Spice commodity chains unraveled:
Investigating wholesalers, marketplace vendors, and consumers in Shijiazhuang City, Hebei, China

by

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ABSTRACT

Cultivation of cardamom, star anise and cinnamon in Chinese accounts for large portions of the world's share annually. However, as these spices reach markets and consumers away from their sites of cultivation, the mechanisms and actors which move these spices are blurred into obscurity. This study attempts to trace these three spices, to elucidate some of these end processes, and to better understand the roles of the actors involved. This thesis offers a case study of Shijiazhuang city, located in Hebei, northern China. The study identifies five distinct nodes that contribute to the distribution of spices within the city. I explore how spices are moved to, between and within each node. In addition, the study highlights the importance of strong social connections and family social capital for entering into this trade and operating wholesale and neighbouring marketplace stalls.

Author's Image: Typical stall in the Ta Tan Nong Mao Large Neighbourhood Market

CHAPTER 1. INTRODUCTION

1.1 INVESTIGATING SPICE COMMODITY CHAINS THAT PASS THROUGH SHIJIAZHUANG CITY

The three spices black cardamom, star anise, and cinnamon are commonly used in Asian households, as well as in the West to a lesser degree. Cardamom, a spice cultivated in Southern Yunnan, has been traded since the Ming dynasty, and has recently become a profitable crop for borderland farmers. Currently, with its medicinal properties, it is one of the world's most expensive spices by weight (Buckingham and Tu Minh Tiep, 2003). In the past, cardamom was widely cultivated as a complementary crop to other harvests such as rice or maize, yet it is now increasingly seen as a lucrative agroforestry frontrunner in the Sino-Vietnamese borderlands in Yunnan (Zhou, 1993). Star anise is native to and mainly cultivated in Guangxi Province, China, with production in China accounting for over 85 percent of the world's yearly yields. From this number, northern China sales account for more than 70 percent (Lederer et al., 2006). Finally, cinnamon is an abundant resource in China, with Yunnan, Guangdong, Guangxi, Fujian and Hainan provinces producing 80 percent of the world's share annually (Li et al, 2013).

China's production of both cinnamon and star anise separately account for over 70 percent of world production in each market (Lederer et al., 2006). According to Kvikvik (2001), the demand of cardamom in China is around 2000 tonnes annually, while the country only produces 1000 tonnes, filling the shortage of supply with imports from countries like Vietnam, Laos, and Burma. All three spices grow exclusively in hot climates such as those found in southern China and southeast Asia. Therefore, it is evident that there exists a network of mechanisms and actors that connect the spices from the point of cultivation, in the south, to points of final consumption in the rest of the country. With such large quantities of spices being moved within China, it is becoming more and more crucial to understand the workings and functions of these distribution mechanisms.

1.2 RESEARCH AIM AND QUESTIONS

We are beginning to have a small body of literature that focuses on the starting points of the commodity chains for these three spices, primarily studying the cultivators and wholesalers (see Tugault-Lafleur & Turner, 2009; Turner et al 2015; Turner et al. in prep; Putzel 2017). At the same time, this literature has been able to explore international prices for the end commodities. However, as these spices reach markets and consumers away from their sites of cultivation, the mechanisms and actors which move these spices are blurred into obscurity. What we have yet to see are case studies that focus upon the consumption ends of these commodity chains, focusing on how these spices get to local consumers, and the commodity nodes and transactions at this level. This study will attempt to trace three spices, cinnamon, star anise, and black cardamom, to elucidate some of these end processes, and the actors involved.

The **aim** of my study is: to analyze the identities, roles, and interactions among actors at the end nodes of cinnamon, cardamom, and star anise commodity chains, through a case study of Shijiazhuang city, northern China.

To investigate my aim, my thesis will address three main questions.

1. How are marketplaces in Shijiazhuang city positioned with regards to each other (hierarchy, structure, purposes, space) and how do they operate?

Specifically, I outline the five-node hierarchical structure of marketplaces in the city and how each tier of marketplace is operationalised. I will explore the spaces spice traders and consumers occupy within the marketplaces, and reflect on the degree to which these marketplaces are formalised or not.

2. How do actors at the different nodes of the city's marketplaces and urban consumers interact with each other and move the spices along commodity chains?

I analyse how the spices are moved around the city and the integration of each node into their commodity chains. I will uncover how the actors involved differ in their knowledge and use of the three spices.

3. More specifically, what role does social capital play to support the economic activities of spice vendors in different marketplaces in Shijiazhuang?

I examine the use of social capital to support everyday tasks of spice vendors, as well as the importance of social capital to initially enter the business.

1.3 CONTEXTUALIZING THE STUDY IN SHIJIAZHUANG, CHINA

Shijiazhuang is the capital and largest city (population 9.55 million as of 2012) of Hebei Province in northern China (Lin et al., 2012). Located 300 kilometres south west of Beijing, it is representative of a 'typical city' in middle China (Figure 1). This means that the city's "developmental characteristics and land use change provide good representatives of the middle China cities, since most of them have experienced the same political, economic, and technical revolution events" (Xiao et al. 2006: 70). Consequently, Shijiazhuang offers a case study that might be broadly representational (albeit used with caution) of how the three spices also pass through other commodity chains that terminate in Chinese cities away from cultivation areas (Xiao et al. 2006).

Figure 1: Location of Shijiazhuang City (Adapted by author from Esri StreetMap Premium for ArcGIS)

1.3.1 Shijiazhuang – historical development

As one of the three main cities in the Jing-Jin-Ji Urban Agglomeration, Shijiazhuang has experienced dramatic expansion. Shijiazhuang was a small village with around 600 inhabitants in the early 1900s, which rapidly increased to 1.6 million inhabitants by 2004 ("Social and Economic Development" n.d.; Xiao et al., 2006). On average, the city expanded annually at a rate of 2.4 km^2, growing from an area of 6.31km^2 in 1934 to 165.5km^2 in 2001 (Xiao et al., 2006).

Urban expansion of the city occurred in four different stages. The initial growth stage from 1934 to 1949 involved slow, natural expansion of urban land cover, at around 1.15km^2 a year (Xiao et

al., 2006). During this time, the Japanese army and National Army used the city at a military base due to its strategic location on the Jing-Guang and Shi-Tai train lines. Following this was a short what the author called a "recovery stage" from 1950 to 1955, characterized by rapid land cover growth at 3.65km^2 a year (Xiao et al., 2006). A slow growth stage from 1956 to 1980 was due largely to political events during which time Shijiazhuang became the capital of the Hebei province in 1968. The final slow (0.46km^2/year) land expansion stage, from 1981 to 2001, was an outcome the Cultural Revolution, during which almost all economic activities stopped (Xiao et al., 2006).

In the 1950s several large cotton factories were established in the city to take advantage of its central location and access to railways (Wu et al., 2015). Further economic development occurred with the introduction of the market economy in the late 1900s and from 1980 to 2010 Shijiazhuang's urbanization rate increased from 4.8 percent to 12.1 percent (Wu et al., 2015). Orchards, agriculture, and residential land surrounding the city was converted to become part of the urban landscape, comprising of high rises and highways (Xiao et al., 2006). The response to agricultural decollectivization in the 1980s was marked by a significant influx of rural to urban migrants seeking work (Perkins, 1994). Since then, the city has become an important centre for administration, culture, economic growth, and transportation (Weinert et al., 2008).

Turning to focus on marketplace trade in the city, the current day commercial marketplaces in Shijiazhuang city take their roots in the early twentieth century, coinciding with the introduction of the market economy. Due to its vital position on the railway system, abundant products, and industry gathered together. On the city's website, the municipal government acknowledges the importance of commercial marketplaces, stating that "…considerable goods and commodities circulation systems have been formed in Shijiazhuang City, with the regional markets as [a] backbone, and the specialized markets of local characteristics as foundation" ("Shijiazhuang.China", n.d.). Explicitly, the site names the Qiaoxi Market of Vegetables as one of the highest contributors to a total GDP of 45.66 billion Yuan (6.63 billion USD) generated by the city's wholesale markets in 2003.

These days, mobile shopping has also become a huge contributor to consumer sales in the city, both for foods and non-food items (Wee and Ramachandra, 2000). However, consumers purchase food online with caution due to safety and logistics concerns (Kim et al., 2015), leaving wholesale markets largely unaffected by online shopping.

1.4 THESIS OUTLINE

This thesis will be arranged as follows. In Chapter 2, I draw upon literature on commodity chains, marketplaces, and social capital to form the conceptual framework used in the study. Chapter 3 outlines my methodology, detailing how the markets for interviews were chosen, and the processes of data collection and analysis. In Chapter 4, I provide the results relevant to my first and second research questions, detailing the commodity chains and the interactions that occur at each node. In Chapter 5, I finish presenting the results for my first two questions as well as answer my third question, regarding the role of social capital for spice vendors. Chapter 6 extrapolates on and discusses the meanings of the results. Finally, I summarize and conclude my thesis in 6.4.

CHAPTER 2. CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

This chapter introduces the conceptual framework with which I analyze the distribution of the three spices in Shijiazhuang, China. This conceptual framework consists of three bodies of literature. First, I review market place literature which will guide my analysis on the marketing functions and degree of formalization of Shijiazhuang marketplaces. Then, I review the commodity chain literature in order to build a framework to uncover the structure, and horizontal and vertical components of spice trading. Finally, I introduce the concept of social capital to create a framework to analysis interactions within the market place. Combining these three bodies of literature, I hope to elucidate the networks, processes and actors at the consumer ends of the commodity chains of star anise, cardamom, and cinnamon in Shijiazhuang.

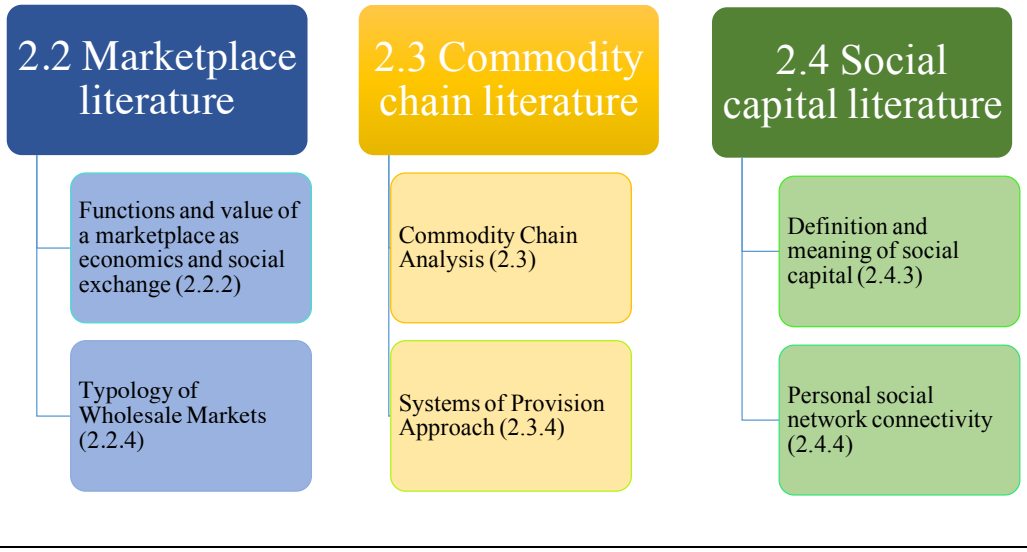

Figure 2: Constructing my Conceptual Framework

2.2 CONCEPTUALISING MARKETPLACES

2.2.1 Introduction

Recently, with the expansion of the Chinese consumer market, there has been interest in the systems of distribution of agricultural products, agricultural development, and food safety in China (Hua and Fan, 1993). The principal concern for the Chinese government is the circulation

of fruit and vegetables within the country while assuring quality and controlling prices (Ahmadi-Esfahani and Locke, 2006). The Chinese government has chosen the centralized wholesale market as the main vehicle for improving infrastructure as well as regulating these products. In this section, I review the literature on urban food marketplaces to elucidate the dynamics of the marketplaces examined in this study. First, I explore the functions of marketplaces. Following that, I describe the changes marketplaces undergo as they become more formalized. Lastly, I make concluding remarks regarding how these concepts are used to address my first research question.

2.2.2 Functions of a Marketplace

In general, marketplaces are locations where goods are bought and sold. As such, they fulfill a number of economic, political, and social functions (Zunn, 2008). Cadilhon et al. (2003), identified two main types of wholesale markets: assembly and terminal. Assembly markets usually operate in rural areas where food products are collected from producers in bulk.

Assembly markets in rural areas traditionally operate through an auction system, which encourages fair prices to farmers, and is deemed as the most equitable type of exchange in a free market (Walras, 1897). Buyers in these markets typically include wholesalers and supermarket representatives. Extensive analysis on rural marketplaces has been done by William Skinner (1964), who classified these rural Chinese markets into a hierarchy. Skinner (1964) places markets and cities into an economic hierarchy, arranged in a triangular lattice. Rural communities with distinct cultural practices, local dialects, traditions and religions contribute to trade in intermediate market towns, who in turn are encompassed in the economic area of central market cities. Skinner's work is essential for understanding rural marketplace structure. However, since this thesis analyzes urban marketplaces, the rest of the chapter will be focused on understanding the second type of markets as defined by Walras (1897): terminal markets.

Terminal wholesale markets exist at other end of the food supply chain: in urban areas where products are sold to other stakeholders, who then retail to the general public (Cadilhon et al., 2013). Workers at terminal markets in cities de-bulk and sell their produce to consumers in the city. These include independent retailers and institutional customers. Sometimes, supermarket

representatives will also purchase from terminal markets when this presents the most cost-efficient way of obtaining specialized and highly perishable items (Galizzi, 1971).

Furthermore, not only are marketplaces economic spaces but they can also act as a platform for social interactions. Marketplaces provide a space for building and maintaining social relationships and networks within the community (Bohannan and Dalton, 1971; Rankin, 2003; Turner, 2003; Amin, 2007). As stated by Belshaw (1965: 8), "market places are sites, with social, economic, cultural, political, and other referents, where buyers and sellers (or perhaps exchangers of other types) meet for the purpose of exchange" - whether this exchange be social or financial.

2.2.3 A Typology of Wholesale Markets

The most popular model of urban marketplace commerce is made up of two parts: 'informal' versus 'formal' markets (Plattner, 1989). Informal markets are more likely to cover a larger range of marketing functions where enterprises operate in small scale, unregulated economies (Peña, 1999). They are more likely to be labour intensive, with workers being from the same household working irregular hours. These markets are popular with shoppers since products differ, bargaining is expected, and food is seasonal and only purchased for short term consumption (Plattner, 1989; Jensen and Peppard, 2007). Many markets operate in basic conditions with vendors displaying goods on the ground under temporary or handcrafted shelters (Bonnin and Turner, 2014b; Lyons and Snoxell, 2004).

As these markets become more formalized, they often undergo changes in structure. Bonnin and Turner (2014b) found, in numerous upland markets in Lào Cai, that guidance and support from the government resulted in markets upgrading to concrete and permanent structures. In these more formalized markets, traders rent a permanent stall space to sell goods. Additionally, many agents in formalized markets will often substitute capital for labor. The most extreme example can be seen in supermarkets. Supermarkets offer capital intensive aid (*e.g.* shopping carts), and invest in expensive computerized systems to document current stocks and sales, cutting down the need for highly paid employees (Plattner, 1989; Ahmadi-Esfahani and Locke, 2006). Polanyi (1944, 1957) argued that these modernized markets reduce markets to purely economic functions.

However: "Current authors are clear to point out that all economies, even 'developed' capitalist ones are socially embedded and infused with social values and norms" (Bonnin and Turner, 2014b).

Oftentimes, governments formalize markets with an intention of expanding as well as regulating food supply (Tomek and Robinson, 1990; Ahmadi-Esfahani and Stanmore, 1997; Ahmadi-Esfahani and Locke, 2006). Consequently, chain stores often arise alongside the formalization of wholesale markets within cities. This causes food provision systems to become increasingly decentralized (Tomek and Robinson, 1990). Kohl and Uhl (1990) suggest that there is a cyclical component to this evolution; as markets advance, they become increasingly centralized and then decentralized.[1] To stay competitive, wholesalers become involved in a greater range of marketing functions, such as relocating their stores. They will also engage in buyer services, specialist distance provision via retail linkages and agreements between consumers. Thus, this presents another criterion to evaluate the formalization of marketplaces in Shijiazhuang. Ahmadi-Esfahani and Locke (2006: 91) state: "These activities are themselves perhaps an indicator of their stage of development." Kohls and Uhl, (1990: 210) agree by saying: "The degree to which this [previously mentioned marketing functions and buyer services] happens is often a function of increasing sophistication of producers in selling…" reflected in how formalized these markets are.

2.2.4 Marketplaces Conclusion

There are two main conceptual elements I draw from marketplace literature, the first are the functions and value of marketplaces to vendors and consumers as both economic and social spheres. Second, I evaluate the changes in marketplace structure through an assessment of physical structure, as well as marketing functions and buyer services which vendors engage in. By doing so, I will be able to and reflect on how formalized the markets of Shijiazhuang are, and help answer my first research question.

[1] Economic decentralization in this case refers to the process that occurs when markets disperse. For example, centralization would be having one large wholesale market in the city, while decentralization would push the opening of new markets, thereby 'decentralizing' the original, large market.

2.3 COMMODITY CHAIN LITERATURE

2.3.1 Introduction

Commodity chain analysis provides a way to study the practices which shape the flow of goods. A commodity chain is the entire trajectory of a product from its conception and design, through production, retailing, to final consumption (Leslie and Reimer, 1999). More specifically, it is defined as "a network of labour and production processes whose end result is a finished commodity" (Hopkins and Wallerstein, 1986: 159). By examining commodity chains, researchers can uncover the set of inter-organizational networks of households, businesses, and institutions that are involved in the production and consumption of a commodity. Next, I outline the three different approaches for analyzing commodity chains found in literature: Global Commodity Chains, Commodity Circuits, and Systems of Provision. I conclude that the System of Provision approach is best suited for my study. Then, I focus on the vertical and horizontal approaches within the System of Provision approach. The vertical approach will allow me to address **the first research question of my study.** Likewise, horizontal analysis will allow me to answer my **second research question**.

2.3.2 Global Commodity Chains

Global Commodity Chain analysis is concerned with the production, consumption, and retailing linkages of trade which cross international borders, as opposed to trade at a smaller domestic scale (Leslie and Reimer, 1999). In addition, Global Commodity Chain analysis looks at the structures and functions of international institutions, and the increasing internationalization of the means of production and consumption (Roth et al., 2008). Global Commodity Chain analysis takes consumption as the starting point and traces it back to the point of production. Points of distribution and consumption are simply accounted for before focusing on and unveiling the exploitative reality of production (Leslie and Reimer, 1999). Arce and Marsden (1993: 269) state that an "application of the systems approach effectively suppresses the significance of contextualized human agency", in that the system is reductionist because it obscures the themes of new economic coping strategies, gender dynamics, labour-force concerns, and modern methods of capital accumulation. Thus, as this type of analysis encompasses a large subject matter, the tendency is to gloss over specific details while focusing on systems and flows at the

surface level and only periodically examining individual nodes (Leslie and Reimer, 1999). On the other hand, a benefit is that it allows a holistic and circumspect examination of international commodity chains. Nevertheless, my study is focused on the nodes within a city and elucidating the actors as each node. Since the Global Commodity Chain approach does not allow for the intricacies of human behaviour at each node to be carefully investigated, this type of commodity chain analysis will not be drawn upon in this thesis.

2.3.3 Commodity Circuits

The Commodity Circuit approach is less concerned with the production and sequences that dominate the Global Commodity Chain approach. The Commodity Circuits approach focuses on the dynamics of the relationships between producers and consumers (Jackson and Taylor, 1996) by which commodity systems are shaped and reshaped. To Cook and Crang (1996a), it is better to look at the web of interactions and assume that commodities are interconnected with other goods as they arrive at different places, contextualizing their value amongst other items, rather than examining goods in a vertical chain (Cook and Crang, 1996a; Crang, 1996; Cook et al., 1997). Whatmore and Thorne (1997) explain that the value of an artefact lies in the different processes and perceptions in its various 'moments of production'. Thus, the consideration of the meaning of an item and how it is constructed at every moment is a clear advantage of the approach, compared with a global commodity chain approach (Leslie and Reimer, 1999). The Commodity Circuits approach also emphasizes the role of the consumer, stating that circuits themselves are created and recreated by consumer knowledge (Jackson, 1999), and actively considers consumer knowledge and perception (Gregson and Crewe, 1997; Clarke, 1998; Crewe and Gregson, 1998). However, a concern with the commodity circuits approach is that it is a virtually endless circuit, which may mean a loss of focus on examining economic exploitation (Jackson and Thrift, 1995). Additionally, this approach seems to emphasize the symbolic meaning of items while understating economic interpretations (Leslie and Reimer, 1999). This is concerning because of the economic activities which revolve around commodities.

Though the dynamics of the relationships between consumers and retailers are vital in any marketplace, I also want to address the interactions between vendors and discover the sequences that are involved in distributing the spices within the city. Moreover, the absence of a distinct

beginning and end along with the emphasis on symbolic meaning of a good limits the usefulness of this approach to my study, given my aim.

2.3.4 Systems of Provision

The third tradition of commodity chain analysis that I focus on here derives from Fine and Leopold's (1993) Systems of Provision approach. This approach combines aspects of both Global Commodity Chains and Commodity Circuits approaches. Leslie and Reimer state (1999: 405**)** that "by considering the intersecting dynamics of production and consumption, a System of Provision approach moves beyond the relatively long-standing polarization in debates". In this approach, there is an emphasis on the importance of both production and consumption, as well as an analysis of the distinct relationships between material and cultural practices which shape interactions at every node. The aim of this approach is to uncover the signs and symbols associated with the product and trace it back to the raw materials. As such, Leslie and Reimer (1999) describe the Systems of Provision approach as the most comprehensive elaboration of production-consumption analysis among the three. Nevertheless, one shortcoming of this type of analysis is its reliance on explanations of production-driven activity, contrary to the efforts of this approach to balance the importance of both production and consumption (Leslie and Reimer, 1999).

The System of Provision approach focuses on both vertical and horizontal analyses. Naturally, a commodity chain approach is conducive to vertical connections by emphasizing the links between production and consumption: this approach follows the trade through the different steps required to advance it. A vertical approach allows for the identification of dynamics along individual chains (Wrigley, 1992). The System of Provision approach also utilizes a complimentary approach, namely the horizontal approach, which stresses themes such as gender, ethnicity, power relations and studies the relationships between different commodities at each node; for example, the final sales point of a product (Leslie and Reimer, 1999). Advocates of the horizontal approach argue that the symbolic meanings of each commodity are not only shaped by the chain itself but also by their identity with regards to other commodities (Mort, 1996). Nonetheless, exclusive horizontal analysis leads to a highly descriptive account of consumption, as argued by Fine et al. (1996). It can be seen that while horizontal analysis describes functions

within each node, vertical analysis contextualizes the activities at each node within a larger environment. Thus, there remains a need for both horizontal and vertical approaches to be used (Bush, 2004).

I suggest that the Systems of Provision approach is the most appropriate for the purposes of this study as it allows for both a comprehensive analysis of the movement of goods along a commodity chain, as well as an integrated understanding of the complex interactions at each node. More specifically, I will use the vertical analysis approach to examine the different steps taken to advance spices to the final consumer. This process will help me to answer my first research question. At each point in the chain, I will then engage in a horizontal analysis to understand the intricacies of each node, and construct the profiles of the traders, vendors, and consumers in Shijiazhuang. This will help me answer **my second research question**.

2.3.5 Commodity Chain Conclusion

In conclusion, among the three approaches most commonly used to study commodity chains, the Systems of Provision is most useful for my thesis. Specifically, due to the scale of my study and focus on uncovering dynamics at each node, I will use focus on vertical and horizontal elements. Vertical analysis will allow me to compare the difference between knowledge, actors, and market penetration of different tiers of markets, while horizontal analysis will allow me to discover the intricacies at each node.

2.4 SOCIAL CAPITAL AND NETWORKS

2.4.1 Introduction

In the following section, I conceptualize how personal connections influence the activities of sellers and consumers in the marketplace. First I describe how social capital forms the foundation for the concepts of social network analysis and social network connectivity. I specify the different aspects of social capital, including the concepts of linking, bonding, and bridging capital, as well as heterophilous and homophilous relationships. I go on to elaborate on how social network connectivity provides a more appropriate scale for the type of analysis done in

this study. I will then introduce a special type of social capital that exist between family members, mainly prevalent in informal markets. I conclude by relating to how social network connectivity will help answer my **third research question**.

2.4.2 Social Networks

Before defining social capital, it is necessary to first understand the social network perspective. When people interact with each other, it is possible that a network of social ties is formed. Through these ties, people are able to enhance their activities by obtaining and sharing information (Crowston et al., 2001). The social network perspective studies how information flows through communications between direct and indirect network ties, and how people can procure resources from these ties (Garton et al., 1997). Social network analysis seeks to provide a holistic description of the patterns and flows of information and resources as well as to discover the effects this has on people and organizations (Wigand, 1988).

The significance of social networks in this study is the foundation it provides for social capital and social network connectivity. In this case, a social network consists of a group of actors – spice merchants and consumers – and the flow of information and resources flow through these interconnected individuals.

2.4.3 Social Capital

Social capital has been defined in multiple ways and is used in various fields such as management, sociology, economics, and geography. The mutual connection between members of a society, and the benefits these connections bring to an individual, are the idea of 'capital' (Allbritton, 2007).

Social capital comprises of all existing social networks and the values that arise from these networks for its members to help each other (Putnam, 1993). Bourdieu (1986) describes social capital as the aggregate of actual or potential resources amongst the members of a group. This idea is corroborated by Nahapiet and Ghoshal (1998) who describe social capital as the sum of all actual and virtual resources embedded within, available through or derived from institutionalized relationships of mutual recognition.

Researchers have identified different types of social capital. Gitell and Vidal (1998), along with Szreter and Woolcock (2004), summarized three main groups of social capital: bonding, bridging, and linking. Bonding social capital exists between members of a homogeneous network who are similar in a measurable way, such as age, socio-economic status, race, or ethnicity (Putnam, 2000). This type of capital is often used by disadvantaged individuals with limited access to institutions or social networks to "get by" (Putnam, 200 Turner, 2005; Briggs 1998; Holzmann and Jorgensen 1999). On the other hand, bridging social capital refers to relationships between people who are more heterogeneous, or, different in a measurable way. This type of social capital often allows for a greater number of contacts and diversifies one's connections by creating new ones outside of close families and friends; allowing one to "get ahead" (Turner, 2005; Barr 1998; Kozel and Parker 2000; Narayan and Pritchett, 1999). Finally, linking social capital refers to the connections individuals make with those who are relatively more powerful than themselves, either in terms of economic class or in terms of social status (Woolcock, 2001; Szreter and Woolcock, 2004). These aforementioned types of social capital are found within varying social contexts.

Furthermore, Lin et al. (2001) characterizes social capital in two different ways: homophilous social capital between similar groups (much like bonding social capital) and heterophilous social capital between unlike groups (like bridging or linking social capital). While homophilous social capital provides the strongest relationships, it is the weaker heterophilous connections that result in the generation of new ideas, values, and perspectives (Woolcock, 2001; Szreter and Woolcock, 2004).

These concepts also give rise to the discussion of whether social capital is wholly beneficial or detrimental to individuals. Homogenous communities tend to display more homophilous bonding social capital but less bridging and linking social capital at both societal and institutional levels (Lin et al., 2001; Costa and Kahn, 2003). On one hand, strong connections within a community are beneficial in many cases, as it can be seen in disaster relief situations. Dynes (2006) reported that individuals who received help from their neighbours and community after a disaster have increased survival rates. In contrast, weak heterophilous connections are amplified when a

community is economically or racially segregated (Leonard, 2004; Beaudouin, 2007; Mathbor, 2007). The victims of Hurricane Katrina illustrate this example: the socially and economically vulnerable made slow recoveries due to the lack of financial capital and political support (Dynes, 2006; Brinkley, 2006; Park and Miller, 2006; Mathbor, 2007; Rowlands and Tan, 2008). Thus, negative impacts of social capital are seen in the form of exclusionary actions taken by communities that embody strong group identification. In addition, homophilous groups may be more likely to propagate single ideals and may isolate themselves, contributing further to isolation (Gerber, 2010).

The limitations of social network analysis result from its intensive focus on structure within a particular group, resulting in extensive descriptive analysis. Hence, in the following section, personal social network connectivity is introduced to provide a more appropriate scale for the level of analysis of this thesis.

2.4.4 Personal Social Network Connectivity

Personal social network connectivity focuses on how individuals shape and utilize social structure in order to benefit themselves (Allbritton, 2007). Here, there is a focus on the micro and individual level as opposed to the macro level analysis of the network analysis approach. Personal social connectivity is measured as the degree of accessibility of an individual possesses in relation to others.

Social network connections can be examined based on the strength of that relative tie (Allbritton, 2007). One method is introduced by Granovetter (1973), who defines strong and weak ties of an individual. Strong ties include close friends and coworkers who share dependencies in work related tasks and weak ties are those that connect acquaintances or friends not central to the individual's domain. The strength of the ties depends on the social capital an individual is able to draw from a connection.

2.4.5 Social Capital and Marketplaces

Social capital is beneficial to marketplace vendors because it increases trust between transaction partners (Adler and Known, 2002); reduces transaction costs (Lazerson, 1995; Vandeth, 2003);

enhances access to markets, complementary resources, and prioritized access to information (Hitt et al., 2001). The more information a business owner's social network contains, the more knowledge they can collect, evaluate, and apply (Cohen and Levinthal; 1990). For a marketplace actor, social capital networks can also allow the acquirement of better human and financial resources (Florin and Lubatkin, 2003). In fact, it has been shown in in several studies that merchants in informal markets place importance on developing close ties with fellow merchants as a way to ensure livelihoods (Lyons and Brown, 2007; Lyons, 2005; Kumar and Matsusaka, 2004). This makes marketplace friendships important for quotidian activities, as well as strategic management of business affairs (Lyons and Snoxell, 2004).

A special type of social connection are the social connections within a family. Arregle et al. (2007) used the term Family Social Capital (FSC) to distinguish connections within a business between kin. FSC builds on the internal trust, which is stronger and more enduring within a family, business, or local community (Montemerlo and Sharma, 2010). Family relations are important in economics activity. For example, Power and Willmot (2007) found in their study that the majority of traders in a market in Nairobi had been helped by relatives, giving them an advantageous start in the trade. Furthermore, it has been shown that in Vietnam social and economic activities mainly revolve around family (Dalton et al. 2002; Turner and Nyugen 2005). Family social capital is a unique aspect of social capital and it relies heavily on internal cohesiveness and solidarity within a collective or unit (Montemerlo & Sharma, 2010). Thus, FSC is found in dense networks, which in turn helps build trust, internal cohesiveness, and solidarity in the pursuit of common goals (Coleman, 1988). Moreover, between family, there are lower monitoring costs, higher commitment, fast dispute resolution and an absence of prolonged grievances and grudges (Nelson, 1989; Ouchi, 1981).

2.4.5 Social Networks Conclusion

Since my thesis looks at individual vendors and consumers, I will focus on micro-levels of social capital by employing the personal social network connectivity approach. The benefits of this approach are reflected in its emphasis on the individual and how their connections can be advantageous for them. I will evaluate strong, weak, and familial social connections and their importance in the marketplace, helping to address my third research question.

2.5 CONCEPTUAL FRAMEWORK CONCLUSIONS

Using literature from commodity chains, marketplaces and social capital, I have constructed a conceptual framework for my thesis. First, in Section 2.2, I reviewed marketplace literature. I look at marketplace functions, and their value to actors as an economic and social place. I draw on literature on formal and informal markets to guide my analysis for my first research question. I will look for indices such as marketplace structure, decentralization, and marketing functions.

In Section 2.3, I summarized the approaches to commodity chain analysis, and concluded that Systems of Provision approach is the most suitable for my study. Within this approach, I will draw on aspects of both horizontal and vertical analysis to contextualize each node in the commodity chain as well as to understand the dynamics which shape interactions along the chain. This will complete the analysis for my first research question and provide a framework to analyze my second research question.

Finally, in section 2.4, I explored social capital literature, from which I draw upon the notions of personal social network connectivity and strong and weak relationships. I also looked at the I will look at the importance of social capital in marketplace operations for vendors. Social capital literature will provide a framework to analyze my third research question.

CHAPTER 3. METHODS

3.1 INTRODUCTION

In this chapter, I outline the methods I used during the four weeks I spent in Shijiazhuang through July to August 2016, carrying out field research on the commodity chains of the spice trade in the city. Since the goal of my thesis is to follow the movements of spices through the commodity chain, I primarily focused on interviewing three groups of spice vendors found in the city: large scale wholesalers, smaller scale distributors, and individual vendors. I also interviewed consumers to determine the different ways these spices are used.

3.2 LOCATION CHOICES FOR MARKETPLACES

Due to the size and complexity of Chinese cities, many small scale marketplaces cannot be found on maps or online. Even with information found on the internet, it was difficult to determine the size of the city markets and their role in the commodity chains (for example, a wholesale market versus a larger neighbourhood market). In order to locate the different sized markets, I asked locals – both interview participants and personal contacts - where to find spice vendors. Using this method, I discovered wholesale markets as well as unmapped local neighbourhood markets. This also gave me an idea of the extent of spatial awareness of consumers and vendors of their neighbourhoods. I found that large wholesale markets were mentioned by almost every interviewee, whereas smaller markets were mentioned exclusively by people who lived in that area.

Through the information I collected, I found consensus regarding the existence of three large wholesale markets in the city. Following this information, and based on selective/purposeful sampling (I wanted to visit wholesale markets to answer my research questions), I visited all three, but was only able to collect information from two markets (explained below). The two wholesale markets where interviews were completed are the Qiao Xi and Jia Nong markets. I chose two medium size market places, pointed out by large wholesale market vendors, with a strong presence spice wholesalers: Bai Fo and Ta Tan Nong Mao markets. Finally, I conducted research in two neighbourhood markets – Yu Dong and Zhu Jiang markets. These two markets were identified by consumers. Zhu Jiang market did not have a name, so I identified it by the name of the main street it was located on.

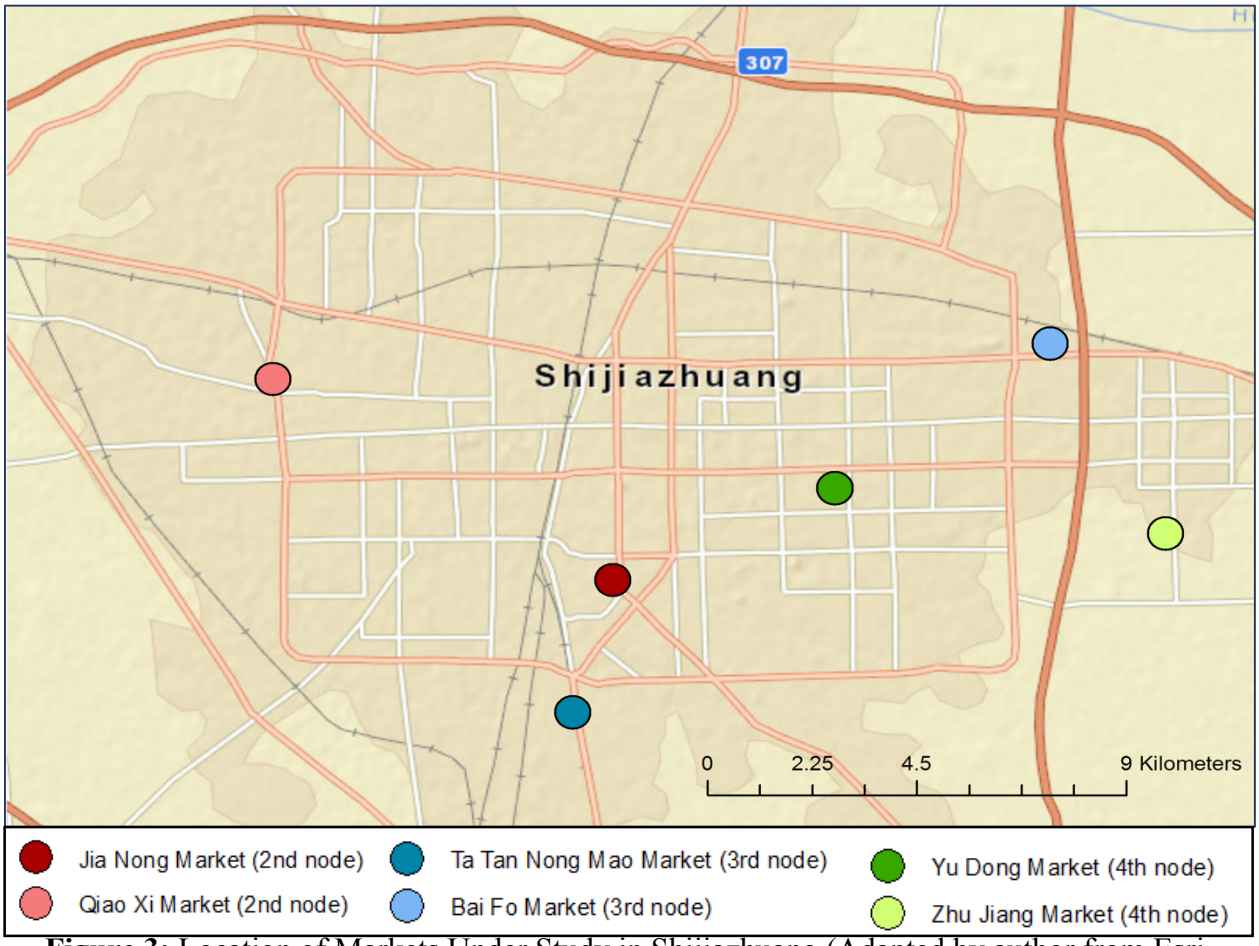

Figure 3: Location of Markets Under Study in Shijiazhuang (Adapted by author from Esri StreetMap Premium for ArcGIS)

3.3 METHODS USED: SEMI-STRUCTURED INTERVIEWS

Due to the nature of this study, I used semi-structured interviews (sample questions in Appendix 1). In total, I conducted 12 interviews with large wholesalers, ten interviews with smaller distributors, four interviews with individual vendors, and four with consumers (summary in Appendix 2). Because I was interested in speaking with specific vendors, I used selective sampling within in marketplaces. Specifically, I only sampled vendors who sold spices. I started each interview by approaching a vendor and introducing myself and my research. Additionally, I made sure to gain informed consent throughout the process.

In using a semi-structured interview style, I was able to use ordered but flexible questioning, allowing participants to express their opinions and experiences which I may not have been aware

of to ask about specifically (Bennett, 2002; Dunn, 2010). The informal nature of my research also fell in line with the environment of the market place and worked to ensure that participants felt comfortable and willing to express their opinions (May, 2001; Dunn, 2010). The semi-structured interview permits the free flow of ideas while permitting the interviewer to steer the conversation towards different themes (Hollway and Jefferson, 2000).

Before going in the field, I developed an interview guide with thematic topics and a detailed list of questions for each theme (Longhurst, 2003). During each interview, I adapted the guide, adding or omitting questions according to the participant's willingness to engage with the topic in order to keep the conversation flowing. I was able to delve deeper into certain research topics with some individuals and this allowed informants to discuss aspects which were important to them (Bernard, 1998; Longhurst, 2003; Cohen, 2006; DiCicco-Bloom and Crabtree 2006; Dunn, 2010). Also, keeping to thematic dialogue and not specific questions made comparability and analysis of recurrent patterns and themes possible between interviews with different degrees of information (Eidse, 2011). Given the market place environment, I did not record any interviews. Instead, I jotted down notes during the interview – mainly during breaks when interviewees attended to customers – and then I filled in my notes with any additional details of the interview afterwards. Interviews were transcribed to computer files at the end of each day in order to ensure the maximum amount of data retention.

Consumers were family friends who I also briefed and informed of my research intentions, gaining consent to interview. Four individuals were interviewed over the phone or in person using similar semi-structure interviews. Questions focussed on their knowledge and use of the different spices. Due to personal connections, all those interviewed came from similar middle class backgrounds.

3.4 ANALYSIS

In order to analyze my qualitative data, I developed a series of descriptive and thematic codes. This included identifying recurrent common themes in interviews and then furthering splitting these into smaller concepts (Cope, 2005). For comparison between the different scales of vendors, I first analyzed interviews at different nodes. Then, I was able to compare differences

and similarities between the different nodes. I used the same process on all correspondents regarding the final uses of the spices.

3.5 ETHICS

Permission to interview human subjects for this research project was granted by McGill University's Research Ethics Board-I (Appendix 3). Due to the nature of this research project, potential harms and risks were minimal, but nonetheless, important to address. First, because I approached vendors in their stalls during business hours, I made sure to pause the interview if a customer approached, or end the interview if business got too busy. Since the interviews took place in an open, public setting, full anonymity could not be ensured as participants could be seen speaking with me. However, I took steps to ensure maximum confidentiality of the participants. I made sure to brief the informants of how I would maintain their confidentiality and their rights to stop the interview or not respond to specific questions. Three participants exchanged contact information and their real names were only recorded in my records with permission. Otherwise, a pseudonym was assigned from the start. No identifiable information, such as the name and specific address of the store was recorded.

3.6 POSITIONALITY

My identity as female Chinese-Canadian raised and educated in Canada, undoubtedly influenced my interactions with participants and my interpretations of interviews. In having this duel identity, it was evident that my identity worked both in aiding and hindering data collection (Mulling, 1999; Ganga and Scott, 2006; Jaschok and Jingjun, 2013). Like Jaschok and Jingjun (2013) in their work with Hui ethnic minority individuals, I adopted more customs of my native identify in order to close the gap between myself and my respondents, such as adopting more a more acceptable form of communication like WeChat.[2] However, this may have been problematic in the sense that similarity highlights disparity (Ganga and Scott, 2006). Exchange and dialogue are the main means by which we resolve the difficulties of communication. Therefore, although my fluent Chinese and appearance closed a gap of culture, it brought attention to disparities due to my age and my claims of being from a foreign institution, which

[2] WeChat is a popular software in China. It can be downloaded on mobiles, and is used mainly for communication, keeping up with news, and online payments.

sometimes caused questioning of my motivations. Due to this, at times I had to play up my outsider role as a foreign university student, producing papers and student ID, in order to legitimize my research (Ganga and Scott, 2006). This, in turn, may have closed the gap between myself and my respondents, and created trust, as they learned of my legitimate reason to be wishing to interview them (Bourke, 2014). As result of the complex nature of my positionality in relation to those of my informants, I approached my interviews with the goal of building good rapport. It is evident that I was able to obtain more information from those whom I developed good rapport with.

3.7 METHODS CONCLUSIONS

In this chapter I have outlined the methods I used in the field. I outlined the process of gathering and sampling interviewees and described the methods I used during my interviews, including their structure and adaptation strategies I drew upon when needed. Following, I summarized the technique of using descriptive and thematic coding to analyze my qualitative data. Finally, I addressed the ethical concerns of my research as well as my own positionality.

CHAPTER 4. MOVEMENT OF SPICES IN SHIJIAZHUANG

4.1 INTRODUCTION

In this chapter, I address my first research question: How are marketplaces in Shijiazhuang city positioned with regards to each other in terms of hierarchy, purpose and space, and how do they operate? In sections 4.3 to 4.7, I elucidate five distinct nodes along the vertical spice commodity chain within the city. Within each node, I describe how actors interact with each other and assess their overall integration within the commodity chain. By describing the flow of commodities between the markets, I address my second research question about how actors move goods along the spice commodity chain. Finally, in section 4.8, I describe the knowledge at each node regarding the commodity chain of the spices.

4.2 FIVE NODES IN SHIJIAZHUANG

The results show five distinguishable nodes in Shijiazhuang. First, there are first node suppliers, which consists of long distance suppliers and warehouses located in the city's periphery. Then, there are three large second node wholesale markets: Zhong Chu, Jia Nong and Qiao Xi markets. At the third node, there are medium neighbourhood wholesale markets, such as Bai Fo and Ta Tan Nong Mao. The fourth node is comprised of smaller neighbourhood markets, such as Yu Dong and Zhu Jiang. Lastly, the fifth node is spice consumers. Figure 4 shows a summary of the five nodes.

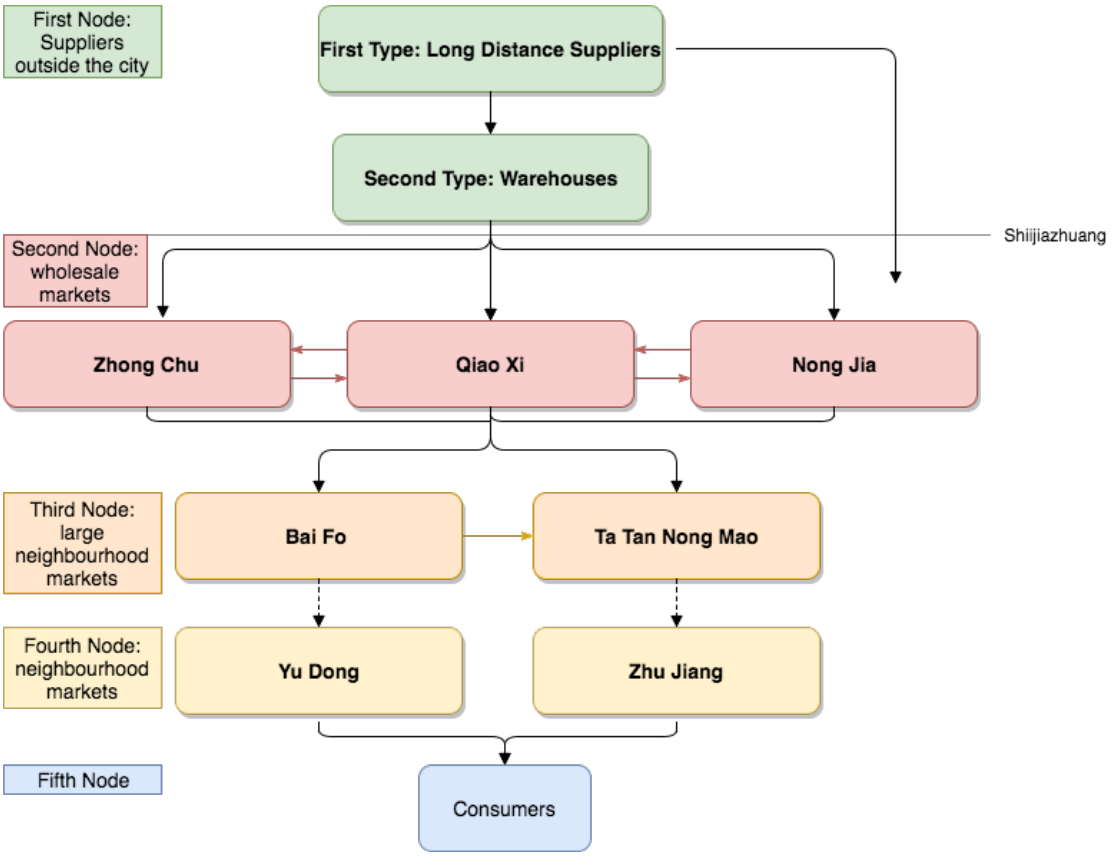

Figure 4: Commodity Chain Diagram of Shijiazhuang's Five Nodes

*Colored lines indicate horizontal trade, dotted lines are inferred trade patterns (as fourth node vendors did not indicate exactly where they obtained supplies from).

4.3 FIRST NODE: INITIAL SUPPLIERS IN THE CITY'S PERIPHERY

The first node is comprised of suppliers located outside Shijiazhuang city. From this study, two different types of first node suppliers are identified. The first type includes long distance suppliers located near Shandong (300km away), Beijing (300km away), Qinghuangdao (600km away), and Bao Ding (150km away). The second type consists of warehouses located in the city's periphery. These warehouses are located outside the city's urban core and act as storage sites for large quantities of spices. One of these warehouses is located in An Guo, a market just south of Shijizhuang. Since the warehouses do not have store fronts to attract customers, their operators rely on orders from wholesale markets. According to Xiao[3], many warehouses around the city purchase their supplies from long distance suppliers (08/05/2016). Thus, the prices these warehouses sell for are slightly higher than long distance suppliers.

[3] All names are pseudonyms.

4.4 SECOND NODE: ARRIVAL OF SPICES IN SHIJIAZHUANG

Large wholesale marketplaces purchase spices from first node suppliers to sell to restaurants and other wholesalers located in Shijiazhuang. I call these "second node wholesale marketplaces". In total, there are three second node wholesale markets in the city: Qiao Xi, Jia Nong, and Zhong Chu. However, data were only collected at the Qiao Xi and Jia Nong markets, as Zhong Chu vendors did not want to participate in interviews. Thus, the results in this chapter are based on information from Qiao Xi and Jia Nong markets. At this level, vendors typically make sales in bulk, and rarely see individual customers buying small quantities for personal consumption.

Like in traditional markets, these vendors do not use contracts for obtaining supplies or selling spices. All second node vendors I interviewed concluded there are rarely any problems in obtaining sufficient quantities of the spices they want, and they are flexible with which suppliers they purchase from. Vendors in Jia Nong and Qiao Xi claimed that when the marketplaces first opened, suppliers from outside the city visited the marketplaces to circulate their contact information. Wholesaler Zhan at Qiao Xi market expressed: "[When the market first opened] two years ago, people would pass by every day and hand out their contact information" (07/29/16). These people were representatives of warehouses or intermediaries for several warehouses. The visits dwindled to a couple each month after the opening period passed and demands from the wholesalers at these newly opened stalls settled into a routine.

Second node wholesale marketplace vendors generally have little attachment to first node suppliers, and do not hesitate to jump between them to get the best deal. Wang stated: "When I import spices, I usually call a few to compare prices. But the prices are always similar. There are so many of them that they have to keep their prices down" (08/13/16). Four second node vendors confirmed they contact warehouse suppliers to obtain their spices. An alternative method for obtaining supplies was described by second node wholesale marketplace vendor Xiao. Xiao's family has been in the wholesale spice business for over 30 years. Members of her family-run stall often travel to Baoding or An Guo (marketplace south of the city) to access suppliers and pre-order spices for shipment. In fact, Xiao said: "I know many new stall owners buy supplies from warehouses. But these warehouses buy their supplies from Baoding, or Beijing, or

Shandong. The warehouses sell for higher prices... Everyone who's been in the business for a while knows this" (08/05/2016). Thus, going straight to the long-distance suppliers helps her family save on costs and guarantee the best spices by having first pick on stock arriving to the area. There are three second node vendors who are aware of long distance suppliers. They have an average of over ten years of experience, which dwarfs the one to three years of experience of the vendors who purchase spices from visiting warehouse representatives. They also stated they visit the same long distance suppliers to restock since these second node vendors have built strong relationships with these long distance suppliers over the many years they have been in the business. Knowledge of the existence of long distance suppliers and trust built up over many years transfer into a willingness to travel further to procure supplies thereby dismissing the warehouses. While this small subset of experienced second node vendors acknowledged the existence of such warehouses, they do not buy from warehouses because of the higher prices these warehouses sell for. By skipping the warehouses, these experienced vendors are able to generate a higher margin of profit.

Unsurprisingly, the largest breadth of knowledge regarding the commodity chain also occurs amongst experienced second node vendors. In addition to having knowledge of both types of first node suppliers, experienced second node suppliers also revealed information regarding the price fluctuations over the years, along with knowledge regarding the quality and origin of the spices (more in 4.8).

4.4.1 Distribution of Spices from Second Node Markets

Regardless of how their supplies are acquired, second node wholesalers typically sell in bulk to restaurants and other vendors. In addition, the vendors of the Qiao Xi and Jia Nong markets also exchange stock between the markets. Usually this occurs if there is a shortage of stock at one market. Conversely, exchange between Jia Nong and Qiao Xi also happens if there is a surplus of stock in one market, and vendors are unable to push out their inventory to customers. The spice vendors interviewed in Qiao Xi wholesale market are all located under a hanger on the periphery of the market. Due to the nature of this set-up, apart from the occasional wanderer, the wholesalers of Qiao Xi do not attract many individual customers and cater mostly to restaurants and other vendors. For these vendors, the relationships with their customers are quite casual.

While all the vendors receive repeat visits from some restaurants, it is unlikely that these restaurant owners come to the same stall for every order. Visits from the same restaurants and other vendors occur a few times a year. Many customers will order from different vendors: "I think the customers come in and just buy from whoever. Of course, if they know me, they'll visit my stall, but it's not every time they buy something" (Zhan, 07/29/16). The vendors in the Qiao Xi market whom I interviewed have been running their own stalls for less than three years. Most had opened their own stall when the market opened in 2014. The casual relationships these vendors have with their customers could be a reflection on their relatively short business experience, which limits the opportunities of developing strong relationships with repeat customers. On average, these wholesale vendors sell 350 *jin* (175kgs) of star anise at 8-10 RMB/*jin* (1.16-1.45 USD), 200 jin (100 kgs) of cinnamon at 10-15 RMB/*jin* (1.45-2.17 USD), and varying amounts of cardamom at 40 RMB/*jin* (5.90 USD) – from 80 to 200 *jin* (40 – 100kg) per month.[4]

On the other hand, spice vendors in Jia Nong wholesale market are spread over two rows located centrally in the marketplace. This more accessible location for customers is reflected in the products these stores carry – with several stalls displaying household consumer goods, such as soy sauce, salt, and vinegar to entice individual buyers. Coincidently, the wholesale vendors who carry a wide range of items are also the vendors who have been in the business the longest –an average of over ten years.[5] Unlike Qiao Xi, Jia Nong wholesale marketplace was established in 2012 and shows a heterogeneous mix of wholesalers. While the store fronts in Qiao Xi are similar in size and setup, the stores of the wholesalers in Jia Nong vary. There are stores that carry spices in large sacks arranged on the floor, while others have spices in bins arranged in the centre of the stall. The Jia Nong vendors also target a wider range of customers than Qiao Xi. The vendors mostly sell their products to restaurants (average of over 60% of sales), with other wholesalers making up the remainder of their customer base. The prices of the three spices in Jia Nong wholesale marketplace are similar to Qiao Xi, but the monthly quantities of spices sold vary between 200-1000 *jin* for star anise, 100-500 *jin* of cardamom, and 100-300 *jin* of cinnamon.

[4] A *jin* is equal to two kilograms

[5] Similarly, one vendor in Qiao Xi who had been in the business for over ten years and also carried an array of spices and household items. Another correspondent pointed out that he had been in the business for the longest, suggesting I speak with this vendor to find out more about the spice trade. However, the vendor did not want to participate in an interview. This was the only store which sold bulk spices as well as household items in the Qiao Xi market.

Additionally, the more experienced second node vendors are more likely to have established recurring relationships with restaurants. Two other wholesale vendors, Li and Hao (each have been in the business for over ten years), confirmed that they each have an established business relationship with several restaurants. These more experienced vendors claimed that business is steady year-round, as restaurant orders rarely fluctuate. However, Liu and Tian (who were the sister and wife of the stall owner- who had been in the business for two years) explained that most their sales come from the "*shaokao*" (street barbeque) business in summer (08/05/16). Thus, in winter, the business shuts down for a couple months. Liu and Tian reiterated the importance of receiving regular restaurant orders to upkeep a healthy business.

In both second node markets, vendors obtain their supplies from first node vendors and sell spices to other wholesalers and restaurants. More years of experience in the business is reflected in knowing about long distance first node vendors, and also in the ability to build rapport with repeat restaurant customers, thereby securing business year-round. Experienced vendors at both markets also sell a more diverse range of products, from bulk spices to packaged consumer goods, to maximize their sales for bulk orders as well as individual customers. Less experienced wholesalers mainly buy supplies from warehouses at a higher price, and have casual relationships with their suppliers and customers. While rapport with suppliers may give a competitive edge, wholesalers (like Liu and Tian) place more importance on securing customers.

4.5 PROFILE OF THIRD NODE VENDORS

The next stage along spice commodity chains are medium sized markets, such as the Bai Fo and Ta Tan Nong Mao marketplaces. The most prominent differences between second and third node marketplaces are the level of integration within the commodity chain as well as the targeted customers. These markets are also spread over the area of a few city blocks, but are only a fraction of the size of second node marketplaces. The vendors of the Bai Fo and Ta Tan Nong Mao markets mainly purchase supplies within Shijiazhuang and derive most of their business from household consumers. In these two aspects, they are distinguishable from second node vendors. The setup of Bai Fo and Ta Tan Nong Mao markets are quite different. In Bai Fo, similar to second node markets, spices vendors are concentrated in one area. Nine out of ten

vendors interviewed also carry packaged spices and other cooking ingredients, mainly to be sold for individual consumption. In Ta Tan Nong Mao market, spice vendors have an array of consumer goods. Although these markets cater to both restaurants and individuals, most interviewees named individuals as their largest customers. Since restaurants owners can purchase directly from larger wholesale markets, it is rare for a restaurant owner to visit third node markets to obtain large supplies of spices. Occasionally, restaurants do order spices from these markets, but Lan, a vendor in Bai Fo, noted that her stall does not have enough storage room to keep up with spontaneous bulk orders – "…if restaurants come in and buy spices without pre-ordering, it will completely empty our inventory. Then we'll have to drive around and try to find last minute stock so we can keep doing business" (Lan, 07/22/16). Three other vendors at Bai Fo stated they have two to three restaurant representatives who buy regularly from them. For these restaurant orders, they purchase spices from second node vendors and stock them temporarily in their stalls before delivering to the restaurants. During these transactions, the third node vendors act more as a liaison moving the spices to restaurants, rather than selling to these restaurants directly from their stock, like second node suppliers. In Ta Tan Nong Mao market, where the spice vendors carry more diversified products than Bai Fo, two vendors regularly supply restaurants with bulk orders. For the rest of the vendors, their business comes mainly from individual buyers who purchase spices for household use.

Among the ten vendors interviewed, two vendors visit first node vendors for spices, with one vendor exclusively securing supplies from these suppliers. The Zhong Chu, Qiao Xi, and Jia Nong second node markets and the Nan Su market were named as the main avenues of supply to third node markets. These vendors travel to the supplier to pick up their supplies. Figure 4 depicts the trade of spices between markets within the city.

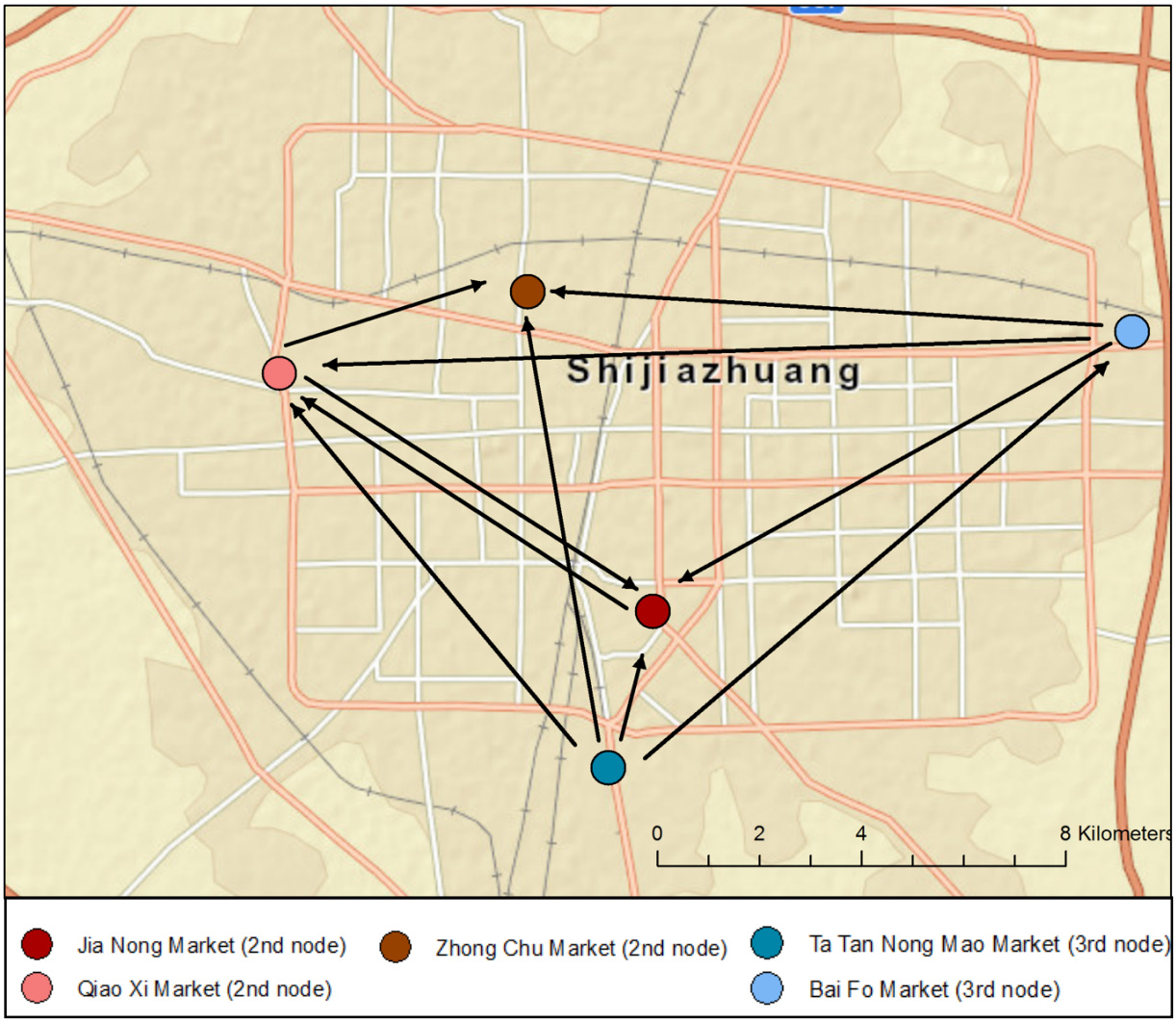

Figure 5: Exchange of Spices Between Markets (Adapted by author from Esri StreetMap Premium for ArcGIS)

*Fourth node vendors are excluded due to lack of information

4.6 THE FOURTH NODE: NEIGHBOURHOOD MARKETS

The fourth node is comprised of neighbourhood markets such as the Yu Dong and Zhu Jiang markets. Neighbourhood markets are the smallest type of markets in Shijiazhuang and are comprised of small stalls that carry a variety of products. The vendors in fourth node markets sell everything from spices, fresh fruit and vegetables, to pot and pans. As such, there is no designated area for spice vendors, like in the second and third node markets. Another characteristic which distinguishes fourth node markets is that the vendors here only sell spices to individual consumers. The Yu Dong market has store fronts along the length of a neighbourhood

block with vendors on each side. Zhu Jiang is set up like a courtyard, with store fronts located on three sides and stalls located in the center under a canopy. Both markets are a lot smaller than third node markets, taking up the area of one city block or less, with a total of less than 30 stalls at each market. In addition, these markets are only well known to those who live in the area. I discovered these two markets from interviews I conducted with consumers who live in each neighbourhood. In both markets, the vendors open in the early morning, around seven or eight, operate until noon, and open again around four in the afternoon. These vendors open their stalls for the morning rush, when people buy fresh food for the day and the evening rush, when people visit stalls on their way home from work. In between, the number of customers are limited and vendors head home to rest.

In each fourth node market, only two stalls have spices for sale in bulk quantities. These vendors could not estimate the amount of spices sold monthly because spices are not consumed as fast as other food products, as an individual consumer may only buy small quantities at a time. Xu said: "I know I sell around 40 *jin* [20kgs] every couple months [of each of the three spices], because I run out. But some months I sell none and sometimes I sell a lot more" (08/11/16). Vendors replenish their stock of spices every couple of months from designated suppliers. The interviewed vendors did not know of any suppliers outside Shijiazhuang. All fourth node vendors had been introduced by friends or family to the business and stuck with the suppliers introduced to them. Since only a small portion of their sales come from spices, none of these vendors have the initiative to discover alternative, possibly cheaper suppliers. Hei from the Zhu Jiang market said: "I know my husband always contacts three different people [for supplies]… There are probably other suppliers but it doesn't matter, I don't sell a lot of spices… I make the most profit from selling sunflower seeds" (08/11/16). Unlike the other nodes, fourth node vendors confirmed they stick to a few suppliers, and do not shop around for supplies, while one vendor exclusively orders spices from his nephew's wholesale business. However, none of the four vendors interviewed openly stated which markets they acquire their spices from. The relationships fourth node vendors hold with their suppliers are stagnant compared to the casual relationships of most second and third node vendors. Of course, this may also be due to in the fact that these vendors have been in the business for a long time; three have been running their stores for over ten

years.[6] These stores identified Lunar New Year as the most profitable period for spices, as many Chinese families cook meat dishes to celebrate the festival.

4.7 FINAL NODE: CONSUMERS IN THE CITY

At the final node, the fifth node, consumers expressed concerns about buying spices in bulk from marketplaces. Average household consumers prefer to buy spices from supermarkets, since spices are often kept in the open at marketplaces. Yang said:

> I don't buy spices from markets, only fruit [from Yu Dong neighbourhood market], because I know the fruits are fresh. I don't know how long the spices are there for … and they are not covered. They are dirtier and older [compared to packaged spices from grocery stores]. (08/03/2016)

However, consumers are more willing to buy spices in bulk from a trusted vendor and if the vendor takes measures to ensure spices are kept in a clean environment. Hong (08/15/16) said: "I'll sometimes buy spices [if I need them to cook something that day] from one vendor (in Zhu Jiang) because she's been here for very long [about eight years]. I always buy fruit from her… She keeps her stall very clean." Consumers do not visit marketplaces solely for purchasing spices or have designated vendors they buy from. Consumers purchase spices only a few times a year and do not visit second or third node markets to buy spices.

For consumers, the most often used ingredient is star anise, followed by cardamom, and lastly, cinnamon. In fact, at the time of interviews, all consumers stated they had star anise in their kitchens, while three had cardamom and only one had cinnamon. The prevalence of star anise can be attributed to the fact that it is the only spice of the three which consumers said could be used for other purposes besides stewing meat. Star anise, cardamom, and cinnamon are common ingredients to add when stewing pork, lamb, fish, and beef to enhance flavour. However, per local culinary customs, star anise can also be used to make side dishes or added to stir fry.[7] The consumers verified the findings of the fourth node; that they purchase more of the three spices during Chinese New Year, as they celebrate the festival by cooking a variety of meats.

[6] The fourth vendor had taken over her friend's business around 2 years ago.

[7] One common dish mentioned is made with peanuts. Peanuts are boiled with star anise, pepper (whole), and salt for a couple hours, chilled in the fridge, and served cold.

4.8 KNOWLEDGE OF THE SPICES

Surprisingly, none of the vendors interviewed in any node could specify the origin of the three spices. Two second node vendors mistakenly referred to suppliers in Beijing and Qinghuangdao as producers. The lack of knowledge towards spices was attributed to the difference in culture between northern and southern China. When asked, many of the vendors identified southern China as the origin of the spices, but did not know the specific region. Additionally, vendors acknowledged that these spices are culturally more important in southern China. Hao said: "All three spices are indigenous to hot areas… northern cuisine and culture developed without these spices until trade opened" (08/05/16). Star anise, cinnamon, and cardamom hold less cultural zenith in northern cuisine compared to the south. In the north, these spices are used primarily as "*zhu rou liao li*". Restaurants and families usually add one, or all, of these spices when boiling or stewing meats. Star anise, also referred to as "*da liao"* (literal translation: big spice) can be added to a stir fry.

Interestingly, only experienced second node vendors could name specific criteria they follow when choosing spices. For all three spices, they look at the size, color, and smell, indicating the necessary conditions of sealed and dry storage areas to prevent the growth of mold. In star anise, they also look for symmetry. These vendors were the only ones who stated they would not buy from a supplier if they are unhappy with the quality. Other second node vendors and vendors in other nodes do preliminary checks on quality when ordering – like cleanliness and absence of mold, but rarely reject spices due to quality issues. These vendors justified this by saying that all the spices are of similar quality, as bad spices would have been discarded long before reaching Shijiazhuang. Zhan said, "… they are all the same by the time [the spices] reaches us [up north]. All the suppliers probably have spices from the same producer in the south. The quality and prices are always similar" (07/29/16). Second node vendors also have more knowledge of the network of the spices outside of the city – with the furthest suppliers located in Shandong and Beijing. Other vendors interviewed were not knowledgeable about first node suppliers and were only aware of second node suppliers within the city. Thus, there is a gap of knowledge between the spices' origin in the South and how they transported to northern consumer cities.

4.9 CHAPTER CONCLUSION

As we move along the commodity chain, vendors sell more diversified products catered towards individual consumers. In the second node, the large wholesalers import spices from first node suppliers outside the city. Experienced vendors have more information about where to obtain spices, going to suppliers in Baoding, and Anguo markets to obtain spices. Less experienced second node vendors obtain their spices from warehouse representatives who come to their markets to advertise their products. The warehouses sell spices for higher prices than long distance traders. For this reason, more experienced second node vendors will buy directly from these long distance traders. The less experienced second node vendors have casual relationships with their suppliers, but both experienced and less experienced vendors show attachment to repeat consumers of restaurants and smaller vendors. Third node vendors mainly buy supplies within the city and sell their spices to individual consumers. Fourth node vendors have more attachment to their suppliers- who are all located within the city - and do not engage in any explicit actions to secure repeat customers. At all levels, with more experience and time involved in the trade, vendors develop closer relationships with suppliers and tend to gain a wider knowledge of where the spices come from, as well as the opportunity to cultivate more fruitful relationships with suppliers and customers. Finally, consumers prefer to buy packaged spices from grocery stores, although they make exceptions for vendors they know well. In northern China, cinnamon, star anise, and cardamom are used primarily for stewing meat, but star anise is commonly used for cooking other dishes like a stir fry. As such, it is the most commonly sold and used spice among all three.

CHAPTER 5. SOCIAL NETWORKS AND FUNCTION OF SHIJIAZHUANG'S MARKETS

5.1 INTRODUCTION

In this chapter I conduct a horizontal analysis on the three vendor nodes inside Shijiazhuang to create a complete more complete understanding of how these vendors operate their business. In section 5.2 I describe the everyday operations of the stalls. In section 5.3, I describe the findings on the relationships between vendors in the marketplaces, looking at the differences between second and third node markets versus fourth node markets. In 5.4 I look at the importance of social connections for vendors entering the business. Through the chapter, I present findings regarding the formality of Shijiazhuang's markets, which I summarize in 5.5. Finally, in 5.6, I conclude how the results complete the analysis for my first research question and address my third research question.

5.2 OPERATIONS OF STALLS

The profiles of spice vendors in Shijiazhuang are consistent with the findings of Wang and Dong (2009). Like in the Xinfadi wholesale market in Beijing, almost all stalls are small family owned and operated businesses. Shijiazhuang markets fall in line with informal economies in terms of the prevalence of labour intensive process and little use of technology. In fact, 92 percent of vendors only take cash payments, while eight percent take online transfers. Still, only half of the vendors have automated cash registers (where prices still have to be entered manually). Only two storefronts (one in Qiao Xi and one in Jia Nong second node markets) employ a worker who is not related to the owner. However, in these two cases, the owners of both stores were present. The other 23 storefronts all have employees with first degree ties to the owner. Another similarity to Xinfadi wholesale market in Beijing (Wang and Dong, 2009), is a visible division of labor. I observed in six different stalls, as a family member looked after the stall, the owner was out purchasing spices. It is evident that members of the family have clear responsibilities and are not concerned with each other's tasks. As one respondent replied: "I am here to look after the stall – my dad is actually in one of the bigger markets looking to replenish out stock" (Lan, 07/22/16). Another vendor in Jia Nong market expressed regret towards not having more information for my interview: "I don't know much really… I just sell the spices. I'm not the

owner, if he was here he would be able to answer your questions. He's out getting spices right now, actually" (Liu, 08/05/16). In relation to previous studies done by Alexander and Alexander (2000) in marketplaces, spice vendors in Shijiazhuang also act under the direction of male household heads. While 71 percent of 26 vendors taking care of the stalls were women, almost all the stalls are owned by men (89%), or jointly by a couple (11%).

5.3 RELATIONS WITHIN THE MARKETPLACE

Due to the proximity of the vendors within the marketplaces, it is quite natural to look at the relationships between these actors. The findings of relations within the marketplace further support Ahmadi-Esfahani and Locke's (2006) claim that marketplaces in China show characteristics reflective of formalized marketplaces. Unlike informal markets, the need for maintaining social capital with other vendors is not as imperative for the Shijiazhuang vendors. Lyons and Snoxell (2005) showed how traders in the informal economy, perceive, develop, and prioritize social capital in order to support sustainable livelihoods.

5.3.1 Economic Functions of Second and Third Node Marketplaces

The vendors of second and third node markets of Shijazhuang are all conglomerated into one area, like the markets in the Lyons and Snoxell's 2005 study, but did not express interdependence on their neighbours. When asked, most acknowledged they do not share close, personal friendships with their neighbours, but they are on friendly terms. Chang, a vendor in Ta Tan Nong Mao third node market, confirmed this:

> Of course I didn't know anyone when I first got here. But when you come every day, you get comfortable and familiar with everyone. Everyone has their own things to tend to; but I'll watch their stall if they leave for a bit and they'll do the same for me. (08/06/16)

Thus, there is not a strong need for bonding social capital in these markets, reflecting a high degree of formality in the markets. Furthermore, none of the vendors expressed hostility towards neighbouring competition. Wang at the Qiao Xi second node market claimed: "I don't think anyone [customers] would be able to find me if I were alone. It helps to be in one area because all the customers come to one place" (08/13/16). Li, from Jia Nong second node market, was the only one to express dissatisfaction with the number of wholesalers present at the market:

> When I first started in the trade, it was very lucrative and the trade routes were more secretive; not many people knew the prices of the spices so we could sell

> them for high prices. Now, the market is so saturated and prices are so transparent that we cannot earn more than a marginal profit. (08/05/16)

He too, however, admitted that he was on friendly terms with neighbouring stores: "It's useful, if I have to run out for a couple minutes, they'll help me look at my stall" (Li, 08/05/16). In four cases, as I was conducting interviews in the second and third node markets, another vendor stopped by to converse with my correspondent. Conversation was always light and affable.

Furthermore, market spaces offer a wide range of functions. Hei described the Qiaoxi market as being a place for trade for several kinds of merchants:

> If you want to find out where the spices come from, maybe you want to talk to the merchants that come in the mornings. There's a lot of them; they drive in with their trucks loaded with fruits and vegetables and sell their produce for cheap. They're usually from outside the city, so they'll know more about things outside Shijiazhuang. Of course, if you're interested in spices, they won't be much help because it's usually fresh produce. They come in every morning at four a.m. and leave when the regular wholesalers come in. It'll be hard to talk to them because it'll be hectic- everyone will be trying to auction off and buy produce. (08/11/16)

The physical location of a market place serves as a place for spices wholesales, but also trucker merchants too. Second node markets provide a space for economic transactions between different agents to take place. In the mornings, they serve as markets for fresh fruits and vegetables produced by farmers in surrounding areas of the city. Later in the day, they act as terminal markets for products, such as spices, which originate from areas outside of Shijiazhuang.

5.3.2 Fourth Node Marketplaces: Economic and Social Exchange

In Yu Dong and Zhu Jiang fourth node markets, there is a marked difference in the atmosphere of social relations. Not only are the stores closer together, but the relationships between vendors are closer as well. This may be because only a couple vendors in each marketplace sell spices in bulk, and they are not located next to each other, thus reducing competitiveness. These relationships have a level of trust and comradery I did not witness first hand in second and third node marketplaces. For example, as I was interviewing Yang in the Zhu Jiang fourth node market, the neighbouring stall owner noticed a potential customer looking at Yang's produce. When Yang continued her conversation with me, her neighbour, without a moment of hesitation, proceeded to greet and sell the customer eggs, then handed the cash over to my correspondent, Yang. Hei, located in Yu Dong cheerfully told me:

> Of course! I know everyone. I have been living in the neighbourhood for 30 years! After my son graduated university, I didn't need to run the stall anymore, but my husband wanted me to continue because I get to be outside, and we are not just staring at each other every day. It's very nice. I get to talk to everyone here, and I am not at home arguing with my husband. (08/11/16)

Another vendor, Xu, in the same marketplace told me that his daughter and nephew had set up the stall for him to keep him busy: "… I don't need the money [generated from the business]. But after my partner left, they [daughter and nephew] set up the stall for me so I can go outside and chat with people. The day goes by faster this way" (08/11/16). It is evident that the marketplace for fourth node vendors serves to satisfy not only economic, but also social functions. On the other hand, second and third node markets serve primarily as places for economic interactions, as vendors maintain a friendly but distant relationship between each other.

5.4 ENTERING THE BUSINESS

Though building social capital is shown not to be prominent between vendors with already established stalls, it is an important factor for vendors entering the business. In fact, from the 11 correspondents who responded to the question, eight vendors accessed the trade directly through a strong network tie. Six had familial connections with someone in the trade, while two were introduced by a close friend or neighbour. The other three worked in the trade before, becoming familiar with the vocation before starting their own business.[8] These three vendors were able to establish store fronts in the Qiao Xi second node marketplace because their previous business ties gave them prioritized information about the opening of a market. This fits the definition of a strong tie. In addition, these ties are important for recruiting labor, trade partners, and finding new information. Yang (08/09/16) stated how her friend introduced her to the trade and gave her all her current contacts: "My friend showed me everything for two weeks, gave me all his contacts, and showed me how and where he got his supplies from. I stick to the same suppliers. I make a profit, so there's no reason to change."

Though most respondents did not want to share how they entered the business, 55 percent of those who responded were introduced by family. Additionally, of the 26 merchants, 23 are

[8] Of these three, two (Zhan, 07/29/16; Wang, 08/13/16) came from surrounding villages and had been introduced to the trade by a "*lao xiang*."[8] The other had found employment in the city by himself, after which he decided that starting his own business was more profitable.

exclusively family businesses, meaning they do not hire anyone without blood relations to the owner. Fang expressed the convenience of owning the stall with his wife, and hiring their siblings to work: “It’s just easier to work with family. I don’t have apprehensions about leaving the stall or that they won’t care enough to make sales… Also, they can help last minute. No one else would do that except family” (07/22/16). Thus, FSC (family social capital) aids in the initial stages of setting up the business, but also provides reliable and trustworthy employees.

5.5 FORMALITY OF SHIJIAZHUANG’S MARKETPLACES

All six markets where interviews were conducted fit the description of a terminal market, as defined in Section 2.3.1. The markets of Shijiazhuang corroborate the findings of Ahmadi-Esfahani and Locke (2006) in Beijing. The markets are all owned and governed by the municipality. All marketplaces, from the second node to the fourth node, are controlled and maintained by the government. Furthermore, the six marketplaces showed high degrees of formalization; all had concrete and permanent structures. The formality of these markets was described by Hei: “Any market you see like this- where there are many stores in a designated location - is all ran by the city. We all have to rent out our stall on a monthly basis” (08/11/16). Zhan (07/29/16), from the Qiao Xi market, supported this fact: “We pay our monthly rent in order to keep our spot. There are also people who come and take the garbage- I just keep my store front clean.”

Across all four nodes, though the use of social capital may enhance a vendor’s daily experience and satisfaction for social interaction, obtaining the trust of their neighbours is not a priority for vendors, as it is for actors in informal markets. This could be attributed to the fact that my correspondents operate in formal, legal, and permanent spaces. Thus, there is not a strong need to rely on social capital to secure their livelihoods. The nature of these markets reflects on the government of China’s attempt to formalize and regulate food supply (Ahmadi-Esfahani and Locke, 2006).

5.6 CHAPTER CONCLUSION

Operations of the stalls are dominated by women, although the majority of stores are either owned by men, or jointly by a couple. In terms of operation of the stalls, Shijiazhuang shows

features of informal markets, in that it is characterized by labour intensive, instead of capital intensive, activities. The goods carried by vendors are also seasonal and vary from stall to stall, resulting in a wide range of market functions. Additionally, marketplaces in Shijiazhuang are comprised of small, independent stalls, which are similar to informal markets. However, the formalization of Shijiazhuang markets could be seen in that the vendors do not rely on personal social networks to get by in the marketplace. In the second, third, and fourth node markets, vendors do not consider building social connections with other vendors around them as imperative as it has been shown for vendors in informal markets. This could be ascribed to the fact that these vendors operate in legal, formalized marketplaces, and do not need to form personal connections to get by. Relationships among second and third node vendors, although distant, are amicable and reflect the economic functions of these markets. Vendors in the fourth node rely on the marketplace to fulfill their economic needs, but also view the market as a place for social interaction. Thus, although marketplaces in Shijiazhuang are legal and formalized by the municipality, they still share similarities with informal markets.

Despite the insipid development of new ties *within* the marketplace, for the same traders, strong ties with individuals *already involved* in the trade are essential for access to the market. Among this, the overwhelming majority of respondents were introduced to the trade by a family member, illustrating the importance of strong connections at the initial stage of setting up a business than weaker, social capital ties. FSC is also important for gaining priority access to information as well as maintaining long lasting and favourable partnerships. Most vendors I interviewed were introduced to the trade by family, indicating the importance of FSC. Additionally, family ties continue to be maintained and fostered in the long term, for the benefits these ties bring to the business, especially in terms of reliability and trust in employing members of the family.

CHAPTER 6. DISCUSSION AND CONCLUSION

6.1 INTRODUCTION

In this chapter, I expand upon the results of Chapters 4 and 5. In section 6.2, I assess the impact that decentralization has had on vendors in the second node. In section 6.3, I discuss the difference in fluctuation in the sale of spices mentioned by the vendors. In particular, I look at why second node vendors mentioned differences in prices before and after 2010, while third and second node vendors focused more on seasonal variations in spice sales. I conclude the main the reason for this is because only second node vendors were visibly impacted by the forces of decentralization. Finally, in section 6.4, I discuss the familial relationships found in the marketplace by contextualizing the importance of family in Chinese society, before concluding the thesis in section 6.5.

6.2 MARKETPLACE DECENTRALIZATION IN SHIJIAZHUANG

The results in Chapter 4 and 5 have shown that wholesale market vendors are driven to provide more services, such as delivery, and sell products tailored for individual consumption in order to increase their competitiveness. As Shijiazhuang's population grows, and the demand for spices also grows, wholesale markets decentralize to meet these conditions. Originally, there was one market Zhong Chu in the city (Xiao, 08/05/16). As demand grew, stalls in Qiao Xi and Jia Nong were also established for spice vendors by the municipality (Xiao, 08/05/16). Spice vendors claimed they relocated to Qiao Xi and Zhong Chu because these new locations provided an opportunity to access new market areas (as seen in the Qiao Xi marketplace which is fairly new - 2014). When new markets opened, and more vendors settled in, the market for spices became more saturated. The growing number of vendors vying for customers worked to gain consumers by undercutting each other's prices. This fact is evident because the prices of each spice are almost identical across vendors at the second node marketplaces. As a result, vendors are only able to derive marginal profit gains. The opening of new marketplaces falls in line with increasing decentralization, as stated by Kohls and Uhl (1990). Wholesale vendors become involved in a greater range of market functions, buyer services, and specialist distance provision to maintain their market competitiveness. Thus, wholesale vendors in Qiao Xi and Jia Nong second node markets offer discounts on bulk spices, take orders in advance, and provide delivery services. Li, a vendor in Jia Nong second node market, iterated: "…When I first started, we

didn't deliver, everyone came to us!... Now, there are so many [vendors], if I don't deliver, I will definitely lose business" (08/05/16). The dynamics of such market forces are in line with the government of China's goal of implementing price mechanisms within marketplaces. As new marketplaces open to accommodate rapid growth of the city, and as market saturation occurs, prices for cinnamon, star anise, and cardamom become more transparent. While these concerns were common for second node vendors, similar worries were not voiced by third or fourth node vendors. This point is analyzed in more detail in 6.3.

6.3 FLUCTUATIONS IN SALES

While low standardized prices may be favourable for the Chinese government, as well as for consumers, it was a point of concern for vendors who had been in the business for a long time. Li, of the Jia Nong second node market, explained how the price of spices almost halved since he first started in the business over 15 years ago (08/05/16). The gravity of the situation was also emphasized by Xiao (08/05/16).[9] However, this was by far the busiest stall I witnessed, with seven individual transactions and Xiao's mother prepping an order for delivery during the 45 minute interview. Additionally, only vendors with over ten years of experience could point out the difference in sales before and after 2010. Since the early 2000s, cinnamon, cardamom, and star anise have halved in price (prices noted in Section 4.3). Moreover, Xiao claimed that her store can only secure half of the restaurants orders it did before: "We used to not be able to rest, it was so busy. Now, business is very slow" (08/05/16). Less experienced vendors also noticed price drops since 2010, but were not as ardent in their accounts. Zhan (07/26/16) said: "I think business is a little slower [since 2010, when I first started working in the business], but it has been slowly picking up." This could be attributed to the fact less experienced vendors have not been involved in the business long enough before 2010 to experience the drastic price differences before and after the economic downfall and the simultaneous increase in vendors. Thus, price mechanisms, coupled with the economic downfall, have mostly affected restaurant orders, thereby impacting the overall transactions of second node vendors.

[9] While Xiao did not attribute the fall of her revenue to an increase in the number of competing vendors, she did describe how her marketplace stall did not generate as much income as before, saying that her business took a hit in the 2010, when the effects of the 2008 recession percolated to Shijiazhuang, and had only just started recovering when interviewed in 2016

At the third and fourth nodes, where vendors target household buyers, the vendors did not mention price fluctuations over the years. In contrast, these vendors focused on different volume demands over the course of each year. No vendor discussed the economic recession or decentralization. Correspondents did not mention the opening of new third or fourth node markets in recent years. New markets may have opened, but vendors in the third and fourth markets were unaware. Third and fourth node vendors would only be affected by opening of new markets located very close to them since they rely on a smaller consumer base (neighbourhood level). In contrast, second node markets are different because they target consumers within the entire city. Thus, the opening of a second node market on the other side of the city would still affect business in existing second node markets. Additionally, third and fourth node markets mainly sell to individuals, unlike second node vendors who depend on restaurants, and were unaffected by the decrease in number and quantity of restaurant orders in 2010. Third and fourth node vendors mentioned that peak of spice sales occurs in January and February, during Chinese New Year. The exceptions are Liu and Tian, who mentioned their store sold the most spices during the summer street barbeque session.

Decentralization coupled with lesser and smaller restaurant orders have mainly affected second node vendors. In contrast, third and fourth node vendors were largely unaffected because they mainly target individual customers and rely on smaller consumer bases. As a result, second node vendors were more concerned with difference in sales before and after 2010, while third and fourth node vendors only mentioned seasonal variation in spice sales.

6.4 FAMILY SOCIAL CAPITAL IN SHIJIAZHUANG MARKETPLACES

The proportion of family businesses in the marketplaces where I conducted interviews reflects the cultural essence underlying the family businesses, or as Greenhalgh (2012: 478) describes “the traditional, collectivist, mutually beneficial Chinese family”. The family firm is also reflective of the Confucian culture which emphasizes traditional, familistic harmony, and emotional bonds (Tai, 1989; Redding, 1990; Yu, 2011). The household firms in my study show no particular distinction between the household and firm, economic relationships, and kin relationships. The flexibility of small enterprises is useful, as previously mentioned by Chu (Section 5.5) in terms of employment but also pay. The vendors I interviewed did not mention

salaries for family members. With these strong ties, there is an obvious trust, priority, and cohesiveness that is particular to familial relations. Families have been recognized to have an important role in Chinese business (Chau, 1974; King and Man, 1979; Wong, 1985; 1988b; Greenhalgh, 2012). Thus, the dominance of family owned and operated firms in Shijiazhuang marketplaces is not surprising.

6.5 THESIS CONCLUSION

Throughout this thesis, I have worked to answer my three research questions:

1. How are marketplaces in Shijiazhuang city positioned with regards to each other (hierarchy, structure, purposes, space) and how do they operate?

The findings show four vendors nodes and one consumer node. The first node comprises of warehouses and long distance vendors situated on the outskirts of the city. Specialised spice wholesalers of the second node are located in Qiao Xi, Jia Nong, and Zhong Chu markets. Second node markets are large, occupying the area of several city blocks, with designated areas for wholesale vendors. Third node vendors are mainly distinguishable from second node vendors from the size of the markets- usually the size of one city block and their target customers. I found two types of second node markets: Bai Fo has spice vendors concentrated in one area, while vendors in Ta Tan Nong Mao are spread throughout the market. Finally, fourth node vendors occupy the smallest spaces. All markets are owned and overseen by the municipality. As a result, the markets showed high levels of formalization; they are built with permanent structures and vendors are required to pay monthly rent. A couple similarities with informal markets are the prevalence of labour intensive activities and also lack of computerized systems for stock inventory and buying/selling transactions. For second and third node vendors, the marketplace serves as a place for economic exchange, whereas fourth node vendors also view the market as a place for social interaction. Finally, consumers comprise the fifth node.

2. How do actors at the three tiers of the city's marketplaces and urban consumers interact with each other and move spices along commodity chains?

Second node market vendors import spices from first node vendors and sell in bulk to restaurants and other merchants. Experienced vendors prefer to buy supplies from long distance vendors, instead of warehouses, because of lower prices, while less experienced vendors purchase from

warehouses. Third node wholesale market vendors import spices mainly from second node markets, selling in bulk to restaurants and individual consumers. Third node vendors mainly target individual consumers, with a few providing restaurants with spices. Fourth node vendors purchase spices within the city and only sell to individual consumers. Second and third node vendors trade with other similar sized markets – usually for emergency restock or to sell overstocked spices – while fourth node vendors do not engage in horizontal trade. Consumers prefer to buy spices from supermarkets, but occasionally purchase spices from trusted vendors. Star anise at all levels was overwhelmingly recognized as the most commonly used spice of these three in the northern Chinese diet.

Moving along the commodity chain, the circle of knowledge becomes smaller, with regards to where the spices originate from. Vendors in second node marketplaces could identify spice suppliers outside the city, as far away as Shandong and Beijing. Third node vendors rarely had knowledge of operations outside Shijiazhuang, while fourth node vendors did not show any knowledge of suppliers outside the city. Experienced second node vendors also identified price difference in the spices before and after 2010, mainly attributed to the increase in the number of vendors and economic recession.

3. What role does social capital play to support the economic activities of spice vendors in different marketplaces in Shijiazhuang?

In the marketplace, wholesalers retain casual friendly relationships amongst themselves. There is little hostility between market vendors at all nodes. Additionally, the number of years in the business corresponds directly with strength and bonds of relationships vendors have with their suppliers and customers. Second node vendors generally place more importance on relationships with regular customers and maintain casual rapport with suppliers, while I found the reverse is true for third and fourth node vendors. The exceptions are second node vendors who have been in the business for more than ten years, who stated they had trusted suppliers they buy from. These vendors are likely to stick with the same suppliers and travel longer distances to these suppliers on a regular basis. FSC and strong connections prove to be most beneficial for vendors entering the business. FSC also provides trustworthy and reliable employment during regular business operations.

This thesis provides insights into where and how the commodity chains of cardamom, star anise, and cinnamon terminate, focusing on a typical, medium sized city in China. The thesis reveals that the mechanisms and actors at the terminal markets in Shijiazhuang are complex and dynamic, yet there is little knowledge of the starting nodes of the spice commodity chains; for urban marketplace vendors as a whole, profit margins remain more important. It will be interesting to revisit this city in the near future to see whether food safety continues to be a concern for residents and the local government alike, to examine how these markets might change further, and to determine whether the degree of family ties and social networks among spice traders will be altered as the city no doubt continues to expand.

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APPENDIX A

Sample Questions for vendors

Background:

a) How long have you sold spices for? Did you sell elsewhere before starting to sell here? (if yes, where; when moved here and why, etc)
b) How did you get involved in the spice business? (e.g. learnt from parents, followed friend…)
c) Why did you decide to sell *this* spice (ask for all three)?
d) Who is involved in this business with you? E.g. husband/wife? Children, parents, in-laws, paid workers?
e) How has your business developed over the years? (growth / stagnation / decrease) Why?
f) Do you lease this market stall? – try to get details as to how that works- monthly, yearly rent? Do you have to pay for things like electricity and waste disposal too?
g) Relations with other stall holders? – friends at all? Look after stalls for each other? Help each other with big orders? Or fully competitive, cut-throat? Or a mix- why friendly with who…
h) How has the market in spice developed over the years? – more buyers than before? Less?
i) Do you think you will continue running this business in the future?

About the spices:

j) What do you know about the spices you sell - Origin? Conditions? (goes moldy? – is it a problem? How do you prevent this?) Processing (that they do or that they know about that others do, e.g. star anise being dyed different colours)? Quality issues?
k) Price (fluctuations)? Over the years / during one year? (e.g. more expensive before Chinese New Year?) – try to get information for changes within a year and over many years.

a. Is the price you buy for more or less than last year, 3 years ago, 5 years ago, 10 years ago? When can you remember it being the cheapest/most expensive (ask for each of the three spices).

l) How much sold / month?

m) Who are the end-users? How much do they buy? What are the uses?

n) How important are the three spices in Chinese cuisine / medicine?

o) What can you tell about the quality of these Chinese spices (cardamom, star anise, cinnamon) in comparison to the same spices from other countries?

p) Do you know that these spices are grown in Vietnam too? – if yes, do you think their spice is better or worse? Why?

Trade networks:

q) How does the product reach your stand? Do you have someone deliver or do you pick it up yourself? How often?

r) How do you purchase your products, do you have an agreement, or do you pay up front?

s) How did you initially get to know your suppliers? How many different suppliers do you have? Where do your suppliers come from? How often do they come here? (or do you visit them?) To what extent do suppliers specialize in one spice? How many traders do they trade to?

t) Do you always purchase from the same suppliers or are you flexible?

u) Do you know where your suppliers get their spices from? Where do they buy the spices? (different parts of the country / other places abroad)

v) Who buys the spices from you – e.g. individuals for household/own use, restaurants, small scale traders? If small scale traders, where do they trade? How much do the different types of customers buy?

w) Do the people you sell to pick up the spices or do you deliver to them? If you deliver, who does this – yourself or a porter? If a porter, what is the business relationship you have with them (e.g. they always work with you or you use whichever porter is available in the market that day). [try to get more info on links with porters, cost of using porter etc]

Other:

x) Do you think you will continue running this business in the future?

y) How do they consider the future of the spice trade? What are their worries / concerns?

Sample Questions for Consumers

The purpose of these interviews is to obtain systematic basic information on the different uses of cardamom/cinnamon and star anise. Questions may include:

Spice uses

a) What do you use these spice(s) for? Medicinal reasons (like what?)– for cooking? –cooking what? Other uses?
b) Since when? Who did you learn this from?
c) Do you have recipes that use these spices? – where did these recipes come from? – family tradition; relatives or friends in the village (if so, which village), cultural tradition? Cook books?
d) How do you use the spices (i.e. in what form): bark, pods, seeds, powder?
e) Used for certain festivals; in certain ceremonies?
f) Are these products important in your everyday consumption? How important are the prices of the products?

Spice supplies and suppliers

g) Where do you buy your spices and why? – any social relation/long term connection with seller? Trust them? Any quality concerns?
h) What attracts you to buy from this stand?
i) How often do you buy these products? How much do you buy?
j) How far did you travel to buy these spices?
k) Do you know where they come from originally?
l) How are they grown?
m) Who grows them? – any specific ethnic minority?
n) How do they get to this city?
o) What's the current price and how has this changed over time?
p) Are these spices from certain regions/countries better than other regions? What about spices from overseas – etc, details of place, opinions.

Cultural connotations of spice

q) Sayings / legends about the history, origins, uses, etc. of spices?

r) Are there any beliefs / food taboos related to these spices?

APPENDIX B Summary of Interviews – All names are pseudonyms

Table 1: Vendors

Name	Date of Interview	Store Type	Employee Type	Characteristics
Qiao Xi Wholesale Market				
Zhan	07/29/16	Wholesale	Owner	- Store owned by couple for 1.5 years (20's-30's) - Was introduced to the trade and city by friends from the same village
Bai	07/29/16	Wholesale	Non-family	- Female, 20's-30's - Small store front run by a female employee - Wasn't sure what cinnamon was
Chao	07/29/16	Wholesale	Owner + Non-family	- Female (50's), owner male 40's - 50's - Biggest store front at the market, and longest in the business
Wang	08/13/16	Wholesale + other	Owner	- Male, 20's-30's - Started business 5 years ago and moved to this location 1.5 years ago
Mong	08/13/16	Wholesale	Owner	- Female, 50's - Store only carried star anise and was run by a relative of the owner (male)
Jia Nong Wholesale Market				
Li	08/05/16	Wholesale	Owner	- Male, 50's-60's - Had been in the business for 15 years having been introduced by friends after moving into city to help children
Hao	08/05/16	Wholesale	Owner	- Male, 30's – 40's - Introduced into the trade by wife's friend after moving into the city 10+ years ago
Dai	08/05/16	Wholesale + other	Non-Family	- Female 20's-30's - Not related to the owner, who is a male
Liu and Tian	08/05/16	Wholesale	Family	- Two females 20's-30's, along with three kids playing in the store

				- Wife and sister of the owner who was out gathering supplies
Xiao	08/05/16	Wholesale + other	Family	- Female 30's and mother 50's-60's - Family had been in the business for 5+ years, while father in law and husband had been in business for 30+ years - Moved to this location a couple years ago
Zhong Chu Wholesale Market				
Ding	07/28/16	Wholesale	Family	- Female, teens, helping mum look after the store
Bai Fo Medium Market				
Fai	07/28/16	Wholesale	Family	- Female, 50's - Daughter and son-in-law's store she's helping look after - Son-in-law introduced by a friend
Chen	07/28/16	Wholesale + other	Family	- Female, 20's - Looking after uncle's store
Chang	08/06/16	Wholesale + other	Family	- Male, 30's - Was introduced by a friend a few years ago, both coming from nearby village
Chu's	08/06/16	Wholesale + other	Owner	- Couple (30's) - Only carried star anise anise and cardamom
Chang	08/06/16	Wholesale + other	Owner	- Male, 40's - Owner of the store, had been in the business for 5+ years
Zhong	08/06/16	Wholesale + other	Owner	- Female, 50's - Hired by owner, not related
Ta Tan Nong Mao Medium Market				
Cui	07/22/16	Spices + other	Family	- Female, 20's - Owner is aunt and uncle on her dad's side
Fang's	07/22/16	Spices + other	Owner	- Couple, 30's - Has been in this location for a year, when friends introduced them
Lan and Feng	07/22/16	Spices + other	Family	- Female, 20's - Daughter and daughter's friend of owner
Wu	07/22/16	Spices + other	Owner	- Female, 40's - Sold spices along with products

				such as sunflower seeds in bulk
Li Na	07/22/16	Spices + other	Owner	- Female, 30's - Took over friend's store a few years ago
Yu Dong Neighbourhood Market				
Heng	08/09/16	Spices + other	Owner	- Male, 50's - Had the store for over 10 years
Yang	08/09/16	Spices + other	Owner	- Female, 30's - Runs the store, but husband helps move deliveries - Took over the stall when her friend moved
Zhu Jiang Neighbourhood Market				
Xu	08/11/16	Spices + other	Owner	- Male, 60's - Daughter and nephew set up store, is looking after store while daughter has a baby - Orders spices from nephew
Hei	08/11/16	Spices + other	Owner	- Female, 50's-60's - Took over stall from neighbor - Has been in location for 20+ years - Revenue from the stall put her son through masters and PhD

Table 2: Consumers

Name	**Date of Interview**	**Characteristics**
Yang	07/20/16	- Woman, 50's mother of two - Does not buy spices from wholesalers because she is worried about cleaniness
Hong family	08/03/16	- Couple 50's - Wife will sometimes buy spices from neighbourhood market
Qian family	08/03/16	- Family of three - Lives inside a gated community and buys spices from a small grocery store inside for convenience
Song family	08/15/16	- Family of three - Buys spices in grocery stores - Sometimes visit

		neighbourhood markets for spices, but mainly for fruit, dried noodles, or cooked food

APPENDIX C

Ethics Certificate

McGill

Research Ethics Board Office
James Administration Bldg.
845 Sherbrooke Street West. Rm 429
Montreal, QC H3A 0G4

Tel: (514) 398-6831
Fax: (514) 398-4644
Website: www.mcgill.ca/research/researchers/compliance/human/

Research Ethics Board I
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 8-0616

Project Title: From ethnic minority cultivators to urban consumers: Evaluating the trade, knowledge and use of cardamom, star anise and cinnamon among the final commodity chain consumers in Shijiazhuang, Hebei, China.

Principal Investigator: Yi Fan Emily Hu

Department: Geography

Status: Undergraduate Student

Supervisor: Prof. Sarah Turner

Approval Period: **July 19, 2016 to July 18, 2017**

The REB-I reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

Deanna Collin
Ethics Review Administrator, REB I & II

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* All research involving human participants requires review on at least an annual basis. A Request for Renewal form should be submitted 2-3 weeks before the above expiry date. Research cannot be conducted without a current ethics approval.
* When a project has been completed or terminated, a Study Closure form must be submitted.
* Unanticipated issues that may increase the risk level to participants or that may have other ethical implications must be promptly reported to the REB. Serious adverse events experienced by a participant in conjunction with the research must be reported to the REB without delay.
* Modifications must be reviewed and approved by the REB before they can be implemented.
* The REB must be promptly notified of any new information that may affect the welfare or consent of participants.
* The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this project.
* The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.