boschmann and Cubbon's (2014) review of sketch mapping points to the similarities with mental mapping, the key difference being that sketch maps tend to be cartographically accurate (Brandt et al., 2020) whilst mental maps are free-form drawings on blank paper with little official cartographic reference (Boschmann and Cubbon, 2014). In general though, these methods seek to use mapping as a means to unpack how individuals make sense of space, navigate through it, and make decisions. The drawing of maps helps reveal these spatial perceptions, as well as commonalities between different people. In doing so, these mapping activities can also elicit feelings, emotions and meanings towards the places and the practices depicted. Importantly, mapping activities are supplemented with other research methods, such as interviewing, focus groups, and photography. In this way, mapping acts as a device to elicit 'spatial narratives that can represent the diversity and complexity of people's lived experiences' (Boschmann and Cubbon, 2014).

The principles of these mapping methodologies can be a valuable addition to exploring good farming across geographical and cultural divides, particularly in relation to the challenge of animal disease management and biosecurity. In studies of animal disease and biosecurity, participatory mapping has already been used to help determine

<sup>6</sup> The Chinese word '*zhunong*' is written as '豬農'

<sup>7</sup> The Chinese word '*jinong*' is written as '雞農'

<sup>8</sup> The Chinese word '*qingnong*' is written as '青農'

<sup>9</sup> The Chinese word '*nunong*' is written as '女農'

the incidence of livestock disease (Bett et al., 2009), and assess farmers' perceptions of the geography of disease risks (Enticott et al., 2021b). Indeed, given that mapping is a fundamental tool in epidemiological studies of animal disease, this methodology should resonate with all stakeholders. Thus, in the context of this paper, mapping can generate a picture of human-animal interactions through showing verbal and graphical descriptions of material - and emotional - engagements with animals in pig farmers' daily biosecurity practices. Mapping therefore acts as an 'inscription device' for the dissemination of a particular 'disease story' and its related biosecurity practices. In doing so, mapping exercises can also reveal farming scripts and symbols that define what it means to be a good farmer.

We developed a narrated mapping methodology<sup>10</sup> to explore the connections between farm biosecurity and good farming. Research was undertaken from January to February 2017, involving twelve Hong Kong pig farmers<sup>11</sup> who were recruited to take part in the mapping exercise with the help of the Hong Kong Pig Farmers Association (see Table 1). Participating farmers had been raising pigs for more than 16 years and were aged over 50. In HK, pig farm businesses are family-based and use indoor industrialised production methods to raise around 1500 to 6000 pigs, which may be housed in two-floor farmhouses. Following an explanation of the project aims and agreement to participate, the researcher visited their farms. The mapping activity was conducted using two guiding questions: 'Can you draw a map to tell me about your farm<sup>12</sup>?', and 'Can you use drawing to illustrate the current disease prevention and control (i.e. biosecurity) measures you adopted on your farm in your map? Can you use the map to explain the reason of adopting these measures<sup>13</sup>?' An A4-sized sheet (i.e. 21 x 29.7 cm) of paper was given to farmers to draw their response to these questions. On completion of the map, farmers were asked to narrate their map and the researcher explored the textual and graphical representations on the map using follow up questions. For instance, "can you talk more about why you drew a pair of boots and a needle on your map?"

At the end of the exercise, each map was photographed. Discussions of the maps were audio-recorded and transcribed. Thematic analysis (of maps and transcripts) in NVivo was used to understand farmers' lived experiences and disease events, and identify specific themes relating to good farming. For the purpose of this paper, however, our analysis is illustrative, rather than exhaustive and focuses on two farmer-drawn maps (FM09 and FM12),<sup>14</sup> drawing on comments from other participating farmers to elaborate specific issues where necessary. Fig. 1 shows the farm map drawn by Mrs Li (pseudonym, FM12). Her pig farm is regarded as one of the largest-scale industrial pig farms in HK, housing more than 5000 pigs in 8 ha of private land, which she has run for the past 40 years. Fig. 2 shows the farm map drawn by Mr Fong (pseudonym, FM09). He owns an industrial pig farm, where he has been raising pigs for more than 29 years. In what follows, we highlight the methodological contribution of narrated mapping to good farming, and its translation within different cultural contexts.

<sup>10</sup> Please note that as our research is qualitative in nature, the concepts of validity and reliability have a different meaning. Indeed, the purpose of the paper is not to demonstrate representativeness and the like common to quantitative research, but to explore the linguistic reliability of a key concept in rural studies, that of the good farmer. In that sense, the paper as a whole is an investigation of reliability rather than reliability being a component of methodology.

<sup>11</sup> In 2017, there are 43 licensed pig farms still operating their businesses in Hong Kong.

<sup>12</sup> The Chinese translation of the first guiding question: 可否請你畫一張圖來形容一下你的農場是怎樣?

<sup>13</sup> The Chinese translation of the second guiding question: 請畫出你的農場正採用甚麼疾病防控(即生物安全)措施呢?可否用圖畫表達採用這些措施的原因?.

<sup>14</sup> The selection criteria of these two farmers are based on they were representatives of large farms and typical pig farmers in Hong Kong.

**Table 1**

Farm characteristics of research participants.

Map ID	Gender	Pig types	Herd size	Year in pig raising	Approximate Farm size (Square feet)
FM01	Male	Landrace, Duroc and Large white	1500	22	20,000
FM02	Male	Landrace, China hybrid 1 (Duroc + Yorkshire)	2500	28	35,000
FM03	Female	Landrace, Duroc and Large white	2500	29	38,000
FM04	Male	Landrace, Duroc and Large white from the US	2000	30	30,000
FM05	Female	Landrace, Duroc and China hybrid 1 (Duroc + Yorkshire)	1500	30	30,000
FM06	Male	Landrace, Duroc, Large white and Berkshire from Taiwan	2000	33	28,000
FM07	Male	Landrace, Duroc, Large white and Berkshire from Taiwan	1500	28	33,000
FM08	Female	Duroc, Large white and China hybrid 2 (Duroc + Yorkshire landrace)	4000	32	65,000
FM09	Male	Duroc, Landrace and Large white, and China hybrid2 (Duroc + Yorkshire + Landrace)	4500	29	63,000
FM10	Male	Landrace, Duroc and Large white, and China hybrid 1 (Duroc + Yorkshire)	2500	35	75,000
FM11	Male	Landrace, Duroc and Large white	3000	26	60,000
FM12	Female	Landrace, Duroc, Berkshire from Taiwan, and Large white	5000	40	80,000

#### 4. Mapping the translation of good farming

The narrated mapping methodology revealed a number of different approaches to managing animal health and farm biosecurity priorities. Importantly, however, in narrating the maps that farmers had drawn, rather than symbols of good farming, farmers described the importance of a related, but different concept: that of 'diligence' and the 'diligent farmer'. This is an important linguistic difference, and not simply an approximate translation. Diligence can be translated as 'qinlao'<sup>15</sup>, 'qinli'<sup>16</sup>, 'qinfen'<sup>17</sup>. The Chinese word 'qinlao' are commonly used in Mainland China and Taiwan, however, the word 'qin li' is more frequently used among pig farmers in Hong Kong. In Chinese, diligence has important cultural connotations, denoting a comprehensive value by which hard work is considered an imperative value of material accumulation and developing long-term security for family (Harrell, 1985, 1987). The following sections reveal how diligence was symbolized on farmers' maps and subsequently described through specific narratives and stories (Vanclay and Enticott, 2011) that are told and shared within the farming community. Specifically, we point to four key dimensions of diligence: productivism, social relationships, environmentalism and spirituality.

<sup>15</sup> The Chinese word 'qinlao' is written as '勤勞'

<sup>16</sup> 'kan lik' 勤力 is a commonly saying in Cantonese speaking regions.

<sup>17</sup> The Chinese word 'qin fen' is written as '勤奮'

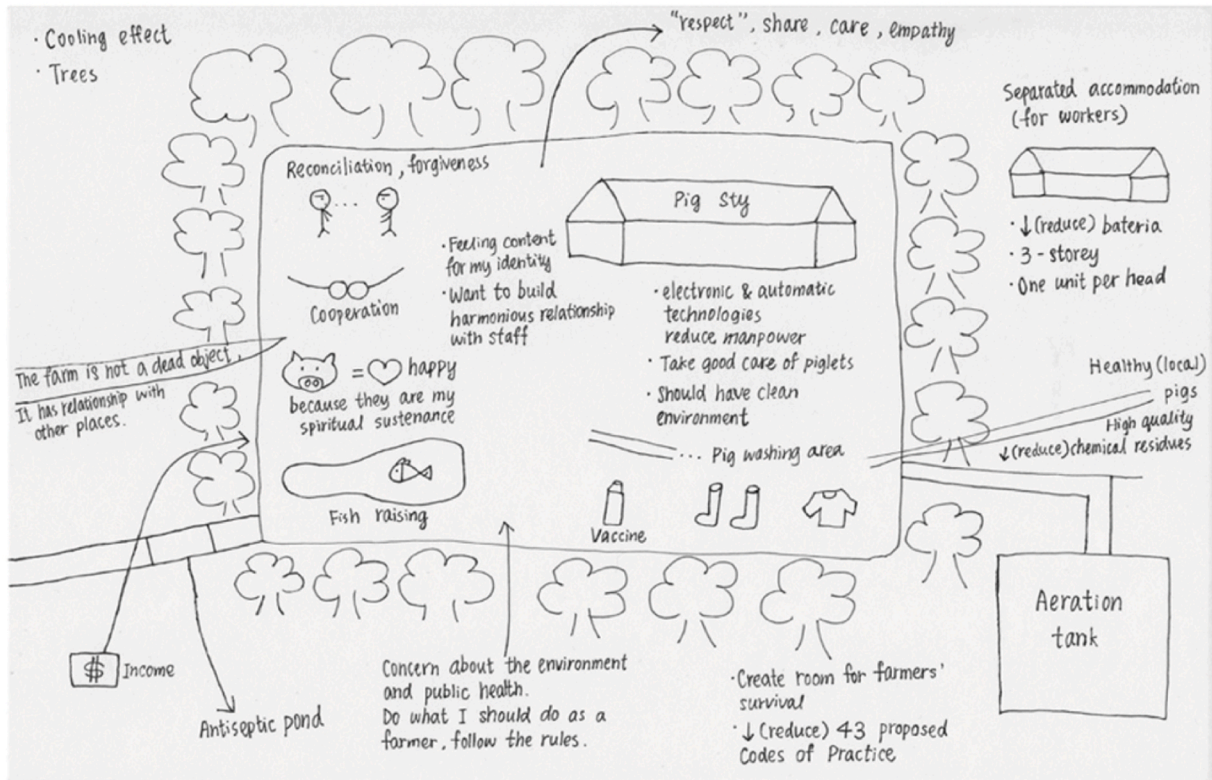
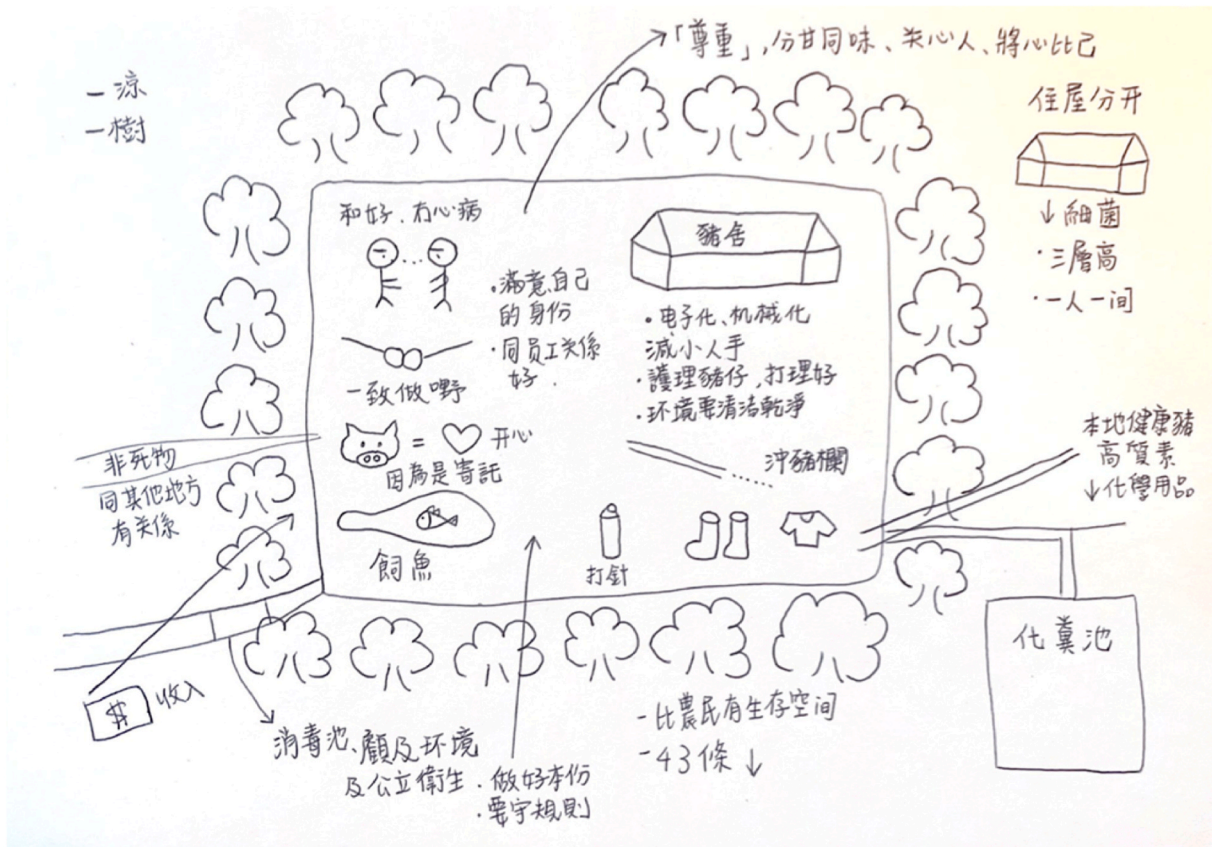


Fig. 1. Mrs Li's Narrated Mapping of the Nature of Diligent Farming (English translation of the lower part).

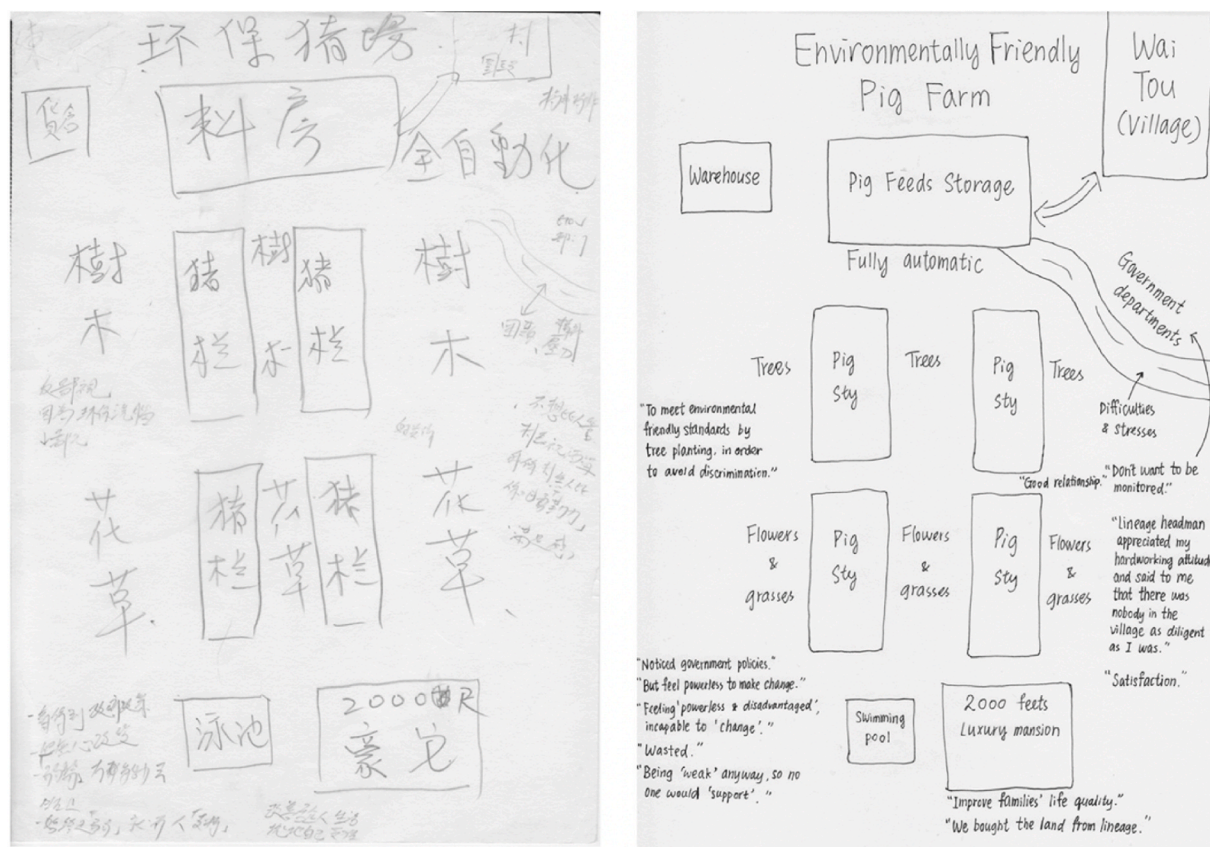


Fig. 2. Mr Fong's Narrated Mapping of Diligent Farming (English translation on the right).

4.1. Productivism, hard work and the diligent farmer

'Diligence' (*qinli*) is an important dimension to Chinese farming traditions representing a farmer's entrepreneurial virtue as one who can make use of farming resources to improve material well-being and climb up the social ladder. Each of the maps drawn by Mr Fong and Mrs Li contained symbols of this form of diligent farming. For Mr Fong, diligence was represented on the map through symbols of productivity: his drawing included a luxury mansion and a swimming pool to indicate the economic benefits his pig farming business has provided him. Moreover, in explaining these symbols, Mr Fong recited a commonly shared story amongst Hong Kong pig farmers that recalls the life of a local farmer known as 'Uncle Chik'<sup>18</sup>, (i.e. Mr Leung Chik). The story tells how Uncle Chik began his pig farm with six pigs. Through hard work and diligence, Uncle Chik built his farm into the largest in Hong Kong, achieving great economic success. In doing so, he gained the reputation as 'the king of pig farming' in Hong Kong, which was further enhanced by a visit by US President Nixon (*Kadoorie Farm and Botanical Garden, 2021*). In this story, diligence therefore comes to encapsulate the importance of productivity, visible success, hard work and intelligent decision. Specifically referencing the story of Uncle Chik and his desire to follow him by working hard, Mr Fong therefore explained that:

"High productivity of pigs shows that I am a *qinli* (diligent) pig farmer! When I see lots of pigs in my farm it means my farm is expanding. This provides my wealth, enabled me to buy a luxury mansion and build a swimming pool around it. These are the source of happiness!" (FM09)

Other farmers, (e.g., FM08) drew a pig with a smiley face and a cash

symbol on her map to indicate that her hardworking derived from pig selling enable her to buy daily necessities and obtain material possessions. Moreover, hardwork and productivity was also connected to farmers' biosecurity activities. Diligence was regarded as 'essential to run the farm for a living' (FM08), particularly to pay for new equipment to manage the health of pigs or avoid the use of antibiotic medicines:

"I work hard (*qinli*) to make change ... for instance, I imported high quality Hampshire pig from Canada; however, the sultry weather affected their productivity. So, I installed air-conditioning system in a farmhouse to improve their productivity" (FM11)

"I am paying lots of effort (*qinli*) to reduce the use of antibiotics by using more probiotics such as enzymes, putting trace elements and improving farm hygiene" (FM02)

For Mrs Li, diligence was also expressed in relation to her productivity, with her map illustrating a heart. This symbolized her happiness at seeing the proliferation of pigs on her farms and indicated her ability to raise healthy pigs without the use of illegal veterinary drugs. She commented, that raising such 'prolific pigs' provided 'spiritual sustenance because I can find meaning and purpose in my life'. The importance of spirituality was also reflected in other farmers' maps: one farmer (FM01) described on his map that working hard to produce safe and high-quality meat as a 'sacred task'. In particular, this role was connected to diligence through the raising of locally bred pigs. Raising 'Bendi'<sup>19</sup>, pigs differentiates farmers produce from that imported from mainland China, and symbolises 'safe' and 'ethical' food, free from toxic chemicals and drugs used elsewhere. Locally bred pigs symbolise diligence to both the local community, and rearing practices themselves as Mrs Li commented:

<sup>18</sup> The Chinese word Uncle Chik is written as '植叔'

<sup>19</sup> The Chinese word 'bendi' is written as '本地'

"I am proud of producing 'Bendi' (locally bred) black pigs and we do not use Clenbuterol and other toxic chemicals ... To maintain their productivity and immunity, our black pigs are feed with high quality fodder crops with other supplements, such as trace elements, dried breadcrumbs and sometimes even fresh rice wine lees. The rice wine lees contain a variety of vitamins and yeast"(FM12)

However, in narrating her farm map, Mrs Li also highlighted the personal consequences of diligence, and which reflect her role as a female farmer within a male-dominated farm culture. Thus, in describing the effort of diligence, Mrs expressed being made to feel weak and tired while having to supervise the seven men on her farm (cf. [Silvasti, 2003](#)):

"Pig farming was daunting work; we needed more men to be involved. Sometimes, my workers didn't follow my suggestions or opinions on when to vaccinate the pigs or muck them out .... My workers knew that I needed them to operate my farm so they would seek opportunities to bargain on the amount and types of work they preferred. For example, some workers hesitate to vaccinate the piglets and manage the pig waste treatment facilities. As you know, there were difficulties when attempting to distribute the farm's workload equally. This put me in a dilemma when allocating their share of the farm work" (FM12)

The gendered dimensions to diligence therefore obligated Mrs Li to assume the role of a 'superwoman', attending not just to her own needs, but those of her family and workforce, equivalent in Mrs Li's words to 'holding up half of the sky'<sup>20</sup>. Thus, for Mrs Li and other female farmers, the consequences of the constant hard work of *qin li* manifested in emotional and physical pain:

"Every three days I needed to mix two tons of fodder which required me to carry 14 bags of corn powder, 4 bags of yellow bean powder, 2 bags of oat grains ....each bag of corn powder weighted 100 cattis [60 kg] ... mixing all these caused me repetitive joint and back pain" (FM08)

#### 4.2. Diligence and the cultivation of *guanxi*

Diligence is also connected to the Chinese concept of *guanxi*, which<sup>21</sup> is usually translated as 'social connections' or 'social relationships'. It is a long-term relationship which involves implicit social norms including trustworthiness, face ('good image or honor'), and mutual obligation (norms of reciprocity) ([Barbalet, 2021](#); [Qi, 2017](#)). Developing and maintaining good *guanxi* is essential to diligence: without it farmers cannot be productive. The maps drawn by Mrs Li and Mr Fong demonstrate this in a number of ways. Firstly, Mrs Li's map depicts tree planting and fruit production surrounding her farm. In one sense, this could be interpreted as a form of 'hedgerow farming' in which the appearance of the farm boundaries symbolise a good farmer ([Gustavsson and Riley, 2018](#)). In Mrs Li's case, these drawings symbolise her attempt to cultivate '*guanxi*' with her neighbours. The fruits produced by the trees, and the green barrier they produce help to manage the perception of pig farming as dirty and polluting: fruits are shared with her neighbours as means of 'reconciliation' and 'forgiveness' that are written on her map. This *guanxi* helps Mrs Li escape the reputation of a polluting pig farmer.

Secondly, Mr Fong's map also refers to attempts to develop *guanxi*. In Hong Kong, the Block Government Lease System (formerly called the 'Block Crown Lease System') constructs a unique production relationship between indigenous landowners and tenant pig farmers. Under this system, the Lineage possessed the means of production (i.e. land), while

tenant pig farmers should provide their labour to raise pigs and earn money to pay the land rent to the Lineages. Under this hierarchical relationship, tenant pig farmers have been marginalised politically and economically and suffer from land insecurity ([Watson and Watson, 2004](#)). Tenant pig farmers like Mr. Fong are therefore keen to earn goodwill with the lineage groups to secure their leased lands from the lineage. The mansion and swimming pool included in Mr Fong's map therefore symbolise the importance of his productivity and its role in maintaining good *guanxi* with the lineage group. To secure their lands, tenant farmers like Mr Fong constantly seek recognition from the Lineage headman and show support to the Lineage at social and political events. Participating in the Lineage annual dinner benefits the relationship between the landlords and tenant pig farmers to maintain the 'security' of the land tenancy. Mr Fong explained how these were relevant to his relationship to the lineage describing how the lineage head appreciated his entrepreneurial virtue of being hardworking. His economic success brought him a good image (*mianzi*<sup>22</sup>) and a trustworthiness (*xinyong*<sup>23</sup>) which strengthens his reciprocal relationships (*renqing*<sup>24</sup>) with the lineage community and his negotiating power for land security. This is clear from the 'wai tou'<sup>25</sup> (literally meaning 'lineage landlord') written on the map by Mr Fong and his comments that:

"I had to maintain a good relationship with the 'Wai Tou' which is the Tang's lineage because I am a tenant and the Tang's lineage owns my land. Thus, I always attend their lineage's annual dinner to gain their goodwill. One time the Tang's lineage headman appreciated my hardworking attitude [in pig-raising] and said to me that there was nobody in the village as diligent as I was"(FM09)

*Guanxi* is also specifically important for maintaining biosecurity and animal health. Whilst the examples above show how *guanxi* is forged with off-farm actors, Mrs Li's map also refers to the importance of maintaining *guanxi* with the workers on her farm:

"Farm biosecurity can be piecemeal, but it requires care and attention to detail for everyone in my farm. I will boil soup, prepare delicious food, and even give extra monetary rewards for my colleagues if they are willing to pay attention to detail in managing farm biosecurity. These include cleaning spider webs, replacing fly traps, refilling the disinfectant wheel and foot dips, putting newborn piglets under infra-red lamps, and checking the ventilation and water levels, etc" (FM12)

Thus, good *guanxi* strengthens the management of animal diseases and biosecurity practices on-farm in the absence of formal legal enforcement or guidance by codes of practices. Good farming *guanxi* strengthens social interactions and contributes to positive affection and synergy effects to make farm biosecurity work. Without it, the stain of the 'dirty' polluting pig farmer, that is common to Hong Kong governmental discourse, cannot be avoided.

#### 4.3. Environmental diligence (*huan bao*)

The need to be diligent and secure<sup>26</sup> *guanxi* also speaks more broadly to the way pig farming has been framed by the Hong Kong government. Successive governments have sought to minimise the extent of pig farming in Hong Kong through licensing agreements which allow farmers to leave the industry ([Chan, 2015](#)). The effect has been for the industry to shrink in size, becoming a marginal form of agriculture. The motivation for these actions has been to reduce the effects of pollution from pig farms. At the same time, pig farmers have become associated

<sup>22</sup> The Chinese word '*mianzi*' is written as '面子'

<sup>23</sup> The Chinese word '*xinyong*' is written as '信用'

<sup>24</sup> The Chinese word '*renqing*' is written as '人情'

<sup>25</sup> The Chinese word '*wai tou*' is written as '圍頭'

<sup>26</sup> The Chinese word '*huanbao*' is written as '環保'

<sup>20</sup> The Chinese phrase 'holding up half of the sky' is written as '女人撐起半邊天'

<sup>21</sup> The Chinese word of '*guanxi*' is written as '關係'

with poor farming practices and pollution such that normative waste treatment practices conceptualise indiscriminate discharge of pig waste as an illegal and deviant behaviour (Chan, 2020). In response, farmers have sought to portray themselves in relation to their environmental diligence (or 'huan bao'), and use it to secure *guanxi*.

Mrs Li's drawing of trees and fruit around her farm is one example of environmental diligence, but both maps seek to reassure and present the farm as clean and green. Violating environmental regulations would simply reinforce the commonly held view that pig farmers were polluters: displaying materials and practices used to deal with pollution could, however, signify environmental diligence. Thus, both Mrs Li and Mr Fong's maps as well as other farmer participants' maps (FM01, FM02, FM04, FM08 and FM 010) included waste treatment facilities and tree planting in their farm maps, with Mrs Li commenting on her map:

"Trees symbolise a live nature; this lively nature interacts with the farm. That's why I should be concerned with it. I draw the waste treatment facilities to show that I did not indiscriminately discharge pig waste into the stream, I am responsible for environmental conservation and have fulfilled the public health standards"(FM12)

Similarly, a septic tank was drawn to indicate that Mrs Li was fulfilling the ethics of environmental conservation and following the government's animal waste treatment regulations. Mr Fong's map included the word of 'trees' on his map, to indicate the value of environmentally friendly. He also entitled his map 'Environmentally Friendly Pig Farm', and included the river in his drawing specifically to indicate that pig sewage was treated so that he could legally discharge it into the nearby watercourse. Mr Fong explained, "If I didn't behave in an environmentally friendly manner, I would be discriminated against by society. So, I manage the pig waste well and do not illegally discharge sewage into the river. I raised pigs on elevated pig pens so that we can wash the pig waste on the floor easily. Also, we used plastic slat flooring to keep the elevated pig pens clean and warm. The deposit of the piglets can directly go to the floor. All these make my pig farm clean and hygienic."

However, the dual meaning of diligence as both productive and environmentally friendly leaves Mr Fong in the awkward position of being an entrepreneurial farmer whilst having to maintain a harmonious and environmentally friendly relationship with nature. These tensions were depicted on his map by the river modification taking place on his farm at the time of the interview. In discussions, it became apparent that these modifications affected his ability to act with diligence in relation to animal health and pollution. At the same time, the river crystallised a threat to his autonomy as a farmer and his ability to manage the environment himself – a discourse common to western good farming ideals:

"Almost every government department visited my farm, such as the Water Department, the Transportation Department ... and even the Housing Department. What the heck were they doing? I was stressed and suffered a great deal of psychological anxiety. Now I cannot discharge treated sewage, as it can cause sanitary problems, and I had no clue what I should do ... My farm work was already busy enough ... [merely from] eradicating pig diseases [through vaccination]! Could the government departments give me space to raise my pigs? My farm was beset by enemies from within and without"(FM09)

The threat to autonomy depicted in the maps was also represented through the spirit of self help: the sense that good farmers must solve problems for themselves because of the lack of veterinary help and advice. Indeed, whilst the Hong Kong government have emphasised the "control and monitoring" of the pig farming industry, they have been unwilling to train husbandry veterinarians to help pig farmers combat pig diseases. The restriction of veterinary services served the government's interests by re-inforcing a self-help mentality among pig farmers. As a result, to boost pigs' immunity, Mrs Li feed glutinous rice distiller's grains and a small amount of rice wine to her finishing pigs:

"We have ten big ceramic jars for producing glutinous rice wine. Those glutinous rice distiller's grains and small amounts of rice wine will be used to feed our finishers. This can boost pigs' immunity because distiller grains are full of protein and a variety of trace elements. This can further stimulate pigs' appetites, and the hypnotic effects can help with sleep. All these help pigs to grow faster"(FM12)

#### 4.4. Diligent biosecurity as spiritual practice (*baishen*)

A final dimension of diligent farming refers to the use of spiritual practices to help secure the future of the farm. *Baishen*<sup>27</sup> (worshipping) is a religious rite where farmers conduct periodical rituals and provide food and paper offerings for local deities in order to seek the power of deities to cleanse animal diseases, wrong-doing and bad luck in farms. Thus, whilst Mr Fong used the elevated pig pens and washed the pig waste on the floor to improve the farm hygiene and maintain cleanliness, he also provided offerings to the local deity, to cleanse more of the diseases and the spiritual disharmony built up on the farm. Setting up earth god shrines within farm premises not only reflects the Chinese tradition of worshipping territorial deities, but also evidences the belief that it was recognised as a 'protector' of the farm (Liu, 2003; Zhu, 2013). This is a form of spiritual interpretation of farm biosecurity: when farmers face unpredictable disease events, the symbolic practice of worshipping a deity or deities encourages the farmers' self-betterment and re-inforces their confidence due to the belief that the earth god would help them to expel uncontrollable diseases and bring 'harmony' to their farms. Through the discussion of the map and his relationship with the surrounding environment, Mr Fong commented:

"We never know when the disease will come; since I was young, my parents told me that from the first to the fifteenth day of each month of the lunar calendar, we should *baishen* (i.e. worship the earth god). I will light three sticks of incense, pour three cups of rice wine, and provide offerings and burn paper products to the earth god ... The earth god was to be placed at the entrance of the farm to guard against the diseases and protect our pigs from getting sick. To avoid diseases, I provided more offerings than my parents did "(FM09)

The cultural practice of '*baishen*' plays an important role in pig farmers' daily biosecurity practices, representing a farming ritual to cleanse illness, wrong-doing and bad luck built up in the farm. This helps pig farmers to restore spiritual balance and harmony with nature (Webb, 1994). For instance, pig farmer FM02 drew the symbols of earth God shrine to present the symbolic practice of worshipping a deity and grow fengshui tree to bring good fortune and purify bad air accumulate in the farm in his map. Some pig farmers believe that the earth god will protect the farm territory from diseases. In order to seek earth god's protection, farmers set up an earth god shrine in their farm entrance; periodical rituals, food and paper offerings will be made. Offerings are always made with prayers and gratitudes from the first to the fifteenth day of each month in the Lunar Calendar, and during the main Chinese festivals (e.g. Lunar New Year). From Mr Fong's story, farm biosecurity is not just merely linked to farmers' understanding of the physical landscapes, but also farmers' spiritual connections with their farmland and their spiritual interpretation of their farm biosecurity. Setting up the earth god shrines marks the invisible territorial biopolitics of security between multispecies and non-human. The cultural script of '*baishen*' reflects farmers' spiritual interpretation of insecure land tenure and uncontrollable disease events. To pacify farmers' unsettling feelings, the practices of *baishen* become a rite to express farmers' wishes to maintain harmonious relationships with nature, people and diseases. *Baishen* is therefore an expression and practice of diligent farming.

<sup>27</sup> The Chinese word '*baishen*' is written as '拜神'



## 5. Discussion

In highlighting the role of diligence and diligent farming in Hong Kong, the narrated mapping methodology sheds light on the key challenges facing good farming set out at the start of this paper. In this section, we discuss the broader implications of diligent farming specifically in relation to what constitutes a good method for good farming, the language of good farming, the applicability of good farming in non-Western contexts.

Firstly, the use of the mapping methodology in this paper should open a broader debate about which visual methods are appropriate to investigate good farming (cf. [Riley and Robertson, 2022](#)). In practice, the mapping methodology was inclusive, allowing farmers to draw and speak for themselves. It revealed how biosecurity practices were shaped in relation to regulatory constraints on pig farming in Hong Kong. Thus, in the context of Hong Kong pig farming, diligent farming reflects existing cultural priorities, fitting better with how farmers perceive their status and threats to it. Diligent farming encapsulates both personal pride and legitimacy in the form of productivity and material wealth, as well as the need to forge relationships with external stakeholders to ensure the longevity of the farm. In doing so, the mapping method allowed the culturally specific concept of diligence emerged, rather than research participants be guided by Anglophonic terms ([Gkartzios et al., 2020](#)). Given the cultural significance of diligence in Hong Kong, it would seem inappropriate to ask direct questions about what constituted 'good farming', just as much as it would seem inappropriate to ask Western farmers about what constituted diligent farming. Had we framed our methodology in relation to good farming, the cultural specificity of diligence may have been missed. As we have shown, the experience of using our narrated mapping method allows the farmer to draw and speak for themselves, sketching the story of their farm as they see fit. Neither the terms diligence nor good farming were mentioned to those farmers when asking them to draw their maps: the concept of diligent farming and its associated practices were allowed to emerge organically, reflecting farmers' own cultural experiences of farming rather than being ensnared by the hegemony of mistranslated Anglophonic terms ([Gkartzios and Remoundou, 2018](#)). Indeed, avoiding the methodological complications of linguistic nuances may be more easily dealt with by not framing research tools around good farming at all, whether that be by using visual methods like mapping, or other open-ended non-specific interview questions. This suggests that whilst it may be tempting to use good farming to frame methodological tools, good farming is better understood as emergent from data analysis (cf. [Sutherland, 2021](#)) rather than a pre-existing category applicable to all.

Secondly, the visual methods used in this paper raise broader questions about the relationship between different theoretical framings to good farming and methodology. In fact, rather than pointing to theoretical and conceptual diversity, our mapping method seems to point towards theoretical complementarity. On the one hand, the mapping methodology reveals the symbols of diligent or good farming that publicly communicate cultural capital in a Bourdieussian framework. Diligent farming has its own set of symbols and symbolic activities that provide cultural capital and legitimacy within the agricultural community. Moreover, the mapping approach also revealed the relational and more-than-human approaches to good farming ([Burton et al., 2020](#)): mapping allows farmers to visually depict their connections with animals and emotional attitudes toward disease outbreaks, which can be subsequently discussed in detail. Additionally, farmers' maps were not merely graphical depictions of land; rather, they reveal farmers' spatial imaginations of their farms, their cultural values (minds), bodily interactions (bodies) and their spiritual connections (souls) in relation to biosecurity. On the other hand, the mapping exercises also revealed the performative dimensions to good farming, by eliciting specific practices and narratives of diligent farming ([Vanclay and Enticott, 2011](#)). Thus, in Hong Kong pig farmers describe the symbols of productive and entrepreneurial farming, whilst simultaneously describing how they must

engage in public performances and rituals to seek the *guanxi* that makes these symbols meaningful. Rather than seek to identify the specific relevance of individual conceptual approaches, good farming researchers might instead seek to explore how different approaches overlap in order to build a more unified rather than diverse theory of good farming.

Finally, our finding that the concept of diligent farming rather than good farming has cultural saliency amongst Hong Kong pig farmers, points to both the limitations of the language of good farming, and its applicability to non-western contexts. As [Gkartzios et al. \(2020\)](#) note, there is a danger that the uncritical application of anglophonic terms can 'mask a series of nuanced, but critical understandings which reduce the quality of debate in rural studies'. Despite some conceptual similarities between good and diligent farming, the cultural specificity of diligent farming means scholars should not begin looking for it in other Western contexts, not least because of problems of translation. In English, 'diligent' means an activity conducted with effort but in a careful and decent way ([Cambridge-Dictionary, 2022](#)). The word 'diligence' refers to qualities of hard-work, conscientiousness, rigour and tirelessness pointing. It is debatable whether diligent work is enjoyable work in the way that enjoyment may be associated with a good day's work or good farming ([Sutherland, 2021](#)). The Latin etymology of diligence refers to taking delight in something, but its modern-day usage refers more to zealous and punctilious work: aspects of bureaucratic farming such as record keeping generally not seen to be good or reflective of the practical skills and intuition of the good farmer.

Referring to diligent farming in anglophonic cultures may conjure different meanings to those held by farmers in Hong Kong farmers where the word '*Qin Lao*' (which is often translated to English as 'diligent') has a more complex meaning involving pain, toil, tiredness and fatigue: work that would not normally be considered enjoyable or 'good'. Unlike in English, *Qin Lao* also indicates the intended consequence, which is the material wealth generated from this process ([Handian, 2022](#)). In this way, diligence may also be associated with emotional well-being, pride and happiness. Diligent farming therefore problematizes the binary distinction between good and bad farming, folding both terms together at once. Diligence reflected activities that had to be done, with negative consequences, but which simultaneously could provide material wealth and personal happiness. This challenges Sutherland's (2021: 696) that good and bad farming experiences are 'temporally distinct', or that there are temporal transitions between good and bad farming ([Campbell, 2020](#); [Haggerty et al., 2009](#)). Instead, diligent farming alerts us to the need to explore in more detail how good and bad farming are connected and overlap, with the balance between each constantly being renegotiated which the framing of 'good farming' misses. Diligent farming therefore points to the study of how farmers must live with the contradictions between these different forms of farming, rather than just to their longitudinal changes.

One conclusion from this is that researchers should spend more time trying to reveal how good and bad farming fit together. As [Sutherland \(2021\)](#) notes, however, eliciting accounts of bad farming is methodologically challenging. Our visual mapping method did allow farmers to alert us to what they considered to be bad, or at least mundane, farming. A second consequence is what to call good farming if it is both bad and good? In the face of this linguistic challenge, a final task must therefore be to think about ways of accommodating the diverse terms and meanings of good farming highlighted in this paper. For [Gkartzios and Remoundou \(2018\)](#) the solution is not just searching for a new term but also internationalising existing terms that fit different fieldwork spatialities and linguistic contexts. Their use of the term 'eparchy' therefore denotes the multiplicity and polyvocality of rural space, as well as avoid the hegemony of English language. Finding a similar vocabulary for good farming would help avoid the need for definitive translations of good or diligent farming (or other forms like 'real') whilst recognising the instability and non-dualism of these terms. In biosecurity studies, the concept of the 'borderland' ([Hinchliffe et al., 2013](#)) has been deployed to

capture a zone of exchange and interaction in which identities, knowledges and practices are constantly shifting and being reproduced. Reframing good farming as a study of 'farming borderlands' may help to recognize the polyvocality of multiple and diverse research and farming cultures, and provide cross-cultural feedback loops to calibrate the language of concepts.

## 6. Conclusion

Good farming has become a popular concept within social studies of agriculture, but without methodological rigour and innovation, it may cease to provide innovative understandings of farmers' practices. Worse, without recognising linguistic nuances of farming, it will remain limited as an anglophonic concept. This paper seeks to avoid that fate by promoting a wider methodological debate on what constitutes good methods for good farming and applying visual good farming methods to non-western contexts. At the same time, the nuanced linguistic differences between good and diligent farming suggest that the concept of good farming can be broadened by learning from other agricultural contexts. Thus, in stimulating debate over what constitutes good methods for good farming, this paper encourages debate over ways of recognising the polyvocality and linguistic nuances in the naming of the term good farming itself.

## Author statement

Ray Chan: conceptualisation; funding acquisition; formal analysis; Investigation; methodology; Project administration; Supervision; Roles/Writing - original draft; Writing - review & editing; Gareth Enticott: conceptualisation; methodology; analysis; Roles/Writing - original draft; Writing - review & editing.

## Data availability

Data will be made available on request. The research data supporting this publication are provided within this paper.

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