QUALIA IN MARKETS: RUILI'S JADEITE MARKETPLACES IN THE CHINA-MYANMAR BORDERLAND

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ABSTRACT

This dissertation examines how qualia, qualities, and quality-like variables of commodities, are both constitutive of a market and produced by it. By looking at the heterogeneity of a market, this research also explains how a concrete market is configured, practiced and negotiated by a diverse group of actors and agents such as states, market organizations/unions, firms, trading specialists, and street peddlers, and the specified commodities.

I present my ethnographic study of Ruili, a jadeite marketplace in Southwest China's border with Myanmar, and I argue that "qualia" (Munn 1986) as qualities, and quality-like variables of commodities, in the process of market practice, are constantly made and remade through market agencement, the mutuality of heterogenous actors and agents in a market setting (Callon 1990, 1998, 2021). In practice, the "qualia" of jadeite, I suggest, are constitutive of market management and the economics/knowledge of the market (Callon 1990, 1998).

This research contributes to the study of markets through ethnography of a jadeite marketplace explains how a market is configured and experienced through a set of qualitative dimensions (commodity qualia are realized in addition to labor costs and scarcity as the economics of jadeite), and in turn how these qualitative dimensions are reproduced through market agencement----the constant process of market practice by heterogenous actors and agents in a spatial-temporal framework. In this process, these qualitative dimensions are constantly quantified through commodity pricing, daring modes of business and life (betting), as mastered as expertise and specialization in market management. By combing qualitative dimensions and market agencement, "qualia in markets" provides one way to understand the alignment of human and nonhuman actors, the interplay of structures (Giddens 1984) and the agency of different actors (Callon 1986a, 1998, 2021). It contributes to the epistemology of markets and exemplifies how the anthropology of markets can provide fruitful ways to understand our world.

In my analysis, I show how agents price and judge jadeite commodities based on the physical qualities and appearances of jadeite stone, ie. the "qualia of jadeite," as one way to understand "contemporary jade culture in a market" in Ruili in Chapter 3. Grading and pricing based on preferred qualities and appearances of jadeite commodities (economic valuation), which I also frame as the knowledge/economics of jadeite, is at the core of how this market

operates and is set up on the ground. In turn, given the physical characteristics that raw jadeite stones exude and possess, such as their non-perishable character, jadeite commodities are sold, stored, and displayed accordingly to constitute a spatial structure of "qualia in markets" in Chapter 2. Further, the potential of raw jadeite stones that appears as quality-like variables such as the "skin/crust" and color and veins on the surfaces that exude information about whether raw jadeite commodities might be desirable, have further configured a type of "betting" life in Ruili's jadeite markets in chapter 4.

If reading and assessing jadeite stones is an individual practice, are there any market standards? How do traders negotiate in market practice? Chapter 5 further shows a broad range of these valuation criteria, ie. the qualia of jadeite, is further constituted through bargaining as a market mechanism in Ruili. Chapter 5 also shows how bargaining in Ruili's marketplace is associated with norms and rituals in wider structures of economic life in Ruili.

In Chapter 6, I illustrate how the arrival of new e-commerce in jadeite business has reshaped market management in Ruili, with market organizations have playing a "visible hand" in market regulation. The qualia of jadeite commodities are constituted through the expertise and specialization in market organizations. Here trading specialists are conferred expertise by mastering the "knowledge/economic of jadeite" through their extended years of practice which is crucial in the process of market management.

Through "qualia in markets" that heterogenous actors and agents are mutually dependent upon, this dissertation shows the alignment of human and nonhuman actors and the interplay of individuals and institutional practice. "Qualia in markets" could be an exemplary form of "reciprocal conception" as framed by Zygmunt Bauman (2002 in Beck and Beck-Gernsheim's book): "Society shaping the individuality of its members and the individuals forming society out of their life actions while pursuing strategies plausible and feasible within the socially woven web of their dependencies" (Beck and Beck-Gernsheim's 2002: 14). I intend for this research to evoke more theoretical discussions about qualia and markets, and also showcase how the anthropology of markets can provide fruitful ways of understanding our world.

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LIST OF ABBREVIATIONS

Abbreviation		Character
PRC	People's Republic of China	中华人民共和国
GJAR	Gemstone and Jadestone Association of Ruili	瑞丽宝玉石协会
BABC	Burmese Association of Business and Commerce in GJAR	(瑞丽宝玉石协会)缅甸商 会
KIA	Kachin Independence Army	缅甸克钦邦民地武装
MGE	Myanmar Gem Enterprises	缅甸宝石公司
YRIGJQSI	Yunnan Research Institution of Gem & Jade Quality Supervision and Inspection	云南省宝玉石质量监督检验 研究院

CLARIFICATION ON ORTHOGRAPHY, NAMES, AND SOURCES

The language most commonly used by my informants was standard Mandarin Chinese, spoken by Chinese traders (including some ethnic minorities) and Burmese traders. (Sometimes, Chinese informants spoke local Yunnan dialects of Mandarin). Occasionally some Burmese traders spoke the Burmese language through which I was capable of communicating with a rudimentary understanding having studies Burmese language (with my Burmese informants) before. Unless otherwise noted, interviews were conducted in Mandarin.

All non-English words are in italics, and their spelling adopts the Romanized Hanyu Pinyin orthographic system established by the People of the Republic of China. Corresponding Chinese words use simplified Chinese characters and English translations in single quotes appear directly after the first use of each non-English term. For clarity, a few Chinese texts and quotes from Classic Chinese literature are listed as footnotes under the same page where they are first appeared.

Most cited texts use the Hanyu Pinyin system. If a cited work follows another orthographic system, it will be noted in parentheses in the Bibliography.

Pseudonyms have been provided for all interviewees and other informants except for historical or public figures such as places and institutions.

Nearly all photographs were taken by the author unless noted otherwise in figure captions.

INTRODUCTION

I darted into the swirling mass of crowds right after we parked at the entrance of Jewelry Street in a small area for street parking. Even from some distance away, the hum and whirring from the direction of the marketplace could totally guide a new visitor such as myself. Off I went, jostling into the boisterous street, adroit vendors and convivial jadeite mongers immediately bopping up and swarming around me, many of them attired in longyi with shirts tucked in. They hawked goods furiously, and speaking in fluent Chinese with red wrapping paper sealed by a sort of plastic membrane enveloped in their hands, beckoning me to their precious goods. I anticipated I would roam the street on my own, but amid clumps of people in the bustling and hustling jewelry street, the torrential crowds moved me and energetic clinging sales people directed me wherever they wanted. Over the counters or in the shops, and through the paths, I interacted with them whenever I could.

In 2020 I met Tingting in Jiegao District in the city of Ruili along Southwest China's border with Myanmar. Tingting is in her late 20s, a Chinese-Burmese trader who now lives in Ruili and runs a jadeite business with her Chinese husband. Tingting is naturally a bilingual speaking native Mandarin and Burmese. They set up a storefront in a backstreet in the Jiegao Jadeite marketplace selling mainly cut-open raw jadeite stones. Tingting grew up in Muse town in the Shan state right across the border from Ruili, where her parents live and now own a small bakery in downtown Muse.

Tingting has only been in the jadeite business in Ruili for about three years, and she told me that it was her husband who brought her into jadeite trade after they met. Prior to this she worked in various sales jobs in Muse. Tingting and her husband purchase semi-cut jadeite stones from Myanmar and resell them in Ruili. Though she is relatively new in Ruili's jadeite market compared to lots of long-term traders, Tingting is quite familiar and already had rich experience buying jadeite in Kachin state where many jadeite mines are located. Tingting implied her strength in associating her husband in business is that being a Burmese citizen permits them go to certain areas in Kachin relatively safer than being a Chinese. When I asked Tingting about the general jadeite market in Myanmar, Tingting explained the biggest centralized jadeite marketplace is in Mandalay where the market is though smaller than in Ruili. Many traders in Myanmar will go to Hpakant to purchase jadeite and sell it somewhere else.

One afternoon while I was hanging out in her store, as we were seated outside around a tea table in front of the store, her husband Mr. Huang came back from somewhere. Right after he parked his scooter under the tree, Tingting asked how it went. Mr. Huang shook his head and did not say much. I was about to ask what was going on and Tingting then asked to "take a look." Mr. Huang then passed Tingting a tiny package from his bag. As Tingting uncovered it, I saw a set of four jadeite ring-surfaces enwrapped in a red envelope. Tingting explained these ring surfaces were from their friend and that they were only helping to sell them. As their major business is semi-cut jadeite pieces, only occasionally they get involved in refined products when they have reliable sources. Tingting stated if they could make a lucrative deal for this ring set, they would share a small piece of pie as well.

I was particularly interested in understanding how traders price their (different) products, especially with what criteria or methods, and out of curiosity I asked how much for the four ringsurfaces, Tingting responded "these ones are not expensive, only forty thousand yuan (more than 6 thousand US dollars) something". Though she stated that this was the lowest price their friend has set, Tingting still explained how the *yanse*/color and *shui*/water are the basic criteria for judging qualities, but that zongti/wholeness is also important. Another important aspect Tingting highlighted was "to follow (Ruili's) market." Even with semi-cut jadeite stones, the pricing criteria eventually falls into these qualities that ultimately constitute jadeite's potential. The potential to "bet," to be resold, to be hoarded, or to be processed into refined jewelry or artwork, could possibly lead to a maximum price in a market. One of the interesting things in Ruili I learned about jadeite during my fieldwork is that, unlike gold, which has a relatively stable grading and pricing system, the price of jadeite diverges distinctively. When traders talk about jadeite it sounds like common sense knowledge such as "some diamonds are more expensive than others," yet judging and assessing the price/economic value remains inscrutable to outsiders/laymen. How do traders like Tingting price and grade their jadeite products? Are there some market standards that people follow, or not? How then does this market operate among such a diverse group of actors and agents among the Burmese and Chinese traders involved?

I recall in my first interview with Tingting, I asked how she understands the current jadeite trade and such a big market in Ruili. Tingting's answer captured a great aspect of the current jadeite business in Ruili: One is that both Chinese and Burmese are doing jadeite business, but from her understanding traditionally Burmese people prefer gold (over jadeite),

unlike Chinese who have a long history of jade culture and seems have a particular interest in jade. Today there are more and more Burmese starting to like jade as well. When I asked why, she said "I am not sure why Burmese start to like jadeite, but I think maybe because jadeite stones are worth money, or because there is a market, or maybe just because it is a modern thing..." Tingting's ambivalence reflects another aspect of how regular people, such as customers I interacted in marketplaces, feel and understand jadeite stones when they purchase them.

In Ruili's jadeite markets, understandings about jadeite can be very different between sellers, customers, lapidaries, brokers, carving artists and streaming-hosts. Yet, if the valuation criteria around jadeite commodities are purely individual, is there a market standard for jadeite? Or what are the standards, and how do they work? In this dissertation, I explain how Ruili's jadeite marketplaces operate on the ground: I demonstrate what traders do with jadeite, what people think about jadeite, how they are selling and pricing it, how they negotiate and how they cooperate in business, how the market is regulated, and how other factors play into the role of market transformation. By doing this, I further explore the relation between valuation criteria of jadeite as commodities and the constitution of a marketplace.

My research question is: how are "qualia," qualities and quality-like variables of commodities, both constitutive of the market and produced by it? By looking at the heterogeneity of the market, this research also explains how a market is practiced and negotiated by a diverse group of actors and agents such as states, market organizations/unions, firms, trading specialists, and street peddlers, and the specified commodities.

I argue that "qualia" (Munn 1986), as qualities, and quality-like variables of commodities, in the process of market practice, are constantly made and remade through market agencement, the mutuality of heterogenous actors and agents in a market setting (Callon 1990, 1998, 2021). In practice, the "qualia" of jadeite, I suggest, are constitutive market management and the economics/knowledge of the market (Callon 1990,1998).

Jadeite jade and Nephrite jade

I want to briefly spot the difference between jadeite and nephrite here. It should be well noted that, in China these two types of jade have long been valued as jade, yu (\pm), a generic word include both nephrite jade and jadeite jade, with each category containing slightly different

mineral substances. In geology and mineralogy, nephrite is a type of amphibole jade, a tremolite-actinolite [Ca2(MgFe)5Si8O22(OH)2] rock with a felted, microcrystalline habit; jadeite is a type of pyroxene jade [NaAlSi2O6] which varies from micro- to macrocrystalline textures (Ferraris et al. 2014; Coccato et al.2014; Shi et al. 2009; Shi and Harlow 2012). These two sets of jade stones dominate Chinese conceptions of *yu* with each possessing their own physical character. Nephrite jade exudes more of a creamy white form, like "mutton fat" while jadeite can appear though sets of iridescent colors such as green, lavender and (light) apricot. Jadeite jade in Chinese language is called *feicui 翡翠*, while nephrite is usually distinguished as *ruan yu 新玉* by traders. Geographically, nephrite jade is mined in Vogur in Xinjiang province in northern China, while jadeite jade mainly comes from northern Myanmar. In Ruili's jadeite marketplace where I study in this dissertation, the main products are commoditized Burmese jadeite (along with small sections of colored gems trader are selling). It is particularly about a jadeite jade market, and for simplicity and clarity, I use the term jadeite market in the rest of this dissertation.

I. Theoretical Framework: qualia in markets

1. Existing scholarship about jade and Ruili

China has a long history of jade, and many scholars have contributed to work on historical jade. Archaeologists, historians, and anthropologists are particularly interested in the long history of jade (Zhang 1983,1986; Yang 1989, 2004; Chang 2011; Sun 2011; Ye 2011,2014; Yao 2018; Deng 1988, 1999, 2017, 2019; Yu 2011; Yi 2019; Yang and Jiang 2013). These studies highlight important understanding of jadeite such as: (1) the profundity of historical jade in feudal China, and jade's long use for ornaments, tools and weapons since Neolithic times, confirming a long history of jade culture since ancient China. (Zhang 1983, 1986; Deng 1988, 1999, 2017, 2019; Yu 2011; Ye 2019; Yang and Jiang 2013), (2) the different source and historical trade route between nephrite (from the north) and jadeite (from the south) (Sun 2011; Ye 2011, 2014; Yang 1989, 2004; Deng 1988, 1999), and (3) the ongoing history of jade trade and exchange (Sun 2011; Chang 2006, 2011; Rippa and Yang 2017). These studies have approved why jadeite was, and has been distinct in Chinese culture. With this meta background I then demonstrate how jadeite, not as life necessities, but as meaningful commodities in contemporary market.

In a recent study, Chinese scholar Zhu (2008) offers a systematic view of understanding the changing dynamics of Chinese jade culture, and how it evolved and changed from history to contemporary times. Zhu (2008) argues the history of jade culture can be understood via three major phases from (1) spiritualization as spiritual jade, to (2) politicized as noble jade, to (3) secularization as prestigious jade (and wealth). This study attempted to explain how the meaning of jade moved from upper class consumption to being popularized by regular people in daily life. Zhu (2008) takes a "linguistic approach" and goes on to state mass consumption as key in contemporary China, yet Zhu's (2008) analysis in this part does not explain to what, or how exactly jade culture is alike or could be considered akin to in today's China. Also, given that the term Chiness-ness remains highly contested (Clayton 2010; Ong 1999), we need to be more discreet when we address "Chinese jade culture." In this dissertation, I intend to demonstrate who is involved with jade and how they think, and talk about it, conceptualizing what I regard as contemporary Chinese jade culture in a market. It is in lens of "qualia in markets" (details in below and Chapter 1, Literature Review) that jade culture is rendered as mass consumption and best exemplified.

Another intriguing study presented by a European scholar Møller (2019) in another ethnographic examination in Ruili offers an important view of jade culture in contemporary China. Building on Appadurai (1986), Møller (2019) depicts an image of how jadeite passes through different hands and creates different social realms around itself in present day Ruili. Referring to the history of jade culture in China, Møller (2019) takes a linguistic approach to explain how human subjects play a dominant role in conceptualizing jadeite by means of terminologies in ancient China. When referring to current China and Ruili, Møller (2019) adopts an ontological turn with new materialism or the vital materialism of Bennet (2010), to suggest that jadeite is creating different social lives for different actors. Thus, carvers in Ruili, according to Møller, are guided and directed by jadeite stones. They "follow the stone," rather than something else in their process of carving, in what he frames as an "objected oriented/non-linguistic" (2019: 57-58) approach. Different from Møller (2019), this dissertation intends to look at a market presence by emphasizing "qualia in markets", that how multiple actors and agents, understand jadeite, and how they price jadeite, and how they work together to make a market work.

Qualia in Markets:

My research problems regarding "qualia in markets" (Munn 1986; Harkness 2015; Callon, 1986, 1990, 1998, 2021) provide a fruitful way to understand how ambivalent understandings, such as qualities, feelings, in addition to price about jadeite commodities, are produced and reproduced in market practice both in economic and sociocultural realms. Qualia of jadeite are intermediaries (Callon 1990), that manifest market agencement (Callon 2021) in Ruili's jadeite markets as practiced and understood by a diverse group of entangled actors and agents.

I analyze and highlight a jadeite trading marketplace in Ruili county in Yunnan province of China, along the Myanmar borderlands, one of the largest jadeite markets in the world. I am highly aware of the numerous ways and individual experiences of studying and defining markets, which I reflect on as the challenge and the difficulty of studying markets. I do not claim a universal model of qualia in markets, but hope to tease out something abstract yet potentially useful that can help us to understand some common characteristics of markets in contemporary society. To quote Callon (2021: 34): "The idea is to reach an underlying representation that captures the essential through successive abstractions." Below I sketch out research problems on qualia and markets.

2. Research problems on qualia and markets

2.1. Qualia

The term qualia (singular, quale) in western philosophy is used to refer to perceptions and sensations "in" and "of" the mind, and the term quality is used to refer to material properties of entities of the world (Chumley 2013: 4). In Charles Peirce's pragmatic philosophy, he demonstrates the relations between the mind and the material property through qualities, qualia and qualisigns (Peirce 1955: 101). Qualia are interpretated as semiotic elements of experience in pragmatics that are not treated as signs by interpretants (Harkness 2021:2). In a simplified way, Peirce's sign theory can be understood as relations between sign/signifier, along with the object/signified, the idea/ground, and its arbitrary/meaning in semiotic analysis (Peirce 1955: 99). In Peircean pragmatics, all social practice is semiotic (Harkness 2015). The recent anthropological interest in qualia can be seen in two trends, one is in linguistic anthropology which draws analyses mainly from the language and speech behavior (Keane 2003; Gal 2013;

Lemon 2013), another is generally associated with non-linguistic materializations and practice of sociocultural life (Harkness 2021: 2; Calvao 2013; Keane 2008). According to the latter set of studies, scholars have demonstrated the term "qualia" as the semiotics of qualities (Keane 2003; Harkness 2013, 2015; Calvão 2013; Ralph 2013; Lemon 2013; Chumley 2013; Gal 2013), which are expressed as "experiences of sensuous qualities, such as color, texture, sound, and smell) and feelings, such as satiety, anxiety, proximity, and otherness." (Chumley and Harkness 2013:3).

As Chumley and Harkness (2013: 4) state, anthropological studies of qualia provide a shared understanding that qualia are concerned not just with subjective, mental experiences, but rather with the cultural framing of meaningful social practice. Nancy Munn's work, the Fame of Gawa, draws heavily on the Peircean concept of qualia in her analysis of value in Gawanese systems of production, consumption, and exchange. In Munn's (1986) work, she demonstrated how sensorial and social experiences come to be construed as instances of qualities that are key in the transformation of valuation in the Gawanese system of value and exchange. In actions from gardening, canoe building, to marriage exchange and witchcraft, Gawanese work to produce qualities such as lightness and darkness, heaviness and buoyancy. By examining how these qualities may confer or negate value in entities ranging from rocks, to human bodies, to gardens, Munn argues that qualities are values through which Gawanese generate "intersubjective spacetimes:" selves, relationships, communities, and also hierarchies and inequalities (Chumley and Harkness 2013). Key in Munn's analysis are "qualia" as value making, for instance eating food will lead to sleep which contracts one's space and time versus giving will strengthen one's alliance and create obligations. Thus, qualities such as lightness and darkness, heaviness and buoyance are making (positive or negative) values.

Reflecting on qualia and value in Munn's work: Can the idea of qualia drawn from a relatively closed economic system, be applied to study contemporary market exchange? Or, how do I define a "qualia in markets"? According to Graeber (2001: 43-47), the importance of actions in value making in Munn's work, is that social relations take on value in the process of being recognized by someone else. Taking on Heracleitian philosophy (Graeber 2001: xii), Graeber sees "objects as processes, as defined by their potentials, and society as constituted primarily by actions" (Graeber 2001: 57). Therefore, using Graeber's (2001) interpretation of Munn (1986), a short answer to my question is that qualia (Munn 1986) in markets (Callon 1986, 1990, 1998, 2021) are one lens through which to look at how ambivalent understandings, qualities and

quality-like variables of jadeite commodities, and their trading actions are realized in market practice both in economic and sociocultural thinking. This claim has been further supported by several scholars taking on "qualia" (Harkness 2013, 2015; Calvão 2013; Ralph 2013; Lemon 2012; Chumley 2013; Gal 2013).

2.2. Why markets matter---Research problems on markets

This dissertation advocates strongly for the need to problematize the term market for both theoretical and methodological discussions. The significance of markets is vital in long traditions in both academic and real life. Theoretical orientations on markets mainly take two separate stances: on one side they lean toward an orthodox neoclassic economics approach that sets supply-and-demand in the center of markets, stemming from classical economics inherited from Adam Smith (Smith 2007[1776]), which places the scarcity of resources at the center (Çalişkan, 2010:2; Jackson, 2019:12). Adam Smith advocated for an ideal free-market without state intervention, in that the utilitarianism of markets is merely economic and based self-interest. His approach was critiqued by classical political economy approaches like that Karl Marx (1955 [1867]), who focused on production and reproduction and argued markets are destructive in permitting a surplus at the core. On the other side is the heterodox approach that offers insights on the institutionalism and sociality of markets, an approach that social scientists have invoked in ceaseless critiques towards the orthodox approaches to economy (Weber 2002 [1905]; Malinowski 1922; Mauss 1954[1925]; Polanyi 2001[1944], 1957; Granovetter 1985). In this stance, earlier anthropology and sociology shed light on comparisons in market and non-market exchange (Malinowski 1922; Mauss 1954[1925]; Sahlins 1972).

In the practical world, the importance of markets is seen in the fact that political systems in relation to market systems can lead to different social systems that create different forms of life and livelihoods for people. A short example in history is the so-called planned economic system. Adam Smith (2007[1776]), whose aversion to state intervention/regulation on markets and advocacy of self-regulating market systems touted markets as the essence of free capitalism in the west. Karl Marx (1955[1867]), regarded markets as merely destructive. He contended that commodities produced by human labor and circulated and distributed by monetary exchange through constant fetishism, the outcome of capitalism ultimately created inequality in capitalistic societies. Different than Smith who regarded markets as serving societal change and

development, Marx, in another extreme, saw markets as attesting to the centrality of inequality and exploitation of capitalism. To Marx, eradicating markets could open up a "utopian" system in a form of planned economy. Marx's thoughts have invoked a wave in the world to overthrow a capitalistic social system, though in vain, while there have been attempts in the pursuit of a path of communism in various parts of the world, these have never conformed to Marx's vision.

(1) The ambiguity of the term market.

One of the first research problems on markets is a need to problematize the term market. According to the existing studies, the ambiguity of the term, market, is not because of a dearth of definitions, but quite the opposite, due to numerous studies on the possibilities of the term. Sometimes these definitions can be contradictory. Or more often, the term market is used interchangeably and elusively with various terms such as trade, exchange, or in parallel with capitalism. Indeed, there are clear links between trade, capital, and markets, and from there we realize how encompassing the term can be. In this dissertation I stive to elaborate on theoretical considerations by taking these contradictions and comparisons that may further enhance discussions on the study of the markets. The complexity and the ambiguity of the term is worth attention in future studies.

In the following I would like to go over some classic works that concerns 'the market' directly and indirectly. As aforementioned the two stances by Smith (2007[1776]) and Marx (1955[1867]), which has invoked many critiques towards these two extremes. Weber (2001[1905]) takes on market as an economic existence, claiming in many ancient systems such as in Egypt or India, market and exchange actually did exist despite the social or political system being non-capitalist (or capitalistic) in the broadest scope. Weber focused on finding out what motivated the development of capitalism including markets in the west (versus in the east) in his analysis, and he found the answer was the spirit of Protestantism. To Weber, markets or capitalism are broadly and loosely defined, and they both can be understood as fields or arenas of social interaction for the exchange of goods and services, which were regarded as having occurred in various forms and scales in different societies in the world since the pre-capitalistic age (Weber 2001[1905]). This view speaks to the debate on the functionalist view of markets: markets are an outcome of modernity with processes of commodification and privatization, either as productive (Smith (2007[1776]) or destructive (Marx, 1955[1867]).

Malinowski (1922) and Mauss (1925) seemingly do not deny the calculative agency of human nature, which are expressed and achieved through exchange in non-monetary forms. Inspired by their attention on calculative agency, Polanyi (2001[1944]) shows how free markets need state intervention, arguing against Smith, and he sees market institutions as an outcome of historical struggles and a social construct of a highly specific time and place. Polanyi is critiqued for his romanticizing the past as being communitarian, social, and too stark from the modern. This became the center of the debates about economics being only market driven or much broader, in the substantivist-formalist binary and concept of embeddedness. Despite the different theoretical inclinations of Marx, Weber, and Polanyi, they do share a striking commonality in thinking that commodity market institutions are organized around capital, accumulation (of wealth), consumption, profit, etc. These classic studies have sparked a considerable interest among social scientists.

In a more recent study, sociologist Mark Granovetter (1985) critiques the substantivist and formalist debate through an interpretation on embeddedness differently, focusing on how behavior and institution are affected by social relations. Granovetter (1985) argues economic action is embedded in social structures of relations, and that such a view requires one to avoid extremes of an under- or over-socialized view of human action/interaction. According to Granovetter, markets can be viewed as networks and institutions: agents are not atoms of free will but instead bundled in relations that shape their activities and affinities.

Moving beyond critiques towards concerns on embeddedness as discussed above, a different approach on markets oriented by science and technology studies critically addresses the relationship of economics and the economy in the forming of markets (Callon 1998, 2009; Çalişkan 2010; Berndt 2009 and Boeckler 2009; Müller 2021). In a recent study, Callon (2021) proposes an intriguing perspective in his markets-in-the-making approach. In his Markets-in-the-Making analysis, Callon (2021) refutes viewing human and non-human components of markets (such as goods and agents) as pre-existing, but turns to look at how things or unknown objects become goods when they enter a market, and how different actors constantly compose, decompose, and recompose relations within markets, as markets are in the making. Central in Callon's analysis, (2021) is the idea of "market agencement". The idea of "market agencement" does not treat agency as existing in atomized individuals, or separated in goods or research labs but is distributed, involving human, material, and technical devices. Agents must have the

equipment to do their work, such as know-how, manuals, comparative guides, accounting tools, management instruments, and cost-benefit analysis methods, data, algorithms and so on (Callon 2021: 60). Callon's work provides an innovative way of thinking through market processes.

In this dissertation, I address qualia in markets by examining how qualia of commodities are constitutive of the market and also remade by it. Actors and agents in market agencement fundamentally express human-jadeite relations in Ruili's jadeite market. By combining qualia with the idea of market agencement, this study fleshes out how the alignment of human and nonhuman actors, and the interplay of structures and agencies in market practice take shape.

(2) Market versus marketplace: What can anthropological work contribute to an understanding of markets?

The research object in this dissertation is about a marketplace. It is well noted that Bestor (2001, 2004) distinguishes market and marketplace, defining a market as something that can have broader implications encompassing "an abstract economic institution or process" (2004: 20) versus a marketplace being "both a geographic and localized set of institutions, transactions... a specific place and a social setting" (2004: 20-21). According to Bestor, market-ness and marketization is a social process. A market is also framed as a "de-spatialized market" in that global ties and connections in contemporary times surpass links at various locations (Hahn and Schmitz, 2018: 4). An emphasis on marketplaces renders ethnographic research more feasible, as well as specific and applicable to my research in this dissertation. In this dissertation, I take on Bestor's (2001, 2004) definition of markets and marketplaces as "organized and institutionalized exchange" (Jackson, 2019: 4) in an economic arena as a point of departure. My research objective is to treat the dispersed marketplace clusters in Ruili as a whole, and to look at how a market is organized, practiced and negotiated, and how people talk, sell and buy their jadeite commodities etc. Henceforth, in the rest of this dissertation, what I call Ruili's jadeite marketplace refers to three specific dispersed marketplace clusters stretched out in the city of Ruili. Given the fact there is also newly occurring e-commerce sectors in Ruili, I also use Ruili's (jadeite) markets to refer to online streaming sale of jadeite. Additionally, Ruili's jadeite markets situates Ruili as a node at the center closely linked to other marketplaces in Myanmar and other parts of China in its wider trading networks.

In *Tsukiji, The Fish Market At the Center of the World*, Bestor (2004) exemplifies how the anthropology of markets can provide fruitful ways to understand peculiarities and complexities of our world. Building on Granovetter (1985), Bestor (2004) lends that economic activity in the Tsukiji seafood marketplace in contemporary Tokyo remains firmly embedded in wider structures of Japanese society, and that the market is molded by the institutional arrangements in the forms of social, cultural, economic, and political integration and coordination in the capitalistic economy. Central to Bestor's (2004:12) argument is that Tsukiji market is an institutional structure and coordination in which "structures of administrative guidance, vertical integration overt in-group harmony, consensus, and long-term stability of ties" (15) work to make the market "typically Japanese."

In Bestor's outstanding book, he captures Tsukiji as a major seafood industry market within the wider context of Japanese capitalism, depicting Tsukiji as a dense and fluid interwoven network of institutions that "are typical of the intricate forms of social, cultural, economic, and political integration and coordination that are key forces in the social organization of complex societies throughout the contemporary world" (Bestor 2004: 12). Bestor's work provides a theoretical inspiration for studying markets, in which a market is rendered and informed by cultural meanings and social institutions (institutionalized structures) that it also produces. Bestor's agenda in studying the Tuiskiji fish market epitomizes how an anthropology of market can provide fruitful ways of understanding the peculiarities and complexity of markets in social, economic, cultural, and geo-politically layer-ed intertwinements in various parts of the world. This dissertation is also enlightened by Bestor's work, studying markets addressed in terms of both theoretical and methodological concerns.

II. Ruili, At the End of the Border

This dissertation captures fragments of dispersed market clusters of jadeite trading in the city of Ruili, a porous border (before Covid-19 pandemic) in China-Myanmar borderland. It delineates an open market present with the rise of retail businesses, live-streaming e-commerce, trade associations, government regulations, schemes of jadeite knowledge (shown through stories about traders), expertise of trading specialist in Ruili jadeite market within a spatial-temporal scope.

I am grateful to have witnessed and participated in the hectic days of a dispersed marketplace in one of the largest centralized jadeite trading hubs in Ruili county, Dehong prefecture, Yunnan province, in the China-Myanmar borderland. I spent a total of 18 months here since 2016 with summer fieldtrip and a longer stint through the year of 2020. I first landed in Ruili valley in the summer of 2015 as part of a short tour group, and what was bedazzling was the significance and the scale of vibrant jadeite retailing business and the medley of diverse trading diasporas. The Burmese and many Chinese trading groups from other provinces of China. By that time there were approximately 6,300 valid jadeite retail shops according to registration records of the Ruili government and more than 80,000 people were directly involved in jadeite trade (Ruili government annual year book, 2016). Jadeite trade is distributed in three major marketplace clusters in urban Ruili. The year between 2015 and 2016 is regarded as a watershed period for the growth of jadeite business, while afterwards Ruili's jadeite market shrank and sales subsided (especially with the impact of COVID-19 from 2019 onwards) for the first time since its formal establishment. But prior to this downturn, there was a time between 2002 and 2014, which is touted as "jadeite rush" corroborated by local traders. The year of 2016 is considered as a turning point that marked the transformation of Ruili's jadeite market, from traditional face-to-face and cash-and-carry forms to incorporating live-streaming sales on the internet.

1. Locating Ruili

Ruili, Chinese characters as ### Ruili, is a county-level jurisdiction¹ in Dehong Dai and Jingpo Autonomous Prefecture, Yunnan province in Southwest China, in China's southwest border with Myanmar. Geographically located in a subtropical area, with high vegetation coverage and wetlands, Ruili has long been a dwelling place for ethnic Dai people for more than 200 years (Ruili City people's Government Portal). The city of Ruili is adjacent to Muse city, with only 4.5 km away, a state-level inland port of Myanmar, and approximately 440 kilometers away from Mandalay, the second largest city in central Myanmar (Ruili City people's

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¹ The administrative jurisdictional system in China consists of province (sheng, 省), prefecture/city, (zhoushi 州市), county(xian,县), and township(xiangzheng乡镇). In this system, higher level jurisdictions maintain leadership and control over lower levels; Ruili as a county-level city is governed by both the provincial and prefectural governments.

Government Portal). It is at the epicenter connecting three areas, the ethnic Kachin state, and Shan states of Myanmar, and Yunnan province of China. Ruili is the nexus hub of the China-Myanmar-India highway and also the first/last stop on the China-Myanmar railway in China's Pan-Asia Railway Network that connects China with Myanmar (Kunming-Dali-Ruili-Yangon).

Ruili is culturally diverse in what James Scott (2009) framed as the part of Zomia (before 1950), a highland region within Southeast Asia, primarily inhabited by ethnic minorities with a long regional history of avoidance and/or conflict with central Southeast Asian and Chinese states. The contemporary borderline divides these minorities into different juridical zones. For instance, Jingpo people in Longchuan county are the largest subset of Kachin people in northern Myanmar, and Dai people in Ruili share similar cultural traits with Shan people in Myanmar though they are referred to differently in these ways on each side of the border. There are also Lisu people living on both sides of this border. Before China and Myanmar resumed their diplomatic relations and opened up the border in the 1960s and 70s, active interactions among

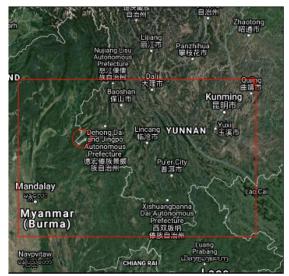


Figure 1. Ruili at the China-Myanmar Borderland

these ethnic groups were already seen in some scholarly work. The current border line between these two countries with an approximate length of 169.8 km (Ruili City people's Government Portal), presents a mostly open landscape alongside its meandering Ruili river and undulating mountain lines. There are 36 large and small ferries and channels, and four cross-border transit sites on each side of the border. It is also an inland port for opening China's strategic China-Myanmar transport channel and the western line of the Pan

Asian Railway (Ruili City people's Government Portal).

By many accounts Ruili was once described as a backwater area. From time to time, stories written up about Ruili in academic works depict the border as a distant place filled with drugs, smuggling, human trafficking, or often as a remote frontier beyond government regulation. However, in reality, two decades of changes and development in Ruili substantiate China's spectacular economic growth in this secured border. Recent media has documented Ruili as a mysterious border town; a promising land for young people to earn wealth, a repository of

authentic Burmese jadeite for connoisseurs to collect products, in a sharp contrast to its past as a maelstrom of disorder. Foreigners are, perhaps, still incredulous about the fact that nowadays Ruili as a well-regulated "frontier", and instead in their conjecture they tend to vicariously delineate a dark side of economic life in Ruili: the market and profit is rigged directly by the government institutions, the prices are manipulated and pegged by local lords, and the precious goods are commandeered by cronies in collusion with military elites at distance and across the border. For nearly 4 decades, roughly between 1920s to 1970s, the two countries were first compelled to World War II and then later-on kindled their own domestic civil wars, the administration on Ruili-Muse border was by then not at the top agenda of two governments. During this period (1920-1970) the embargos enforced by government on two sides means any formal, or large-scale of trade across Ruili border was illicit (He 2014, 2016).

Since the 1990s, several mainland Southeast Asian countries in what's previously been labeled as the "Golden Triangle" or "Quadrangle" region between northern Thailand, Myanmar, Laos (and Yunnan), have intended to boost economic growth and promote social development, implenting a series of policies to regulate the border (Eng. 2000; Walker 2000). These countries have attempted to secure lawful social environments by (trying) cracking down on illegal activities, ie. drug producing and dealing, and smuggling (Eng, 2000; Walker 2000). Under China's blueprint in border control and development, the Central Committee of the Party in Beijing determined to re-design Ruili as an economic corridor to Southeast Asia countries. Given the fact that cross border trade was prohibited by the two governments between the 1920s and the 1970s, local people on the two sides of this geographically porous border, in fact, already built and maintained steady trading relations through underground trade. The government's move has been to now promote legal trade, since the establishment of the Ruili Economic Corridor in the 1990s. Under this background, a jadeite marketplace was permitted: to bring all the underground jadeite trade into the open market, at the same time, to optimize the transparency and regulation of the market. Since the 1990s it was also the vigorous promotion of "Opening and Reform" (gai ge kai fang 改革开放) and "Develop the West" (xi bu kai fa 西部大 \mathcal{H}) in China, more and more business people have gravitated to Ruili seeking for their fortune in cross-border trade.

Myanmar is now one of Yunnan's biggest foreign trade partners, through which Ruili is the largest trade zone on the Yunnan border. The prominence of bilateral trade between China and Myanmar is seen in cooperation of the building of a gas pipeline, exchange of hydropower resources and construction, minerals, wood/timber, fisheries, and agri-products and so on. Chinese goods are exported to Myanmar from Ruili, and flood into Burmese markets. Burmese goods are imported to China through Ruili. Hence, Ruili is trumpeted as a key step open to the outside world along the southwest border. In my understanding, Ruili's rapid growth (before the impact of 2019-Covid pandemic) was a reflection of China's economic boom in last two decades, and a mark of China's contract and cooperation with Myanmar under the initiative of a "Belt and Road" corridor.

On the Myanmar side, the production of jadeite is often opaque due to the complex politics in northern Myanmar, unclear ownership of mines, and feuding political conflicts and inefficient management for mining (Global Witness 2015). Raw materials of jadeite come mostly from the Hpakant mines in the Kachin state, which possess approximately 14,000 hectares of the richest deposits in the country as the largest epicenter of jadeite production. In Myanmar, the conflicts between the military government and the Kachin Independence Army (KIA) have once reached a ceasefire agreement since the 1990s, and the military junta has gradually taken control over most of the jadeite mines in the Kachin State (Global Witness 2015). In the mid-2000s, the military Junta agreed to leave parts of mines for private mining and for civil insurgences but exacted all jadeite mined in the Kachin State to go to public auctions and be taxed in Yangon and later Naypyidaw, as their first stop before being sold out of the country. Thus, both insurgencies and the central government of Myanmar are co-regulating mines and jadeite business in northern Myanmar. Outsiders, in particular Chinese are not allowed in the Hpakant mines unless they pay bribes to local insurgents and military commanders to secure their safety.

But over the last two decades, jadeite trade gradually expanded along with China's thriving economy and growing consumption, and Ruili now becomes one of the centralized jadeite markets in all of China. Ruili is a key site of transmission and transformation of the Chinese jade economy, and a crucial link between Chinese markets and Burmese production of jadeite resources.

2. The significance of jadeite trade and building of a marketplace in Ruili

Ruili is a "brand new" trade hub, officially established by the Chinese government as an inland port for the propulsion of cross-border trade with Myanmar in 1992. Compared to various

trade, such as timber business, electronic and agri-products, the jadeite industry employs a much bigger population from retailors/sellers, artisans, to processors, petty traders and companies, with which stalls, sheds, shops, malls are virtually everywhere in Ruili city. The legalization and promotion of the jadeite industry has attracted foreign traders from Myanmar and India, and other parts of China in these years, with currently more than 80,000 petty traders running retail jadeite businesses in Ruili. In accordance with Dehong Industry and Commerce Bureau statistics from 2016, by and large more than 6,300 individual shops had registered and acquired business permits in Ruili, covering 80,000 people including approximately 30,000 Burmese traders.

According to traders who came here early in the 90s, Ruili was a sort of occult gem trade zone, and only "inside dealers" (in trade circles) from Myanmar or Guangdong and Shanghai furtively gathered here for underground trade. Over the next two decades of trade increment in the border, trading diaspora from Myanmar, (less from) India, and other parts of China such as Guangdong, Henan, Zhejiang and Sichuan province, have come to Ruili, forming a spanking engorged and vibrate border city. The jadeite industry in Ruili mainly covers retailing, alongside with relatively small (compared to Guangdong province) scale processing, carving, and designing businesses. What is perplexing to outsiders is that among many similar jadeite objects, the price varies from hundreds of RMB up to hundreds of thousands, or millions of RMB. How do traders set up a primary price for these pieces of jadeite jewelry? What are standards of grading and pricing on jadeite stones from consumers understanding, versus the government bureau of price? I was driven by these questions in search of my answers during my fieldwork.

Ruili market is mostly for jadeite stones with a small portion of colored gems, amber and other types of precious stones mixed. Hitherto Ruili market has developed in three major marketplace clusters at Jiegao District, Jewelry Street and Delong District in Ruili city. There are two main types of jadeite commodities in Ruili: refined jewelry and raw to semi-raw/cut jadeite materials. Jadeite commodities varies from pendants, earrings, necklaces or bracelets to "betting" stones (I will explain in more detail in chapter 4) and cut-open jadeite boulders of all sorts. Outside Ruili, this jadeite market is in direct contact with Sihui and Pingzhou in Guangdong province in China, and interlinked closely to Mandalay, the largest jadeite trading site in Myanmar. In the rest of this dissertation when I use "Ruili's markets" it refers to a concrete jadeite market that incorporates three dispersed marketplace clusters in the city.

During my initial fieldwork in 2016, I learned that in order to promote trading and exchange in Ruili, the government provides relatively loosened policies to support both Chinese and Burmese citizens to cross the border and conduct business. Chinese government institutions try to simplify procedures for Burmese in acquiring legal business permits, and they also issues daily visa or border crossing passes to border citizens² of both countries. Border citizens are permitted to carry 30 kilograms of agri-goods with no tax in-and-out on both sides (Ruili Government Annual Report 2016). Burmese citizens are welcomed to conduct business or work in Ruili legally. These "soft" policies have served Ruili as one of the most bustling trading hubs in China's southwest border, enticing even more people to come to Ruili.

In the past years, Ruili's markets hit their peak, a period approximately between 2002-2014, while afterwards it slacked off. Many traders insist that this phenomenon is a consequence of the anti-corruption campaign ordered by President Xi Jingping, which urges sumptuary orders to government officials regarding excessive consumption among middle class workers, the main consumer groups in China. But in fact, over the last two decades, the overall price of "speculating" jadeite in Ruili, though volatile, has remained steady along with China's economic growth. Lots of traders describe this peak period (2002-2014) as producing utmost "daring/easy wealth" and parvenus in Ruili because of jadeite trade. It was "daring/easy" because the market was incredibly flourishing. Prior to recent online business, face-to-face trade and cash payment was once the major form of trading. Since 2011 e-commerce prevailed in China as Alibaba initiated online business, and sales of jewelry products including jadeite (in Ruili starting in 2016) have been traded through the internet. Since then payment means have become more opened (complying with Alibaba's online regulations).

In January 2020, the outbreak of the Covid-19 pandemic spawned an interval of moratorium from early February to late March on commercial activities in Ruili. In the next two years, an immediate implication from the Covid-19 pandemic was unremitting border closures in China. Meanwhile, the restriction of the in-flow of both people (traders) and goods (jadeite) among intra-regions were frequent. According to my informant in Myanmar, the Mandalay market was also closed temporarily in March 2020, and was fully shut from approximately

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² Border citizens in China refers to citizens in both countries who hold a legal ID of being "endemic/local", such as a Hukou or Household Registration in China often used to stabilize people in a certain region.

September 2020 to May 2021 (and was fully resumed in December 2021). On one hand, the impact of the COVID-19 pandemic was real, on another it also has been an incentive for thriving e-commerce of jadeite trade (As I will explain more in later chapters).

III. Methodology

The methods I partake in this research include participant observation and interviews, along with analysis of local official materials and documents such as government annual statistical year books and historical reports. I fuse a reflexive construction on my field work extended for about 18 months over 5 years, with concerns of both general methodological and theoretical frameworks of markets. I draw on two concerns in anthropological methodology. On the one hand my studying "up, down and sideways" (Nader, 1969; 1980; 1997), is manifested through working and communicating with upper-class business traders, high governmental officials, and simultaneously novices, and street vendors, all parcels of the marketplace. This reveals that in Ruili's jadeite markets lie a power-laden structure. On the other hand, this research is reflective of what is currently framed as self-reflexive participant observation, in which the relation between self and the other is located at the center. Reflexivity requires one to be aware of the interplay of mutual experience, and the challenge of confronting and sorting out experience in situations in contrast to others, and simultaneously in the course of research the experience and interactions shaped the ethnographer's understandings of local values, patterns of interactions, ways of being and feeling (de Waal and Morais, 2012: 5). These two concerns have rendered ethnography imbued with power, positionality, accountability and legitimacy.

Anthropologist Laura Nader's (1969) groundbreaking article, "Up the Anthropologist" encouraged fellow anthropologists to be aware of the challenge of studying culture and relations of power or the colonizer. The key in Nader's thought is to be aware of power structures in anthropological research both methodologically and theoretically. Later on, in her publications, she implied a reinvented anthropology should study "up, down and sideways simultaneously," and that anthropologists should not only study elites and the upper class but also their relationships and interconnections with people and institutions in larger processes of change (Nader 1980). Nader pointed out the way of analyzing the dynamics of power through examinations of the links between various strata of society, the "vertical slice" (Nader 1980), to understand cause and effect of the researched phenomenon. In an extension of vertical linkage,

Nader called on the applying of the network model in anthropological research to study power not only vertically but also horizontally. Many ethnographic works have applied Nader's thoughts to "study up, down, and sideways" in both theoretical and methodological paradigms. Nader's work is reflective of the power structures in which power creates webs and relations between researchers and the researched, between individuals and groups, between actors and institutions in wider structures of social life. Also, Nader inspired scholars to recognize the relation between the researcher and researched. Thus, situatedness (Haraway, 1988), self-awareness and reflexivity (Madison 2012), are key terms in methodological concerns in the study of critical ethnography of markets, that I seek to give proper attention to in this writing and analysis; any faults and missing or incorrect information are my own errors and do not reflect the feeling or lives of my interlocutors.

My first challenge was to work with rich businesspeople and top government officials providing new concerns in "studying up" (Nader, 1969). On the one hand, it not only presented me with an issue of being different from conventional ethnography and completely immersing myself into my informants' daily lives, which was not possible. With these people I could only visit and speak with them intermittently and not live with them in order to respect their "privacy". So here there is a concern regarding appropriateness and access, but also pertaining to some critical "inside perspectives" such as "the knack" of their business and success and whether I should reveal these aspects publicly or not. On the other hand, this is related to what Gusterson (1997:116) proposed as a "polymorphous engagement," that challenges conventional ways of doing participant observation, whereby turning to multiple sites with varied data from a disparate array of sources is useful. The study of market then implies talking to the different actors, from both top-down and bottom-up directions, respecting market regulations and inside rules, assuring policies-makers' confidentiality and traders' anonymity, and being highly transparent about my own purposes, positions, and aware of the potential influence of my research.

In one aspect, this reveals that the positionality of the researcher has an influence on how researchers look at, and conceive of their research. In this research, how I approached this field site is again highly reflexive on how I theorize my research. My entering on this site at the beginning is at the sight of a market. I was vouched by government officials and upscale traders, which allowed me be able to "power/study in and through" Ruili's jadeite marketplaces, interviewing managers and talking to master artists that built me deep-seated networks in the

market (from the development and management aspects of the market at the beginning). With the respect to understanding market rules and regulations, I was able to dig into the market by tagging along with occasional tour trips organized by city hall, went sightseeing in live streaming bases (and some other industry projects that locals are trumpeting), and explored the Jadeite and Gem Quality Supervision and Inspection department from the "top". With the help of the government, I managed to link up with several companies that run live stream broadcast bases. I met up with managers not only at the top, but also the middle and upper levels who are in direct charge of the management or business that are crucial key informants. This is important for gaining a systematic view of the market.

How I landed to conduct research on jadeite goes back to a serendipity in my college years, or borrowing from traders' daily idioms, *yuanfen* as karmic fate. My first contact with the jadeite business in Yunnan was through work experience from 2005 to 2010, when I got a part time job in a leading jewelry company in Kunming during college. The company is a family firm owned by a geologist who worked at the geology research department of the Yunnan provincial government and decided to retire and set up his own gem and jewelry business in his late 50s. His three sons and their families manage the major branches and stores for this company. The company has two major sectors of business: in the domestic market their major business is jadeite jewelry along with a small portion of amber; the other major sector is minerals along with some colored gems in international markets. The company is set up this way largely due to the owner, Mr. Wu's personal experiences, sources and contacts which he gained from his previous job. During my time with the company, I worked as a sectary assisting some of their international business, along with helping to arrange and translate for field trips in various part of Yunnan. This experience is of great value to me not only helping me gain an understanding of business settings in the retail market of jadeite and gems and their networks in Yunnan, but also conferred upon me some common understanding with traders, and some rudimentary knowledge about jadeite and other minerals. Over the years I have maintained my friendship with Mr. Wu and his family. Learning that I was going to partake in this PhD research (I explained it to them as studying the culture of jadeite), Mr. Wu and his family arranged a first formal fieldtrip, taking me to Ruili and introducing me to his business networks in Ruili's market.

Therefore, I am highly aware of my own positionality in the social space of the field and how it might affect my data collection. In order to limit a mere "top-down" approach, I

intentionally went out to different marketplace clusters persistently initiating talks with strangers such as street vendors, peddlers and customers to "study down". To clarify what I mean by "up" and "down" here, it refers to a primary comparison in terms of traders' business scale and their power, which is largely based upon their capital, goods, social status and knowledge of jadeite; traders frequently refer to whether "he or she knows about and understands jadeite".

To study strange traders was not an easy task at the beginning, however after a length of time of persistent trying and being a constant presence at the market, I was able to access "studying down." By talking to business sales promoters who do not own any products, but are captivated by and brought to Ruili for the streaming business, struggling to maintain their trade life in Ruili, I learned about the other side of the market, the "uncertainty of hope," that sometimes business challenges can be brutal and relentless. I was utmost transparent to any group and any informant I worked with about my identity and purpose in their presence and received their confirmation to include them in my work. Learning my background, sometimes these informants would ask me: "since you are researching markets, what do you think, which business strategy I should adopt ...or how should I promote my business?" And some streaming presenters would ask me to help them to set up their streaming accounts to reach overseas customers such as through Tiktok and Instagram. Therefore, my second challenge in the course of when I studied down, concerning questions like these: to what extent did the informant understand the significance of my question? How do I explain a critical theme of market to them? What is the optimal way of repaying of thanking my informant? How do I justify myself when I could expose the "knack" of my informants shared with me that in no place ended up impacting them?

Lastly but not least, both the abstractness and concreteness of markets were substantial during my research. Concerning the multiple components and aspects of markets when treating them as direct research objects, then what components can be most representative of a market, or not? What parts do I leave out or elaborate on and how might they affect my own perception? These questions lurk behind and are highly reflexive in both the theoretical framework of studying markets and the methodology that constitutes a critical theme of the complexity of market agencement.

IV. Overview of Chapters

To help readers to navigate this dissertation, particularly in terms of the argumentation herein I provide an overview of each chapter. In order to show how this research engages with the ongoing research about qualia and markets, this dissertation begins with a literature review with relevant studies and how they have informed my research in Chapter 1. The rest of chapters all respond to my meta question of how qualia of commodities are constitutive of a market and produced by it. Approaching "qualia in markets" from the heterogeneity of a market, each chapter looks at how different actors and agents play their role in constituting what I call "typically Ruili." These chapters share a common thread of valuation criteria for jadeite that lies in the core of Ruili's jadeite markets.

Chapter 2 sets the physical layout for Ruili's jadeite marketplaces. It conveys how a marketplace assigns special properties and how qualities are drawn in a space between people, place, goods, devices and equipment (traders, jadeite commodities, and the physical settings of marketplaces). I also demonstrate here how this market operates on the ground. The chapter provides a lively image of "who does what, where, and how" in qualitative dimensions. I depict and overall image of how the jadeite market is organized and formed, and what roles different actors and agents (traders or institutions) play in each node of a market network.

First, I introduce the historical background of Ruili as a trade hub, and then in the second section I delineate the distribution and physical setting of the three dispersed jadeite marketplace clusters in the town. I show how the jadeite commodities are displayed, stored and sold, and how the marketplace is laid out and distributed, and that that a market is inherently "material" Callon (1998). In this chapter, I also introduce the development and transformation of the market from traditional modes of face-to-face trade to newly developed e-commerce through live streaming sales on mass media and various online platforms. This also shows how technological devices affect not only the trade forms but also the physical settings of marketplace. Ruili's jadeite marketplaces incorporate digital and electronic markets that bypass and contract geographical locations. In the qualia of this marketplaces, the structures and relations are not only spatial but also material, technical, and physical. These structures and relations are inscribed in time and space.

Chapter 3 investigates the "qualia of jadeite" by looking at how the valuation criteria constitute a set of knowledge and expertise in Ruili's jadeite markets. This set of knowledge is

key in the economics of jadeite, allowing traders to measure value in Ruili's markets, ie. to price, grade, bargain and inspect jadeite commodities. The knowledge of jadeite is also what I call "contemporary jade culture in a market."

In the first section, I provide a background on jade culture in traditional/feudal Chinese society to show how the past, more or less, has an influence on the contemporary valuation and mass consumption of jadeite. In the second section, I explain how agents (traders) in the marketplace learn and utilize historical "jade culture" in marketing, through an analysis of how they interpret jadeite commodities and intentionally endow meanings when trading them. The analogies of jade culture are reflected in jadeite jewelry. I suggest traders as vehicles and mediators play an active role in producing and reproducing what I call "contemporary jade culture in Ruili's market." The third section explains how the "qualia of jadeite" are instantiated into a set of main criteria and standards that I catalogue from traders from their practices, which remains the core of the knowledge of jadeite. This knowledge of jadeite then is the basis how a price range is estimated, set up or assessed.

Chapter 4 reveals how the qualia of non-human actors (Callon 1986a) in a market play a significant role and act upon human actors. Based on physical qualities and material appearances which raw jadeite stones exude, traders develop a set of "empirical knowledge" to surmise what is inside a raw uncut stone, to trade and to bet. Jadeite stones in Ruili's market configure the life of "betting." In the first section, I sketch out the commodification of raw materials of jadeite by introducing the biography of "betting" stones, what they are, and how they are traded and what traders do with them. The second section explains how traders learn to judge or surmise the potential of the quality-like variables in the "betting" stones. The "knack" of this set of knowledge is not achieved by examinations in geological or gemological labs, but through personal observations, learning (apprenticeship), and past experiences in cutting stones and "betting." The third section turns to the uncertainty of hope by further looking at how jadeite stones have engendered traders' lives of "betting." It follows stories of long-term traders, vendors, and novices in the marketplace, and their different struggles and setbacks in their trading history. This further unfolds in asking what "betting" means in the wider scope of economic life in Ruili's jadeite markets.

Chapter 5 captures bargaining as a feature and trade form in Ruili's jadeite marketplace. I explore how bargaining is fundamentally constituted by the qualia of jadeite commodities, the

magnitude of valuation criteria and the knowledge of jadeite (both refined jadeite jewelry or rough "betting" stones). I further showcase how bargaining is not only configured by the qualia of jadeite commodities, but also shaped by the wider structures of social economic life (Bestor, 2004) in contemporary China. This chapter further highlights the interplay of agency between human (traders) and non-human (jadeite stones) actors entangled in a web of relations, which can be seen in personal predilections and choices for jadeite, which are hard to quantify (such as affection, design, personal considerations, individual knowledge of jadeite etc.). These are reflected in stories of how buyers bargain in Ruili's jadeite markets.

Chapter 5 contains three sections: The first section conceptualizes bargaining in market exchange to show how it engages with existing scholarship about how bargaining has been regarded as form of mediation, and a meaningful act. The second section answers how and why bargaining is formed and how bargaining operates in Ruili's jadeite market. I argue the "indeterminate" and "uncertain" aspects of economic valuation of jadeite commodities (seen in chapters 3 and 4) pertaining to sets of knowledge of jadeite and business are one aspect of what constitutes bargaining as a unique feature in Ruili. The third section further explains how bargaining mechanisms in Ruili's jadeite marketplaces are influenced by social settings of the market in the wider scope of the market. I delve into "Day's opening business" (a kick-off deal for opening up a day's business) as an example illustrating "ritual negotiation" (Calvão, 2015), as a mode into understanding the "irrational" factors that play into bargaining in some contexts. Bargaining is what makes the marketplace "typically Ruili."

In chapter 6 I show how qualia constitute market management from a different angle: I discuss how different actors and agents in the marketplace negotiate and cooperate, resolving trade disputes in market practice and management. By tracing the irreplaceable role of trade associations, I show how these institutions (such as quality inspection organizations) and their authority are conferred by a group of trade specialists and their charisma in Ruili's jadeite markets. The expertise of these trading specialists and their knowledge of jadeite commodities, matters significantly in solving trade disputes.

The chapters all showcase how qualia of commodities are constitutive of a market, and at the same time, constantly remade in the process of market practice. "Qualia in markets" are not fixed or static, rather these qualitative dimensions are constantly quantified in commodity price, and by modes of business and life (betting), mastered as expertise and specialization in market management.

CHAPTER 1. LITERATURE REVIEW ---QUALIA IN MARKETS

In the introduction I explained how I have adopted an inductive approach in this research that led me to examine "qualia in markets." In the first section of this chapter, I review the concept of qualia from previous scholarship to show how I engage with this set of literature. The second part shows how this study builds upon interdisciplinary scholarship on markets in sociology, cultural geography, political economy, and anthropology. In the third section, I reinforce how my fieldwork data speaks to "qualia in markets" by building upon Michel Callon (1986, 1990, 1998, 2021) and Nancy Munn (1986). I also borrow the idea of structuration from Anthony Giddens (1984) to demonstrate the interplay of human and nonhuman actors in market agencement (Callon 2021).

I. Qualities and Qualia

The term quality is an important notion in economics. The notion of quality is often associated with commodity/product quality, and market quality. Discussions on product quality can be traced back to Joseph Schumpeter's (1934, 1942) model of economic development. According to Schumpeter (1934, 1942), the first stage of development is the introduction of a new good, with particular importance placed upon the quality of a new good. In the Schumpeterian model of economics, promoting economic productivity requires focusing on improving the quality of goods (Dana and Fong 2011). Sweeney (1974) understands different quality levels of commodities as mutually exclusive distinct commodities, as the most important element in the hierarchy of commodities. Thus, the idea of quality provides additional structure to consumer choice based on the desirability of certain elements. There are recent studies that use market quality as a viewpoint of efficiency and fairness, the idea that market quality is supported by market infrastructure, the entire network of social arrangements in which a market functions (Yano 2009 in Dana and Fong 2011: 139). In general, economists are interested in the relations between product quality, price, profit, and market structure (Dana and Fong 2011; Furukawa and Yano 2014; Zhou et. al 2002). This notion of commodity quality, in an anthropological lens, can be formalized into the concept of qualia.

Oualia

The term qualia (singular quale) in western philosophy is used to refer to perceptions and sensations "in" and "of" the mind, and the term quality is used to refer to material properties of entities of the world. If this distinction is true, then how are these two terms related (Chumley 2013: 4)? In Charles Peirce's pragmatic philosophy, he demonstrates relations between the mind and material property through qualities, qualia and qualisigns (Peirce 1955: 101). In a simplified way, Peirce's sign theory can be understood as relations between sign/signifier, along with object/signified, idea/ground, as a form of semiotic analysis (Peirce 1955: 99).

Peirce (1955: 102) states: "A qualisign is a quality which is a sign. It cannot actually act as a sign

Chumley and Harkness (2013: 5) differentiate Peirce's semiotic account, explaining "regards qualities as firstness: the abstract, uninstantiated properties or attributes; qualia as secondness, qualities instantiated or embodied in entities or events; and qualisigns as thirdness, as linking an object with an interpretant in a sign or 'standing-for' relation". Here, qualia are interpreted as semiotic elements of experience in pragmatics that are not treated as signs by interpretants (Harkness 2021:2).

until it is embodied; but the embodiment has nothing to do with its character as a sign."

In anthropological work, studies of qualia provide a shared understanding concerned not just with subjective, mental experiences, but rather with the cultural framing of meaningful social practice (Chumley and Harkness 2013: 4). Anthropologists interpret Perice's pragmatics as "the matter experience as experienced" (John Dewey 1935 cited in Chumley and Harkness 2013: 5), arguing that all social practice is semiotic (Harkness 2015). Nancy Munn's work, the Fame of Gawa, draws heavily on the Peircean concept of qualia in her analysis of value in a Gawanese system of production, consumption, and exchange. In Munn's (1986) work, she demonstrates how sensorial and social experiences come to be construed as instances of qualities that are key in the transformation of valuation in the Gawanese system of value and exchange. In actions from gardening, canoe building, to marriage exchange and witchcraft, Gawans work to produce qualities such as lightness and darkness, heaviness, and buoyancy. By examining how these qualities may confer or negate value in entities ranging from rocks to human bodies, to gardens, Munn argues that qualities are values through which Gawans generate "intersubjective spacetimes:" selves, relationships, communities, and hierarchies and inequalities (Chumley and Harkness 2013). Key in Munn's analysis of "qualia" are acts of value making. For instance,

eating food will lead to sleep which contracts one's space and time versus giving will strengthen one's alliance and create obligations. Thus, qualities such as lightness and darkness, heaviness and buoyancy are part of this broad (positive or negative) value making in the Gawanese system.

In 2013 several articles about qualia were published in the Journal of Anthropological Theory in honor of Munn and her work in the fame of Gawa. In these studies, scholars use qualia to analyze questions regarding senses, aesthetics, materiality, embodiment, and affect, and have defined "qualia as experiences of sensuous qualities (such as colors, textures, sounds, and smells) and feelings (such as satiety, anxiety, proximity, and otherness)" (Chumley and Harkness 2013: 3). These studies provide fruitful conceptualizations of qualia not only instantiated in qualities of objects, but also in the throat of taste (Harkness 2013), in the body of pain (Ralph 2013), and in the school grade evaluation regimes (Chumely 2013) among others. In each case qualities are experienced, recognized and memorized.

Harkness (2013: 14) examines the quality of "softness" among various qualitive dimensions in consumption of soju in South Korea among alcohol consumers: "The lowered alcohol content is understood to produce a softer taste, a softer sensation on the throat, softer sonic reactions to consumption, a softer feeling of inebriation, a softer mood among friends and colleagues, and softer embodiments of both masculine and feminine personhood." Harkness (2013) argues qualitative experiences are made of qualia and that the actual instantiation is expressed through materiality, thought, and sensory channels. This article has reminds us to be aware of how different sensorial and social experiences can be understood as (different) instances of the same quality in the present study on qualities in observed in jadeite by Chinese consumers.

Calvão (2013) examines traders' qualitive experiences evoked through procure and transport, trade, and smuggling of diamonds in Angola. Calvão (ibid) argues "qualia" orient objects/diamonds and people by displaying a connection to the qualities of diamond, and the qualities traders experience. The relations these traders cultivate and the social processes they facilitate exhibit a qualitative dimension for diamond trade and various facets of diamond qualities. The sets of opposing qualities between clarity and visibility, invisibility, and hiddenness, indexically frame the qualitative experience of diamond security and control over theft in the actual processes of carrying and trading these stones through practices articulated by

transporters, agitators, and traders (Calvão 2013: 132). Calvão's intriguing analysis further reveals how materiality and sociality is intimately linked.

Gal (2017: 132) argues "qualia are the embodied, conventional, and experienceable forms of abstract qualities, and the qualia of experience are not inherent in objects; they are the result of the way persons, relying on conventional discourses (interpretants), embedded in institutions, take up objects and experiences (Chumley and Harkness 2013)". Gal (2017) emphasizes that qualia of porcelains are the outcomes of semiotically mediated events of encounter regimented in the institutions, thus the properties of porcelains are constituted and materialized through semiotic process. Gal (2017) points out the use and consumption of porcelains, as indexical qualia in porcelains are in fact part of much wider socio-political institutions and contingencies. Even though porcelains in Europe are discussed this material also originated in China which is in and of itself is a form of indexical qualia connected with wide questions related to European colonialism and extraction. This is an important framework as it posits that qualia in consumable commodities can be historical and political as well as being individually and socially construed as in Munn's (1986) original analysis. Different types of porcelain relate to different locales or historical periods in Europe through political affiliations and associations that make them desirable or not to consumers as commodities. This is also as explained in Vallard's (2019: 138) article, a historical process of valuation that offers "comparative overview of the modalities by which jade, diamond, corundum, carnelian, agate, or amethyst become valued differently but, ultimately, each as precious in their own way".

To conclude, in this dissertation qualia are defined as useful ways to understand problems of the senses, materiality, aesthetics, affect, and the bodily dimensions of practice (Munn 1986; Chumley and Harkness 2013; Harkness 2013, 2021; Gal 2017); Qualia is an abstraction of a set of qualities. "Qualia are the embodied and experienceable forms of abstract qualities that can be represented by historical and socio-political moments" (Gal 2017: 132). In Ruili's jadeite market, I showcase how qualia of jadeite commodities are realized, experienced and instantiated in economic settings. "Qualia in markets" are anchored not only in semiotics but also in bodily practice, and sensuous experience, and institutions.

II. Studies on markets

Most studies of markets take concrete markets as their point of departure to explore the abstractness of the market, by providing tentative answers that shed light on the nature of a market, and how markets operate on the ground, and their role in social economic system more broadly. These studies provide outstanding conceptions and great contributions in comprehending markets. In order to clearly demonstrate market agencement (Callon 2021) and how it has provided innovative perceptions on markets, the section will map out how this existing scholarship has perceived markets in recent decades? What are some differences and highlights from this intellectual work? These studies will focus on (1) networks and institutions, and (2) performativity.

1. What is a market?

I begin with a consideration of definitions of the term market that have remained widely viewed. There have been legions of economists and sociologists dedicated to work on markets, with many distinct, sometimes contradicting discussions. Certainly, it is understandable that individual experience of markets can be so divergent, that no one would attempt to frame a fixed meaning that works for all markets across time and space. The purpose of considering the term market in this dissertation, is not to reconcile the differences, but instead to bring out the common traits and abstractions, in a way that allows us to understand something essential about markets.

Even economists hardly share an agreed-upon definition of a market. Common features of markets are that they are regarded as the embodiments of economics (Jackson 2019). Some key points are: 1) In previous eras, a market was the physical location of trade; 2) markets represent organized commerce rather than informal/disorganized exchanges between individuals; 3) nowadays markets can be virtual or electronic, bypassing geographical and physical location through technological improvements. (4) markets are organized by the mechanism of competition. Ideal markets for orthodox economists normally encompass instrumentally rational behaviors, full information or fair competition etc., based on a neoclassic approach or belief. Economist Virgil H. Storr (2010: 201) acknowledges a social dimension in his definition and argues that a market is a social construction. Storr writes: "The market is a phenomenon that is produced by social actions of individuals and it is how the internationalization and socialization

of a shared interest forms a community through the actions of people buying and selling goods." (ibid: 201). To Storr a market is a product of social action.

Respectively, social scientists do not deny both an economic and social domain of markets as said above, and they insist markets are more incorporative and encompassing. As sociologist Asper (2011:4) describes: "A market is a social structure for the exchange of rights in which offers are evaluated and priced, and compete with one another, which is shorthand for the fact that actors - individuals and firms...this definition covers the market as a place, as well as markets as an 'institution' (Asper 2011: 4)." Similarly, anthropologists Hahn and Schmitz (2018) emphasize "market principle" and "market as location" to highlight the institutional and geographical features of markets, and they define a market as a location as well as a principle and mode of exchange. Their idea of market as a principle is to highlight the availability of goods and as a regulatory mechanism controlling access to and exchanges of goods in markets, and furthermore, many social actions that are in line with market requirements, "as a spatial entity of activity" (2018:1). Hahn and Schmitz (2018:2) insightfully bring up the idea of "despatialized markets," to describe how global ties and connections in today's market activities link different actors based in very different locations. This situation is sometimes explained as the notion of commodification, the process through which personal goods became anonymous tradeable goods in wider economic networks (Hahn and Schmitz 2018:3). This is one example of a circumstance where scholarly work referring to long-distance trade, commodities, and consumption more broadly has been applied in some overlapping layers. In other circumstances, markets are analyzed closely with society (as opposed to being separated from society). Streinzer (2018: 104) uses market fundamentalism/capitalism to consider how constrained and ambivalent peoples' relation to neoliberal economic thought and practice in Greece, and he emphasizes the scattered nature of the market as thought and everyday practice from individual stories. Streinzer (2018) tends to see how the relations between market and society are organized, made and remade in the context of market capitalism more broadly. Here markets are conceptualized by Carrier (1997: vii) as: "A certain sort of buying and selling benefits all those involved economically, politically, socially and even morally".

These discussions have shown definitions of markets are encompassing as well as ambiguous, which strongly suggest that we can study markets, as perhaps, contested, fragmented and diversified. According to existing studies, markets can be sorted out as networks,

institutions, cognitive frameworks (Fourcade 2007, Fligstein and Dauter 2007, Berndt and Boeckler 2009). In sections below, I sort out two themes on studies of markets in sociology, political economy, cultural geography and anthropology to see what are fundamental elements about markets. I emphasize interrelations and dynamics among these studies rather than their clear-cut boundaries. It is through the internal connections of these studies that markets are commonly realized. My goal is perhaps to evoke a theoretical vantage point of the anthropology of the market, and hope to contribute the understandings of market agencement through qualitative dimensions.

2. Markets as networks and institutions.

Markets seen as networks, in my view are essentially a set of congealed social relations and structures; A view of markets as institutions highlights social rules and norms within market settings.

(1) Markets are most commonly viewed as social constructions in sociology, regarding market-as-network or a set of relational social structures more broadly. These studies invoke theoretical constructs around power, information, and cooperation to explain how markets are formed by social structures (Skinner 1964; Granovetter 1985; White 1981; Swedberg 2005; Beckert 2010). The concept of embeddedness pioneered this set of studies. Polanyi (1944; 1957) proposed embeddedness to argue that economy is embedded in social relations especially in non-market societies. In Polanyi's formal meaning of market, markets in the west are meant to allocate scarce resources in a manner in which economy has become disembedded from society; a stance in some ways similar to Adam Smith's free market economy. But contrary to Smith's aversion towards state regulation, Polanyi suggests the creation of markets required state regulation, especially in the west where disembedded-ness can produce social chaos. Therefore, Polanyi (1957) suggested that governments would have to intervene in markets to stabilize them and to provide social protection for workers, and rules to guide the interactions between groups of capitalists.

Granovetter (1985) interpreted embeddedness differently, focusing on how behavior and institutions are affected by social relations. He critiques the two opposed opinions between formalists and the substantivist followers of Polanyi, by asserting the level of embeddedness is more substantial than that allowed by formalists and lower in nonmarket societies than that

described by substantivists. Granovetter (1985) argues economic action is embedded in social structures of relations, and that such a view requires avoiding extremes of under or oversocialized views of human action. According to Granovetter (1985), "anonymous market of neoclassical models is virtually nonexistent in economic life and that transactions of all kinds are rife with the social connections" (1985:495). Granovetter's viewpoint suggests research on markets need to pay attention to the actual patterns of personal/social relations by actors that are involved and the transactions that are carried out. His thoughts are best refeleted in Bestor's (2004) work on the Tsukiji fish market in Japan. In Tsukiji, systematic economic activity is neither the product of individual self-interest, nor is an optimal form of collective rationality. Instead, individual actors and institutions together construct economic systems, slowly formed in a seemingly natural way, to organize economic life in Tsukiji (Bestor 2004: 14). The book thus analyzes how patterns of trade emerge from and are ordered by the social institutions and cultural patterns in which the marketplace is embedded (Bestor 2004:38).

Anthropologists have taken on a micro-level scope or approach to studying market networks to the degree that they reflect upon social relations between actors related to social ties such as kinship, religion or friendship in generating trust between traders, making market exchange stable (Geertz, 1978; Gregory 1997; Babb 2013). Social ties might be different depending on the social system, but they are the key to market networks and bonds. to economy to understand bazaars because they are too opposed. In these studies, markets serve important functions as networks of communication, hubs of social interaction, and political arenas, in which control is arranged over both people and goods.

Cultural geographers are often interested in how market networks are formed across geographic space, such as cross-border market networks or commodity chains, and how these networks and identities are co-opted, but they are interested in place-making, ie. how places are integrated or disintegrated in spatially dispersed market-making or market effects (Coles 2014). In another way, geographers look at markets territorial/spatial arrangements and how markets contribute to a focus on the spatial renegotiation of economic and social relations in the global stage. In a similar scale, anthropologists have also studied the "world system" or "local system of the world" (Sahlins 1994) and "globalization" and "global markets" to explore how these global markets and capitalism shape and are being shaped in modern life (Ong 2000; Tsing 2005).

(2) Scholars who emphasize markets as institutions focus on the role of social norms,

cultural rules, governments, and law in the creation of particular features of markets. They intend to examine how markets, are also structural, but depend on socially agreed institutions and regulations that sustain/stabilize exchange. This scholarship highlights how institutional arrangements such as norms, conventions, regulations, orders, and networks govern and regulate markets and maintain market order (Abolafia 1998; Fligstein 1996, 2001; Beckert 2009). Market actions and activities are contextualized through power and rules.

Sociologists navigate on "market order" to see how networks and rules are produced through coordinated activity despite heterogenous motives and interests, or how such order and rules, or coordination/competition are maintained by social or political structures (Mitchell 2008). Sociologists try to understand how a balance of competition and cooperation among different actors (such as buyer-seller, seller-producer), to constitute a dualism of stability and instability in market behaviors. Institutionalists suggest not only that contractual market exchange depends on rule setting and sanctioned enforcement by states, but also that states may define what types of products are appropriate for exchange.

Fligstein (1996:657) takes a political approach to studying market, framing "market as politics" in which he views market formation as a process of state-building. According to Fligstein (1996), modern states with capitalist economies create the institutional conditions for markets to be stable, in which wars and depression are pivotal to understanding how markets develop. Powerful actors or behaviors such as property rights, governance structures, conceptions of control, and rules of exchange define the social institutions necessary to make markets thus a political project.

Aoblafia frames "market as cultures" by focusing on their constitutive rule, local rationality, and the dynamics of power and change. Using an ethnographic approach, Abolafia (1998) seeks to understand the repeated interaction and transaction of how markets exhibit their own distinct set of mutual understandings and stability, as being both enabling and restraining. Although market actors may all be self-interested rational maximizers, they enact differing market cultures depending on internal and external pressures.

In a similar frame of "market as cultures," Zaloom (2005) shows how changes in the world's leading financial market in Chicago have transformed economic cultures and how different actors respond to these changes. Central to Zaloom's argument is that forms of rationalization seek to eliminate the social from the stock market, but on the other hand there are

still social and cultural aspects hidden in it, which is seen in how groups of actors are held together by material technologies, and their beliefs and hopes in a "rational" and a better market. What she calls "practical experiments," are the everyday work of rationalization in financial markets in line with the existing and evolving social forms of market action.

(3) In another thematic trend, some scholars have looked at the "destructive" aspect of markets, often in development discourse (Ferguson 1993; Tsing 2005; Apter 2005). They view markets as powerful and encompassing forces (often against networks or coordination); they reexamine the linkages between markets, states, law and the historical emergence of systems of governance; they pay more attention to uneven neoliberal capitalism and market variants, and their effects on various outcomes. A lot of these studies were spurred since the 1970s onward to examine how agriculture, capital, commodities, and places are drawn into spatially dispersed production and distribution networks within an increasingly complex global division of labor. They look at the political exercises that governments, NGOs, and development agencies such as the World Bank have enacted to integrate local or marginal markets into global supply chains through particular forms of governance and power manipulation. Critical insights in these studies are often grounded in labor struggles, social displacement, and uprooted-ness, inequality, and exploitation, etc. In these studies, markets remain submerged in a wider category of capitalism and globalism.

Anthropologist Anna Tsing's outstanding book, *Friction* (2005) examines global connections and how capitalistic realities comes to life through friction in zones of violence, confusion, and robbery of resources in the context of neoliberal globalization. Taking the Indonesian rain forest as the ethnographic example, Tsing explores how global capitalism carries out illegal resource extraction in the name of prosperity and development, and she demonstrates "awkward engagement" through encounters and fragments, which she coins as friction— "the awkward, unequal, unstable, and creative qualities of interconnection across difference" (Tsing 2005: 3). Tsing's intriguing analyses are anchored in the specifics of Kalimantan's "frontier" forests and in the lives of those being affected by radical transformations of Indonesian Borneo's landscapes where forests were destroyed not for local needs but global markets. Thus, Tsing's takes on global market and capitalism is that there is a "destructive" force of capitalism forged in "dissension, fragmentation and local inequality" (2005: 2).

Tsing's insight has inspired geographer Ouma's (2015) research. Ouma (2015) examines

how global market connections and disconnections are being constructed, ordered and performed in an agri-commodities market in south and north Ghana, and argues that Ghana agri-export markets are assembled as "sociotechnical arrangements," and are made through moments of crisis, disruption and resistance among different actors, such as governments, consultants, retailers, companies, industrial associations, and farmers. But Ouma's (2015) view of market takes on the ANT framework from Callon (1986; 1998) and Latour (1986), viewing markets as "sociotechnical arrayments," which "conceive of agency as a relational, often precarious effect of heterogeneous associations binding human and nonhuman elements together that finally act as a network – hence the term actor-network" (Ouma 2015:24). Ouma's work stands as a strong example of the performativity of market as I highlight in the next section.

3. The performativity of markets.

The performativity of markets can be simply explained as the thought that neoliberal ideas shape economic realities (Berndt and Boeckler 2009: 545), or to quote Callon (1998:2, 2009) "the economics (discipline) performs the economy (reality)". One of the distinctive features of the idea of the performativity of markets pioneered by Callon (1998,1990,1986,2021) and Latour (2005), is that the refutation of the assumption that actors and markets are pre-given.

If networks and institutions of markets are ways to understand how social structures construct markets, the performativity of a market provides one way to, as Fourcade (2007:1025) explains, view how markets construct societies. In this thematic field, scholars conceive of agency, including non-human actors, as a relational effect of heterogeneous associations binding human and nonhuman elements together that finally act as an agent/actor-network (Callon, 1986,1998; Callon & Law 1995; Latour 2005; Ouma 2015). Callon's (1998, 2009) overall argument is that economics as a standardized, orthodox, and rational-based discipline constructs economy (activity and behaviors). He states that calculative agency lies at the core. In Callon's (1998) analysis, agency is regarded as a combination of material and technical devices tools, and human beings in constant relational ties, as agencement; Agents are entangled in a web of relations and connections that construct the world around them; thus, agents are actor-worlds. Under this view, capitalistic markets should be viewed not as stable forms of exchange but "sociotechnical arrangements" and "hybrid collectifs" (Callon & Law 1995; Callon 1998) that align humans, materials, resources, technological infrastructures, accounting/marketing,

standards and procedures, systems of metrology, and aspects of political regulation assembled together in multiple ways to organize and forge a market and market system.

Working within social studies of science and technology, Latour (2005: 9) proposes an ostensive sociology ("sociology of association") to refute the idea of pre-structures and social order in conventional sociology. In ANT, Latour (2005) specifically emphasizes non-human actors and their agency in endless relation with other (human) actors, which he coins as actornetwork. Performativity in ANT, is what Latour (2005:34) calls social aggregates in actornetwork which are "not object of ostensive definition...but a performative definition. They are made by the various ways and manners in which they are said to exist", and in ANT "neither society nor the social exist at the first place. They have to be retraced by subtle changes in connecting non-social resource" (2005: 36). Thus, in ANT, the rule is performance and connections. Though his analysis is not on directly focused on markets, under Latour's framework, markets are performative as a heterogeneous assemblage of human, non-human, and hybrid actors in relational practice without any hint of pre-configured structures, instead they improvise. I respect the true strength of an ANT framework as to highlight the agency of non-human actors.

As shown, the performativity of markets influenced by Callon (1998) and Latour (2005) share three traits: the first one is that the configurations of relations, and connections stand in the core rather than mere actors nor structurers; the second one is that these connections are constantly in motion and they are a performative effect of socio-technological agencements with "things" and "sciences," such as economics (Boeckler and Berndt 2012:425); the third is that society is an outcome (Callon 1998: 30; Latour 2005: 35).

Many scholars have taken on insights from the performativity of markets to study global supply chains and marketization (Dicken et al. 1997; Çalişkan 2010; Slater 2011; Ouma 2015; Muller 2021; Karnøe 2022; Mitchell 2007; Bair et al. 2013; Boeckler and Berndt 2009; Berndt and Boeckler 2012). In this set of literature, the emphasis is placed on markets as processes and dis/articulation: "the conjunctural connections of commodities, people, and places, and complex processes of separation and exclusion, that together constitute circuits of commodity production" (Bair at el. 2013:2545). This is framed by Callon (1998) as framing and reframing. The double process of dis/articulation marks a boundary of market-inside and market-outside, including not only place but extending the market to people, things, and regions/geographies (Bair at el.

2013:2545). Taking Geographer Ouma's recent research as an example, Ouma (2015:77) shows how expansion of markets and processes of commodification of agri-food takes effect in Ghana, looking at how two global agribusiness companies operate in Ghana's north and south and how local farmers and workers were driven to agribusiness through contractual arrangements. Ouma's (2015) book recognizes how global market connections are being constructed, ordered, and performed in concrete places for concrete agri-commodities. From the performative vantage point, markets are not simply about buyers and sellers, but also about the technical devices, infrastructures, institutions, various people, technologies, and information revolving around the market, in which there potentially exists a preposition of conflicting interests because of the heterogeneity.

Taking the markets-in-the making lens of Callon (2021), Karnøe et. al (2022) examines a market agencement of wind power deployment in Denmark. Karnøe et. al (2022) argue that wind power was created through the activation of multiple distributed agencies that gradually became entangled and reinforced each other over time. They focus on market dynamics by inquiring into processes that stabilize relations between heterogeneous but entangled 'domains of action', such as regulatory (institutional) frameworks, climate discourses, ownership structures, turbine design, economic price-setting models and grid infrastructures, which would conventionally be treated as distinct domains (or levels). How do these agencies work to create wind power in the making? Karnøe et. al (2022) give an example of how private ownership of wind power and solar panels requires regulations that enable such ownership, and in turn these regulations specify in which forms wind and solar power can come into existence through their relationships to the electricity grid. In this sense, markets are outcomes of devices that are creatively invented by actors. Market devices are endogenously made, modified, and maintained by the same work in socio-technical market agencement that give rise to them.

To quote Tsing to conclude here, "all human cultures are shaped by the long histories of power, trade, and meaning" (Tsing 2005: 3). Despite the different theoretical inclinations in the above studies, these perspectives share a striking commonality that markets contain a wide variety of actors and agencies, and that market elements such as firms, commodities, traders, technical devices, technologies and institutions etc. needs to be put in contact and context. These studies present the multisided aspects of markets as being part of their nature. Thus, the

anthropology of the market can provide fruitful ways of understanding the diversity of economic life and sociality under global configurations and alignments.

III. My interpretation on market agencement and qualia

The above intellectuals have been a great inspiration in this research. In this dissertation, I present my ethnographic study of Ruili, a jadeite marketplace in Southwest China's border with Myanmar, and I argue that "qualia" (Munn 1986) as qualities, and quality-like variables of commodities, in the process of market practice, are constantly made and remade through market agencement, the mutuality of heterogenous actors and agents in a market setting (Callon 1986, 2021). In practice, the "qualia" of jadeite, I suggest, are constitutions of the market management and the economics/knowledge of the market (Callon 1990, 1998).

1. Market agencement and Michel Callon (1986a, 1986b, 1990, 1998, 2021)

Michel Callon, along with John Law and Bruno Latour, is one of the most influential scholars in Actor-Network Theory, a framework that focuses on the production of scientific knowledge and the construction of technological artifacts. Particularly, Callon has provided intriguing understandings about economics and markets (Callon 1990, 1998, 2021; Callon and Muniesa 2005). In respect to Callon, below I review some of his major that directly informed in this research.

In 1986, Callon published "Some Elements of Sociology of Translation", to examine the development of new social relationships in a study of domestication of scallops in St. Brieuc Bay. The key concept in this article proposed by Callon (1986a) is that of translation as a process through which actants are transformed, and how they forge alliances, work with one another, and circulate. In this process, Callon (1986a) states, researchers forge alliances that simultaneously require negotiations with a multitude of interposed entities, such as anchored larvae, professional delegates, dissenting scientific colleagues and so on. Through this process, researchers became "spokesman" for a range of actors and interests. In this article, Callon (1986a) has rendered a network as a research object, and within this network relations are represented as a single entity. He states translation occurs through four processes: problematization, inter-assessment, enrollment, and mobilization, to see "the simultaneous production of knowledge and construction of a network of relationships in which social and natural entities mutually control

who they are and what they want" (Callon, 1986a: 59). In this article, Callon (1986a) also made it clear that scallops as non-human actors are fundamental in a network: a group of fishermen in St. Brieuc Bay formed to catch scallops for profits, and a community of specialists was organized in order to study scallops, and ten years later "scientific" knowledge about scallops was produced and certified.

In 1990, Callon published "Techno-economic Network and Irreversibility", where he explores the process of social and technical change, and in particular the dynamics of techno-economic networks. In this article, Callon (1990:134) defines the notion of intermediary, in which "an intermediary is anything passing between actors which defines the relationship with them." In another way, intermediaries can put actors into circulation or interaction. Callon provides analysis of four major types of intermediaries: texts, technological artefacts, skills/knowledge, and money. According to Callon, embodied skills and knowledge can be treated as networks of entities. "No description of skills is possible unless a network of humans, texts and machines...to describe a skill, is thus, to describe a social context". (Callon, 1990: 138) Here, Callon (1990:140) also explains "an 'actor' is any entity able to associate texts, humans, non-humans and money." In this article, Callon also emphasizes how to pay attention to the boundaries of networks. According to Callon (ibid: 149), one way could be "counting on the numbers of times in which a specific translation is in the relevant body of texts". An important inspiration in this work is that the idea of intermediaries helps to understand how different actors and agents are connected.

In 1998 "The Embeddedness of Economic Markets in Economics" in an edited book *The Laws of the Market*, Callon evoked a discussion on markets in which previous research, particularly on market theory had barely paid attention to, the marketplace. Callon (1998: 3) emphasizes that (1) a market implies a peculiar anthropology with a calculative agent or more calculative agencies involved. (2) A market broadly implies organization, an organized market with the variety of calculative agents. (3) A market contains calculative agents that can oppose one another (sellers want to sell dear and buyers want to buy cheap), and these oppositions are mediated through acceptable compromise in the form of contract or a price. (4) The market as a process helps us to understand the historical dimension, which then helps us to understand the construction of markets and the competitive arrangements in which they are stabilized, for a time and in a place. In this piece, Callon's overall argument (1998:2) is with respect to the

"performativity of economics." He explains that it is economics (the discipline), in the broadest sense, that shapes and performs the economy (activity). This is considered the "performativity of economics." Two important ideas are first laid out by Callon (1998) in this writing on calculative agents: First, he centers his thinking on calculative agents to explain how atomized agents calculate when no stable information or co-ordination exists (to help them). Callon explains that there is a web of relations and from these connections agents derive their ability to calculate within the economy. Second using a concrete example in the case of Gracia's strawberry market, Callon explains how being able to calculate is neither from the brains of humans alone, nor from the social-cultural norms, but stems from "equipment and devices: (material: the warehouse, the batches displayed side by side; metrological: the meter; and procedural: degressive bidding) which give his or her actions a shape" (Callon 1998:21).

This performativity of economics is critiqued by Miller (2002: 219) in a recent article, as Millers states "the theory that Callon produces is in most major respects a defense of the economists' view of the world and a rejection of the evidence of how actual economies operate as available to anthropologists and sociologists." Miller (2002) rather suggests the following: (1) Taking a substantivist approach, Miller uses the idea of "virtualism" from his previous research about pottery provision in a northern Indian village, and explains how in the *Jajmani* system pottery provision takes no account of market relations, needs or supply, but appears as a ritualized expression of the religiously ordained and moral relationship between any two households. (2) Miller finds that Callon's "dis-entanglement" can be problematic in terms of an atomized individual's calculation. In an example of Sophia's choice of a car, such as transactions might not be a totally disembedded. "But even if we were to grant (as I think we should) to the environmentalists that all that they proclaim has been externalized out of the frame of the actual purchase of a car, does this make that purchase a model of a disembedded market transaction? What are the factors that determine Sophie's selection of this car and the price she is prepared to pay for it?" (Miller 2002: 225). Miller then explains, in reality, Sophia's reason is hard to quantify but rather qualitive. That is, price has a qualitive sense.

In response to Miller (2002), Callon (2005:3) insists that "Talking of the performativity of economics means assuming that agency is distributed and that concrete markets constitute collective calculative devices with variable, adjustable configurations". Callon (2005: 4) highlights how agency has to be understood in a much broader scope, in "hybrid collectives" that

comprise human beings as well as material, technical devices, texts etc. Further, depending on the forms of arrangement, agents are multiple and diverse. Callon (2005) refutes describing agency as being merely contained in a human being or localized in institutions, norms, values that are assumed to produce effects on individuals. It is seen in Callon's emphasis on what he calls "symmetry" in the "hybrid collective," not to grant a prior category or relationship into accounts of economic relations or agentive transactions (Callon 1986a: 74). But, Miller's critique also reminds us to contemplate how an actual economy, or a particular market operates on the ground, particularly when they are embedded in religion, norms, and other social settings. I think the Callon-Miller debate can possibly allow what I call a market framework, for arguing for markets as sets of structures and relations hereupon to be explored in this dissertation (I will explain in details later in this chapter).

Market agencement

In *Markets In the Making*, Callon (2021) focuses on how an initially unknown (i.e., unqualified) object becomes qualified and valued as a '[market] good' for economic exchange, and addresses how the knowledge used to qualify existing market goods becomes stabilized or contested. By starting with the unknown object to be qualified and framed as an exchangeable good, markets-in-the-making studies help to trace the histories of knowledge used to define and frame goods such as "organic milk," and "fair trade" coffee. However, the exchange of goods also requires complementary infrastructures to circulate goods where consumers can access them. Besides complementary infrastructures, market framings also work through various regulations such as property rights, labor market rules, and environmental standards. In this way, a markets-in-the-making lens makes it analytically visible that markets framed for specific goods are outcomes of concrete happenings produced by creative actors, and such arrangements only exist as long as the relations between these heterogeneous elements are stabilized.

Central in Callon's analysis, (2021) is the idea of "market agencement". The idea of market agencement does not treat agency as existing in atomized individuals, or separated in goods or research labs but is distributed among the heterogenous actors and agents, involving human, material, and technical devices. Market agencement emphasize the interplay of these different actors. Agents must have the equipment to do their work, such as know-how, manuals, comparative guides, accounting tools, management instruments, and cost-benefit analysis

methods, data, algorithms and so on (Callon 2021: 60). Callon's work provides an innovative way of thinking through market processes.

In this dissertation, qualia of jadeite commodities are neither merely produced by the nonhuman actors such as jadeite or the gauging and scaling instruments themselves, nor the traders and collective institutions rationality. In Ruili's jadetie markets, qualia of jadeite are constantly made and remade by the interplay among these heterogenous actors and agents. To put it simply, a piece of jadeite does not lose its intrinsic quality (such as greenness) when stored at home, yet when it is placed in a market to trade, these qualitive aspects are further highlighted as price, feelings, experiences that are instantiated in commodities. It is in the process of trade, sometimes through multiple hands (brokers, lapidaries, artists, retailors, buyers), the qualia of jadeite are constantly produced and reproduced.

It is notable that Callon neither tries to deny social structures in market settings, nor does he fail to realize them. As he writes, "All viable markets require rules, private or public conventions, and laws or regulations that are shared and apply to all participants. The market, experts have concluded, is an institution" (Callon 2021: 42). He is, as I would say, just not interested in understanding markets through conventional means or what he calls "interface model/markets" (ibid: 33) that previous scholars often understood from social norms and cultures. Instead, he wants to emphasize how devices and equipment play a role and that agencement rises from the network of all different actors and intermediaries. Thus, markets are constantly in the making (Callon, 2021).

Actors, both human and non-human, such as commodities, the technical devices, infrastructures, institutions, various people, technologies, and information revolving around the market are entangled in (endless) relational practice. These actors are not fixed or static, instead they are constantly in motion and they can act and be act upon one another in different contexts.

2. On Structuration and Anthony Giddens (1984)

In order to emphasize the interplay of human and non-human actors in what I call "qualia in markets," I also borrow the idea of structuration of Anthony Giddens to support my analysis. My emphasis is that non-human actors and human actors are irreducible in market agencement, or to put it another way, non-human actors do not necessarily constrain human agents completely in some contexts. That is, an emphasis on non-human actors, including devices, does not cause

agents to lose their capabilities in making sense of their actions and practices. Even Callon (1998) particularly emphasizes that agents are able to calculate a decision and that they must be able to draw up a list of actions that they can undertake, and those actions are shaped by knowledge of economics. In this dissertation, I want to emphasize the interplay of non-human and human actors and agents through market agencement.

In doing so, I highlight agents are affected by numerous factors to undertake their actions, like norms, rituals, knowledge etc. The goal is to be in the middle ground here, not toward any polarity. Structuration (Giddens 1984) is carved out as the relationship between individual human agency and the pattern properties of society as a whole. The classic functionalist approach tended more to emphasize the social system as an organized and stabilized whole that works to shape individual behavior. For instance, Emile Durkheim's (1933) "mechanical solidarity" ³ explains how individual behaviors remain largely the same in a society. Examples can include how kinship or religion work to connect communities or societies. Holding a similar critique towards structuralists as well, Giddens (1984: 2) writes, "The basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time".

Giddens recognizes both the social system as a grand force working on society, and individuals' capabilities to decide and act differently as well, and how to reconcile these extremes through practice. To Giddens (1984: 25), systems are "reproduced relations between actors or collectivities, organized as regular social practices," and at the same time agents are highly competent through using their knowledge or a range of skills to understand or transform rules around them, or allow them to make sense of complex situations and to act (in relation to others). Structures are then recursively organized rules and resources, and "individuals are motivated to engage in regularized social practice" (1984: 14). According to Giddens, we need to understand agents as situated in a web of social relationships that also create opportunities they confront; and structures are in turn constituted by individuals' "practical consciousness"

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³ Durhkeim E. (1933) also defines "organic solidarity" to understand relationship of individuals that consists of interdependence, and he believes a division of labor is what drives the transition from mechanical to organic solidarity, as each member contributes to the whole according to his or her capabilities. Durkheim conceived of mechanical solidarity as based on similarity, while organic solidarity is based on complementarity.

(Giddens 1984:7), acting and interacting in specific ways, thus the interplay of structure and agency.

The interplay between structure and agency speaks to a broader question in social science since its inception, in how society works to shape individual lives, or how individual lives constitute the notion of society. This is framed as "reciprocal conception" by Zygmunt Bauman in the foreword of Beck and Beck-Gernsheim's book (2002: 14) *Individualization:*Institutionalized Individualism and Its Social and Political Consequences: "Society shaping the individuality of its members and the individuals forming society out of their life actions while pursuing strategies plausible and feasible within the socially woven web of their dependencies."

In this vein, I suggest marketplaces are an ideal arena to understand this "reciprocal conception".

According to Giddens, it is possible to view markets as encompassing structural properties "which make it possible for discernibly similar social practices to exist across varying spans of time and space" (Giddens 1984:17). In this way, markets can be understood in a spatial-temporal scope. Giddens structuration theory also helps us to understand that institutionalized individuals (Beck and Beck-Gernsheim 2002) remain highly aware of what they buy or not, individuals can still make their decision with shared values or norms within the relatively, open-ended or ambivalent markets.

In one way, I found a similar layer shared between Giddens and Callon in that Giddens 1984) insists agency does not exist outside of structure, while Callon (1990:134) emphasizes that "agency cannot be dissociated from the relationships between actors," or in what he calls "structured agencements" (Callon 2021). Callon's contribution is his emphasis on the agency of non-human actors and how it plays a role in a network. Callon does not deny agency from structure (1990: 134), and he recognizes scholars like Crozier and Friedberg (1977), who speak of actors and systems, Bourdieu (1990) of agents and fields, and Parsons (1977) of roles and functional prerequisites. But he does not assume every actor as already a social being or pre-existing. In Markets in the Making, published in 2021, Callon makes his point on markets clear:

"In the interface model [as Callon critiques], goods play a foundational role...their existence is given; They are already there, available...goods...connect and coordinate these two populations of agents, the buyers and the sellers, while also maintaining their own autonomy" (Callon 2021: 36-37).

In his market-agencement model, Callon (2021) follows goods in different spheres of circulation, and looks at the process of how "things must be torn out of the world to which they are attached and displaced in order to then be reassigned to a new world" (Callon 2021: 67), providing a sophisticated analysis explaining the logic of how this process happens through framing⁴—overflowing—disentanglement—and re-entanglement process. Callon (2021) speaks highly of how Appadurai (1986) has demonstrated how things, from their birth until death/destruction (like a car) pass through different hands have different lives. Callon is interested in demonstrating:

"Goods are participants in market transactions only at certain moments, and the possibility of being framed as commodities is constantly under threat by forces that push them to branch off and lead them to change status and state" (Callon 2021:72).

"Associations are at the heart of things themselves, of their being and their destiny, but they are neither social, nor symbolic, nor material, nor physical, but all of these at the same time. The thing constitutes a nexus of connections and associations, and on condition that one does not distinguish a priori among these associations...It is transformed and requalified depending on the associations into which it enters" (Callon 2021:75).

To recap, Giddens's (1984) idea about human agency suggests that human agency and social structure cannot be separated but instead are all pieces together produced by social actions and interactions. Callon (1986a, 2021) then emphasizes agency that also comes from nonhuman actors such as scallops (Callon 1986a) and its networks or agents that gather from distributive agencies in a network as market agencement (Callon 2021). "Qualia in markets" in this dissertation is the exemplar of the alignment of human and non-human actors, and the interplay of individuals and institutionalized practice.

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⁴ An example of understanding framing in "*market-oriented passive(c)ition*" a) detaches the good and liberates it from all those who participated in its elaboration and profiling, b) renders it apt to provoke courses of actions and to contribute to their realization (that is, imbues it with uses), c) ensures that its behavio is at least to a certain extent controllable and predictable, and d) organizes the attribution and transfer of property rights". (Callon, 2021:57)

3. Qualia in Markets

My analysis of "qualia in markets" in a spatial-temporal framework is based upon three presuppositions: (1) The fact that markets have evolved and existed for thousands of years. There is a history of the development of market variants. (2) There is a market present that we commoners enter into and markets that are already there. The reality of markets is found nearly everywhere in our life now. (3) There is a possibility that new forms of markets, or markets with unknown innovative commodities, are being constantly made, even in new directions that we could hardly predict.

In this dissertation, I examine how qualia as qualities and quality-like variables of jadeite commodities, are both constitutive of a jadeite market and produced by it.

Qualia of jadeite are at the basis of how traders read and assess the physical qualities and appearances of jadeite at the center of pricing criteria on jadeite commodities in Ruili. Just to clarify here, this is not to say the cost of labor work, or the sense of scarcity is completely swept out. In this dissertation, my analysis does not oppose regular economic settings that traders in an ideal situation hope to "buy cheap and sell deal" and maximize their profits. Unlike gold which has a relatively rigid standards and pricing system, jadeite stones are presumably judged by certain color (such as greenness), the character and degree of "type-waterness," and cut or craftsmanship that may remain hard to quantify, or the potentials and characteristics of rough stones etc.

The grading and pricing based on preferred qualities and appearances of jadeite commodities (economic valuation), which I also frame as the knowledge/economics of jadeite, is at the core of how this market operates and is set up on the ground. In turn, given the physical characteristics that raw jadeite stones exude and possess, such as their non-perishable character, jadeite commodities are thus sold, stored, and displayed accordingly to constitute a spatial structure of "qualia in markets" in Chapter 2. Further, the potentials of raw jadeite stones that appear as quality-like variables such as the "skin/crust" and color and veins on the surfaces of raw jadeite commodities which are desired, have further configured a type of "betting" life in Ruili's jadeite markets in chapter 4.

If reading and assessing jadeite stones is an individualist practice, is this market still accountable? How do traders negotiate in market practice? Chapter 5 further shows the broad range of these valuation criteria, ie. the qualia of jadeite, constitutes bargaining as a market

mechanism in Ruili. Chapter 5 also shows how there are norms and beliefs that draw from market practice in wider structures of economic life in Ruili.

In Chapter 6, I explain how the arrival of new e-commerce in jadeite business has reshaped market management in Ruili, in which market organizations play a role as a "visible hand" in market regulation. The qualia of jadeite commodities constitutes the expertise and specialization in market organizations. Here trading specialists are conferred their expertise by mastering the "knowledge/economic of jadeite" through their extended years of practice and are crucial in the process of market management.

Qualia in markets can be seen as an exemplary form of "reciprocal conception" as framed by Zygmunt Bauman (2002 in Beck and Beck-Gernsheim's book): "Society shaping the individuality of its members and the individuals forming society out of their life actions while pursuing strategies plausible and feasible within the socially woven web of their dependencies" (Beck and Beck-Gernsheim's 2002: 14). I intend for this research to evoke more theoretical discussions about markets, and also showcase how the anthropology of markets can provide fruitful ways of understanding our worlds.

This research contributes to the study of markets through my in-depth illustration of a jadeite marketplace that explains how a market is configured and experienced through an abstraction of a set of qualitative dimensions (commodity qualia are realized in addition to labor cost and scarcity as the economics of jadeite), and in turn how these qualitative dimensions are reproduced in the market agencement—the constant process of market practice by heterogenous actors and agents in spatial-temporal framework; in this process, these qualitative dimensions are constantly quantified into commodity price and configured by modes of business and life (betting), mastered as expertise and specialization in market management. By combing qualitative dimensions and market agencement, qualia in markets provides one way to understand the alignment of human and nonhuman actors, the interplay of structures (Giddens 1984) and the agency of different actors (Callon 1986a, 1998, 2021). It contributes to the epistemology of markets and exemplifies how the anthropology of markets can provide fruitful ways to understand our world.

CHAPTER 2. RUILI AND DISPERSED JADEITE MARKETPLACE CLUSTERS

If I was to be astonished at first catching a glimpse of a remote border town, any idea of remoteness was soon effaced when strolling through an urbanized city in downtown Ruili. In the streets, in dispersed marketplaces clusters and even in shabby and dilapidated alleys, shops and considerable open-air or ware-house-like markets and bazars will frequently offer a view of a hustling and bustling border city. Traders and customers are figuratively tied to counters, nailed to benches, and cling to stalls, brimming in the marketplaces. In 2016, I began my endeavor of my first formal ethnographic exploration here and discovered these sprawling and dispersed jadeite marketplace clusters in Ruili city.

This chapter navigates the spatial structure as the qualia of Ruili's jadeite marketplaces: a lively image of who does what, where, and how. I convey the qualia of Ruili's jadeite marketplaces as a spatial structure with special properties and qualitative dimensions within a space. These include people, place, and commodities, and how their businesses operate in a retail (and wholesale) setting. To put it another way, this chapter provides an overall image of the heterogeneity of Ruili's jadeite market ---- the heterogenous actors and agents coming together in a specific geographic location forming a marketplace presence.

I already briefly sketched out the significance of jadeite trade in Ruili and the market building in the introduction. In this chapter, I want to provide more details about Ruili, its background, and its full image of a jadeite market, its paramount role as a trade hub in and across the border. I seek to highlight how the geographic location matters, in a sense that, if this market was situated in downtown Beijing, it could be completely different in its layout. I thus do not suggest that Ruili's jadeite market as stereotypical of all jadeite markets or precious gem markets image in China. "Qualia in markets" needs to be specified here, situating Ruili's niche role in the jadeite economy in and across the border.

There are two parts in this chapter. In the first section, I introduce the historical background of Ruili as a contemporary trade hub and the development of a jadeite trading market here in the past three decades. The second section walks readers directly into Ruili via a thick description of the distribution and physical setting of the three dispersed marketplace clusters. In the second section, I also depict how technologies (electronic tools and equipment) and other factors prompted the transformation of this market from traditional modes of face-to-face trade to newly developed e-commerce, live streaming sales on mass media, and various

platforms. Today, the newly built streaming base reveals how Ruili's jadeite market increasingly incorporates digital and electronic markets that bypass and contrast with geographical and physical location for market activity.

I. Ruili, China's southwest border with Myanmar

In the China-Myanmar borderland, Ruili has long been a magnet of mystique and exotica. The Ruili river and hills winding through the border divide China and Myanmar, while Ruili city rises up at the northern bank of the river. In China, Ruili is under the jurisdiction of Dehong Dai and Jinpo Autonomous Prefecture of Yunnan province. Geographically, Ruili county is at an intersection connecting three regions: the Shan state and the Kachin State in Myanmar, and Yunnan province in China. Ruili is right in a valley of what Scott (2009) describes as "Zomia," 5 an area of "hills and valleys" along the Himalaya mountains and other parts of highland Southeast Asia in Thailand, Laos, Vietnam, and Cambodia. Today Ruili still presents a mix of different ethnic populations dwelling across the border. The two main ethnic groups here are Jinpo People, known as Kachin People in Myanmar, and Dai people in Ruili who share similar cultural roots with the Shan people in Myanmar. In history, the Dai and Shan are the cursory lowland inhabitants who traditionally grew paddy rice as opposed to the Jingpo/Kachin who lived in the hills as swidden agriculturalists. There are also Lisu, De-ang, and Rohingya people from Myanmar living in Ruili. In one aspect, the building of Ruili's jadeite market plays a unique role in the social landscape of the border that draws different groups to come to Ruili to participate in this market.

Located close to the Tropic of Cancer, the Ruili valley is highly inhabitable and a land of abundance. An innate wilderness outside of the city provides a marriage of mist with boundless verdancy all through the year nurtured by the subtropical monsoon climate. In spring and summer, tourists come to Ruili, easily capturing a bountiful gaiety in the city scene, with musky mango trees planted on the sides of the avenues and palms trees lining up in the streets, exerting a tropical glare. In the fall, high in the air, mangos and jackfruits hang aloof, proffering people with the joy of harvest and opulence. Winter is chilly though it shortly passes on in this region,

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⁵ "Zomia" (Scott, 2009) denotes how historically hill tribes or ethnic minority peoples in the mountains intentionally escape to the high mountains to avoid "state enrollment" by lowland people, providing one way to understand interaction/resistance across a diversity of ethnic groups in this region.

though the cool air provides countervailing relief to the dominant sweltering months; like a trophy to inhabitants.

As a thriving trade hub, groups of Han Chinese and trading diasporas from other provinces across China have also migrated to Ruili over the past two decades, captivated by businesses opportunities. Like many urban cites in China, Ruili consists of many newly built middle class residential neighborhoods (Zhang, 2010), business plazas, artificial parks, and outside the city newly improved infrastructure such as high-speed roads, providing efficient transportation means to nearby towns and cities. The prosperity of Ruili marks China's spectacular economic growth in it its southwest border.

Ruili city can be nondescript to its visitors as well. It is nondescript, because nowadays the urban planning with homogenous features and designs are highly recognizable across urban China. But for one who pays close attention, a distinction is palpably unveiled: Burmese in their *longyi* are everywhere along with local ethnic minorities dressed in their stylish clothes alongside the Dai-Buddhist architecture, ethnic restaurants etc., all evoking one to ponder the touristic and exotica myths of this city and Yunnan Province more broadly.

The jadeite marketplaces are some of the most conspicuous locales in Ruili. Among various categories of cross-border trade, jadeite involves the most significant scale of people and physical space in the city. Nearly anywhere in the city, it is very likely tourists are caught up by effervescent Burmese street vendors peddling their precious packages wrapped in their hands, often covered in red paper coverlets. They jump out of nowhere like apparitions so unobserved, and they vanish into the vast sea of people if you spurn them away adamantly. Why? For one who wants to have a hint, go and gaze upon the jadeite marketplaces.

In summer 2016 when I embarked on my preliminary research, I came to Ruili and lived in a hotel for two months. By that time, the jadeite market in the city converged around a density of people moving like clockwork from morning, to afternoon, and evening alternating between three market clusters. The rhythm starts from "morning market" centered in Jiegao District, moving to Jewelry Street for the "afternoon market," them to the newest crowded mob at the "night market" in Delong business area. Many traders rented a stall or a counter in one or two separate locations so they can be flexible to sell at various times at different clusters. However, in 2020 when I returned to Ruili for my long-stint fieldwork, the marketplaces had and were shifting to a new mode of operation due to the impacts of the COVID pandemic. According to

local traders, Jewelry Street used to be the hot spot in the jadeite rush between 2002 and 2014 before plunging into a slump between 2018 and 2019. The desolation of the street and vacant counters in the market here known as Taili Jewelry mark this ongoing transformation.

1. Branding Ruili: the development of a cross-border trade hub and jadeite marketplace

The history of Ruili can be traced back to 364CE when the ancient Dai Kingdom of Mengmao was centered in the Ruili river valley. It is documented in Chinese historical books that in the Han Dyansty, the Ruili river valley was under the jurisdiction of *Yongchang (水昌府)* County, and later in the Song Dynasty *Yongchang* was renamed as *Tengyue (腾起)* County (Ruili City Chronicles 1978-2005; Rippa and Yang 2017). *Tengyue* County was known as a trading post on the so-called Southern Silk Road or ancient Tea-horse Road, connecting southwest China, India, Central Asia, and Southeast Asia.

More recently, Ruili was officially established as a trade hub to propel bilateral trade between China and Myanmar. Shortly after Myanmar announced independence in 1948 and the establishment of People's Republic of China (PRC) in 1949, various domestic issues caused an official halt on all cross-border trade. In general, formal trade relations between the two counties remained low due to factors such as domestic wars within both countries, diplomatic relations, etc. that hindered the cross-border trade. In 1987, Ruili was proclaimed as an inland state-level port by the Chinese State Council and was then classified in 1992 as one of 14 Open Border Cities/counties to specifically strengthen trade ties with neighboring countries (Ruili City Chronicles 1978-2005).

Since 1988, when the Myanmar military government took over, the two countries have intended to thaw and synergize trade relations for societal development. Since the 1990s, China and Myanmar's formal economic relations have maintained a steady pace, especially when western countries put economic sanctions on Myanmar (Eng 2000). Formal trade between Myanmar and foreign countries, in particular China is crucial for the government's international revenue. The diplomatic relations and the political environment are important for the building of such a market, but this is not to say Ruili's jadeite market is merely a government designated or facilitated market. In fact, informal trade has long been carried out by border people. According to several experienced senior traders (including both Chinese and Burmese), they and their families participated in underground jadeite trade prior to its legalization. These people insist the

trade relations between China and Myanmar are impregnable by virtue of the conterminous border and the open and porous mountains and river throughout history: "The Ruili river is easy to cross and the mountains are easy to ferry through...(No matter what ban) this is a firm reality." In academic research, scholars have studied how the underground jade trade, the covert network initiated by Yunnanese traders, has long been carried out between Burma, Thailand, and Yunnan from the 1960s to 1980s (Chang 2009, 2011, 2013; Tagliacozzo 2001; Sun 2011; Yang 2004).

Ruili's was once described as a remote backwater town with an underworld bedeviled and tainted by smuggling, narcotics, and HIV as depicted in lurid outside media during the 1990's. It was renowned as a "borderland" with both exotica and a somewhat sinister reputation close to the Southeast Asian "Golden Quadrangle" (Walker 2000). Smuggling was rampant in categories such as drugs, agri-products, clothes, colored gems, and electronic wares. Some informants explain that the smuggling prevailed partially due to stringent trade bans and restrictions. In reality, there is also a strong requisite of exchange and social interaction between and within ethnic groups across the border. Communication is not a problem with shared ethnic languages among Kachin-and-Jingpo people, Shan-and-Dai people, and Lisu people on both sides of the border and social ties that can be fortified through exchange and trade. Opening the border and lifting the trade bans officially has been considered a benefit for both sides. Under this background, the Chinese government has implemented potent policies and regulations cracking down on unlawful practices since Ruili was branded as a special economic corridor in the 1990's. The local government aims to rectify the city into a safe and lawful transnational trade hub with efficient border regulations. After several years of constant endeavors, the "gambling enclaves" or illicit gangsters have been pushed out of the Chinese areas and further into neighboring southeast Asian countries (Nyiri, 2012). But this is not to say that the border is purely utopian and free of illicit trade today. Once in a while, the local public media releases tidbits about intrepid clamping down on drug dealers and smugglers.

Over the course of my fieldwork, Ruili continued to exert its influence as a secure trade hub and an open tourism site for both foreigners and Chinese. To many commoners, trading business permits, such as for jadeite and other precious stones, are easy to apply for and acquire. Government agents intently navigate and set up loose tax policies and legal paths to widen customer bases and create more opportunities. For Burmese working in Ruili either in business

or as menial labor, as long as its legal, there is nearly nothing to hinder for them from applying for a legal permit to visit Ruili known as a "daily border crossing visa." Prior to COVID-19 these permits, a local policy outside the scope of China's normal immigration laws were incredibly easy to obtain. The bureaucratic procedures are transparent and efficient. Many Burmese would rather take a job in Ruili, notwithstanding low salaries for menial labor, but still worth quite a lot as remittance sent back to their homeland. The overall social milieu in Ruili I experienced is rather lawfully regulated and socially secured.

The current Ruili County contains an area of 1020 square km including 6 townships, with *Mengmao (動卯*) town occupying most of the downtown area of the city. *Wanding (晚刊*) town is another state-level inland port in addition to Jiegao Port (which contains three entrances/exits), for the Myanmar-China trade path. The downtown district of Ruili occupies about 16.5 square km of mixed commercial and residential neighborhoods, lying along the northern bank of the Ruili River, with Jiegao extending to the southern bank of the river. Compared to many prefecture-level cities, a county-level city like Ruili, is in fact not huge in terms of geographic space. One can drive about 30-40 minutes from east to west or north to south and get to any place in the city. Though a small urban area, the residents here register roughly up to 200,000 including 50,000 Burmese in the city (Ruili government Annual Report, 2016).

Before the closure of the border under the impact of COVID-19 in 2020, various trade such as business in timber, agri-products, motorbikes, and cellphones long remained high revenue sources of commerce between the two countries. Among various trade, jadeite marketplaces play a key role in the city's economic vibe and employ the largest population of up to 80,000 people (Ruili Government Annual Report, 2016), including both Chinese and Burmese citizens. One of the striking features that makes the jadeite marketplaces unique, are their hodgepodge and mix of diverse groups in trade, Burmese, non-local Han diasporas, and local people, with individual businesses and family firms are the primary units of the business.

2. Jadeite industry across the border

The jadeite industry in Ruili has developed into a relatively mature business network with retailing, cutting, polishing and machining. Jadeite commodities appear in multiple forms including refined jewelry, semi-refined, and raw stones. Compared to the scale of processing and machining in Sihui city, Pingzhou city etc. in Guangdong Province though, Ruili is more

considered as a retail market because of the smaller size of these business categories. Reportedly, almost 90% percent of the jadeite in Ruili is imported from northern Myanmar, and only a small portion of jadeite (along with occasional nephrite) appears from other parts of the world.

Upstream in the Kachin State in Myanmar is the provenance of most jadeite, where mines are mostly controlled by networks of military elites, insurgencies, drug lords, and crony companies (Global Witness 2015). This network of controllers masters the release or flow of goods, and their networks sprawl to Mandalay and Yangon. It is also said that sometimes these actors hoard products to stifle competition intentionally. These alliances are every now and again volatile depending on the political environment in northern Myanmar. The Burmese government and other scalable joint ventures that dominate the sector of the jadeite industry are vertically integrated through conglomerates with branches and subsidiaries involved from mining, to auction, to foreign trade, with intermediate wholesalers at middle to upper levels in Myanmar. Private companies and traders who are capable of doing business back and forth on both sides of the border, then serve as bridges between state wholesalers and corporations. These brokers can be Chinese or Burmese. More often, Burmese Citizens of Chinese descent collect products in Myanmar and resell them in Yangon or Mandalay or bring them to China. Chinese traders also go to Myanmar to bid in auctions. The jadeite auctions in Myanmar operate with full-fledged yet simple procedures with many sorts of taxes included, and there are companies there that offer transnational consignment/delivery services. In fact, large amounts of jadeite materials sold to China by means of auctions normally enter China through ports in Guangdong Province and are funneled through processing and machining mostly in Guangdong province, and then sent /brought back to Ruili for retail. This is because of the agreed upon policies in terms of exporting/importing between the two countries, and also partially attributed to the needs and influence of Guangdong and Hong Kong business elites. Relatively, Ruili has a smaller scale machining and processing industry with mostly family-run workshops and small companies, compared to Guangdong. There is a dense network between Myanmar, Guangdong, and Ruili with Ruili increasingly asserting its influence in China's jadeite economy.



Figure 2. Locating Ruili Border, cropped by author from Scribble Map

Downstream in Ruili are thousands of private businesses set up in stores, counters, stalls, and streets. Ruili's jadeite market operates through thousands of private retailors, along with some cutting, designing, processing and machining businesses. The hierarchy of business in Ruili is normally determined by economic capital and (jadeite) resources in how much a firm, or an independent trader possess. There are no direct upper-level wholesalers in Ruili's jadeite market. Instead, it can be understood as having several large-scale businesses and retail outlets. Ones who have capital, access, and knowledge about jadeite business can become first-hand "wholesalers" if they go make purchases in Myanmar and bring back hundreds of boulders of raw stone. Yet, giving the immensely significant flow of jadeite and people, Ruili is still viewed as a centralized retail and wholesale locale for businesspeople from other parts of China. Also, since Ruili is geographically the closest hub to Myanmar, this potentially minimizes costs. Some jewelry dealers from other parts of China choose to come to Ruili to replenish their goods (instead of going to Myanmar).

In Ruili, there is a juxtaposition between processing/machining business run by family workshops and small-scale companies. According to a government business report (2016), there are less than 10 big companies involved in cross-border jadeite business. My interviewee, Mr. Kang, whose father was a first generation mine contractor in Myanmar, said that "huge bosses do not do business directly by themselves, they sell their portions to partners and their resources are indirectly transferred and rearranged by smaller companies, and co-opted in Ruili." Thus, Ruili's marketplaces do not directly involve state corporations from Myanmar, and there are no public/government-owned companies on the Chinese side either.

All up and down across the border, the jadeite trade seems to boost border economy and foster inter-ethnic interaction among different groups: Kachin and Shan from Myanmar usually work as suppliers or brokers who run back and forth from Myanmar and Ruili; Rohingya and Bamar often work as processors; Non-local Han Chinese are in charge of most retail shops with a relatively smaller number of Dai and Jingpo Chinese involved in the jadeite business. Sometimes, people stereotype certain type of jadeite products based on ethnicity such as "Kachin's betting stones, Rohingya's ring-surfaces, and Chinese's bracelets" reflecting how each group occupies specialties in business. The majority of Chinese traders in Ruili's jadeite market are, in fact, non-local trading diasporas who have moved to Ruili since the 1990s from Fujian, Guangdong, Henan, Zhejiang and other provinces etc. all over China. As for Burmese traders, the earliest to Ruili were mostly from Yangon, and in recent years Burmese have gravitated to Ruili from various parts from Myanmar including groups of Rohingyas from the south. There are many Burmese traders who commenced their businesses in the 1990's, and quite a lot have stable networks and customers across the border. These Burmese traders are successfully at the top of this market. According to the head of Trade Association of Burmese in Ruili (TABR), most of the Burmese traders who practice independent business are actually not of lowest social class in Myanmar. According to them, in earlies days to be able to be involved in market trading, one either had a personal tie, access, or the ability to be mobile to conduct business. Nowadays, perhaps the situation is slightly different. Young Burmese who are able to come to Ruili for their "fortune cookie" might end up just being sales promoters in the market with unstable income. But, in fact, one Burmese informant told me if they do not have a jadeite network, either through family or their friends, many would rather choose to work in labor-based jobs such as these sales promotion positions in Ruili versus working back home in Myanmar. Ruili further still offers many job opportunities for Burmese servers in restaurants, and other kind of business shops, and as nannies.

Scholars have studied jadeite production to consumption from upstream (Myanmar) to downstream (China's Guangdong, Hong Kong, Yunnan, Thailand etc.), seeing how jadeite has passed on through different hands, stages, and linkages, thus creating different social realms. This commodity chain perspective looks at how each node of the chain overcomes frictions and negotiations often in unequally distributed power relations. Ruili is at a center node in this network, a command and consumption center of the jade economy in China. The valuation

standards and criteria in Ruili's jadeite market epitomize a general understanding about how China's contemporary jadeite economy is constructed and transmitted both transnationally and domestically. This research provided me with an ethnographically contextualized perspective on how a the cross-border jadeite market operates and some of the ways in which heterogenous actors closely act on, interacted with, and participated in the jadeite economy in the social landscape of the border.

II. Three major marketplace clusters in Ruili city

As aforementioned, the development of Ruili's jadeite marketplaces is a historical process that began since the opening of the border in the late 1990's and has continued over the last three decades. Over the past years, the marketplace moved hither and thither in centralized areas in downtown Ruili due to juridical arrangements, urban planning, and market promotion. In 2015 (my first tour trip to Ruili), there were three established major marketplace clusters dispersed in Ruili city. In each marketplace, there was a mix of facades with fancy shops, storefronts, and bazaar-like marketplaces, both haute and low, and varied in terms of the scale of business. Elsewhere in the city, jadeite jewelry shops are by no means unusual to find interspersed within different locations such as alleys, streets and malls.

One of the unique traits of Ruili's jadeite market is that there are no clear-cut upper-level wholesalers or middle range sectors. It is reasonable that an artisan can be a retailor anytime if a customer was introduced to his/her store for a deal; a wholesaler is certainly happy if he sells only one piece of jade or ring worth thousands of *yuan*/dollars; a refined jewelry retailer is lucky to find some raw materials that he/she can bring to workshop to make a batch of bracelets. Their roles can be flexible relative to their specialty in the business. Ruili's jadeite market is composed mostly of family businesses, firms, and shops with relatively smaller portions represented by companies and corporations. These companies do not necessarily have an iron grip on capital but are involved in marketplace rental contracts, live-streaming teams, and corporations involved in cross-border trade, mining, and retailing.

In Ruili's marketplaces there are two major types of jadeite commodities: refined jewelry/artworks, and raw to semi-raw/cut jadeite materials. Items from pendants, earrings, necklaces, bracelets, table-set artwork/statues, to cut-open and uncut jadeite boulders, are major categories of jadeite commodities. In the past, the physical setting and the distribution of

marketplaces has changed, complying with technological development. For instance, the traditional face-to-face marketplace is now being co-opted by streaming sales bases for online live-stream sales. The market is dispersed in the sense that in the width of 16.6 km² urban space⁶, there are three districts specifically designated as centralized trading marketplaces under the management of local administrative institutions: Jiegao District (姐告区), Jewelry Street (珠宝街), and Delong Night market (德龙夜市).

1. Jiegao District and the border

The Jiegao 姐告 district is a piece of *terra firma* lying across the river from the main city of Ruili along the south bank of the Ruili river, and surrounded by the Burmese city of Muse (Mujie in Chinese pinyin), the second largest state level land port in Myanmar, in the east, south, and north. Jiegao was an important post during the Anti-Japanese War when a temporary airport was built for U.S aircraft delivering munitions and supplies. In 1991, Beijing established the Jiegao Border Economic zone to subserve bilateral trade between China and Myanmar. Three "national doorways," entry/exit checkpoints were set up in Jiegao to regulate import and export



Figure 3. Locating Jiegao at the border, cropped by author from Scribble Map

trade and border crossing. Since then, Jiegao district has prospered as a newly developing business town and border resort with facilities and typical localized ethnic features such as architecture found in major cities in Yunnan. The building of Jiegao as a special Economic Zone is an indication of China's fervent aspiration of promoting economic cooperation and exchange relations with neighboring countries in Southeast Asia.

In 2000, the central government in Beijing announced the "inside and outside customs" policy understood as "outside the customs regulations and within the boundaries" policy, promoting Jiegao as a unique area for trade of various types of goods. The so-called "inside and

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⁶ Since 2013 the local government initiated urban planning and compartmentalizing four major districts in downtown Ruili: Jiegao, Mengmao (old town), West Region, and East Region as extended new areas. The three marketplace clusters are distributed in Jiegao District, and Mengmao District across the Ruili River Bridge connecting to the old downtown.

outside customs" mode refers to that in Ruili, the customs boundary line is marked further inland from the border line to an inside area of Ruili using the Ruili River Bridge as the point of demarcation for customs regulations. This opened up Jiegao as an exempted trade zone with its own special supervision methods, tax policies, and goods production. Customs inspection agents of the Chinese government are located on the west side of the bridge traversing the Ruili river; exported goods crossing the customs boundary line of the Ruili river are considered as exported goods; imported goods are exempted from declaration to customs in Jiegao. (Ruili Government Annual Yearbook 2003). Along with the establishment of the Jiegao free trade zone, a series of special industrial policies and other preferential regulations were carried out in Ruili to strengthen trade and investment, forge special modes of interconnection with Myanmar and deepen cooperation (Liu 2016). These include direct benefits for traders and companies such as export tax rebates, and exemption of value-added tax and preferential land use tax, etc. The operationalization of these policies in Jiegao has also led to expansion in the fields of jade processing and warehousing, storage, and tourism as well.

Like many urban areas in China, new residential buildings mixed with restaurants, malls, and many other shops fill in this district across the Ruili river. According to customs statistics, about six thousand tons of jadeite stones produced by Myanmar annually flow into China with four thousand tons entering through Jiegao and Ruili (Ruli government Annual Yearbook, 2016). The Jiegao marketplace is the first stop for raw Burmese jadeite materials to enter China (legally). Before the rise of online live streaming sales of jadeite, Jiegao cluster was more of a "morning marketplace," with 80 percent of the transactions taking place during the rush hours between 7:00 a.m. and 12:00 p.m. The rest of day some traders who own or rent multiple stores or stalls might move out to the "afternoon marketplace" at different location, or traders and tourists arrange sales-services in the afternoon. For whatever reason, Jiegao cluster used to be vacant except in the morning.

The biggest lure for jade traders in Jiegao District is the tax-free policies (or abatement of tax in some business), especially since the closing of public jade markets in Myanmar and the strict monitoring of jadeite raw stones by customs. The geographical and policy advantages of Jiegao are of tantamount importance for wholesale and retailing. Merchants from Myanmar, Pakistan, and some from India all come to Jiegao for business. Today the market area has expanded to fifty acres, with a length of 1200 meters of jadeite counters and display cases. There

are more than two thousand registered family-firms or shops doing jadeite retailing business, including more than eight hundred shops run by Burmese traders. In addition to some trading areas and stores scattered around certain streets, the big Yucheng (玉城) is the centralized warehouse cluster in Jiegao District. Yucheng (Chinese characters literally meaning "jade city") was established through investment by the Yucheng Ltd. Company to create the earliest jadeite marketplace in Jiegao district.

Earlier in the 2000's, the big Yucheng marketplace occupied only 5 acres, however today, the current Yucheng market cluster area is much larger and contains three sections: Shunjue (M) 瑶), Jimao (吉茂), and Yucheng (玉城). Walking into Yucheng marketplace from the south entrance gate, it is an open-air marketplace, about eight hundred square meters wide, with metallic stalls lined up in a rectangular shaped yard, an area where most Burmese traders sell raw jadeite stones. On the east border is one strip of stalls covered by roof tiles where more refined jewelry is displayed. The elementary supplies and equipment such as sheds and stalls are set up by the Yucheng Ltd. and rented out to dealers. On the west side, a path cuts through bungalows, in an area called the Huayuan (translated as garden in Chinese) stretching out approximately eight hundred square meters wide as well, with stalls set up for refined jewelry; this is an area where most of the high-quality rings sold by Rohyingas are located. Normally in the later afternoon this area gets quiet, and dreary. Around 2 to 3 pm traders pack up all their products and move to other destinations, leaving behind chairs and stools hanging on top of stalls covered by grubby cloth, plastic or tarpaulins. Some of these metallic stalls are rusted and left empty when by traders who have moved on leaving an at times desolate scene here. In this image it is hard to imagine a set of ring stones or necklaces can be easily sold for up to 200,000 RMB or even more in such a place. Through the aisles between stalls to the north and further, in the middle there are two sections in a two-storied huge warehouse, where hundreds of glass counters or display cases are rented out for various jewelry retailing. A few counters sell amber, agate or other kinds of jewelry interspersed among them. Early on I thought that perhaps fancier stores or shops normally sell more expensive jewelry, which is normally true, but not always in these clusters. Products speak louder. You can find cheap sets in these fancy glass counters, but you can also search for high quality stones in shabby open-air stalls.

Rambling around the marketplaces, prowling across stalls, and cutting through paths, exchanging pleasantries to acquaintances, scouting at the abrupt pandemonium brings joy for me.

My regular perch at Jiegao is at the unheeded corner of the path from Nanmen Area to Garden Area. The Garden Area in Yucheng is like a rectangular shaped market cluster, a dilapidated jumble of shops, sheds and stalls set up by rusting metallic tools. Entering the cement-floored Garden Area, you find yourself in a closed, low, bazar with vintage fashioned looking stores built on the walls around the sides, and with stalls set up throughout the middle areas. The kind of dilapidate physical environment does not convey any sense of "prestige" or superb glamour to outsiders. For a stark new visitor, like me in my first visit, it is unbelievable! Only after a series of systematic visits and a careful inquiry of the market, one can arrive at an understanding of its roles in wider structures of the jade economy.

This Garden Area is well known for high-quality ring pieces and many Rohinga traders conduct their business here. When it is quiet, it is easy to detect my resting spot. An old green oil painting advertisement board with white calligraphy says "Dream Jewelry Designing and Processing," hovering high in center of the shop, at the sharp bleak corner in the middle area of Yucheng marketplace. Advertisement boards or store plaques are the most boring features in Ruili's jadeite market. In my observation, no matter how gaudy they are, they are nothing perhaps compared to the actual dazzling jewelry and gems. They are useful only because they are easy to read, and names are easy to remember if customers wish to return to a specific stall or trader. Dealers are more into the quality and prices of their products.

The shop where I perch to observe the market and interact is only around ten square meters in size. Within the shop seventy five percent of the space is built into a tiny workshop with three processing machines set up behind a glass wall. The other twenty five percent of space is on the left side with a two-meter-long glass case displaying jewelry designs for rings, pendants, and brooches. My spot is right at the glass counter on the side of the store where I sit upon a high revolving stool and scribble notes without much disturbance to my informant. Next to this shop is a path that allows one to set off from the Garden Area to the Nanmen Area, a section mostly for "betting stones." In front of the shop there are stalls rented by my other informant Ruiyi, who usually leaves around 2 to 3 pm in the afternoon. The shop was a great spot where it is easy to stride to both sections of the market, the Garden and Nanmen area. As a researcher, whenever there is a cry and screaming, I need to make sure I can shove into the crowds as quickly as I can. The owner of this shop is a goldsmith who runs his major store in Guangdong, and only set up two smaller workshops in Ruili. He hired Xiaochen, whom is a 20-year-old jewelry processor

who came from Guangdong in 2016. He specializes in making and designing artworks of jewelry such as rings or pendants. When he is not working, he usually plays on his cellphone, and when he works he buries his head on his machines for hours. When he takes a break, he seems to be content just staying in the store and chatting with his friends including me. After my several months presence, we became so familiar and exchanging everyday pleasantries was unnecessary. He knows that I'm some kind of researcher who has no interest in buying jadeite and I will be there unbiddenly. He knows that I would be seated here for a while or that sometimes I would step out to chart with other friends/informants.

Further to the north side of the market area at the back, a huge shed approximately one thousand square meters wide, was initially set up for online live streaming auction broadcasts by Yucheng Ltd. in 2017. This section is newly built. Earlier on, all the streaming hosts were required to bring their electronic devices and come to their designated stalls to broadcast/video shoot their products. Hosts must also acquire a legal permit co-approved by the Gem and Jadeite Association of Ruili (private organization) and the local government to run online sales. Later, the policy loosened up and some Burmese traders choose to rent some empty streaming stalls for online retail businesses. Eventually the area became a cluster of both online (streaming) and offline sales. Burmese or any other owners of goods can bring their products to hosts, and hosts sell them on the spot and share a 5 to 10 percent of the profits if a deal is made. Even though it is newly built, the area is designed in a low-key tone with concrete floors and metallic stalls, and a roof high above; power wires and lines hang across suspended in the air. Blazing banners hang across the area with advertisements. At each stall there are several power strips with electronic outlets for charging cell phones, cameras, and other various electronic equipment. Given that all sales occur online and don't require much of an outward exterior appearance there is less attention given to aesthetics than in other sections of the marketplace. Online live hosts will gather from around late afternoon till late-night/morning to 2 am, to sell their products in this area. The cries of traders and roaring hosts make this section buzz from dawn to dusk. Whenever I come down here, I feel the vibe of hosts and the vitality of this market.

Next to Yucheng is Jimao Jewelry, another huge warehouse like space. Across Jiegao South Road, Shunjue is on the other side of Yucheng and Jimao. The connecting path area between Yucheng and Jimao is always clogged with street vendors selling all kinds of refreshments, packed fresh fruit, bottled water, open coconuts with straws, jelly bean-curd, pancakes etc. in their flatbeds, barrows, and tricycles, high and low, underneath awnings, and some have glass hoods to ward off dust, pitching into the market space like a breathe of life, pure and fresh. In China, this kind of scene seems more natural, even in a fancy mall, food carts can appear and both Chinese and Burmese people are quite fond of this kind of "market lifestyle." It is not haute at all, but it allows people to get a bottled water, a bag (take-away style) of Burmese coffee, or a pack of cigarettes quickly and nearby, rather than driving miles to a store, it is amazing.

Compared to the topsy-turvy mixture at Yucheng, Jimao is a more organized section. This huge, gated warehouse is supported by many slim round metal pillars galvanized in golden color, with a high ceiling and divided into two areas: one area for refined or semi-raw jadeite along with some pearls and amber, and in the south corner there is another area specialized in raw materials, the "betting stones." Opposite from Jimao, Shunjue includes more than two thousand counters rented out to roughly nine hundred traders and family-firms.

Entering and walking around the different sections of Shunjue and Jimao marketplaces is an eye opening and highly visual experience, at times perhaps overwhelming due to the sheer scale so that visitors are easily found bedazzled by the place. As mentioned above it is split into different sections with quite different aesthetics and visuals, but each shares the experience



Figure 4. Bird's eye view of Jimao marketplace from People's Daily

during peak times of constant flow of goods and people. Even during the COVID-19 pandemic times with the rising popularity of online video auctions, Yucheng is still a busy spot and herds of people rush in. Sections in the center of the facility dealing in refined jewelry still possess a quieter tone with less online sales and less foot traffic among customers. This is

partially due to the less volatile and fluctuating nature of jewelry prices versus those of uncut "betting stones." Here the stalls are made of finished wood, in stark contrast to the metallic tables found in the raw stone sections. There are lower ceilings with LED lighting, comparing starkly to the dark area in the raw stone section where dealers use penlights to inspect the stones.

The Yucheng marketplace used to primarily be a morning market where dealers gathered along with brokers, petty runners, and customers/tourists from all nodes of the network. The market starts around 6 a.m. Traders from all directions who rent stalls here come from downtown across the Ruili River Bridge or enter Jiegao from Myanmar by means of checkpoints with their special daily-crossing visas. In recent days because of the rise of online live stream sales and the building of the special zone, "the live stream base," hosts and traders gather for their late-night shows in the designated area. Overall, the infrastructure of the marketplace is a little old, low key designed, and certainly not as glitzy as the jadeite jewelry itself which sparkles and entices people to invest in such luxury. People who have never been to Ruili could be shocked by the fact that in Jiegao, one of the largest jewelry distribution centers in China, expensive jewelry is traded in and environment like what one might experience in an agri-food bazaar or flower market. Even in shops in the streets, stones touted as being worth thousands of dollars can be found lying on the floor or a rusty shelf. For a small border town, Jiegao play a surprisingly large role within global markets, known colloquially in China as a "Real-Price-Jade-Shopping Holy Land."

2. Jewelry Street District

Reminiscing about the first time I was introduced to Jewelry Street, I had no idea how to picture myself in a bustling, gaudy, perhaps slick shopping district with exquisitely ornate shops of glitzy precious jewelry with a student budget in my pocket aiming to talk to jewelers for research. My friend, a government official highlighted the quaint architecture, suggesting the street is a must-go excursion even for tourists who are not coming for jewelry. I immediately mustered my courage for my first visit.

At the intersection of Mengmao Road and Jianshe Road in downtown Ruili, is hemmed in a strip of street with stylish architecture, a mix of Dai and old-fashioned two-floor buildings, roughly about five hundred meters long and 30-40 meters wide including the middle strip of stores, creating two alleys by the sides. In the small space at the entrance area, is a small parking

lot where when standing, you see a mixture of Dai and traditional Chinese style concrete arches hover into view, atop a plaque calligraphed with "Ruili's Jewelry Street." Regally, this dignified ferroconcrete façade is poised defensively at the south entrance gate, like a local monument, in pale yellow and orange, typical Thai-temple styled colors. Ineffably, the whole contrivance to this architecture evinces a sense of exotica to its visitors. When business tones down and traders shift to other regions, the street bears a quaintly and quiet elegance, staid rather than glossy. Not tacky. Storefronts one by one line the street under the roof which stretches along the veranda and arcade strutted by lofty cylindrical girders forming a solemn atmosphere. Jewelry Street is a reverential shopping district for jadeite in Ruili due to its history and status.

Many of the stores, each with a single wooden door lacquered in claret red and inlaid with dragon or blossom-shaped carvings, and some hollowed out adornments, are quite similar style to one another, each with an extra metal rolling door spiraling up. Inside are several glassfront displace counters filled with iridescent jewelry. A few larger stores (with two or three doors) are refurbished with additional wooden walls inside and circular windows and arches atop, delivering a quaint elegance of traditional Chinese artistic style. Some stores also have grids built embellished on the walls so some decorations and sets of jewelry may be shelved. Outside Jewelry Street there is gentrification in the vicinity with all kinds of storefronts sprawling over into nearby streets. Only a walking distance away, used to be the Ruili Hotel, which was once a hot spot for dealing raw jadeite materials in the early 2000's.



Figure 5. Bird's eye view of Jewelry Street from Bing Image

Figure 6. Photo of author at Jewelry Street 2018

There is a short history of the Jewelry Street. Before the local government of Ruili legalize trade for precious stones in Ruili in 1991, underground trade of jadeite along with colored gems such as rubies and sapphires were active by virtue of a covert network in this "remote" borderland. Traders who dealt in gems or jadeite came to Ruili lurking as visitors, and they furtively knocked on doors for indoor/home sales with secret inside ties to conduct their business. Burmese from southern Myanmar around Yangon rode three to four days by bus to meet up with Chinese traders from Shanghai and Guangdong. Three of my Burmese interviewees emphasized at that time it was a strenuous journey on bumpy roads especially from northern Myanmar to Ruili, but the business was an inducement to come. They highlight that there was no fraud and no counterfeit in the old days. Traders maintained trust on both sides; and business was not hard to accomplish and thus the journey was worth the effort. Some interviewees insist on the idea that it was when illegal trade was already prevailing, that the government realized that it was impregnable to eradicate cross-border trade, that they turned to develop and promote it, rather than working to impede jadeite trade, as a local specialty. It was a good methodology to promoting cross-border rise. This led to the thought of Jewelry Street and its creation. According to the Chinese legislation system, the municipal Party committee and government of Ruili City applied to open up and establish Ruili as special zone/county for trading precious stones and was finally granted approval by upper-level government bureaus in charge of industry and commerce, which is how Jewelry Street first came into being. In 1992, the downtown of Mengmao area was



Figure 7. Photo of author at Taili Jewlery 2016

designed to commercialize jadeite business, with 84 shops and 136 booths and stalls set up and ordered by jewelry and jade operators, bringing the hidden underground jewelry trade into a legal business (Yang and Lee, 2005).

In retrospect from interviewees, the scale of street in past time could not be compared to today at all. It was only low houses with storefronts, with trestles propped up as temporary stalls and wooden booths set up in the street, more like a bazaar. The street was mixed with vendors selling cloths, folk arts and crafts, food, and drinks and miscellaneous groceries. After 1993, the Ruili Municipal Party committee further enlarged the investment and

building of jewelry street. Sponsored by Ruili Minzu Furniture Factory and Ruili Municipal Grain Bureau, 82 stores and 72 stalls were built again, and 88 fancy shops and 90 stalls were in invested in by the Service Centre of Ruili Marketplace (Yang and Lee, 2005). By 2002, Jewelry Street went through several reconstructions with old houses torn down and new construction put up. The expanded area of Jewelry Street reached 90.2 acres, with 450 large and small shops and 240 stalls. Today it covers approximately 42,000 square meters including several scattered commercial blocks as a true jewelry center.

Roaming in Jewelry Street, there is recent catchphrase among Chinese netzines that "poverty constraints my imaginations" to describe eye-opening things in a sort-of self-sarcastic way, which could be applied to my first visit while I was caught by fascinating and at the same time perplexing moments: "Are there really so many people buying jadeite?" I would ask myself. My local host family, Mr. Wu took me directly to Taili Jewelry on my first trip, a huge warehouse like open store with hundreds of counters set up and rented out for individual private traders. Mr. Wu told me that Taili Jewelry (台丽珠宝) was a historical site and was first founded by Taiwanese business people in the 1990s, thus named as Taili ($\cancel{\Box} \ \overline{M})$. Taili Jewelry is located in the middle section on the east sidewalk in Jewelry Street where a cut-through alley connects two sidewalks and further into a neighboring street with a grocery store and restaurants. Standing outside, it looks like a small department store, from where dazzling jewelry are hawked by rumbustious cries. I can still hear waves of melodious jingling pulsing amidst the store when traders genteelly clatter jadeite pieces (traders do this to prove their good quality of products). Next to Taili there is another warehouse like market and the two areas are connected by a narrowed path but with stalls lined up, it is like a labyrinth for a new visitor to get through. From my informant in Taili, I heard rent fees were extremely high due to peak years (2002-2014). For just a one-meter counter the month rent is roughly are about 1200 yuan, and even so it is hard to rent one or transfer contract ownership from other traders. My informant told me, locations in marketplace clusters are important because, for one, most customers and tourists will come to the centralized marketplaces so that they could have a vast number of choices and comparisons. Thus, locations at the forefront are usually better than at the back. Geomancy is also often a delusion yet of big important for some individuals as well.

In 2016 Jewelry Street seemed to always be flooded with crowds. This dense congestion can be pictured as bazaar-like. For a face-to-face cash-and-carry market like Ruili, this kind of

traffic was absolutely a good sign for the likelihood of pulling in customers, a potential for high flow of goods and people. As a researcher, I would grasp any chance that anyone accosted me to intersperse my questions and build my network. Between 2015 to 2016 crowds in Ruili still rotated in a daily rhythm from the morning market in Jiegao District, afternoon market in Jewelry Street, to a newly thriving night market building in the Delong Area.

Yet, four years later in 2020, it was transfixing to see the forlorn look and tranquility of the Jewelry Street bluntly against its venerable past. When I returned to Ruili for my longer stint of one year fieldwork in the winter of 2019, the Jewelry Street was no longer pounding. Meandering in such a sequestered and tranquil street in the afternoon, many storefronts had been shut down. It was no not clamorous like before. Only a few shops invitingly stayed open. I had copious time to both visit my informants and savor literally every spot of the street. I was told by my informant Mrs. Shi, who used to rent a two-meter-long counter at Taili, that since 2018 when streaming sales began to thrive there has been a slump in Jewelry Street. Shop owners had to face the fierce challenge of the decline of customers and transforming and adjusting to new modes of trade online.

There was one short period in 2018 when Taili Jewelry was even shut down. Traders who rent counters left and switched to new destinations. The proprietor who owns Taili Jewelry even lowered the renting fee to its lowest in years, while it still did not save the place entirely. It took almost half a year until some traders who tenaciously refused or failed to run online streaming business slowly came back to Taili in 2019. Another informant, a shop owner at Jewelry Street was frustrated about this decline. During the peak between 2009 to 2016, a 20 meters wide store in Jewelry Street could be speculated for sales as high as 2000,000 RMB (300,000 dollars) with rental space being scarce. This shop owner insisted he was tempted to sell his store now, but his wife hesitated so that they would not lose their best chance to make a lucrative deal. Now (in 2020) that glory and bubble at Jewelry Street is gone.

3. Delong Night marketplace

Since 2014, a marketplace in Delong Business District has slowly taken the nighttime stage in Ruili. Traders do not come to Delong and set up their business until late afternoon, around 5 pm till midnight (except streaming sections), thus earning the name "night market" (夜市). Delong (德龙) was the name given by a real estate developer who built Delong as a mix of

residential buildings with business plazas. This kind of mixture is a marker of social milieu in China's recent urban life, where businesses and homes are not completely divided. In the buildings' ground floors are storefronts, usually connected to an extended space in the second or third floor and the rest remain as residential apartments. Some of gated the residential neighborhoods as depicted in the provincial capital of Kunming by Zhang (2010), will include small scale grocery shopping stores and amenities, such as barbers, manicures and massage stores, supermarkets, restaurants etc., for convenience of their residents. Many people appreciate this kind of convenience in the growing urbanization of Chinese life.

Like many expanded urban areas, when Delong was first built, it was still a quiet area with less congestion of business and people. Many of the storefronts were not sold or rented out immediately. The proprietor understood if the business areas were not popular, the apartments would not sell well either. Thus, Delong's marketing team took the first step to ignite business popularity. Seeing that street vendors were everywhere, the manager released news, saying that anyone (with legal status) who came to the open-air marketplace for "night-sales" could get 10-20 *yuan* per night as an award/compensation. Mr. Delong and his team understood that in order to make Delong into a popular spot, like Taili, a relatively centralized market cluster for jadeite business would be an appealing strategy. Soon, they announced that in addition to the "night-sale" compensation, Delong would offer storefronts in the business plaza rent free for the first two years. This was very attractive deal to free-lancers, or even those who might already own or rent counters at other places, thinking they could kill some time in the evening and make extra



Figure 8. Photo of south entrance at Delong night marketplace by author 2020

money. More and more traders begun to come here. At the beginning, a grid of spaces was drawn out on the ground with merchants crouched down with their goods displayed on the ground, with people mostly selling raw jadeite materials ("betting stones" as I discuss in Chapter 4). Soon, these on-the-floor spaces ran out, and booths and stalls were set up in the middle aisles and sidewalks. After about 2-3 years,

gradually, Delong night marketplace was set up through Mr. Delong's business acumen and tactics.

Delong has approximately 28 blocks of five- floor buildings, with the first and second floors designed as business stores and offices, and upper floors as apartments. In between these blocks are shopping arcades filled by booths, and sheds mixed with a few ancillary stalls. Taking the entrance at the south gate there is an on-the-ground bazaar selling raw jadeite materials. Like with the selling of vegetables in China, jadeite pieces are piled up on the floor, and buyers come examining them with flashlights illuminated against the stones. The darker the environs, the better for the reflection of inside qualities on the stones. The motley of on-the-floor stalls are actually rented by traders for a relatively cheap cost, they are not completely scrappy and haphazard like I assumed on my first visit and working in the dark has its purpose.

Entering from the south gate, there are two sections within the business plaza: The main aisles and sidewalks among different blocks are set up with booths with metal stalls, specialized in refined jewelry with the main products made of jadeite, but also mixed with a few other types of goods such as amber, fossil jadeite/ siliceous jade and other artworks, etc. Storefronts within the plaza usually sells relatively higher quality goods. Further in the back in the east corner, there is one section of roughly about 800 square meters of open-air space specialized in "betting stone" trade. This is the most simplified but occult and kind of inscrutable area to outsiders, with no lights at night or wires hang in the air, but only high-roof booths covered in the dark. From a distance, this area is dimly lighted up by flashlights or spotlight torches that traders use to examine the stones, like fireflies in the noisy wilderness. Sellers sit on the ground, displaying rocks in front of them. Upon closer look, this section looks like a haunted house with elated sprits.

Delong is called a night marketplace, because in the daytime the booths and stalls are mostly empty, and traders do not show up till evening. I learned that buyers who come to Delong are not necessarily just "betting stone" players, but in other regions may be retailors, processors, brokers, or tourists (who like to buy a piece and take them to workshops to make some jewelry) and then come here for a visit. My first examination of Delong night marketplace was in 2016 when I took part in some preliminary fieldwork and since that time Delong Night market is still growing.

The Old Huafeng marketplace

Delong's role is helpful to understand the changing dynamics of the market's physical layout of dispersed marketplaces clusters. During my 2016 research trip, I learned that before the rise of Delong, there was Old Huafeng marketplace, once popular like Delong. Huafeng marketplace is located at No. 99, Jiegang Road, (east of Jingcheng community) in downtown Ruili and was founded officially in 1999 as neighborhood mixed with a wholesale business plaza for various sorts of trade by Huangfeng Ltd. Business categories ranged from shop rental, property management, warehousing, wholesale and retail stores for daily necessities, hardware, chemical industry, mechanical and electronic equipment etc. The Huafeng Ltd. Company and Ruili government initially agreed to build Huafeng with a large section for centralizing for the processing of jewelry in the jade industry: engraving, carving, polishing and designing etc. Till 2020, Huafeng still has approximately 100 family workshops, large and small, these workshops doing retail business as well. Since 2015, the jadeite business in Huafeng has gone down, nearly half of the Huafeng areas today have been transformed to other types of retail business such as a clothing and into a food plaza for nearby business people.

More than two decades of development and designing, and accretions of rebuilding, expanding and remodeling mark the ebb and flow of Ruili's jadeite market up till today. In 2020, while I was in the city, I and the market both weathered the first hit of the COVID-19 pandemic. During the lock-down in the beginning of the pandemic in February in 2020 in Ruili, these market clusters were all restrained from running business temporarily and did not resume until late April when the situation was under control. A second lock-down occurred for two weeks in October 2020, but the marketplaces soon eased back to their normal schedule. Overall, the impact of the COVID-19 pandemic in 2020 was real but not incorrigible: the market was indeed stymied by injunctions on business activities and conditional travel bans and the numbers of tourists plummet due to bans on cross border movement. Notwithstanding, Ruili's jadeite markets were able to retain their normal schedule and I managed to conduct my fieldwork safe and sound throughout the year.

4. Newly built lives streaming bases

If the physical layout of marketplaces can be understood as the outer layer of the changing dynamics of the marketplace, the transformation of sales can then be understood as an

inner change. Callon (1998) says agents rely on advanced technologies and tools to calculate and perform. This is seen and true in Ruili in that internet/WIFI and smart phones have rendered the expansion of new trade modes from offline face-to-face transactions to expanded to online live-streaming. The mode of live-streaming sales has a direct influence not only on the building of jadeite marketplaces, where streaming sections are newly designed and added, but is also stimulating new power dynamics between private market organizations and government institutions in terms of market regulation and management (details in Chapter 6). According to statistics from the Ruili Municipal Government, jadeite sales by virtue of livestreaming platforms are estimated to have exceeded 10 billion *yuan* in 2020 (Xinhuanet).



Figure 9. Photo of Jiegao Live-streaming Base by author 2020

The ongoing transformation of the market with the expansion of livestream sales has shifted gears and some priorities in the marketplace. Except in the Jewelry Street area, the other two main marketplaces, Jiegao and Delong clusters have specific quarters divided out as live stream bases. The construction of these newly renovated sections is rather simple, and they are set up with medium-height metal stalls, with the most important devices being electronic equipment and wires and power outlets dangling high above the stalls so the devices used in live broadcasts, such as smart phones or I-pads etc. can be charged at any time. The streaming section also need to have 5G or WIFI service installed to maintain high internet data flow. Hosts or streamers will typically bring their own devices, most simply a smart phone, a phone charger, a penlight, and a tripod.

Live streaming is considered a new interactive business model with multi-functions in sales in addition to recreation and entertainment. Streamers start a live broadcast by introducing products and interacting with viewers and answering their questions. Hosts often use tools, such as an electronic weight scale, a measuring stick, and a penlight. Products like earrings or ring surfaces can be measured to provide viewers a hint of size and weight. A flashlight is placed against the surface of jadeite as to show the inner structure and the translucency or whether there are slight cracks. The pricing in a live broadcast varies. Depending on the host's' sales strategy, viewers can bid on a specific item or they can bargain with hosts, or inquire for hosts to bargain with product owners if items are sold on consignment. In the streaming base, it is common that streamers do not necessarily own any piece of jadeite, there are jadeite owners who bring their products for streamers to shoot in a live broadcast and once sales are made, they share a profit. Once an order is placed, the rest of shopping and delivering service/procedure is very similar to that of traditional website and catalog e-commerce.

In live-streaming, traders or companies can open their streaming account at various internet platforms such as Douyin (Tiktok in the US), Taobao/T-mall, Kuaishou, Y-live, Pinduoduo etc. with the account considered a primary unit in the streaming system. To promote and popularize an account is to attract followers and viewers, especially long-term ones, and also to boost the viewing and clicks of their short videos or live broadcasts. A host or an account who has mass followers or subscribers is considered a potential plus in streaming sales. An account could be shared by several hosts, especially in a team. Or a host could register more than one account depending on how he/she manages them.

After several months of examining the streaming bases, I learned that most streamers at least work with one partner, as teamwork is considered more efficient. This is primarily because of the workload and division: If an account/host broadcasts for a day (or a night) it is likely to have a shift for another host, and also aftersales services such as the shipping and returning requires other team workers. This new e-commerce model has been prevalent since 2017 in Ruili, while prior to that, Ruili itself was touted a "brand" of a face-to-face cash-and-carry spot market. This type of business model is both a challenge and an opportunity to many traders.

Conclusion

This chapter introduces "qualia in markets" in a specific place, a lively image of how Ruili's jadeite market is situated in the China-Myanmar borderland, where actors come from China and Myanmar (some from Pakstan and India) to work as retailors, processors, brokers, carvers etc. in a spatial structure. I provided a background of what makes this market "typically Ruili:" the interconnection with jadeite mines across the border in adjacent Kachin state makes Ruili a "remote" yet the closest hub from jadeite mines. The significance of retailing cam be seen with up to 800,000 actors directly involved in jadeite trade. There are three dispersed marketplace clusters with expansions into new e-commerce models which are now playing a significant role in the function of the market. Soft policies aiming to promote Ruili's jadeite market are also offered up by the two neighboring countries of China and Myanmar, in China through official channels and in Myanmar's mining circles more through insurgent and crony capitalism. What's more, there is no direct wholesaling overlord or big corporation monopolizing the jadeite sales in Ruili. The market is formed by thousands of private businesses; in one place, jadeite stones are piled up and sold on the floor, in another they are collocated in exquisite glass counters. All these factors represent what I call the heterogeneity of a market, which serves the qualitative dimension in Ruili's jadeite marketplaces.

The heterogeneity of a market brings multiple actors and agents together, but not necessarily at the expense of one another. For instance, agents have their capabilities to decide whether they have interest in joining a market (or not), and non-human actors share an influence through how commodities are traded, displayed and stored. A buyer and seller, though their interest of "buy cheap and sell dear" are opposed to each other, but when a deal is sealed, the action is also cooperative. The heterogeneity of a market reconciles these extremes or sometimes opposed interests and brings all the different actors and agents together; a market is constantly negotiated and configured. In the following chapters, I will continue to demonstrate the interrelations among these actors and agents in market intricacy.

CHAPTER 3. KNOWLEDGE/ECONOMICS AND QUALIA OF COMMODITIZED JADEITE JEWELRY

Unlike gold which occupies a rigid system in the valuation standard based on its purity, the assessment and pricing of jadeite concerns several qualitative characters and its appearance. In this chapter, I demonstrate how valuation criteria of jadeite in a contemporary market are constructed through qualitative experience (colors, textures) and feelings (moral, auspicious, prestigious, wealthy) in human-jadeite relations, the qualia of jadeite in Ruili's marketplaces. I highlight traders are vehicles and intermediaries to pass on these valuation standards to their audience, including their customers and their apprentices. I argue the qualia (Munn 1986; Harkness and Chumely 2013; Harkness 2020) of jadeite are constantly made and remade by the heterogenous actors and agents through market agencement (Callon 2021).

From another angle, this chapter situates Ruili's jadeite market through social-cultural analyses, by introducing historical jade culture and then transitioning to, what I call "contemporary jade culture in a market." Although my analysis is not about how exactly the jade culture has changed from the past to present, it is seen that the past has an influence on the present. In "contemporary jade culture in a market", I look at why individuals/agents today negotiate to engage in regularized (market) practice across time and space. In answering I do not deny calculative agency and individual purpose, but rather apply structuration theory (Giddens 1984) to explain the interplay of structure and agency in space and time. I provide a moment in time in a market space, a snapshot of a structure as a set of relations, beliefs, rules, and opportunities which are shared by actors and agents.

To clarify, the historical importance and cultural roots of what constitute jade/jadeite as cultural products are important but NOT determinative in this dissertation. I do not assert that the semiotics of jadeite completely govern the price and sales of jadeite in the present market (for instance labor cost play a role and price itself can be a factor sometimes). I wish to demonstrate the important of the practices of Ruili's jadeite market and that agents who are interested or engaged with jadeite, and the aspect of their understanding of jadeite in social cultural framework. I suggest, the knowledge of jadeite, its evaluation criteria on its qualities and appearances are highly reflexive of the "qualia of jadeite".

Key in this chapter is what I call the "qualia of jadeite." I argue that the knowledge of jadeite is constituted by a set of valuation criteria around how agents read, understand, and make

sense of jadeite commodities in Ruili's jadeite market. This knowledge revolves around the physical qualities of jadeite, and how people attribute qualities (such as "water") to describe them. This analysis also allows me to unravels the relation between human and non-human actors in Ruili's jadeite market: the physical characteristics and qualities of jadeite and how traders recognize them are mutually constructive.

The first section of this chapter provides a historical overview of jade culture in feudal Chinese society, highlighting its changing dynamics and influence on contemporary consumption of jadeite. The second section offers one way to look at how cultures of jadeite in contemporary markets are intently reproduced by agents in processes of marketing and advertising, attaching meanings to the qualities, shapes, and designs of jadeite jewelry, rendering them desirable or auspicious. It is seen that traders play an unrecognizable role as mediators in producing and reproducing these traits and features. The third section explains how the "qualia of jadeite" are instantiated into a set of primary criteria and standards that I catalogue from traders' practices, which remain the core of the knowledge of jadeite. This knowledge of jadeite then is the basis for how a price range is estimated, set up, or assessed.

I. Jade culture in feudal China

Jade as valuable stone is a general word for nephrite jade and jadeite jade with the two both referred to as "yu" 玉 in Chinese. As mentioned in the introduction, in geology and mineralogy, nephrite is a type of amphibole jade, a tremolite-actinolite [Ca2(MgFe)5Si8O22(OH)2] rock with a felted, microcrystalline habit; jadeite is a type of pyroxene jade [NaAlSi2O6] which varies from micro- to macrocrystalline textures (Ferraris et al. 2014; Coccato et al.2014; Shi et al. 2009; Shi and Harlow 2012). Nephrite jade exudes a creamy white form, like "mutton fat" while jadeite has various colors such as green, tawny, and lavender. Jadeite jade in Chinese language is called *feicui 翡翠*, and nephrite is usually distinguished as *ruan yu 新玉* by traders. This difference matters even in historical jade culture since the provenance of nephrite is documented as being from the north versus jadeite which was/is from the south as described by archeologists and historians (Sun 2011; Chang 2011; Yang 2004).

1. Historical Jade

The longings of jade can be traced back further than 7000 BCE in China based on evidence of jade tools and wares excavated in archeological findings (Liu, 2005). The antediluvian



Figure 10. Jade ornaments dating back to Spring and Warring States (722-222 BCE) period in the National Museum in Beijing

Hemudu Culture⁷ (河姆波) site in Zhengjiang province from the early Neolithic period includes artifacts such as blades and daggers dated back to 7000–5000 BCE (Liu, 2005; Cai 2017; Li 2020). Many jade artifacts were also found in Hongshan culture⁸ (红山文化) dating back to 6500-5000 years ago and in the Liangzhu culture⁹ (良渚文化) dating back to between 4000–2500 BCE, where archaeologists discovered jade was an important part of ritual contexts. Carved jades were also excavated in Longshan culture (3500–2000 BCE) in the Yellow River region with various sites found in today's Shandong, Hennan, Shanxi, and Shaanxi provinces. Excavated jade artifacts such as blades, chisels, and shades showcase that jade was first used for tools and gradually applied in funerary and ritual systems as vehicles or mediums to communicate with ancestors and spirits in early religious practices (Liu 2019; Deng 2017; Yao 2018; Li 2020; Ye 2011, 2018, 2019a; Cai 2017). Many of the excavated jade artifacts identified as nephrite jade come from the north in Hetian/Khotan (和用), a Uyghur region in today's Xinjiang province.

In 1968, two sets of gold thread jade suit/armor unearthed from Han tombs in Manchuria (满城, Hebei province), are the earliest and highest grade gold thread jade suit found in archaeological excavations in China (Hebei Museum, 2022). Archaeologists identify that the person buried in the suit are the Duke of Western Han, Liu Sheng (about 165-113 BCE) and his

⁷ Zhejiang provincial Museum, https://www.zhejiangmuseum.com/DigitalMuseum/DigitalCollection?third=LZYQ

⁸ Liaoning provincial Museum, https://www.lnmuseum.com.cn/index/index/nlist/cid/108.html

⁹ Liangzhu Museum of Hangzhou, https://www.lzmuseum.cn/YuQi/2019571218577.html

concubine Dou Wan¹⁰. Jade suit are the special burial objects of the Han Dynasty emperors and nobles, which are classified into gold-thread set, silver-thread set and copper-thread set based on the hierarchy. Liu Sheng's jade suit is 1.88m long, with 2498 pieces of jade and 1100g of gold wire (Hebei Museum, 2022). Douwan's garment is 1.72m long, with 2160 pieces of jade and 700g of gold wire (idbd). The bones in the jade suit are decayed, and there are tooth enamel fragments and bone residues. There were other jade articles were also excavated in the burial site. In 1973, another jade burial suit was discovered in Din county (定县) Hebei province that weaved together 1203 pieces of jade with gold thread, and was also dated back to Western Han Dynasty¹¹. In 1986, a burial suit with 2008 pieces of jade was again excavated in Henan Province and dates back to West Han Dynasty.¹² A few burial suits have also been found in other sites. Archaeologists have interpreted that meanings metaphorically embodied in jade artifacts are spiritual, noble, morale, prestigious and wealthy, and these sayings are also supported by manifestations in historical books, documents, and ancient literature. The Chinese word for jade is \mathbb{E}_{τ} composed of a Chinese radical (indexing component) character \mathbb{E}_{τ} , literally translated as king or emperor.

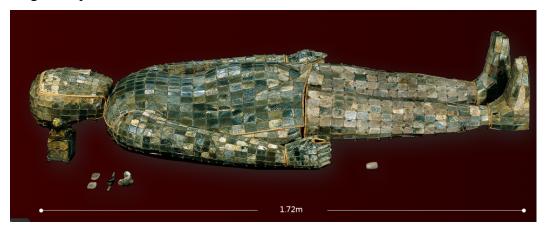


Figure 11. Picture of Jade Burial Suit from Hebei Museum

Sun (2011) argues that Burmese jade possibly started to reach China in the thirteenth century but did not gain its popularity until the mid-eighteenth century during the Qing dynasty. Scholars

http://www.chnmuseum.cn/zp/zpml/kgdjp/202010/t20201013 247855.shtml

 $\underline{http://www.chnmus.net/sitesources/hnsbwy/page_html5/gzfw/spzb/articleaee60039c1654b7fbd0cc818d2112bd3.html}$

¹⁰ Hebei Museum https://www.hebeimuseum.org.cn/shida/vuvi.html

¹¹ National museum of China in Beijing

¹² Henan Museum

agree on the long history of jade culture in traditional China and maintain the view that meanings of jade have evolved since pre-history to later feudal societies, where meanings of jade as being spiritual, noble, and powerful expanded (Zhang 1983, 1986; Zhu 2008).

2. Debates on Jade Culture

In academics, the cultural significance of jade culture can be seen in two themes in current scholarship. The first theme is a debate revolving around two terms: "Jade Road" and "Jade Age." Jade Road was first proposed by Chinese scholar Boda Yang in 1989, arguing the jade road was formed around the 13-century BCE, as the predecessor of the Silk Road. The starting point of Yang's jade route is <code>Hetian/Khotan</code> (和田), known as the hometown of jade in Xinjiang, heading East and West. The east road went across <code>Luobuzhuang</code> (罗布庄) to <code>Dunhuang</code> (敦煌); another branch passed through <code>Kashgar</code> (喀什) and <code>Turpan</code> (吐鲁番), meeting with the first branch in today's <code>Yumenguan</code> (玉汀美) and <code>Jiuquan</code> (酒泉), and then continued to extend eastward to <code>Anyang</code> (安阳), <code>Lanzhou</code>, <code>Xi'an</code> (西安) and <code>Luoyang</code> (洛阳). The westward route moved through Kabul and Baghdad to the Mediterranean, also a route taken by the Silk Road. Although these routes were revised by several scholars over the years, there remains dissent concerning issues precisely on routes, time, and place (Yang 2004; Tang 2013; Zhong 2014). Important though is the significant scale and the fact of exchange and trade of jade in traditional China being underlined in these studies.

Based on excavations of several jadeite artifacts, scholars have also proposed an idea of a Jade Age, to represent the significance and distinction of jade in ancient Chinese society, a period that existed approximately between the Neolithic Age and the Bronze Age (Zhang, 1983,1986; Lin 1996; Yang 2004; Deng 1988; Xie 1994). This time span is described by Deng (1988) as a transition period. The saying of "Jade Age" in ancient China is critiqued though by a critical concern that the access and availability of jade was highly limited. The scale of jade usage was limited as it has only been found in small parts of ancient China, and its use among commoners was way less than bronze, thus some argue that the idea of a "Jade Age" is over amplified (Rawson 1995; Lu 2008; Yang and Jiang 2013; Wei 2004).

A second theme is the construction of jade culture in discursive use, which entails a profound question upon why and how jade was valued in traditional Chinese society. In addition to archeological discoveries, many scholars cite ancient Chinese literature (poems and

biographies) and historical documents, to emphasize that jadestones as yushi 玉石 were already metaphorically quoted as being valuable and meaningful in writings from classic thought in Daoism and Confucianism. The analogies of jade in various historical literature have enabled scholars to build out an incorporative and profound symbolism of jade culture in traditional Chinese society. Here I do not intend to bring out all discussions pertaining to how the meanings changed and evolved in different historical times, but I do wish to highlight how jade represented and was represented in the core of ancient Chinese philosophy through Daoism and Confucianism. In these trains of thought jade was given analogies such as water, morals, etc., which I suggest serve as deep roots and mainstay thoughts from traditional Chinese jade culture in contemporary valuations.

Evidence from the Spring-Autumn and Warring States Periods (722-222 BCE) shows that jade culture was frequently presented in Daoist and Confucianist literature. The philosopher Lao Zi mentioned 丢 (the Chinese ideograph, yu or jade) three times in The Classic Virtue of Dao (known as Daodejing 道德经). The key concept of Dao, referring to the greatest human virtue and "way of doing" as "an appropriate level and degree of things/behaviors to and in the world." Thus, Dao (道), often metaphorically translated as "way-of-being," is also the intrinsic element that constituted the world in Daoism, which is imperceptible, untouchable yet undeniable and irreplaceable, implying the "virtue of human" (Laozi 2016; Jin et al. 2014; Lin, 1977). Water further epitomizes a of "being and doing" in Daoism, which is seen in the complicated Daoist proverb shang shan ruo shui (上善若水) in Chapter 8 in The Classic Virtue of Dao, here I provide a generic translation in below:

Water is most valuable (substance) as the most simple being in the world. Water is invaluable at helping and nurturing all things (however) without competing with all things. Water stays in a stance or place that humans often do not pay attention and fight for, hence it is close to the true meaning of Tao/Dao. Since the water is as Dao, then the best human should live as humble as water, be as wise and deep as water; treat friends as gentle and kind as water, speak as sincere and polite as water; (politicians should) be as organized as water, act as omnipotent as water (for their people); humans should react and adjust (themselves) as flexible as water. It is because he/human have no dispute with all things like water that he has no trouble. In fact, goodness is like water, which means that the highest quality and highest virtue should be the same as water.

The substance and abstract concept of "water-ness" can be understood as the way of understanding Dao. It is important to note that the Daoism, in its early transmission, was a philosophy of thought but later evolved into Daoist religion (Jin et al. 2014). The first Emperor of the Tang Dynasty proclaimed Daoist religion as the official the national religion. In Daoist religion, the founder Laozi was deified as a god, and the highest power was conferred to the emperor as the Jade Emperor ($\mathbb{E} / \mathbb{E} / \mathbb{F}$), the master and ruler of heaven and earth, immensely amplifying the sacred, royal, and noble tokens of jade.

Daoism further has a direct influence on Confucianism. In Daoist ideology, the notion of "the integrity of human-nature" of Laozi, "tian ren he yi" (天人合一), is further seen in Confucian human-jade relations as well. In classic Confucianist classic, the Rites of Zhou (周 礼), six jade artifacts, bi, cong, gui, zhang, hu, and huang are as used as important ritual rites and instruments denoting the role of jade in ritual systems (Liu, 1994; Deng 2017, 2019; Ye 2019b). In much Confucian influenced literature, jade was similarly referred to as of the highest ethic in relation to Confucianism's main thoughts of the moral man (Yao 2018). In Confucianism, the virtuous jade can be understood through water-jade analogies in various adages and phrases in the classics, The Book of Songs. 13 These various adages share a common interpretation with respect to jade relating to the morals of man through its strength and power. Among these metaphors and analogies, two elements, symbols (Chinese radicals) for water and king ---($\mathring{\gamma}$ as % water, Ξ as king) are often seen in ideography in Chinese characters. For instance as seen with, "将翱将翔 佩玉琼琚" in Album of Zhengfeng in The Book of Songs (Liu and Li 2011: 214). Another Classic, Book of Rites (LiJi 《礼记·聘义》)14 has a profound demonstration of relations between humans, jade, and water-ness/Daosim and morals. Translated below:

The wise have likened jade to virtue. Its warmess and moisture represent benevolence; Its perfect compactness and extreme hardness represent the sureness of intelligence and knowledge; its angles clear but not sharp represent righteness and justice; those who are

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¹³ The Book of Songs translated by Liu and Lin (2011) is ancient poetry album that was composed, approximately the late Shang Dynasty (around 1600 BC to 1406 BC) to Spring-Warring period (770 BC- 221 BC), this period also referred as Pre-Qin Time.

¹⁴ One of the ancient classics in Confucianism, composed in Western Han Dynasty by Dai Sheng.

polite will fall down with admiration and respect others with inferiority; the pure and prolonged sound, which it gives forth when one strikes it, represents music. Its color represents loyalty; its interior flaws represent mind sincerity; its iridescent brightness represents heaven; its admirable substance, born of mountain and of water, represents the earth. The price that the entire world attaches to it represents the truth.¹⁵

Here jade was attributed to have eleven virtues: benevolence, knowledge, propriety, truth, credibility, music, loyalty, heaven, earth, morality, and Dao. 温润而泽, the most direct metaphor of jade as "water" is then widely embraced. These analogies of jade index the complex human-jade relations symbolizing ancient religion and social ethics that makes jade meaningful. Hence, I argue, we can understand the virtue of "Dao and Water" is instantiated in the value of physical objects like jade.

From the above analysis, it is seen that historical jade was regarded as symbolic and as a medium in ancient religion and philosophy as being associated with spirits, wealth, aesthetics, power, and prestige etc.; in feudal China, in the mainstays of ancient Chinese philosophy, Daoism and Confucianism, jade is an embodiment/incarnation of highest virtues and ethics, illuminated through spirit/god-human-ethic-jade relations. The panorama of the symbolism of jade from antediluvian times up till today is not meant as the focus in this dissertation. Given how the analogies of jadeite prevailed in Chinese poems, novels, and folklore, my point here is not to look at jade as containing fixed and unanimous meanings throughout, but rather as a culturally distinct object that was arbitrarily valuable and meaningful in Chinese history. To specify, I have illustrated how jade was meaningful in the past, in order to then demonstrate how these values or influences are more or less, instantiated in qualities of jadeite in today's market, as "qualia of jadeite" in the following sections.

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¹⁵ the original text, seen in Hua and Zhang's translation (2017:1225)《礼记·聘义》:温润而泽,仁也;缜密以栗,智也;廉而不刿,义也;垂之如坠,礼也;叩之其声清越以长,其终诎然,乐也;瑕不掩瑜,瑜不掩瑕,忠也;孚尹旁达,信也;气如自虹,天也;精神见于山川,地也;圭璋特达,德也;天下莫不贵者,道也

II. The changing dynamics of jade culture in contemporary markets

In this section, I attempt to demonstrate jade culture in contemporary China by looking at jadeite markets. Rather than reconstructing jade culture from existing literature, my methods and evidence here draw directly from my fieldwork in a marketplace to highlight how people perceive and talk about jadeite from their point of view. Through the lens of a market, I found jadeite is by no means unusual for Chinese, and how they think and talk about jadeite is subject to individual perceptibility (especially among customers). But particularly, I suggest, traders reproduce a type of jade culture when they interpret and attach meanings to jadeite jewelry in their sales and marketing strategies. Callon (2021: 18) explains (though theoretically different) a kind of similar process of how a seller, renders his/her goods desirable with the best price offered to a buyer, a singular relationship between buyer, seller and the product as singularization. In this section, I use qualia to demonstrate how cultural meanings of jadeite are constructed by traders, of how they use analogies and expressions to proclaim feelings such as auspicious, religious, wealthy and aesthetics in their sales or daily marketing. I suggest, jade culture in contemporary markets in encompassed by diversified and multilayered individual characteristics, particularly to those who have interest in and believe these perceptions of jadeite; they represent a kind of jade culture. To clarify, in a market framework, as Giddens (1984) emphasize, practice is also important. Sometimes agents who are seemingly not interested nor believe in jade culture themselves, still respond to shared standards and cultural criteria in market management or regulation.

1.Diversified perceptions on valuing Jadeite

Mr. Liu and Mr. Hu, a processor and a retailor

I was inspired by my informant Mr. Liu, a jadeite processer who has worked on cabochon making and processing over 14 years. Mr. Liu is from Guangdong province and lived in Pingzhou city, practicing jadeite processing for about 13 years with his parents. He moved to Ruili in the winter of 2019 after being invited and hired by a streaming company (he was working when I interviewed him), which specializes in a new innovative strategy of "on the spot sales," (i.e. in streaming they sell the semi-processed cabochon, cut-open stones with "meat" perceptible for customers online (without polishing), and when the customer makes the purchase the item will then be polished). The process is claimed as being transparent as the online buyer

gets to witness how their semi-processed cabochon are handed and made it into refined cabochons via WeChat video talk or Facetime.



Figure 12. Mr. Liu working in his office, photo by author 2020

Mr. Liu is in his early 30s. He often talks in a sotto voice, slow and gentle but works in a punctilious and relentless way. Knowing I am a researcher, he treated me genuinely as a curious apprentice, and not only showed me but also taught me the steps through the whole process of making a semi-processed cabochon through my visits. He told me one main principle to understand about the polishing in his work is that the more expensive the material the longer the time it requires to process and polish. Skills and craftmanship are important and depend on a processor's experience and skills both at handling machines and jadeite, to reveal potentials of jadeite. Mr. Liu also explained based on his 13 years of experience in Guangdong, that the processing technology is much more advanced on the Chinese side versus the Burmese side of the border. When I asked about how he understands jadeite jade in its meaning, Mr. Liu explained that he does not buy into any belief that jadeite is spiritual at all, or the fantasy that there could be a magic power from the stones guiding his work after many years working with jadeite. He insists sayings such things about jadeite are more of business strategies to brand jadeite. When I inquired what he thinks about his customers who would spend up to hundreds and thousands of dollars to buy jadeite, he explained that "there is a history and a tradition of jadeite" and that Chinese have been using and consuming it for a long time. He has no problem if other people value jadeite for different reasons, and he parallels this with the phenomenon of

consuming jadeite like those who believe in or practice religion: to believe or not believe in jadeite is individualistic and optional, it can mean very different things to different people. Mr. Liu was introduced to me by another informant Mr. Hu who holds the same stance but with a stronger degree. Mr. Hu was a big inspiration during my research, as his statement about "too many fairy tales of jade are deceptive" provoked me in early fieldwork. He insists "it is traders who are selling and marketing the culture of jadeite." I met Mr. Hu during my daily marketplace loitering. In expressing my gratitude to him, here I provide a detailed description of how I met him and my inspirations since then.

Many of my regular mornings when I did not have specific interviews or arranged activities, I hung out at different marketplace-clusters at my informants' shops and stalls. If I was lucky, I could meet their friends or business partners who could potentially become new informants. The marketplace is vivid and in constant motion, with congestion that nudged a sort of "market vitality" wherever I went. Just sauntering in paths between stalls became one of my daily routines in the marketplaces. I met Mr. Hu during one of these regular routine visits.

It was a humid and dreary afternoon. Around 2 pm while I was taking a break perched at another interlocutor Xiaochen's store, Mr. Hu arrived and parked his scooter in front of the stall. I will here venture upon a little description of him. He stood about four to five feet in height, with big shoulders, and short hair. His face was not that burnt or dark compared to some locals, a little light in complexion, and with his voice it was clear that he was from another part of China. Wearing his black T-shirt and shorts, slippers and a key in his hand he walked in and took a seat himself. I knew he was likely not a tourist who would slip away unobserved very soon. I nodded to this middle-aged male visitor when he looked in my direction. He started talking to Xiaochen about some old business. After a while Xiaochen introduced me to him. Compared to many other current traders in the jadeite business, Mr. Hu started his business in Ruili relatively early in 2012. After 3 years of doing business in Ruili, Mr. Hu moved his business to Sihui city, in Guangdong province. He is specialized in the processing of bracelets. He moves back and forth between Ruili and Guangdong to sell his refined bracelets or to purchase raw materials in small auctions held in Yingjiang, another county next to Ruili in Dehong prefecture. In 2020, even with the impacts of COVID-19 he stayed in Ruili for four months and told me I was lucky to know him because he can "see through" a lot about the market and was happy to offer his insights to my research. "I'm relatively new (in business), but that does not mean I don't see

through" said Mr. Hu during one of our interviews. Mr. Hu showed lots of interest in my research when I informed him about the purpose of my presence in Xiaochen's jewelry shop. He is unlike most of the traders who generally have less interest in research (more for business) in a jewelry shop and offered important information from his own perspective.

Mr. Hu came to Ruili in early June for his 2020 trip. By this time the COVID-19 pandemic had largely been brought under control in China and most businesses and public services had all recovered to some level of regularity. "For a few months I could not travel so I'm short in materials. Also, I came here to get my money back for those who cooperated to sell my bracelets" Mr. Hu told me. In Ruili he shares an apartment in the downtown area with his old friend. His daily routine is very flexible. Riding a scooter around the city, in the morning he goes to the Jiegao marketplace to look for cut-open raw materials, and in the afternoon, he goes to different stores to visit his old friends or to see some products. In the evening, he often has meals with his friends, banqueting with his business partners. Traders like to be friendly with partners because it makes it easier to cooperate and make profits together by maintaining these cordial ties. He sees himself as an insider of Ruili's jadeite markets.

After several interviews, I learned that before the pandemic, Mr. Hu went to Yangon for a few times to buy cut-open jade stones in big auctions. He also came to Ruili when he was lucky to find some good sources for stones, he told me. In Yangon he hired a specialty shipping company to send the stones he bought directly to Guangdong. When I asked details about how he carried out this sort of international business he made it clear and told me it was not as complicated as I thought. Taxes and other fees are included in the auctions, and once you find a reliable shipping company that allows you to pay all of the relevant expenses for import, export, etc. upfront, you do not need to do extra work and just go back and wait for the goods in Guangdong. He made clear that logistics and consignment are not a problem (before the pandemic).

Mr. Hu's major business is jadeite bracelets. He buys raw materials and processes them into bracelets then sells these to petty traders. His tiny factory is based in Sihui city Guangdong province where he turned an apartment into his factory. He told me he has selling stalls in the Sihui jadeite marketplace but in fact most of his products were brought by him to his partners in Guangdong and in Ruili to sell. His role in the jadeite business is characteristic to understanding Ruili's jadeite markets. In a strict sense, he is a processor who buys materials and machines and

processes them into jewelry, then selling them into the market. Unlike other retailors whose major roles are in their stores or shops in daily sales, Mr. Hu tries to distribute his goods to some of his partners or friends, sometimes also lending his products to live-streaming hosts that he trusts. These forms of non-in-person sales became especially more popular following the COVID pandemic. The jadeite market can be viewed as a net and each node of the chain, involves independent private traders, or family-firms or corporate companies such as those who run sales promotions online, who are capable of playing into the game. Mr. Hu informed me he first came to Ruili and started jadeite business with his friends. By that time, he and two other men began their business by buying some betting stones to resell for a profit. At the outset he did not know how to judge and choose a good piece of stone or decide on a good deal. A lot of times he just gave it a try to see if he was lucky enough to make money. Many traders such as Mr. Hu believe the lower the cost of goods they buy the better and that they can then try to mark them up for a profit when they resell them. That's how one should do business. After a while, he earned some understandings of how the market worked, but also found that one of his friends was fraudulent, causing him to lose almost 7,000 dollars in a deal; he then decided to work on his own. After he made a friend in processing, he decided he wanted to learn himself thinking that it would perhaps provide lower income but at least a stable income if he was able to engage with regular companies who would purchase his jewelry pieces.

Mr. Hu is also different though than some of the other traders I met. He was very interested in my research and constantly wanted to offer help me, as he addressed me as some sort of "college female researcher" at Ruili trying understand about jadeite and the jadeite market here. He himself seems to have no interest in jadeite stones. He does not buy into the belief that jadeite is a cultural product, and he thinks sayings about jadeite (spiritual or magical) are hard to believe. He intrigued and informed me as he says, "it is these traders who are selling cultures (of jadeite)." However, he has no problem with other people buying into these ideas. For him, to be involved in the market is one means to make a living.

According to Mr. Liu and Mr. Hu, jade culture in the contemporary market, perhaps is not relevant to how jade is viewed in spirituality or religion. According to them, there are broad aesthetics in mass consumption related to the natural beauty of stone, affection for it, and economic value (that does not necessarily connect with a spiritual or moral realm). To them, myths and fantasies about jadeite, no matter true or not, were just remade and retold by traders

who intend them as marketing inducements to lure their customers. Sayings and beliefs about jadeite can be individualistic and diverse. In a market scenario, jadeite stones are certainly accentuated as commodities.

2. Reproduction of jadeite culture by trading specialists in Ruili's jadeite marketplace

If there is a jade culture in a market, what is that, and how do people talk about these jadeite products? First and foremost, it is seen that jadeite jade and nephrite jade are popular commodities in market trade in their multiplicate forms in today's China. Both haute and low, they face a wide group of consumers. One can easily find smaller particles of jadeite jewelry for mere hundreds of *yuan*, and they can also find pieces that are worth up to hundreds of thousands. In a marketplace, do sellers and buyers speak and think about "jade culture" when they buy or sell jadeite commodities? This was a question raised by mentors early on in my study for me to articulate my statement about "contemporary jade culture in a market." Bearing this question in mind, I garnered answers in the field. To buyers, obtaining jadeite commodities is an individualistic act that comes out of a diverse range of motivations and goals: a buyer buys it for reselling, for collecting, for wearing, or for gift-giving. They retain a variety of individual stances that cannot be simply generalized. Whatever the individual reason is for jadeite consumption, it is evident that jadeite is a type of commodity with varying degrees of affordability with a broad group of consumers and targeted customers.



Figure 2. Jadeite jewelry at Jiegao photo by author 2020

Still, how exactly can a marketplace represent "contemporary jade culture"? A most generic answer would be that in a jadeite marketplace, trading means, methods, rituals (bargaining ritual transactions that I will detail in chapter 5), physical environment, and layout are parcels of a broad image of "jade culture." Further, brooding over this question, I also found sellers possess a profound yet unrecognizable role in Ruili's market: they are the intermediaries and vehicles of jadeite culture, the aesthetics or any other valuable facets of jadeite are what they pass on, through a process of what and how they see jadeite. They pass this to those they interact and work with. Retailors or carvers constantly convey cultural criteria and meanings of jadeite to their clientele. It is in this process, gradually, that the culture of jade can be reproduced and transmitted to different groups of people and different generations.

In Ruili, descriptions and analogies that represent jadeite as more than necessities, are instantiated into various forms and symbolism of jadeite jewelry. The catchphrase "jade nurtures people and people nurture jade" (玉养人人养玉), is a basic well-known understanding in markets. Almost all retailors (specializing in different categories of jewelry such as pedants) I interviewed can rattle off figures and meanings they grant to these amulets and talismans. It is by no means unusual to see pendants designed as "bamboo-shaped," "bean-shaped," "calabash shaped" or in "Buddha-images," in vogue in various markets in China. Many retailors I interacted with provided similar answers to understand the question of how some shapes, with so many potentials for designs, are ingeniously applied with widely used tropes in their sales.

Ms. Lin, a retailer in pendants working for eleven years was the first trader wo taught me details of how she, like many other traders, attached meanings to shaped products. A set of common interpretations are for instance, a bamboo-shaped pendant can imply a propitious omen from wearing, bu bu gao sheng (步步高升), literally translated as "step by step person and things go up higher in a ladder" in certain social contexts. Bamboo is a metaphor widely quoted in Chinese literature and arts (poems or paintings) as "straight, and growing higher and higher," referring to righteous people, their morals, and their social status. Likewise, beans and seeds are often quoted as representing reincarnations in Buddhism influenced Chinese thoughts: "When you sow and plant (something good), you will harvest (good fortunes and things)." Leaf, the Chinese word ye 中, and the homophone of another Chinese word ye 业, are favored as symbols and metonymy of prosperity and flourishment, "jiaye and shiye (family and career) 家业事业. Shapes of Guanyin and Buddha are some of the most popular jadeite amulets in the marketplace.

In Chinese folk culture there is a saying "male (should) wear Guanyin while female (should) wear Buddha" (男戴观音女戴佛),or "males wear guan yin while females wear fu (男戴官印 女戴福). This suggests that a man is supposed to wear a Guanyin-pendant and a woman is supposed to wear a Buddha-pendant, illuminating a sense of glory with a man being a noble leader and a woman bringing prosperity.

In traders' talk, these kinds of pitching have rendered jadeite jewelry desirable, and meaningful and each of them are convincing as a way to enter jadeite into a buyer's life (Callon, 2021). Thus, these kind of morals and omens from traditional Chinese culture, as a set of qualia are broadly instantiated into jadeite products. These popular pendants and knickknacks are nearly stereotypes though that can be easily made by numerically controlled engraving machines in the market. Retailors introduce these products in their own ways though, constantly presenting jadeite as mysterious, auspicious, and meaningful with both roots in the past but also reinvented for contemporary life.

Master Yang's perspective

Mr. Yang, a distinguished figure in Ruili's jadeite markets, is one of a few artists who has been recognized as a "Jade Carving Laureate" (yu diao da shi, 玉雕大师), and his artwork is considered Avant Garde in the field. Currently in Ruili there are approximately 60 revered jadeite carvers and artisans, among these about a dozen of them are deemed as true masters in handcraftsmanship. Mr. Yang is one of the most well-known and influential artists among them and runs a big workshop of about 40 people in his team. According to Mr. Yang, jadeite carvings are one important layer to see how jade culture is reproduced in contemporary China. For Yang, carvings denoting the traditional or modern taste of Chinese art in landscapes, flowers, animals, religious images and figures etc.

Here are some quotes from Mr. Yang:

In my field there is a transformation from the traditional to modern. In ancient days, even in Neolithic times there was a story about jadeite as a tool in Chinese antecedents' lives. Later generations talked about jade and witchcraft, jade as an agent between ghosts, sprits, and people. It was also a symbol of power of imperial and noble classes in feudal China. The emperor's jade stamp is a solid example. In modern jade art, there is heritage from the past but there are definitely new elements of innovation mixed with heritage and

we call it "modern"...In the marketplace, you still see a lot of carving pieces with flowers, landscapes or animals created in new artistic elements with modern techniques of carving...When I was younger, my artworks were more about complex images which were the major trend in the market then, a cornucopia of complex and dainty images as the marker of the skilled caver. But in recent days, jadeite artwork is influenced by new theories and trends, to make it easier for you to understand, what we call "simplicity" or "pithy" in style, to evoke from the simplest form of portrayal...

During our first interview, I was very impressed by the way Master Yang talked about Chinese classical philosophy and its relations with jade culture and Chinese art. When I inquired about what is key in jade carving, he highlighted a juxtaposition of two elements: Dao (from Daoism) and (carving) technique. Technique and skill are about how to reflect, how to carve and how finds the sublime through artistic conception. The Dao, says Mr. Yang, is a complicated philosophy in *yul*/jade carving. In one way, it is a relationship between the (jadeite) stone and the carver in which the two co-constitute each other. They are one, not separated. Dao is philosophy, the integrity of nature and human. Thus, carvers who can find the true beauty of the stone, will achieve the greatest art. Mr. yang framed it as if he has an innate sense of delicacy in arts: "It is unexplainable. The simplest way, let me tell you. They are like two soul mates, who find each other".

It was engulfed with interest during this is part of my interview and I had to politely request Mr. Yang to restate his understandings about Dao in his work. (I clearly recall in that first interview that while I did not quite follow his abstraction on jadeite in Dao, I was highly aware his insightful statements would be of great value in my research.) To him, carving requires a high taste and creation of an artist. According to Mr. Yang, it is a noble achievement to transform a stone into art, even its imperfections can be a strength with a stone. The uneven color in the stones are natural elements for design. There is kitsch but there is no useless jadeite material. That's the "art of jade" said Mr. Yang. He emphasized even poor pieces of jadeite stone have potential, whether they can it be unfolded and converted is a test for the artist. To him, each piece of jadeite jewelry is inscribed with a phrase, a story, or symbolism.

(Unlike Mr. Hu and Liu) Mr. Yang says, spiritual or metaphysical aspects of jadeite help and sometime guides carvers to work. He told me the story of how he felt impeded with one

piece of bulk jade he bought, and how for two years he tried to cut from one angle but that no color appeared in the stone. He did not know how to turn it into art in a most presentable way until dreams came to him suggesting "a suspicious day" and "a right day" to cut and work on the stone. Mr. Yang summarizes two crucial points in carving: the knowledge and understanding of jade stone, and craftmanship and skills. According to Mr. Yang, knowledge around stones is not only geological or mineralogical, but it also includes sentiments, intimacy with stones, creativeness, and so forth.

The above stories have shown some of the magnitude and changing dynamics of (jadeite) jade culture in contemporary markets in terms of how individuals perceive and consume jadeite. It is individuals who are interested, agree or disagree upon, and recreate a set of believes and relations as major mediators. In the next section, I further demonstrate and highlight the standards and criteria that traders use to price and grade jadeite commodities, particularly features such as type-waterness and greenness (color) as the qualia of jadeite in the core of knowledge of jadeite.

III. Knowledge and Qualia of Jadeite in Ruili's Jadeite Marketplaces

I'd like to introduce a common proverb: huangjin you jia, yu wu jia (黄金有价玉无价), literally translated as "gold has a price, jade is priceless," but normally interpreted as "gold is valuable, jade is invaluable." As a meaningful reference, it can illustrate the semiotics of jade in ancient culture when it was beheld as "inalienable" with an ingrained identity and political power (Vallard 2019). This trait could be represented for instance by an inherited jade stamp of the emperor or a jade family heirloom. Proctor (2001) draws a line between what determines a precious and semi-precious diamond or agate, explain that there are social and cultural currents (events) that promote diamonds as being at the top of gemstone hierarchy, such as the timing of discovery, the changing relations of marriage, market manners, and so on. What has been promoted as precious is seen in the physical qualities of diamonds such as transparency, clarity, homogeneity, and pureness, all "social currency" (Proctor 2001: 397-298), in contrast to semiprecious or "semiliterate" gems as opaque, diverse, and local (Proctor 2001: 404).

According to Proctor, jadeite stones are "social artifacts" (Proctor 2001: 397) and semiprecious stones in campaigns of commodification in contemporary China.

In today's market, jadeite commodities are sold with a price. But the "jade-is-priceless phrase" is quite often used by traders in vernacular discourse, elucidating the inconsistency and incongruity of pricing formulas. Møller (2017) uses an insightful "determinate-indeterminate" framework, to capture the realization of the potential value of jadestones as a conceptualization and process of determining the indeterminate. He refers to raw materials of jadeite stones, in which value (economic) cannot be determined or understood until the outer layer of stone or "skin" is removed by a carver/cutter in marketplaces. According to Møller(2017), the value of jadestones is thus indeterminate and conducive to economic gambling/investment within markets and among traders. Knowing how to recognize the value of a raw jadestone takes much time and practice among traders and an intimate knowledge of the qualities that can be observed in a specific stone; knowledge that according to Møller(2017) involves an intimate relationship between jade itself and people.

In Ruili's market, the expression yu \mathbb{Z} , jade, can refer to a variety of different kinds of jade-like categories in addition to nephrite and jadeite such as crypto crystalline quartz quality jade known as huanglongyu (黄龙玉), siliceous jade known as shuhuayu (黄龙玉) and others. In this section though, I only refer to commoditized jadeite jewelry such as bracelets, rings, and all kinds of pendants. Bracelets have three types: bangles/cabochons are targeted for female consumers; jadeite beads more often for males. The third is an oblate shaped bangle denominated as "the Noble Concubine's." Aside from various modern designs for earrings, jadeite pendants of various shapes such as Chinese zodiac animals, religious totem-characters, and meaningful icons can also be found in the market. Top quality jadeites possess complex features, sophisticated crystallization, perfect color, and moderate translucency and saturation that evoke a sense of serenity and loftiness.

I suggest, the price of jadeite is primarily (not completely in a deal) judged based upon the physical qualities and its appearance: the color/hue, clarity, carving, cutting, cracking, translucency, texture and volume make up this the "qualia of jadeite." But this is not to say factors such as labor cost or price itself could affect the ultimate result on the price (I show this aspect in chapter 5). These qualities are intrinsically linked to cultural frameworks of jadeite in the past and are also related to other factors such as the aesthetics of carving and artwork skills today. These standards and criteria are translated into the practice of trade in daily transactions. Unlike gold, with which economic valuation formulaically based on carat weight, jadeite

possesses complex and malleable valuation parameters. This means that jadeite is typically sold by piece and judged based upon shape, size, color etc. In most situations, different pieces are valued differently, thus there is no standard pricing formula. There is instead "inside" knowledge of jadeite in the market.

Then how exactly do traders judge the price of commoditized jadeite jewelry? What are major standards and references traders use to determine prices in Ruili? Below I explain this based upon basic aspects around grade, type, color, and inclusions (congealment spots inside) and how they represent "qualia of jadeite". I want to highlight that these categories are not merely lab-trained or scientifically disciplined, but rather procured through practice, by means of their direct observation, touch, and examinations with eyes and hands. Based on the below standards and criteria, the price of jadeite can be mostly quantified (other factors for valuation are further highlighted though in later chapters).

1. Grade (A-B-C)

In mineralogy, jadeite is composed of microcrystalline aggregates of sodium aluminosilicate pyroxene, which is opaque or translucent with a Mohs hardness of 6.5–7 and a density of 3.25–3.4. (Dictionary of Geotourism, 2020). Grade is the primary division of the quality of jadeite jewelry, including three categories: A, B and C. In Ruili, grade is labeled on certification cards or booklets that are normally sold along with products. The differences of each grade are listed as below according to the Yunnan Provincial Gem and Jade Quality Supervision and Evaluation Institute:

Table 1 Grades of Jadeite

Grade	Indications	Vernacular abbreviation	Main physical character
A	Grade A indicates products of jadeite are qualified to be free of any chemical treatment, such as heat treatment; without any artificial coloring	A goods (A货)	natural
В	Grade B indicates that impurities or oxidation stains of jadeite has been removed, and is normally infused with some chemical such as acid. Then it is heated with polymer resins in a chamber to "wax" it. It is subject to cracking and discoloring upon heating.	B goods (B货), ci pin (次品, secondary goods)	infused; bleached
С	Grade C products includes process in B, but adding dyed color with no filler. Products after this process are extremely lustrous and shining, they look more like "glass".	C goods (C货), ci pin (次品, secondary goods)	dyed; synthetic

In order to ensure mineralogical authenticity, warranties and certification books are required to list the grade. This is the most rudimentary standard, that any buyer, particularly when they buy expensive jewelry would desire to assure quality, like a warranty. In Ruili there is little jadeite jewelry sold with a B or C grade, because they are often considered inferior and thus not really accepted by consumers. B-grade refers to the "bleaching" treatment of jaideite in original material. "Bleaching is actually a two-step process whereby a brown orgray color component (probablyiron compounds filling the fractures) is removed chemically, followed by impregnation of the resulting white togreen material with some type of polymer" (Fritsch et. al 1992:176).

Grade does not say much about price precisely at first glance, however but works as the primary category to grantee the authenticity of jadeite. The key in this grading, is that grade-A ensures a sense of "naturalness," "authenticity," "pristineness," and "real," remaining as basic qualitative aspects which are important to consumers. Consumers long for real jadeite, not fake pieces. In my observation, buyers are more willing to pay more for a "real" piece of jadeite rather than something is dyed and infused. Dyed and infused jadeite are often regarded as "little baubles or knickknacks" that are only for "playing," not for "beholding."

Experienced traders told me that in most situations, they can examine the grade of jadeite jewelry just by eye and hand based on their experience. However, they still choose to sell jadeite with grading certifications to protect themselves from trade disputes. Indeed, grade is often assessed at particular institutions and labs of the Jadeite and Gem Quality Supervision and Assessment Institute. In Ruili, there are currently 12 institutions including one public institution and more and more recently privatized labs and institutions. (More about these market institutions in Chapter 6). Grade is however a very limited reference to judging the price of a piece of jadeite.

2. Texture, "Type-waterness," and translucency

Table 2 From Møller (2019: 272)

Type 1	Glass-type (boli zhong 璃种)	
Sub-type 1	'Dragon stone glass type' (longshi boli zhong 龙石玻璃种),	
Sub-type 2	'Flower water glass type' (hua shui boli zhong 花水玻璃种)	
Sub-type 3	'Agate glass type' (manao boli zhong 玛瑙玻璃种).	
Sub-type 4	'Standard glass type' (yiban de boli zhong 一般的玻璃种)	
Type 2	Ice type (bing zhong 冰种)	
Sub-type 1	'High ice type' (gao bingzhong 高冰种)	
Sub-type 2	'Ordinary ice type' (yiban de bingzhong 一般的冰种)	
Type 3	Grainy type (nuo zhong 精种)	
Sub-type 1	'Delicate grainy type' (Xi nuo zhong 细糯种)	
Sub-type 2	'Grainy ice type' (nuo bing zhong 糯冰种) / 'high grainy' (gao nuo 高糯).	
Sub-type 3	'Grainy flower' (nuo hua 精花)	
Sub-type 4	'Ordinary grainy type' (nuo zhong 糊种)	
Type 4	Bean type (dou zhong 豆种)	
Sub-type 1	'Delicate bean type' (xi dou zhong 细豆种)	
Sub-type 2	'Coarse bean type' (cu dou zhong 粗豆种)	

23. Hierarchy of value for the four highest valued types of feicui. Type 1 is the highest graded type.

Type-waterness (*zhongshui* 种水), I suggest, is the most direct way to understand the qualia of jadeite, and how jadeite appears as a cultural product. *Zhongshui* (种水) is often used as a compound phrase, 种 is translated as "type," "kind," and 水 as water. In brief, it can be understood as a cultural expression, a term to describe the quality and degree of translucency and texture. It is the most esoteric character to me. The key in this category is that the more "water" jade contains, the higher it goes in the hierarchy of type, and in price. Møller (2019) has a clear division of these general types in the figure I cite here. It is important to stress here, that in



gemology and mineralogy, there is no description in terms of saturation and water in jade. However, feelings of water, or morals are constructed and expressed in how traders describe them. As I have explained in the preceding section, the relationships among humans, jade, water, and their morals and aesthetics renders jade as valuable.

Figure 14. A piece of jadeite with rich "type-waterness", photo by author 2020

In Ruili's market, I inquired with literally all of the traders I spoke with about why they use "water" to describe an abstract yet so important kind of a quality. Only some of them could say exactly how and why, and theirs answer varied a lot (depending on their own background, such as school degree), but a common theme their answers shared is "it is the way it is" without much doubt. Some of them referred to the importance of water in Chinese philosophy (Daoism) or Chinese art styles, like Master Yang. Even some Burmese with good Chinese language skills have inherited this thinking well, and constantly express that "water is good. This thing is good..."

Depending on the crystallization and texture, to identify "type-waterness" requires a trader to have plenty of experience observing, touching, and examining jadeite. The feature of type-waterness is a crucial standard for the pricing of jadeite. If the type-waterness is not good even with intense color for refined jewelry, it would not command a high price at all. Even though outsiders might say "water-ness" can be understood as an illusion and is actually related to some sort of gemological effect, it still remains an useful reference in Ruili's market.

3. Color and hue

Color/hue is also one of the most important standards and is the most perceptible physical quality of jadeite stone for experts or laymen. Various descriptions of color profoundly reveal how some qualities are constructed in jadeite color through traders' expressions and analogies (Calvão, 2013, Chumley and Harkness 2013). Jadeite is known for having rich colors with nephrite including mauve, yellow, black, green, lavender etc. In gemology, color varies slightly due to having more or less mineral components leading to a different degree of intensity and

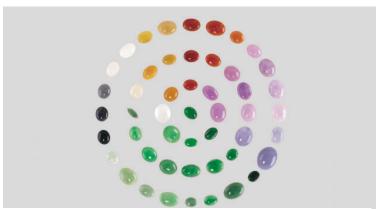


Figure 15. Picture of jadeite colors from Courtesy Mason-Kay Fine Jade Jewelry https://www.gia.edu/jade-quality-factor

depth of the color, in addition to hue. In Ruili, the depiction of a variety of colors is reflected through analogies of human or nonhuman things, such as "imperial green" or "kingfisher jade" as below:

Table 3. Jadeite colors in vernacular descriptions in Ruili

Primary	Variants	Vernacular descriptions
color		
green	emerald green	yang lü 阳绿 Imperial green
	shallot green light green apple green	cui lü 翠绿
		yin lü 阴绿
		Green as most popular color and character for jadeite.
purple	(light)mauve Lavender	chun se 春色 spring color
		hua se 花色 flower color
yellow	apricot/light yellow/fawn yellow-to-greyish	huang fei, 黄翡
		The yellow color are both seen in nephrite and jadeite jade.
pink	purplish pink (light and dark)	fei se 翡色 ,fen yu 粉玉
		fen represents feminine in Chinese context;
		Fei 翡 refers to a general description of various warm and light color
		in jadeite, sometimes including mauve color
creamy-	greyish white;	bai yu 白玉 creamy white
white	elephant white	nephrite is known for have light grey-to-white color, and jadeite is more with green. There are jadeite products with greyish white color.
		It is more often seen in low quality cabochons. But if other categories
		such the translucency, type and water-ness are well it can still be
		expensive.
black	Ebony (light or dark)	mo cui 墨翠 (inky black)
		In recent years, there is black omphacite jadeite found in Myanmar and sold in the market as well.

The fuller the color and hue, the more yang (\mathbb{H}) and zheng (\mathbb{H}), two positive properties a piece of jadeite contains . Yang (\mathbb{H} , sun as opposed to moon) and zheng (\mathbb{H} , purity) as explained in Møller's (2019) research, are components of the yin-yang dualism in Daoist philosophy. In Ruili, traders often apply several properties and qualities (Calvão, 2013, Chumley and Harkness 2013) to depict the preferable character of the color in vernacular discourse:

- 1). chun zheng 纯正 (purity), pure and singular with less flaws and spots or other colors.
- 2). *nong* 浓 (thickness, brilliance), the intensity and brilliance of the color (relatively darker as opposed to light color),
- 3). *yang* [4] (sunny and fullness), exudes brightness and vibrant color, sunny in the circumstance when light shines on the stone it nearly can penetrate below the surface, resembling an alluring brilliance and glow.
- 4). *piao hua* 飘花 (mixture of color), as to refer to colors mixing with one another or two colors in veining, patches, or spots.

5). *yun* (even and homogenous), the singular color is well distributed within the piece, and structure of the crystallization is seen as evenly distributed

6). *Hua* 花 (unevenness), as opposed to evenness. It is used to describe color or parts of color unevenly distrusted and spreading on a piece of jadeite stone.

In gemology or mineralogy, all colors with the same condition are only components of variation, but green jadeite is the most magic and coveted in Ruili. Based on the green hue, brightness, and saturation, green color is recognized as emerald green, apple green, shallot green,



Figure 16. Jadeite bangles from author's informants 2021

spinach green, and greyish green as shown in the table above. The optimal green color is described as "Imperial green," and is usually more expensive. "Kingfisher jade" are pieces with a green less vivid than Imperial, and "apple green" jade has a slightly yellowish green. Comparing a bangle of "imperial green" color with a purplish bangle with same grade and same "type-waterness," let's assume very similar mineralogical condition, why is the green one more expensive and most sellable? Because greenness is considered the most noble and valuable color and more widely accepted as a preference. Much of this has to do with the constructions in Chinese literature of greenish jade as *bi yu* (碧玉), most broadly referred to as

representing "the ever-lasting vitality and lofty" virtue and longing for prestige, power, and nobility. Normally the more purity and fullness and evenness of the color, the better the quality and price. But as explained, to traders, color is not the only formula that determines the price of a piece of jadeite.

4. Cut and craftmanship

Cut and craftmanship are more generic standards and references with regards to refined artworks and jewelry. They serve as fundamental references in jadeite carving of artwork and handmade



Figure 17. Mater Yang's artwork

jadeite jewelry. Many small size jewelry pieces, such as simple pendants shaped like beans, leaves, bamboo knots, and Buddhas etc. can be easily made with engraving machines by means of computer numerical design. But some products such as bangles, cabochons, rings, and round shaped pendants still require manual work of

polishing. Based on my

participation in polishing with Mr. Liu, sophisticated and delicate polishing usually takes longer time and labor. Small sculptures, artworks and some tokens/ornamental pedants are carved by manual labor, in which traders exert more effort into taste, design, delicacy, and non-uniformity for the products. This requires highly specific knowledge and keen judgement in recognizing symmetry, proportion, thickness, trivial/nuances etc., attained through years of practice by examining and comparing numerous pieces of jadeite.

Key in cut and craftmanship of jadeite, especially in the design of artworks of jadeite, their style, taste, being either traditional or modern, and affection, are that these qualitative dimensions remain hard to quantify. So is the price. It often varies for individual consumers. Traders or consumers have their own ways to justify why they are obsessed with some jadeite artwork.

In addition to grade, color, type-waterness, and cut, "cottons" are usually used to describe the flaws that would potentially decrease the value of a piece of jadeite. So-called "cottons" in gemology and geology indicate mineral aggregates or cloudy patches that are unevenly distributed in jadeite (or nephrite) stones. In Chinese terms, these are described as *baoti* (包体). This perceptible feature in local traders' words is called "cottons (impurities)." A jadeite that contains cottons is understood as "lacking water inside and thus dried up."

Top quality jadeites possess complex combined features of sophisticated crystallization, perfect color, moderate translucency and "waterness/saturation" that evoke a sense of serenity, purity, and loftiness. These physical qualities of jadeite and qualities that people attribute to describe these standards (Calvão, 2013), are the core of what I call "qualia of jadeite." They are expressed and described in their own way and through a set of local phrases and terms. Clearly, there is no fixed and standardized criteria that charts the price of jadeite. These "determinate" features and references together compose the "in-determinate" aspects of the pricing of jadeite.

Conclusion

The "qualia of jadeite" is structurally produced and reproduced through methodologies and ways of thinking in a complex web of cultural, social, political and economic contingencies (Keane 2003; Harkness 2013, 2015; Calvão 2013; Ralph 2013; Lemon 2012; Chumley 2013; Gal 2013). According to existing studies, social practices are semiotic. Scholars have demonstrated the concept of qulia as the semiotics of qualities, which are expressed as "experiences of sensuous qualities (such as color, texture, sound, and smell) and feelings (such as satiety, anxiety, proximity, and otherness)" (Chumley and Harkness 2013:3).

In the first two parts of this chapter, I situate Ruili's jadeite market in historical and cultural aspects of jade culture more broadly. In the third section, I explain the "qualia of jadeite" as constituting a set of valuation parameters such as grade, color, "type-waterness," cut, etc. To put it another way, the "qualia of jadeite" serves as the knowledge or economics of jadeite that is typically Ruili. I do not however claim that these standards and criteria exemplify everything about the pricing of jadeite. In other cases, price itself can be a sort of indeterminate quality with "ritual transactions" deciding and converting price (Chapter 5).

The knowledge of jadeite is fundamental to understanding how the market is set up and negotiating in a snapshot in a moment in time. This knowledge, to use Callon's (1990) analysis,

is an intermediary and provides interconnections between heterogenous actors and agents. In Gidden's (1984) view, knowledge is a means on which individual actors rely to carry out their actions. This chapter also provides insight into the social cultural layers of Ruili's jadeite market. In talking about "contemporary jade culture in a market" I highlight the role of agents, particularly traders and specialists, and how they intentionally attach meanings, or share their own interpretations in their sales or in marketing strategies, as the qualia of jadeite. It is through their practices that they reconstruct a kind of contemporary jadeite culture in Ruili. In the next chapter, I will turn to emphasizes, in one aspect, how non-human actors play a role in Ruili's jadeite market.

CHAPTER 4. KNOWLEDGE/ECONOMICS OF "BETTING" STONES

Upon my first glimpse of "betting" stones they seemed like nothing but plain rocks. The first time I examined and scrutinized one jadeite rock, I picked it up and held it under the sunlight, felt it, and smelled it, in vain trying to arrive at some satisfactory understanding about it. By and by, I learned that these types of jadeite stones only exude differential characteristics when traders place a penlight against the integument of these rocks, there immediately projects then a faint resemblance of color somewhere below the surface. Even though I do not have a particular obsession for precious stones, every time when that radiance reflected through onto the surface, miraculous presence from the aura of nature overcame me begetting mystique and joy in my heart. This was the so-called "betting" stone, the raw material of jadeite stones and boulders directly extracted from earth. Their economic value is uncertain unless cut open. Working with betting stones is the most audacious, daring, and boundless adventure of business forms in Ruili's jadeite market. This is what rough jadeite stones can do in Ruili.

In many ways trade around "betting" stones is merely "betting." It is like buying a lottery ticket for whom one could lucky enough to win or not. Normally, how much a piece of "betting" stone in worth is unknown until it is cut open. It is a real bet, and traders either win or lose. I've seen a piece, a so-called renowned "betting" stone owned by a collector whose family used to lease a mine in Myanmar, a piece he refuses to sell no matter how much other people offer. According to him, the stone is most unique and the mine where he acquired the stone is already deserted. Winning or losing, how do traders make reliable judgement, or surmise/reasoning comparatively? A bet on a piece of uncut jadeite stone though, especially to outsiders, remains all but indecipherable. The more I learned from these "betting" stone traders, the more I understood how the stones come to play a role configuring a kind of "betting" life in Ruili's jadeite market. "Qualia in markets" concerns the commodity being exchanged in a market, in the sense that its modality, and the qualitative potential affect pricing, payment means, trade, and transportation forms etc. A different case would be seen most obviously in a financial market where commodities are not material like jadeite.

This chapter centers on the scene of "betting." I argue raw jadeite commodities have configured a life of "betting." (ie. the agency of non-human actors in Ruili's jadeite market) (Callon, 1986a). The "betting" stones engender irregularities in Ruili's jadeite market. In an ideal situation, the intention of "buy cheap and sell dear" ends up being to "buy dear and sell cheap"

or "buy dear and sell dear." These stones tell us about tactics, uncertainty, and hope in Ruili's jadeite market.

Unique characteristic of raw stones of jadeite and its potentials are that they can be stored, exchanged, or cut open to be machined into jewelry and then be highly commoditized. From rough stones to economically valued jadeite commodities, the potency of jadeite is instantiated not only in its qualia and potentials in a market (Vallard 2019), but also in life that is guided, desired, dared for their future. If chapter 3 explains more about what humans bring to jadeite, this chapter highlights what jadeite bring to humans. In the first section, I sketch out the commodification of raw materials of jadeite by introducing what "betting" stones are and what traders do with them. In doing so, I touch on ongoing debates in political economy about commodification of these jadeite materials and its impact in the China-Myanmar borderlands. The second section summarizes a set of empirical knowledge that tactics traders deploy to read, judge and gamble on "betting" stones. The third part then walks readers into the "uncertainty" aspect of this trading life, and further explores what does "betting" mean in a wider structure of economic life.

I. The commodification of raw jadeite materials

1. The so-called "betting" stone

Jadeite in Ruili is mostly from Tawmaw-Hpakant in northern Myanmar (Shi et al. 2009).

Nephrite is hardly found in Ruili, the amphibole jade that usually comes from northwestern



Figure 18. Photo of "betting" stones in Jiegao by author 2016

China. Jadeite in northern Myanmar can be mined from mélanges of mineral dikes in mountainous areas, and also fossicked in riverbeds and valleys from alluvial deposits (Shi et al. 2009). In dike mining in Tawmaw, jadeite dikes are reached by backhoes, scrapers, and other earth-moving equipment in addition to manual digging. Once a dike is exposed, dynamite and jackhammers will be applied to break the jadeite apart and away from the surrounding rock; jadeite is also fossicked along the

banks of the Uru River by crude air pumps

when the water level is high (Hughs and Galibert, 2000: 3-4). Mining waste is transported and dumped down the hills or into ditches which are one of the important sources (NOT all) of "betting" stones. Jade pickers rush to this debris to search for overlooked rocks that might possibly be "hidden."

In a most simplified way, "betting" stones are uncut raw materials of jadeite boulders and gravel mined from earth. Because the surface is often covered by a layer of weathering crust, the internal situation cannot be seen until they are cut-open. People can only infer the quality, the superlatives and flaws of the stone based on their knowledge and through observation and examination of the crust and the "windows," partially peeled-off sections on the surface. But "windows" on rough jadeite are tricky to read. Because rough stone passes through border checks taxed by weight, to hide quality and economic value, some shrewd traders choose to conceal "windows" that might show high quality stone. In contrast, in the circumstance that traders want to highlight the inner parts, "widows" might be inscribed on the outer layers at most conspicuous parts to show a resemblance of the inner color. Uncertainty surrounds the quality of materials inside a stone, while paying a price based on personal estimation thus makes a transaction quite like gambling. Because of different circumstances and mining techniques, in Ruili there are mainly two basic types of raw jadeite materials: (1) big pieces and shales taken off large boulders which are usually semi-open, and (2) uncut small round gravels with rough edges, purely raw stones. Pieces of purely raw stones can be large, weighing tons of kilograms, and as small as the size of a fist.

In Myanmar, jadeite mines in the Kachin State were long fought over and co-controlled by the Kachin Independence Army (KIA) and military government and were officially expanded to private ownership after 1995. There is currently an extensive network of individuals and organizations in jade mining in Myanmar¹⁶. Sales of legal raw jadeite materials are monopolized by the Myanmar government through official emporiums annually held in Yangon, Mandalay, and Naypyidaw as the only legal method of exporting raw jadeite. Low quality stones can also be sold legally at local emporiums in Naypyidaw, Mandalay, or Yangon (Global Witness 2015). These emporiums are organized by Myanmar Gem Enterprises (MGE), "a state-owned enterprise responsible for regulating the gemstone sector and for production of gemstones through joint

¹⁶ Global Witness Global Witness. https://www.globalwitness.org/jade-story/

venture agreements with private companies" (Møller 2019:121), as "a way of monopolizing mining licensing, trade, and taxation" (idbd). KIA-controlled mines, usually managed by military elites and cronies are the opaquest form of production of jadeite circulating across the border (Global Witness 2015; Woods 2011). The complexity of jadeite regulation in Myanmar not only comes from the complex network and ownership but is also exacerbated by the physical characteristics of raw material of jadeite itself. While, taxes are levied by weight and quality and the locality of mines, traders can open a "window" on the spot or make a stain to cover a window, potentially raising the value or devaluing the stone to lower the tax. On the Chinese side, the central government in Beijing has agreed with the Myanmar government that Chinese businessmen can lease mines through the MGE and traders should only buy unprocessed jadeite through emporiums taxed by the Myanmar government (Moller 2019: 123), however in reality covert business networks have long been forged since the 1980s across the borderlands in Thailand, Myanmar, and China (Chang 2009, 2014).

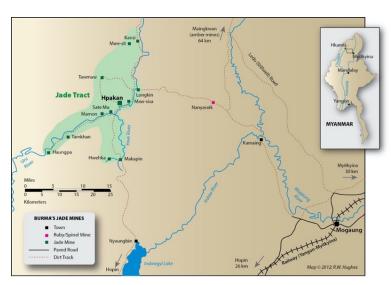


Figure 19. A Picture adapted by R.W. Hughes and G. Bosshard from Hind Co. Map (1945) 2000

What do traders do with "betting" stones? There are two short answers to this question. First, "betting" stones can be directly traded merely as uncut jadeite commodities, and traders hope to make profits by reselling them at higher prices. Second, some traders buy "betting" stones as first-hand materials and turn them into refined jewelry. At any rate, stone betting of jadeite has long been a tradition since the development of a thriving jadeite business along the border in Ruili. A single piece of stone is easily transported, stored, and processed by virtue of its

physicality and nonperishable character. It is plausible if anyone, even customers by chance own a piece of raw jadeite stone, they can find any artisan (or on their own) make it into precious jewelry and thus highly tradable. As the jadeite industry flourished over the past two decades, jadeite rocks became first-hand materials that could be hoarded, traded, or processed (into various jadeite commodities), thereby trade of jadeite rocks was common among mine owners, collectors, manufactures and processors in the jadeite industry across the border. Since the 2000's when trade zones were established in both Myanmar and China, jadeite was legalized for trade across the border, thus a growing market accelerated the commodification of raw jadeite materials. With the growing techniques and lapidary system in China, processing and machining of raw stones have become more available to common consumers. During my fieldwork in Ruili, I witnessed tourists who came to Ruili willing to spend affordable amounts on a cheap "betting" stone and to then send them to a workshop to process into jewelry.

Presently, many of these stones are sold and resold through multiple hands, and there are a group of brokers who cross the border back and forth (before COVID restrictions) specializing in "betting" stones. No matter how many hands a stone goes through, its price cannot be judged until a stone reaches its final destination and is cut open. Normally there are semi-raw materials with large boulders cut in the middle or on the side, where their inner structure can be inferred from what's revealed; depending on the thickness of the slice, these are partial "betting" stones. After a length of time in Ruili, I learned there are many tactics to trading in "betting" stones. For instance, in order to entice their customers and to highlight the potential price for a piece, traders will highlight the most obvious spots of "greenness" on the surface by creating a "window" incision, as a luring strategy. But no one can really know what the real inside of a stone looks like until it is cut open. Callon (2021) depicts casinos in Las Vegas and how their devices and slot machines allure gamblers. In Ruili, the mystery of the stone itself is a lure to traders. In Ruili's jadeite market, prices for "betting" stones run go from hundreds of yuan to thousands, and millions of yuan. To trade these stones without much certainty, is then akin to buying a lottery ticket. Even the experienced trading specialist cannot assure that they will never lose. These "betting" stones demonstrate the stories of who encounter the challenge and uncertainty of gambling and those who hope for a fortune from them.

In trading "betting" stones, it is well known that "one gamble could make you a millionaire and one loss could leave you with no home." There are many thrilling stories of

losing and winning in Ruili. Mr. Laoke, a trader who owns a store in Jewelry Street, is well known for his experience in gambling. An interview about his story is found online about one piece he bought for 200,000 yuan (30,000 dollars) and then sold to a Hong Kong trader for one million yuan. In Hong Kong this piece was resold for a final price of 10 million. Mr. Laoke used money he earned from this piece of rock and bought a Porsche car. However, winning is merely a stroke of luck. There was a lesson well-told of a retired man in Taili Jewelry who spent all his savings on a piece of "betting" stone, the same amount as Laoke's, 200,000 yuan, however choosing the most auspicious day did not change his fortune. When the stone was cut, good color nor quality were found inside. Instantaneously this unlucky man died of a heart attack on the spot. Though risk is high stakes, stones and flukes still allure people into this business.

2. Concerning the commodification of "betting" stones

A concern around destruction of "betting" stones across the border appears to be more complicated. As highly commoditized items, there occur unintended consequences from the production of mining for jadeite rocks in Myanmar. In recent years attention on the commodification of jadeite rocks has first been concerned with environmental degradation from mining in Myanmar and then subsequently associated with social issues such as the spread of HIV, drugs in mining areas, and insurgency conflicts in Myanmar. Chinese consumers are reviled for causing these issues among international communities. Møller (2019:151) applies Proctor's (2008) "agnotology" to describe "a structural production of ignorance," in which he finds that Chinese *feicui*/jadeite vendors contribute to this ignorance "by selectively highlighting history, culture, and symbolism of jade in China, while omitting practices, context, and consequences of *feicui* extraction in Myanmar's Kachin State in their narratives" (2019:152). Moller further highlights this point by paralleling the commodification of diamonds as "purifying such symbolic connotations of gemstones while filtering out unpleasant aspects of their biographies" (idbd). Moller's analysis is provocative, and in a further stance I suggest this ignorance is structurally produced by a lack of knowledge. Here the knowledge I refer to is not merely about jadeite and market, but infused with the complexity of power, in/equality, rights, and legalities. Rather than viewing this ignorance among Chinese or Burmese selectively, or to simply blame an evil nature or pure benevolence intentionally, I encountered many occasions in my research where it pushed me to ask myself: to what extent did the informant understand the

significance of my question, and to what extent did the informant understand what is going on in Myanmar? What could be a better way for international communities to cope with political issues in northern Myanmar?

Though I did not obtain clear-cut satisfying answers to these questions during my fieldwork, I found answers to these questions encompassed multiple layers of the complexity of the commodification of jadeite stones. On one layer, I share a similar perspective with Andrew Wash (2004; 2010) who takes on Geertz's emphasis on knowledge and information differentials in the market. Wash (2004; 2010) argues that Ambondromifehy's Malagasy traders and miners share minimal understanding of sapphire use, in that knowledge is being withheld from them versus not so much from consumers elsewhere in the world who know about it. In the Wake of Things, Wash critiques the approach emphasizing merely a difference of cultural valuations of Appadurai. Instead, he critically coins sapphire trade in Madagascar as "bazaar capitalism" as he states: "As Geertz notes of the bazaar, the sapphire trade is a context in which those who know more about the qualities of, and markets for, what is being traded profit from ensuring the relative exclusivity of that knowledge; those who know less lose out accordingly" (2004: 226-227). These "knowledge differentials" and contingent power dynamic are at the center of what creates "either end of a single global commodity chain in a world of increasing economic integration and inequality" (Wash 2004:226). In Jadeite markets in the China-Myanmar borderland, these "knowledge differentials" pertain to whether traders have and what degree they have knowledge about jadeite stones, information, and their access to resources (jadeite materials), and markets in the much wider stage in the regional jadeite economy. For instance, to what degree do jadeite mine pickers have a say about what they can do with jadeite resources after they pick them as an only marginal labor force? This same concern appears with many different resources and is also further amplified in concerns of alienation, equity, gaps, and distance in the continuing global economy in postcolonial and colonial contexts (Smith 2011:20-21; Apter 2005; Wash 2010).

On second level, I have found what Chinese or Burmese traders and consumers in Ruili have overlooked about the destructive impact of mining areas in Myanmar, to a large degree has to do with the inaccessibility and infeasibility of access to these areas. The mining areas in the Kachin State in northern Myanmar remain inaccessible to outsiders. Regular Chinese or foreigners are hardly allowed to enter this area either for business or for research. According to

my informants, only Burmese are able to get to mining areas in Myanmar, but even Burmese traders who are not "local" have to pay a "special insurance" to local insurgencies and bands for their security and permission for trading for jadeite in their presence in these areas. Trade in "betting" stones at their first/earlier step across the border is most directly carried out by Burmese. What is really going on in northern Myanmar, remains enigmatic to many (not all) outsiders.

Additionally, a most complex layer is in how people understand and perceive what is right/wrong or appropriate in the trade of jadeite and other issues from their own stances. When I shared the ongoing criticisms of mining in Myanmar with a few of my informants (who have college backgrounds), they immediately retorted that "Burmese themselves do not value jade as Chinese, Burmese value gold more than jade." Burmese traders admit Chinese are more willing to spend millions of dollars on exchanging stones. In their stance, cross border trade (including for agricultural products) is a win-win for both Burmese and Chinese and the building of such a marketplace is a feat at the border. The opening of Ruili's border brings in trading diasporas, thus increasing commerce and services allowing Burmese labor to make a living in Ruili. When I specifically alluded the ongoing wars between the military government and extant northern insurgencies and their feuds, many informants only have a superficial and blurry understanding about these wars, especially about relations between the government and ethnic minority groups. They do not know the history and they do not know "who is right." Thus, their stances are diversely differentiated. Burmese traders might stand with the military government or the insurgencies. Chinese traders add another complexity to this layer, to quote one of my informant's strong stances:

"We more or less heard about wars in northern Myanmar, and it has been decades and decades, but there is very little we can do. We cannot interfere because that's their territory and their own business. Our country, since establishment, has never invaded or interfered in any other country's sovereignty".

The above layers are attributed to what I call the lack of knowledge in a broad sense, which are imbued with forms of power structures that remain in a black box, especially to "uneducated" informants. Many traders, both Chinese and Burmese see the market as a positive force. In their views, the building of Ruili's jadeite markets attracts more population in Ruili,

adding more possibilities for business and providing opportunities for Burmese to come and work in Ruili. Though their wages are not the highest in China, their remittances sent back are pillars for their family financials and wellbeing in Myanmar. The debate on this market and commodification of jadeite material was critical in the whole course of my fieldwork and I would often ask myself: how do I explain a "critical" research theme to my informants? How do I represent these diverse stances of interest in studying the market? Keeping this in my mind, I constantly reminded myself of my own accountability on consent, and anonymity of my informants, and to explain my own position/identity, purpose and objective of my presence and research. I incorporated the highly diversified and sometimes opposed opinions and ideas about jadeite and this market in my research. These challenges are imbued with questions about power, politics, ethics, positionality, legitimacy, accountability, knowledge in both methodological techniques and theoretical concerns in the process of research and analysis. I coin this complexity as the critical ethnography of a market and as part of my "market intricacy." The critical ethnography of market concerns both theoretical and methodological issues in this study.

II. Tactics and the knowledge of "Betting" Stones

In Ruili, when traders examine "betting" stones, they often place a penlight against the rough surface. Under the faint transmission of the penlight, one can get a clue of a stone's quality, such as color, "water quality" inside, and its flaws. But no one can fully ascertain the (green) coloration and whether it is "yang"/full or partial. This is because the transmission and penetration of light is limited and even a big projection may not represent the true color inside for the entire stone. The physical characteristics and appearance of rough stones lead traders. The potential value of rough jadeite is ultimately about its inner qualities, the "meat" which is unknown until the stone is cut open. This is both the challenge and the charm of "betting" stones. Through almost 10 years of practice in trading "betting" stones, Mr. Chun laid out a few forms of commonsense knowledge for beginners, and these entry level tactics/tips indicated there are still techniques that could lower the risk in a bet:

First, be calm! When people find that a stone presents marvelous quality just by first sight, think pessimistically about the other side of the coin. In any situation, buyers should avoid the influence of people around them and detect the subtle shenanigans that

sellers could use to deliberately raise the price; sellers might irritate buyers verbally to make buyers lose their normal standards, lower their expectations, and make them impatient. This is what unscrupulous businessmen want, like a sales snare. No matter how dramatic the bargain is, keep calm.

Second, be clear! In the purchase of jadeite rocks, especially expensive ones, buyers should have their own ideas and basic knowledge about the stones, be able to set a price estimation from their own heart, and be capable of estimateing the responsibility of loss. Any buyer should "know" the stone well enough, and never make a deal by following others blindly. If a buyer has no hint of knowledge, the deal (if made) is certainly a bet to lose.

Third, be careful! If one had a successful experience trading or buying a "betting" stone previously, do not be optimistic that the next deal is guaranteed, especially for those who are only thinking of win with fortune.

Fourth, be alert! "betting" stones peddled in the street are the least reliable, for those peddlers are not long-term traders in Ruili. Do not follow into the trap of the "cheap" price in the street! In Ruili, the marketplaces have higher reliability in terms of after-sales service (and other relevance). If one wants to do real business in Ruili, spend time in the marketplace.

Mr. Chun explained trading in "betting" stones is not all clueless and that years of practice and learning in real trade still helps him attain his "trading skills." The trade of raw jadeite stones and refined ones requires a somewhat different set of knowledge. For instance, one of the primary methods for considering "betting" stones is certainly about their size (in terms of quality). But this is not to generalize that the bigger the more expensive, and the economic value of "betting" stones is ultimately about the true quality the inside of the stone might produce when it is cut.

1. How traders read "betting" stones

How to estimate and surmise the potential economic value of "betting" stone still requires a set of knowledge, not only "trading skills" as Mr. Chun hinted to above. This set of knowledge is largely configured by the presumable features of the physicality and materiality of how a stone appears and of how traders discern them. This is the economics of "betting" stones that we can use to differentiate laymen versus trading specialists. People often view trade of "betting" stones as "an insider's game," implying an exclusion to those who do not have much familiarity and experience with rough jadeite. For miners or merchants, observations of surface coloration, and sound measurements via tapping with metal tools are sets of knowledge that require years of practice in trade.

1.1 Mines, pit, and age

Traders say crucial to "betting" stones is knowing what mines and pits they come from, for this provides clues as to estimation of potential value the stones hold. Jadeite forms in large groups as dikes in a tract and it is likely if one pit produces high-quality boulders, there is a higher chance stones dug out of the same pit will have similar qualities. Due to geological formation, the chances for a mine or a pit to produce, at least large boulders with similar qualities, is high. This is the primary clue as to why mines and pits matter so much to infer the quality of a stone. This sounded purely empirical and very simple to me when my informant explained it to me the first time, but following such logic is still never easier said than done.

My informant further hinted that so many rocks look alike and unless one knows a lot about the mines and their production, simply knowing the source of a stone may or may not be helpful. In this stance, those who know about mines and pits, and know what they produce, will have first-hand information; and those who do not work closely and do not have access to mines are then judging from second-hand knowledge. In recent years mined jadeite stones have come from tracts in the Kachin State alongside the Uyu River, in the Lonki- Hpakan-Tawmao-Hweka area (in which Tawmao and Hewka are currently depleted). Among these deposits there are vast numbers of pits that have been explored since the last century. According to the length of time that pits have been mined and extracted, and the quality of production, people sometimes differentiate these mines and pits as "older pits" (*laochang*) and "newer pits" (*xinchang*).

Experienced traders explain that in the earlier extracted mines in Hpakan are on the west bank of the Uyu River, the size of jadeite gravel found is very diverse. Hpakan stone is divided into mountain stone and river pebbles. "Black sand" is the best type of mountain stone, and



Figure 20. Photo of "betting" stones in Delong night marketplace by author 2020

tawny salt sand and white salt sand are inferior. The grains and streaks appearing on mountain stone are fine and dense and feel smooth when touched by hand. The "skin" of river stone is usually thin, and a lot of them have very good transparency. Regardless of mountain stone and river pebble, Hpakan stone has loose spot/flower marks on its shells, and often possess good "water" inside. The skin color can darken from fawn to black. Mr. Kang, based on his experience, said stones from the Hpakan mines appear with grey to yellowish cover, especially with dotted light spots usually signaling very delicate crystallization and "watery" texture of the minerals

inside; black-skin ones usually have a refined texture especially with less "cotton" in the veins. One of the common characters of jadeite stones from the "older pits" of Hpakan, is that between the skin and meat there is usually a "foggy" transition layer formed by some minerals. Versus in the NamQi mines, where most of the jadeite gravel has "wax shells." The "skin" of jadeite stones from NamQi is very thin and slim, about 0.3-0.5cm. The "skin" color of NamQi stones is mostly dark gray to a little bluish, but there are cracks seen more often in the veins. Mr. Kang is a Chinese-Burmese trader who grew up in the mining areas as his father was of the first generation of mine contractors in northern Myanmar. Mr. Kang informed me "the mine matters depending on how many stones (from different mines) that one has seen." Knowledge about mines and the stones that come from them must be learned. This knowledge is superior and merely accessible to those who are at the top of jadeite production lines, contrasted with those who do not have any experience in mining but rely on second-hand information.

According to traders' descriptions, in the Khansee mines many jadeite gravels come from the alluvial sand of the riverbed. In "older pits," stones dug out of the bottom layers usually have thin skin, and the color is often greenish-yellow; their sizes are normally small, rarely more than 0.3kg; stones generally contain good "water;" they have less "fog layers" but more cracks on the surface. In the Khansee mines, there is also a kind of "garlic shell" stone, mixed with red and white color, like the skin of garlic. The local people call it "iron dragon" to indicate its super quality: The stone is full of green, and its "water" is excellent. If one is lucky to bet upon an "iron dragon" rock in the market, they are highly likely to win on the condition that they know how to tell a real "iron dragon."

From the physical appearance and the shared characteristic from mines and pits, traders garner their empirical knowledge obtained from years of practice. Knowing mines and pits constitutes the most primary, meanwhile "superior" knowledge in trading "betting" stones.

1.2 Crust and shell, the "skin" color

The crust or the integument of a stone tells a lot about a jadeite rock. In commonsense, jadeite crust is the residue left behind after igneous activity, metamorphism, and decomposition, formed by weathering effects during geological transportation processes. The crust is a kind of secondary mineral mélange formed due to the hydrolysis of jadeite minerals on the surface of the stone when the stone is weathered and buried under the surface environment (Hughs and Galibert, 2000). The shell and inside "meat" are very different. But characteristics of the external skin/shell can reflect internal quality, and crucial for people to surmise the texture, crystallization, and color inside.

The texture and grains on the surface guide a trader. If the crust appears to be composed of coarse sandy grain, then the stone is categorized as "sand-shell-gravel" (shapishi, 砂皮石). The most common colors of "sand-shell-gravel" are white sand, beige/taupe/tawny sand, iron/ebony sand, and black, etc. which can tell different information about the "meat" inside: traders say there is less to no greenish color inside the stone if the crust is white sand, and even if there is color inside, it is more likely purplish to lavender. Differently, the tawny sand gravel with a better visibility usually indicates more potential green color inside, but the green color is less evenly distributed inside. Usually, the shell of iron/ebony stones is very thin, indicating even better inner quality and condition. Usually, jadeite will be high-grade if the sand "skin" is black to darker green, reflecting a potential for emerald green inside. But, again, the black sandstone varies largely. Some could possibly contain colosseum black stripes or oxidated fractures inside.

Some traders say river pebbles of jadeite were geologically transported for long intervals, and it's likely the dense and delicate parts are preserved inside, so the general quality is better. Other types of color, such as "elephant skin color" are light gray, wrinkled, and prickly when touched, a typical manifestation of weathering. This kind of "skin" has a quality potential. After cutting, a translucent glass-bottom could be seen. Traders who have seen and cut plenty of these stones can know better than those who do not. In a word, the color, density, luster, and thickness of jadeite "skin" can all possibly lead agents to make their decisions.

1.3 Ores seen from layer and fragment

Ore fragments and their veining can be references for traders to infer the geological formation and crystallization of a stone. A Burmese trading specialist who has been in the field for more than 20 years told me the knack is to examine grains and veins. If the lines and veins on the surface are evenly distributed and homogeneously presented, then underneath that surface there is often structured fine or at least homogeneous crystallization. If the surfaces show that the grains and lines are crossed, this indicates a possible mix of multi minerals inside in the process of sedimentation. From the sand and granulated shell, one can speculate about the "water" inside as well. There is a common saying "coarse ore (indicates) coarse meat, fine ore (indicates) fine meat, evenly distributed ore (indicates) even meat/structure, tight ore (indicates) fuller meat." A stone may have multiple surfaces and even round-shaped ones can show different grains and lines. Also, by looking at the grains and veins, you can tell whether the stone is "old" or "new." If the grains look coarse and rough and the texture is a little rough, it is a relatively new stone and vice versa an old stone will show a compact structure, and superlative transparency. Against a penlight, one can see that the green color reaches a little deeper inside in a piece of "old" jadeite stone.

Experienced traders say they also look at the contour and shape of the surface: a purer jadeite stone is usually insinuated by protruding parts/clots on its surface, with refined grained lines and veining attested; versus when there are more mixed minerals inside the surface can have more relatively concave parts with crisscrossed veining. There is a saying in the market that "it is better to buy a round drum." "Drum" refers to a piece of stone with bulging parts on its surface.

In addition, other knowledge of "betting" stones such as "damping measurement" is also crucial for judgment on the stone. According to experienced dealers, the method is to wet the gravel in water and take it out to check the drying speed of the water on the surface: If it dries fast, it means that the crystal is coarse, the structure is loose, or there could be many cracks and voids, and the texture is poor. On the contrary, if the surface is clammy, it signals that the crystal is fine, the structure is dense, and the texture is superior.

To recap, these exuded traits from stones are fundamentally about the physical quality and materiality that traders rely on to judge and estimate when they trade rough jadeite. Thereby, these physical characteristics and potentials of stones lead people on. Rather than being labtrained or based upon information detected using technological equipment, this set of empirical knowledge can only be acquired through years of practice in cutting and trading with "betting" stones. Even the most experienced traders are not guaranteed to win all their bets. In betting on jadeite, there is no expert, only winners or losers.

2. A story of a specialist, Mr. Kang's expertise

Mr. Kang's story exemplifies the high stakes, success, and opportunities, that fall more on those who have rich experience and deep-practiced knowledge. Their access to mines and pits is also crucial which ultimately allows them to approach betting with more certainty. Mr. Kang was introduced to me by my host family in Ruili, Ms. Lee. Mr. Kang is a second-generation Chinese Burmese whose father was once a contractor in jadeite mines in northern Myanmar. The first time I interviewed him, he was proud to tell the story of how he got into jadeite business, including the story of his father. His father retreated to Myanmar as a KMT member in the 1950s before he was born. His parents first lived in one locale in Burma¹⁷ working as manual labor, but for a long time his father's pursuit of work provided very limited income and was far from his father's expectations. One day his parents went to a temple for sortilege and augury and were told by a geomancer that their fate and family prosperity would be found in the northern part of Burma. His father then decided to seek his fortune and moved to north. On the way he accidently met a petty trader who owned a piece of jadeite, asking for about nine hundred *yuan* (about 150 US dollars), which at that time was a big amount of money to many common people. The Burmese seller was insistent, and his father, who had no knowledge, no clue, and no experience

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 $^{^{\}rm 17}$ In 1948-1962, Myanmar was by then "Union of Burma".

in jadeite trade at all, was kind of pushed to take the offer. As a Chinese (immigrant), his father had heard about precious jade every now and then, audaciously made a bold decision to take that offer. The story ended happily, and his father made a lucrative profit from that piece of jadeite. Since then, his father entered the jadeite business and so did Mr. Kang when he grew up. Mr. Kang emphasized he knew this story even when his was little, through years his father retold the story not only to him but to his good friends over and over, revealing how their life has been changed/saved by jadeite.

After the first successful transaction, his father traced the origin of jadeite and moved directly to the Kachin State. As a Chinese immigrant, his father started to work with local authorities and together with the KIA (Kachin Independence Army) as a mine contractor. Mr Kang emphasized that his father was a wise and hard-working man, and soon his father had over around 200 employees working for him in his mine. Mr. Kang told me, many big sellers in Ruili today were once his father's employees. Even though he was only 7 to 8 years old, he clearly remembers when there was successful jadeite mining, their team would kill 5-6 big pigs to treat all the employees as a celebration. Mr. Kang said when he was young, he had already seen many jadeite stones and learned from his father where some good ones were from, and what characteristics different stones showed and how to tell their names and their pits of origin.

Mr. Kang moved to Ruili in the 90's when Ruili's jadeite market was legalized. By that time, he and his family worked both as retailors and as middle agents running back and forth across the border to bring their stones to Ruili. Their business included selling refined jadeite jewelry, semi-raw jadeite shades/materials, and "betting" stones. Mr. Kang sees himself as being on top of the production line and regards himself as a stone collector, and by virtue of his experience in mines his "betting" stones are always sellable products among his peers.

Before I met him, I had already heard about one of his famous stones in Ruili's market for which buyers have offered up 30 million *yuan*, but he still rejected selling it. Since the market has gone down since 2017, he stashed this piece away and does not normally offer to show this piece to visitors anymore. I was lucky to know him well, so he was offered to let me take a look at it one day. I recall that day so well. As we sat in the store, Mr. Kang went to pull down the metal rolling door of his storefront, and then ushered me and my host into an inner locked chamber further back in his store. With a dismal light in the vault further back in his store, he pulled a large piece of cyan silk cloth cover off a huge boulder. It had light sandy beige "skin,"

and was as tall as a stout cavalier, standing motionless and sublime on a low wood pedestal. Though knew about the stone's fame and should have been ready for its mighty grandeur, the moment when Mr. Kang's flashlight rays hit its body, slow and steady at first, and then nimbly highlighting nearly every spot on the stone, I could not but be petrified and frozen by its superb appearance at that moment. Speechless was I all at once, the boulder evinced an ostentatious majesty and splendor yet there was still something ineffable, exuding some preternatural powers. I can see its resemblance of greenness once that penlight penetrated randomly all over its body. The entire boulder is a giant precious item. Tough I am not infatuated about jadeite most of the time; I was completely smitten by it standing there. As if the boulder was calling to me. Mr. Kang then confidently commented that there is never going to be another piece like this. That is why he is not selling it yet and does not even feel safe showing it to visitors anymore. By all odds, Mr. Kang stated this boulder is from a pit he knows clearly and from which he already bought several pieces, big to small, which are all great in quality.

Mr. Kang explained that these years because of the border controls and limitations on jadeite mines, production of raw materials of jadeite are declining. Before the pandemic he was still very active going back and forth across the border. Mr. Kang's strength in Ruili's market is his experience, his access to the mines, his practice with numerous pieces that allows him to approach trade with more certainty, and high standing in the circulation and distribution of "betting" stones in Ruili's jadeite market. Mr. Kang also explained, a market is an open field and on each node of the chain, it is a fair gamble for traders. It depends on traders' knowledge and perceptibility to "turn stones into money."

III. Betting on jadeite and uncertainty of hope

To many commoners, winning on "betting" stones is only a stroke of luck. One's fortune in the business is notoriously unpredictable. In stone betting "there is absolutely no expert, there is only a winner and a loser." In April 2019, the so-called biggest "swindling" on "betting" stones in China hit the news nationwide. Introduced by middlemen Zhang and Tao, Yunnan jade merchant Yousheng sent an 18 kg raw jadeite stone to Mr. Ma, a chairman of an Iron and Steel

¹⁸Official website of Central Broadcast Network, https://baijiahao.baidu.com/s?id=1697576570851281250&wfr=spider&for=pc

^{1.0}

company in Hebei province. Accompanied and witnessed by Zheng, a jade auctioneer, Mr. Ma bid for the stone at a price of 80 million *yuan* (12.8 million dollars), a price estimated by Yousheng who touted that the stone was from the *Muna* mine in Myanmar. However, after being cut open, the price of the original stone was far lower than expected, and only worth up to 4 million *yuan* (0.7 million dollars).

Mr. Ma viewed this deal as a scam and felt he had been set up. Subsequently, Mr. Ma came up with a "strategic vengeful plan" on how to get to Yousheng to a conditional negotiation table. Ma feigned an interest in buying one bigger piece from Yousheng, the seller. Yousheng found a partner and brought the second 98 kg raw stone that they had paid 30 million *yuan* for to Mr. Ma. This time, Mr. Ma accepted the stone but refused to pay the seller Yousheng unless Yousheng refunded the payment for the first raw stone. Yousheng and his partner then took the case to court. The two sides have been deadlocked since then. In January 2020, Yousheng was arrested by the Bazhou Public Security Bureau of Hebei Province on suspicion of fraud. Soon after, the middlemen Zheng and Tao were arrested on the same charges. On April 20, 2021, the case was heard in Bazhou People's Court, and the legal documents involved proof in the form of a report by a Guangdong geology research institution that the stone was actually from Guatemala. Mr. Yousheng, Zheng, and Tao then were accused of complicity in concealment of the fact and intentional fraud etc. and were sentenced by the court.

Betting seems a one-off deal, but it is more complicated. In many big bets on jadeite stones, the act is an extreme which it can lead to both life, and death. A tragedy of an of old man who spent all his retirement savings, 200,000 *yuan* on a piece of stone and cut it open only to find nothing, was a painful lesson repeated by many locals. Though up in the air, winning a lottery over a stone is worth a battle that drives many people in their hope and life. A local billionaire (now) once bought a jadeite boulder for 2 million *yuan* (0.3 million dollars), and after he cut it open the price skyrocketed to 20 million *yuan* (3.3 million dollars). The story hit the headlines the same day the stone was cut and is still repeated by traders as well. The uncertainty of "betting" stones illuminates not only the indeterminate aspect of rough jadeite, but also trading life in this field. In addition, as Ruili's jadeite market has been going through a transformation with expanding live-streaming e-commerce, traders face more challenges and uncertainties than before.

1. Uncertainty resulting from interpersonal relations and trade ties

After several months, I learned interpersonal relations and trade ties are one set of important characteristics in Ruili, and they can be very complicated when sales and cooperation are involved. A reader might say that not cooperating not getting involved with partners might solve the problem. However it is more complicated and I will get back to this point later.

Family shops are the main unit in Ruili. Families and friendship are major ties that organize social relations among traders. This kind of social tie is highlighted across much excellent scholarship as being deep-seated as *guanxi* and *renqing* in Chinese society (Yan 1996; Yang 1994; Kipnis 1997). I do not mean to stress an over-socializing context here, in many contexts I stress that in a marketplace, *guanxi* or *renqing* do not mean one can take away a piece of precious jadeite for free. But this is also not to say there are no interpersonal connections at all. After a lengthy time in Ruili, I discovered there is a complexity and ambivalence resulting from these interpersonal relations in the market. These social ties can both be favored as reciprocal, but also can be attributed to creating uncertainty in trading life.

Ayong's story

Mr. Ayong, a Burmese trader, unraveled his story for me in our first in-depth interview. I was vouched to Mr. Ayong by the sectary of the Burmese Association of Business and Commerce. I recall it was a breezy afternoon, right after the second short COVID moratorium and lockdown in Ruili in the fall. After a five day stay-home order I was elated to get out to continue my work. I was taken directly to Ayong's shop, 3-mintues waking distance from where the Association's office is located. Ayong's shop is cramped at the back of Taili Jewelry in a narrow street. Standing at the end of block in a dwarf building, Ayong's corner store opens with two doors facing the street and sidewalk. A plaster plaque with Chinese calligraphy says Xingfu Zhubao hovering high at the top of the front door. In a 20 square meter-wide shop connecting to a second floor with a staircase in the corner wall, Ayong set up two lines of glass-fronted display counters against the walls, leaving the middle space for reception and with a rest area marked by a low-height wooden tea table with stools around it. Accepting me in a very East Asian mode of hospitality by insisting on offering water or a snack, or giving a cigarette (usually to men), I requested politely to sit in front of the store (under the roof) so I could have enough time to proceed with my questions and avoid taking space away from his business and his family.

I usually began my questions by asking how they got involved in Ruili, and the history of their business. Like many middle-aged Burmese traders, he inherited and learned the basics of business with his family and moved to Ruili when the border town was opened in the 90's.

Ayong started his story from when he moved to Ruili in 2001: Ayong was (during our interview he was dealing with marriage issues) married to a Dai ethnic woman, a local of Ruili, whose parents are also a cross cultural family between Burmese and the Chinese Dai ethnic minority. Therefore, people in his family directly involved in business speak very fluent Chinese like many Burmese traders. Ayong told me he and his brother were brought into jadeite business by their father who has been in the field for about 36 years. His father started his business in Mandalay in the 1980s and by that time there were some Yunnanese actively involved in the jadeite business in Myanmar. From his father he learned the jadeite business already formed a network between Ruili, Mandalay, and Thailand in previous times. But in the 1980s trade of colored gems or jadeite was illegal, thus his father and many other Burmese came to Ruili to cooperate with Chinese partners by doing underground trade. Like Ayong many long-term Burmese informants confirmed a history that in the 80's trade of jadeite and colored gems were under a cloak of secrecy; Chinese businesspeople mostly came from Guangdong, Shanghai, and Hong Kong. Nevertheless, products were reliable, and business partnerships were trustworthy and well organized by people who wanted to maintain long-term cooperation.

According to Ayong, after jadeite trade was legalized in Ruili he moved to Ruili in 2001 while maintaining a business with his family who were back in Mandalay. In the growing economy in China, more and more Chinese wanted to buy jadeite and his business slowly grew. There was an interval between 2007 and 2010 when he went to Guangzhou and pared up with a Burmese trader for a brunch office, while by that time his parents and brother came to Ruili to help with his store. Ayong said the best time for Ruili's jadeite market was from 2008 to 2013. Many traders who "know and understand jadeite" earned lucrative income during that time. Ayong and his family sell both jadeite jewelry and some raw materials (including cut-open material and uncut "betting" stones) whenever the "right opportunity," and stones occur. Ayong's role in the marketplace is again helpful to understand many traders' flexible role in Ruili;s marketplace: on one side they occupy a relatively stable role like opening a store or stall in a marketplace, on the other side they (he and his family) often move back and forth across the border to relinquish cheaper resources, or go to other cities for business exhibitions. Ayong said

his retailing business was stable and even kept growing in the beginning, until the day in 2013 he bought a "betting" stone in Mandalay worth about 2 million *yuan* (0.3 million US dollars). They could have chosen to resell the piece. Somehow his father was enamored and made an audacious decision to cut it open, shockingly, it turned out "the green color only occurred on the top and inside parts were totally plain." It was a dreadful and guilty cut. They tried their best to make jewelry from this piece, and the products only sold for only about 200 thousand *yuan* (30 thousand dollars). Thankfully, Ayong said he was able to handle the loss at that time by tightening his disposable budget.

It was from here, our conversation turned upon a downcast and doleful moment. When I probed what was a most indelible experience these years, Ayong shared his revelations. That moment was inscribed in my mind: after I asked the question, it was a silent instant, his face sagged and he glanced at the street as if he was cogitating about his past; from the side angle, that face perfectly marked something heavy with forlorn look upon Jewelry Street. Ayong signed, moaned, groaned, and explained his hardship.

The first is the dilemma that his business was stymied by the thriving of live streaming. Less customers come to Ruili, compared to peak years, especially in 2020 because of travelling bans under the COVOD-19 pandemic. Businesses started to diverge, online live streaming or offline cash-and-carry. "But live-streaming is messy, and I'm confounded," said Ayong. He emphasized that the old face-to-face sales, in his perspective, should be the mainstay, and in the old days the marketplace was more regulated by "field morals, rules and business ties." As a life-path career, traders tried to maintain their own brand by providing high quality goods and through earning trust. But in live stream business, a lot of strategies and ethics are breaking down. Live streaming business target only sales: young streamers who enter this field do not have much knowledge about jadeite, do not even own any pieces of jadeite. "They could jeopardize the fame of Ruili, which has been built by years of efforts of predecessors". In 2020, the outbreak of the COVID-19 pandemic and the lockdowns and traveling bans again stimulated the streaming business. Ayong thinks real traders in Ruili are confronting a severe challenge, yet the future is hard to predict.

Ayong's second predicament is a debit and credit case he was then facing in court. Ayong told me bluntly that he has been involved in a debt dispute for a long time that already sabotaged his business and now his marriage. His wife divorced him because of two debts he was pushed

into. He has a good friend Xiao, who is from Guangdong province and has settled down in Ruili for as long as him. From his observations of Xiao's experience, he saw Xiao as a trust-worthy dealer and had helped many of their "brothers" (common friends) to set up their path teaching them how to run business, and they made successful cooperation together. In 2015, Xiao asked him if he was interested to join him in helping Xiao's friend in Zhejiang province to kick off a store-opening for jadeite in Hangzhou by lending or co-joining opening sales. Ayong made the decision to take a chance because it was very common in Ruili that sellers help each other and co-join in sales. In his view, he trusts Xiao as a reliable long-term trader in Ruili and has good guanxi with government officials. Ayong then collected more than a dozen pieces of jewelry from other friends (one in Guangzhou and one in Ruili) worth in total up to 10 million yuan and made his visit with Xiao to Hangzhou, Zhejiang province. The store owner in Zhejiang showed keen interest in Ayong's products, and finally on the fourth night after their arrival this Zhejiang boss chose some products worth 6 million yuan. Xiao, that night, suggested to cut it down and make the first deal small as their first deal, then this Zhejiang man agreed and eventually picked products worth about 3 million yuan. The Zhejiang man promised that in a month the money would be wired to Ayong's bank account because he had money pending in other business and after serious discussion with Xiao, they both agreed with the Zhejiang guy and Xiao sort of served as a middle agent/collateral. Under the impression that there was no way this Zhejiang boss would disappear as he had registered a valid business with all his assets and products as collateral, they both agreed. When Ayong returned to Ruili, after one week, the Zhejiang dealer wired about 1 million to his account and promised him the rest of the 2 million would come in another month. Ayong paid part of this money to his friends from whom he collected the jewelry and explained the rest would come in a month as well. However, with one month gone and then one year gone, the money never came and remained this way until the moment that day I was interviewing Ayong.

The story is as complicated as their relations. The Zhejiang boss explained that he had urgent setbacks in his business, and he was stuck in trouble, and Ayong thought that the funds might be restored if he tolerated things for one or two years. He decided not to suit the Zhejiang guy immediately, because practically even sending the Zhejiang boss to the slammer would not help to get his 2 million *yuan* back if the man was totally broke. He wanted to give him more time or hoped to work it out. There was nothing better he could do for the time being. But on

Ayong's side, friends from whom he had collected products were less tolerant and in desperate need of cash flow. After negotiation and discussion in this three-party debt, Xiao agreed to loan 2 million to Ayong to pay off Ayong's friends first. The squabbles were temporarily settled. Not until 2016 did the man from Zhejiang make a trip to Ruili, at which time Ayong forced him to provide a handwritten and signed IOU as a legal proof of the money he owed. But no matter how much he pressured the Zhengjiang man, he did not recover his funds in later years.

By 2020 the loan Ayong had from Xiao including the interest had already climbed up to 2.1 million. Time flies and more than 6 years passed and Ayong's good friend Xiao now started to urge him to pay the money back because of Xiao's involvement with new people and needing the funds from the 2-million-yuan loan. Finally, Ayong had no choice but decided to take Xiao and the Zhejiang man in the initial deal to court in a lawsuit.

As Ayong elaborated on his story, he frowned and sighed many times. Clearly, he emphasized that Xiao was a good person and did help him and other "brothers" with making money over the years. They had experience in bringing products to Macau previously and made successful deals. He stressed that trust could help people make money without benqian (primary cost on investment), if they find sources to sell goods. Which is to say, he can make a profit without owning any jewelry but by borrowing/renting expensive goods from his friends via a verbal contract or IOU. He explained he has had many successful and reliable experiences of borrowing and lending goods with others, but in hindsight if the profit is high the stakes are high too. How one handles and makes judgements about this kind of cooperation is uncertain. Ayong said he still believes Xiao is a good friend because "Xiao never cheated other people, but Xiao's friends are frauds," said Ayong. He did not expect things to end up in court between him and Xiao, but he had no choice.

2. Confronting uncertainty in changing dynamics of the marketplace

According to traders in Ruili, there was a rush or what I call a golden period of live streaming sales in Ruili in from 2017 to 2018 (more details about the development of streaming will be introduced in chapter 6). In Jinxing Mall where the centralized Douyin streaming base is located, I saw painted cardboard looming on the side of an elevator advertising job offers for "fantabulousness streamers/hosts" offering an alluring annual salary of up 1 to 2 million *yuan* (180,000 dollars) per year. I almost found it a little beguiling the first time I saw it, but the

manager of a streaming company with more than 50 employees, Mr. Lei confirmed to me it was really only a little rare. He mentioned a few marvelous streamers who have large subscribers and talents in making sales who were quite competent at reaching their sales goal and thus their salary maximum. Even in 2020, when streaming was already easing off due to COVID, there were still several renowned streamers making lucrative sales with many products owners lining up in front of their streaming tables hoping their products could be broadcasted on these streamers' channels. The famous Jade Sister, I interviewed still earned an average salary of 10 thousand US dollars per month in 2020. Streaming sales seems to be quite a low cost in terms of jadeite business, for they only require basic necessities including a smartphone, a number of subscribers, and valid account on any streaming platform or app.

But after a lengthy time of digging into the details of streaming sales, I found that in reality the booming live streaming business is far more complicated. Mr. Lee who is manager of Yucheng Live Stream Base explained the basics of setting up live streaming business. Individuals or companies can register on different platforms such as Douyin, T-mall, or Kuaishou, with a monthly payment for their account. According to Mr. Lee, there is a high cost to run a live stream business for individual traders. To maintain a high flow and number of followers, the cost of digital investment such as advertising and 5G connections is high. Some streamers spend a certain amount of money to "pull in" an online audience but it does not guarantee that these customers will place the order. Live streaming business is more team oriented and requires high cost and tolerance of investment to promote an account to attract followers and fans. It is a long-term cycle for the flow of capital and products. This challenge has choked many of the individual streamers who are limited by risky investment and do not have the capital to foster and promote their streaming accounts. In fact, many individual streamers I know mostly were going through a bottle neck to promote their business in 2020-2021. Those who were able to maintain business, without loss and without profit, are actually still considered steady business.

Ms. Shijie's uncertain future

Ms. Shijie's decision to joining live streaming or not, was a tough one. I've known Shijie since 2015. Shijie is in her 50s and is one of several local ethnic Dai people in jadeite business. (Local ethnic groups are not the major trading groups in Ruili as mentioned previously.) In 2010

in the early jadeite rush, seeing that Jewelry Street had drawn people all over the country to come to Ruili, Shijie joined the business. She specialized in refined jewelry and leased a 2-meter-long counter in Taili Jewelry and had a stable business there for nearly 8 years. In 2018 with the flourishing of streaming sales, she, like others, suffered a slump in Jewelry Street after its golden time (from 2010 to 2015 as described by local traders). Most traders in Taili left and started to navigate through new plans. She did not rush into streaming business because as she described, the "the battle is in a new technique field" and she was not completely sure how to conquer it. She waited and observed for almost two years during which time she decided to resume her business with affordable "betting" stones. By 2020 when I interviewed her, she could clearly state the pros and cons of streaming sales, and in much revelation showed she had much respect and envy for young people who can work as a team and be successful in streaming business.

Seeing that more and more young people are taking party in live streaming sales, Shijie mentioned how her generation, the elders are falling behind in dealing with new technologies compared to these young traders. "Those who know how to operate streaming now make money in jadeite," said Shijie. She indicated one of the core modes of success for young streamers is that they know how to team up in streaming. But team sales require work from both sides, good and bad. She did highlight too though that "no one can do successful busines just by him or herself."

Yet Shijie revealed that after these years of practice she learned to be more vigilant and discreet working with other people. She used to work closely with business partners, however two setbacks befell her. In 2014 one of the traders who had long been active and vouched as safe by his own success and his honesty in Ruili, came to her, persuading Shijie to join him for a group sale. She stressed that at that time it was common for people to join into business together, an efficient way to promote sales and share a profit. There were numerous cases of people making remarkable profits by cooperating with reliable sources. However, not with the deal she was persuaded into in 2014. This goup was organized by a male trader who had been active in Ruili's jadeite market for more than 10 years and was entrusted by his own success and integrity in business. After some verbal agreements she made her mind to join and lend her superlative sets of jadeite jewelry worth up to one million *yuan* to this trader. In the end, this man managed to assemble several dozen sets of jewelry from nearly 10 sellers, but haplessly the deal he was developed turned out to be a snare, and this man was swindled by third party and all the jadeite

he collected became collateral trapped in a pawnshop. Right after the bad news came, the group of traders reported the situation to the police where they found some clues as which pawnshop their jadeite was held in. Shijie said she even tried to redeem it with her own money, but the price did not work out.

After these events the swindled trader sold his assets including his own apartment and paid nearly 2 million *yuan* to overbearing debt-collectors. At the beginning, these debt-collectors did not want to send this man to the court, for they decided to give this him a chance to make it up. But after three years with no further progress, some traders involved in the group work decided to go to court. Shijie explained she had a different thought that rather sending this man to prison, it was more practical to give him time to pay back their losses. She said, "The fact is if he is in prison, it will not make up for my big loss." She also stated that this man was a victim too. "He was swindled". At the end of the story this man was deprived of all his assets and money and sent to the slammer for 12 years, and the group completely lost all of their money in this case.

It was a painful lesson for her, said Shijie. Now she is very circumspect in cooperating with business patterners. There is a risk and uncertainty, it is like "betting" on jadeite, said Shijie. What's more ambivalent for her is that she thinks cooperation is indeed an efficient way to make sales. If the buyer looks for a specific color and type of jadeite product that sellers do not have for themselves, they are willing to sell their partners' products as long as they fit customer needs. Cooperation is both helpful as well as risky.

When Taili cluster closed in 2018, Shijie started set up a tiny shop at her home in the front porch area in an alley. For the time being she was tempted to join streaming but was not certain about how it operated. After years of sales in jadeite jewelry, Shijie now is trying to learn more about "betting stones" and she goes to the Delong night bazaar for sales. Whenever I did not have arranged activities or interviews, I went to Delong to participate in Shijie's night business. In the "betting" stone section, she occupies a one-square-foot size space where several tiny pieces of jadeite materials are laid on top of a nylon cloth. She always carries a tiny portable foldable stool and sits behind her products. The average price of her products is several hundred *yuan*. Shijie told me she is not making a lot of profit, but she is also not losing too much since her investment is low. It is like a buffer for her to go through the ongoing transformation of Ruili's jadeite market and for coping with COVID-19 as well. She is not sure about her future.

Mr. Maowen, a Burmese trader from Taunggyi (Lashio), has been in Ruili almost 30 years. Mr. Maowen is currently at his late 50s, and he maintains a three-meter-long counter in Taili Jewelry. Maowen's wife went back to Myanmar with their two of children when they started college in 2018. Maowen explained this is also due to their business having gone down since then so that he can manage things himself in Ruili. In 2020 the situation was worse because of traveling bans and less tourists coming to Ruili. While he could he refuses to be a products owner, who brings his products to live streaming bases for streamers. He told me in live streaming middle to low level products are more sellable; but streamers do not really understand jadeite and neither do online buyers. He emphasized understanding jadeite can only be gained through practice over years by comparing numerous products, only then can one truly master the art of jadeite. The transformation of the market from offline to online forms of trade is seemingly unstoppable, but the future is uncertain to traders.

Conclusion

"Betting" stones are rough jadeite, pebbles, or boulders with crust before they are cut open. Since the price cannot be judged until they are cut open, trading of jadeite rocks is merely gambling. Not just money, but something profound mystique about "betting" stones themselves drives people in pursuing them: their veins and grains, shape, colors of the crust, drying speed etc. as quality-like variables make "betting" stones exude with uncertainty, hope, and a "calling."

Over the years, traders have found their way of understanding "betting" stones and have developed a set of empirical knowledge as I have discussed in this chapter. But success does not merely come from this empirical knowledge. Rough stones of jadeite engender a life "betting" within a complicated trading scenario in Ruili. In the third section of the chapter I showed how interpersonal relations, business partnerships, and the encountering of the ongoing transformation of Ruili's jadeite market are all playing important roles in the life of "betting." In this chapter I have focused on highlighting the role of non-human actors and how the qualia of rough jadeite has configured a life of "betting" in Ruili's jadeite market. In the next chapter, I will look at bargaining mechanisms, which I see as a reflection of the interrelations among agents, jadeite stones, business strategies, and techniques that these different actors and agents actively negotiate in the changing dynamics of Ruili's jadeite market.

CHAPTER 5. BARGAINING IN A MODERN BAZAAR

A: "Eight thousand"

B: "Eight hundred?"

A: "Eight thousand!"

B: "Eight hundred?"

A: "No way! Seven thousand and take it!"

B: "No, dude. You're crazy! Five hundred is your deal!"

In their high-flown rhetoric, aggressive and certainly frolicsome attitude, a hasty episode of bickering caught me while entering an aisle in Yucheng's clamorous streaming base. A young Chinese male streamer was holding his phone with a tripod prop/brace broadcasting a live video sale as he was walking, and a Burmese trader in his longyi gliding by unfolded a red piece of paper wrapped in his hand, approaching the streamer he initiated a bargain. Glancing at the product quickly, the walking man responded. But impetuously they only focused on bickering on the price, in a rushing sort of vigor, without much time looking at the product. There are no cryptic hand gestures, and numbers of prices are called out clearly in Chinese. The subjects' solum countenance demonstrated that they are conscientious, obstinate, and serious. They are also obstreperous, after no budging in price on the two sides, they both marched away with their pride. This haggling, like one of the many buoyant and furious bargaining session, enlivened a seemingly ceaseless din in Yucheng marketplace.

"Qualia in markets" in this chapter depicts bargaining behavior as an idiosyncratic feature in Ruili. Rather than looking at bargaining language or speech, I focus on bargaining as practice and experience, and I argue bargaining activities in Ruili's jadeite market are interconnections of the ways that heterogenous actors and agents come to negotiate through interlockings in a market, as a reflection of market agencement (Callon 2021). I suggest individual visions, business strategies, multiple valuation parameters, border crossing policies, market rules and norms (Day's opening business ritual in section 3) play out as interlockings in bargaining. These interlockings might lead in any context to how different actors and agents might respond to a bargain. This shows not only the agents' capabilities of pricing, or jadeite stones that (might) constrain agents' decision, but also how market rules (Day's opening business ritual in section 3) play a role in bargaining mechanisms. Bargaining is thus a social practice in Ruili's jadeite market.

This chapter contains three sections: The first section conceptualizes bargaining in market exchange to show how it engages with existing scholarship. It is well agreed that bargaining is a form of mediation as well as a meaningful act (Polanyi 1957; Sahlins 1972; French 2000; Keane 2008; Calvão 2015; Khuri 1968; Rubin and Brown 1975). The second section explains what bargaining is, and how it operates in Ruili's jadeite market. The third section takes "Day's opening business" as an illustrative example to demonstrate "ritual negotiation" (Calvão, 2015) in Ruili's jadeite market.

I. Conceptualization of Bargaining

Bargaining interactions can be broadly found in many social, political, and economic arenas. In a common view, bargaining in economic life refers to a negotiation over price, interests, and service involving two or more parties. In a marketplace, bargaining is regarded as a main practice of trade in which consumers and traders decide on a mutually agreeable price for products and services. Economists tend to emphasize that a bargaining act is in a situation in which two or more parties have common interest to cooperate while at the same time have a conflicting interest over exactly how to compromise as a sort of zero-sum game (Muthoo 2000: 146). Economists' interest in bargaining has a theoretical purpose in that understanding bargaining is fundamental to the workings of markets and the prevailing monetary and fiscal policies (Muthoo 2000:147). They intend to view the essence of bargaining in the utility of gains or pay-offs over resource control, time, and scarcity for individuals as being rationally driven.

To critique such views, social scientists have looked at bargaining as a price-regulating mechanism in social relationships, and its functions and influence over social interactions and identity formations. In classic studies, bargaining in the West became forbidden in a sense as prices and services were standardized since the burgeoning of capitalism. According to Weber's (2001[1904]: 09) description: "The whole typically citizenry ethic was... held to be forbidden: to make words when buying and selling (haggling)." Many social scientists have looked at reciprocity or exchange in nonmarket or nonindustrial systems to see how bargaining can be favorable or dysfunctional. For instance, Polanyi (1957: 154) classified exchange at a bargained rate as economically "integrative exchange," as opposed to "decisional exchange" (exchange at a

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¹⁹ It refers to the first deal, a kick-off deal for traders in their business days, in Chinese marketplaces often framed as *kaizhangshengyi*, 开张生意 literally translated as "opening-up business deal".

set price). Polanyi (1957) states that "exchange at a fluctuated price" is unfavorable because it "aims at a gain that can only be attained only by an attitude that involved antagonistic relationship between partners" (155). Sahlins (1972) classified reciprocity into "generalized reciprocity," "balanced reciprocity," and "negative reciprocity," and argued that in "primitive" exchange, haggling, barter or gambling are more like "negative reciprocity" as "a matter of defense of self-interest," because the "participants confront each other's opposed interests, each looking to maximize utility at the other's expense" (1972:195). Like Polanyi, Sahlins (1972) views haggling as possibly containing some forms of violence and hostility.

Contrastively, recent studies have looked at how bargaining can reflect social-cultural settings in economic life more broadly. Khuri (1968) takes on a different view indicating bargaining as being two-fold, conflictful, meanwhile integrative and cooperative in both market and nonmarket economies. Khuri (1968: 698-699) explains that in middle eastern market etiquette, bargaining can be socially cooperative (in addition to socially conflictual) because of "instituting an atmosphere of common interest and trust, often leading to a lasting client relationship, or even friendship", Khuri explains (1968: 704):

Through the manipulation of cultural norms and symbols, a bargainer, whether seller or buyer, aims to eliminate suspicion of commodity and price and establish instead an atmosphere of trust often leading to client-relationships, and occasionally to friendship... "business tricks," such as overpricing, underpricing, and credit, are used, but even these tricks cannot be carried out without the initial establishment of trust and through an idiom of trust: kinship terms, polite formulas, observance of good manners. In the Middle Eastern case, the failure of a bargainer to evoke and manipulate this idiom of trust leads eventually to a failure in successfully consummating the intended transaction.

Khuri's analysis shows that motivations and factors cause bargaining or forbid it and that it is socially produced in different cultures. In markets, bargaining is economically formed when exchange is characterized by flexible price policy, by the non-standardization of weights, measures, and goods in addition to various other factors (1968: 700). In the case of a middle east market, bargaining is affected by gender and social status of traders. Khuri reveals the tendency of bargaining as being fundamentally out of material gain but with variations in different social conditions. Bargaining opens sustained economic relations and brings a form of order into

markets. From a social psychology perspective, Rubin and Brown (1975) examine the components of bargaining structure and bargainers as individuals, including individual differences in personality and background, interpersonal orientation, issue incentive magnitude and reward structure, and intangible issues in bargaining. This book unfolds the social influence of bargaining behaviors.

French (2000) examines bartering speech in a Guatemalan market as a particular type of discourse, the genre of bargaining. French (2002) argues that bargaining serves the dual function of communicating one's economic interests and conveying one's social identities in the larger social system. The speech different ethnic groups use in bargaining further reveals how ethnic Guatemalans understand their social values aligned with these identities in a hierarchical social order.

Bargaining is further complicated by a linguistic approach in anthropology in which social relations and materiality factor into the underlying "language of market" (Keane 2008). Keane (2008) argues for bargaining as a semiotic form in which "signs...experienced as material things-the sounds of language in the aural world...they are linked to the world of agents, objects and actions in ways..." (Keane 2008: 31). Keane states marketplace bargaining contains a moral and political rectitude, since "marketplace bargaining may help construct a social imaginary even across such unstable and unpredictable relations as those between souvenir sellers and tourists... Despite its apparent marginality, the market's meta-level discipline is no less fraught with both moral evaluation and resources for political manipulation" (Keane 2008:35). According to Keane, "marketplace bargaining is well recognized speech genre...tends to follow rather strict procedural rules...with some degree of uncertainty...is also high repetitive..." (Keane 2008: 32). Taking on Keane's semiotics of bargaining in the market, Calvão (2015) further posits bargaining as a "material process of social interaction" in his sophisticated analysis of "ritual transaction," where social and institutional relations permeated through diamond trade in Lunda in Africa. Bargaining techniques or everyday talk "connect materiality qualities (of diamond) ... bodily praxis and qualitative labor in process of capital reproduction... to forms of expert knowledge or the "language of the market" (2015: 193). Specifically, Calvão sees bargaining processes as "ritual negotiation" in which labor, knowledge and capital as ritual elements are reflected through use of language in the process of transaction. Calvão (2015: 200) regards "communitive modalities such as indifference and deference, ritual drama and play,

insult and joking, exoteric and esoteric knowledge" as reaffirming the negotiating power in diamond transactions. More broadly, Calvão (2015) demonstrates how materials are aligned inbetween physical substance and the socially mediated experience of trading diamonds, and with reference to materiality and sociality. Building upon this literature, bargaining in market systems is a meaningful act, a "semiotic mediation of the marketplace...should be a crucial component of any political and moral understandings of their workings" (Keane, 2008: 28). It is possible to navigate how commonplace bargaining can be useful to understand the sociocultural or political components/workings in a market.

II. Bargaining in Ruili

When the market is in full swing, and when traders spill onto marketplace clusters, entering there is like experiencing a midst of pandemonium. You hear streamers ostentatiously shouting at their screen, then bursting into laughter, or petty traders coaxing passers by to their precious products. The intense flow of people and goods with bargaining invigorates Ruili's jadeite market into a pell-mell yet earthly and merrily locale. In Jiegao Cluster, counters and stalls are lined up meter by meter, with elbow-to-elbow people jostling in the aisles and pathways. Price haggling is straightforward and aboveboard. It is very likely any customer would be approached by sales promoters who persistently peddle their jewelry or contrive to persuade one to check-out their stalls. All this so ostensibly puts a customer in a commonplace bazaar, rather than a genteel jewelry market. Yet, the hoarsely cries, roaring, and whining of such a helter-skelter situation never seems unproportionate to locals even when a piece of jadeite sold can be thousands of dollars. Bargaining is the most common and idiosyncratic feature in Ruili's jadeite market. By any means, if one purchases any kind of jadeite products without bargaining, it would be extremely odd. In my observation, bargaining is the way of conducting business in Ruili. Price is not fixed here. Traders in Ruili intend to say "every piece (of jadeite) is unique. They are not the same."

1. What is a bargain like in Ruili's jadeite market?

What is a bargaining act like in Ruili's jadeite market? In a very common way, buyers at the counter often inquire about the price from sellers to understand a price range. Sellers often offer an "ideal" price at first, and if buyers are interested, a bargain then begins. It is even more

common, in the paths and sidewalks at the market clusters, for sales promoters to jump in front of passersby, showing their products in their hands while inquiring how much potential customers are willing to pay. In my experience in Ruili, it is never considered an offence if my offer is far from a seller's expectation. Usually there is no body language and no cryptic signs, whether Burmese and Chinese, insiders and outsiders, traders are straightforward in their price numbers as the generic "market language" (Keane 2008). Even when dealing in high quality jadeite, negations on price are considered de rigueur and necessary.

In Ruili's jadeite market, bargaining can also be dramatically coded and performed with maneuvers, strategies, and tactics. For instance, in a face-to-face transaction, buyers pretentiously act like they are giving up a bargain and feign leaving to trigger a reluctance in a deceiving minimal price of seller. If in this moment sellers realize the business would be truly gone and the deal is not that bad, he/she immediately would take his/her refusal back and rather capitulates by selling on the final call. In a centralized marketplace, a bargain can be fierce, buyers may hop from one counter to the next, having multiple choices to argue for a better deal. Bargaining does not only apply to cash-and-carry modes of jadeite trade; it is also prevalent in newer live-streaming sales.

In Jiegao streaming base, online sales bargaining usually involves three parties: "product owners," the sellers who in fact do not directly run online streaming accounts by themselves; streamers and hosts as middle agents, who often do not own any real jadeite by themselves but are good at sales promotion in streaming²⁰; and online customers/buyers. Compared to face-to-face offline transactions, bargaining in live streaming usually goes apace and agile. Sometimes a bargain is geared by a streamer for bidding on a specific commodity, sometimes it is geared by how much a seller is willing to let go of his/her products for. These conflicts and compromises are communicated through digital devices, smart phones, and iPads on the internet through streaming channels.

Bargaining in live streaming is no less fiery than offline bargains. In the live streaming base in Yucheng, many of the hosts come in the late afternoon (some even start from the early afternoon) and work until midnight. Hosts bring their camera devices, usually a smart phone (or more than one), a charger, flashlights, a measuring calibrator, a display pallet or tray, or a piece of fine cloth to lay products upon. They come to their registered stalls, and "product owners" or

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²⁰ In some cases, there are some previous retailors who conduct streaming sales by themselves.

carriers (who work for a boss) will come and pass on their products to the host to sell or auction. The bargaining happens with no stereotypes, it is either the "product owners' who offer a price, or the hosts offer their estimated price. They put the products into the video shoot and offer a first price, with the whole process being audited (or even videoed when hosts try to show the customer how the owners look) through live streaming broadcasts. The bargaining occurs in a simple manner, with each party holding their stance with a price. The host (who typically does not own actual jadeite products) is in the middle, and in order to promote an agreement between a product carrier and the customer, hosts will argue for both parties until the deal is achieved and he/she can draw a percentage of profit from the sale. Thus, it is required for the host to not only have a primary understanding of products, but also good bargaining techniques to seize a sale. It is common when a deal fails, for the host to continue to broadcast for another set of products, and product carriers will probably switch to a different host until they achieve success. In the Yucheng live streaming base, occasionally traders crowd around a stall, creating a commotion as if a drunken revelry or a raging tumult has occurred. When people swiftly condense and again scatter in fleeting moment, it is very likely some serious, yet dramatic online bargaining occurred.

Bargaining is not de facto rare in other retailing marketplaces, such as agri-product marketplaces, private clothing retail stores etc. in both Chinese and Burmese economies. In a generic sense, the key tenet of bargaining is negotiation over how much a seller is willing to sell and item for and how much a buyer thinks an item is worth. What affects a seller's and a buyer's decision involves a complexity of various factors in different contexts, one's own affordability, beliefs, business strategies, and other factors. The uncertainty and indeterminacy over price is neither merely just determined by physical qualities of jadeite, nor just simply one's own mind. It is constructively the interplay among various actors and agents.

2. What is a bargain primarily based upon?

In Khuri's (1968: 704) view "bargaining, an attribute of free market systems of economic exchange, serves an economic purpose, that is, to regulate prices in societies where suspicion and uncertainty of the value of commodities dominate." In Ruili's jadeite market, bargaining power is bestowed upon those who "understand" and "know" jadeite well enough. The mastery of this set of knowledge is directly linked to how one would place a price, or what one thinks a piece of

jadeite worth. In Ruili's marketplaces, a preliminary judgment on the price of a jadeite commodity involves a set of vernacular descriptions of physical quality and materiality, such "type-waterness" (*zhong shui*), grade, color, "cottons"/inclusions, craftmanship in cutting and processing etc. as I have discussed in chapters 3 and 4. These qualities may or may not simultaneously occur in one single jadeite commodity, or in other situations, these qualities occur with varying degrees all in one piece. To experienced traders, a bargain is first initiated by their knowledge of jadeite stones and the market.

Bargaining is depicted as almost a trade paradigm in Ruili's jadeite market, in the sense that almost anyone here does not buy any piece of jadeite without a bargain. But does this mean the jadeite market and its pricing through reflections on bargaining is totally random and unaccountable? Mr. Shan, the chief sectary of the Gem and Jadestone Association of Ruili (GJAR) shared a price range based on his 30 years trade experience and administration role in Ruili. He disclosed that among trading specialists, there is an accountable price range, particularly for middle to high grade jadeite. Taking bangles as an example, the high-level cabochons which contain a "full" Imperial greenness and good "type-waterness," are normally above 300,000 yuan (50 thousand US dollars) and the inferior ones are between 200,000-300,000 yuan; the middle level ones are between 100,000-200,000 yuan; the ones that are below 100,000 can still have good qualities such as color or "type-waterness;" and the ones below 50,000 (7.5 thousand dollars) are normally deemed as "good average" in quality. Anything below 10,000 will be considered common jadeite cabochons. There is a proverbial expression that "jade is priceless" referring to how in the market there is no limit on optimal jadeite. Mr. Shan has had friends who sold jadeite pieces for more than 50 thousand dollars and then took them to another market where the price again increased. At any rate, these sets of price-ranges can be only attained through in-depth trade experience and practice as inside knowledge. Those who master the jadeite and market prices are the best bargainers. But bargaining is still further complicated by various factors including one's vision, one's knowledge, one's strategies etc.

Mr. Togtong's story

Mr. Tongtong is an ethnic Rohingya Muslim jadeite trader who has been working in Ruili's jadeite market more than 7 years. Prior to this time he lived in several cities in China including Guangzhou, Chuxiong, and Kunming conducting jadeite business. Before he came to China, he

started to learn about jadeite in Mandalay with some of his friends in Myanmar. In Ruili, he set up his business with his two nephews that he brought from Myanmar, and they share a 3-meter-long stall in the east path in the Garden Area with his Burmese friends in Yucheng marketplace. In the morning to early afternoon, Mr. Tongtong stays at Yucheng marketplace selling his main products which are ring-surfaces, and from late evening he moves to a stall in Delong night market to sell jadeite bracelets. Mr. Tongtong speaks fluent Chinese, especially when it comes to anything with respect to jadeite, its quality, price, and mine or source areas as if his Chinese abilities are professionally trained for working in this field. However, he told me he did not specifically study Chinese in his high school, learning it was a natural experience since even in Myanmar there are many Chinese business people. In fact, many Burmese in Ruili at least pick up basic Chinese through trade experience and through years of practice they find ways to improve their Chinese quite well. There are also ethnic Burmese Chinese, and Chinese Burmese who are bilingual.

When Mr. Tongtong is not occupied, he and his nephew will swap places to scout at Jiegao District trying ferret out what others are selling in the market. Mr. Tongtong explained that it is important traders have a hint about what is circulating in the marketplace, for when one knows what is released in the market one will know better how much space there is to push and pull when bargaining. One early afternoon I was resting after my lunch standing by Tongtong's stall, as I constantly expressed my curiosity about how traders judge and how they bargain, Tongtong offered to take me on a stroll in Jiegao cluster. We sallied out to Jimao and back to Yucheng, somehow, we sauntered into the streaming section at the back, or perhaps were pulled in by the swath of people and boisterous vibration there. In 2020, the streaming section at Yucheng ran from afternoon till late night with streamers switching shifts at times. In a topsyturvy streaming base, streaming hosts are seated in several trenches formed by hundreds of meter long metal stalls broadcasting on their equipment with product owners outside clinching to stalls with their products displayed on their plastic jewelry trays or carried in their handbags. In between these streamers, occasionally, a stall is interspersed by several retailors, with more of them occupying spots further away at the back of the streaming section. Mr. Tongtong still comes here on occasion for his regular reconnaissance or just for killing time. In 2020, because of the closing of the border, jadeite bought from Myanmar was heavily curtailed. Though not a

good year for his business, ring-surfaces became less and less in Tongtong's stall. He proposed looking for goods in Ruili (instead of going back to Myanmar) as a buyer.

We tramped through stalls as onlookers. On our way out of the streaming base Mr. Tongtong slowed down and stooped over a stall. On the stall sat inky plastic display sets with latticework facing towards buyers on a raised tile so that without lowering one's head anyone could see all the products easily. Tongtong suddenly noticed something on the display set, and he stepped closer and took one ring surface out without asking. Under full watch by its owner, at this open-air stall with no glass top, Tongtong then fumbled his penlight out of his pant pocket and deftly put the light against this ring surface. The seller was a middle-aged Burmese in his longyi and plaid shirt, stood up inside of the stall with his arm crossed on his wrist. Stately he did not say anything but cast his glance at us courteously with a comely smile. After just a few seconds he initiated a seller's mundane warm-up overture and stated in a cliché "feel free to take a look." I nodded with thanks. Mr. Tongtong then passed the ring to me and started to check out another similar piece from the display case, a very light white-greenish ring surface, that looked a little darker and gleamed a high quality of translucency. Mr. Tongtong grabbed another two pieces in his hand and started to inquire about the price.

"How much?" exclaimed Mr. Tongtong in his characteristic insouciance, just as he usually spoke in his own business. For a long time, I'd observed Mr. Tongtong's bargaining panache, unlike in streaming squabbles, Mr. Tongtong was prone to haggle in a propitiatory, curtly yet earnest and forthright manner. He is general not, from what I observed, an irascible and frantic haggler. No matter how unexpected and irrepressible the circumstance of a bargain, even when he is desperate to promote his sale, he does not raise his sonorous voice. His qualm and eagerness are intensified only by a pressing reiteration and frequency to his pet phrases such as, "alas-alas," "boss," "you say," and "how much," indefatigably over and over, with wistful eyes under his swarthy eyebrow bolted on his forehead. His expression still exudes a peculiar emotional undertone. He is not an aggressive but candid bargainer.

(Back to the scene). The seller replied with something shortly in his lingo and Mr. Tongtong explained to me that this guy just said he prefers to sell four pieces as one set, otherwise single pieces would be way more expensive. Noticing that Tongtong had to explain to his entourage in Chinese, for the rest of the conversation they respectfully conversed in Chinese for my benefit.

"Then how much for four?" Mr. Tongtong inquired.

"80 thousand yuan". The seller uttered.

Upon making known his interest, Tongtong did not argue back immediately. From experience I have learned that in a bargain, unless one is resolved at a price, they do not easily rattle off a price back. For if a serious bargain is struck, one would then be remorse to take the offer, and then it will be ethically inappropriate and irreconcilable to accept. A serious bargain is an act of circumspection. Mr. Tongtong then calmly commented: "Oh my, this color. (The price you offer) too high!". The seller responded "type/grade is good and excellent "water" ...how much you say?" Tongtong ruminated for an instant and really chopped harshly at the price by replying with a total of 30 thousand *yuan*. The seller shook his head firmly. Tongtong now commenced with close scrutiny and gauging of the ring surface for an instant, holding it up high above his eye, putting the penlight again against the surface. Then he passed it onto me and asked me to spot the quality. It hypothetically occurred to me that the surface was apparently unmarred with great translucency. Nor was there a very conspicuous greenish color. Mr. Tongtong offered 30 thousand again to this Burmese seller. But this time the seller wheezed and frowned, he reached out his arm towards us, fetched his rings back and stowed them on the display board. "30 thousand! For another two small ones!" He looked at Tongtong and proceeded to pitch two different smaller ones from the display pallet which did not interest Tongtong at all. Mr. Tongtong then took out his phone and dialed his nephew to come and look. Just a few minutes walking distance away, his partner and one of his older nephews showed up on our side. They each took the rings and examined them carefully and muttered something in their language (His nephew only came to China less than 4 years and only speaks basic Chinese). Tongtong and his partner then seemed to reach an agreement, Tongtong offered 40 thousand for the set, but the seller still ponderously rejected this time. The seller instead persisted on 60 thousand and did not want to yield for less.

Mr. Tongtong was seemingly very interested but incredulously retorted again "Oh my. I am serious, the 'water' is fine, but the color is simple." The seller tipped his heads towards Tongtong and insisted that he could guarantee it was a worthy deal for Tongtong. In a short stalemate, Tongtong appeared to have a rumination in his look, and his eyesight lurked with a

strong desire, and he made a generous final call of 50 thousand. Still, seeing the seller standing motionless with no words, Tongtong confirmed and entreated "do we have a deal?" The seller did not give up his stance. Tontong turned away, and for a second, he looked back at the seller but did not speak. In this bright silent instant, he guided us to leave. We marched a few steps out of the streaming section where the stall was, and the seller scurried out of his stall, fluttered his hands with a dint of grim displeasure calling Tongtong back. With their compromise, a deal was instantly struck at 50 thousand.

It was a very candid and quick negotiation. Even though I normally do not unduly dissuade or wade into any of my informant's business, it seems this battle was easy and a little too rash for a big decision. I wanted to fulfil my role as part of Tongtong's entourage, so I double checked with Tongtong that he was certain about his offer. At that moment my apprehension pop out for two reasons: one being that I had stayed at one of my other informant's stalls in the same area who sells average to low quality ring surfaces and I witnessed the plight that he did not make any sales in nearly in two months; two, from the length of the time I had spent in the market, I learned to be rather vigilant in trade on account of my student budget and that anything out of my financial ability would be considered exorbitant and lavish. Tongtong then walked me to the side and whispered that in fact he had previously looked at this ring set a few days ago, and after several days search, he came back to them. He placed great confidence in his excellent judgement that the set was scarce in the market and that he could sell this set for 60 to 70 thousand yuan when he found the right buyer. Hearing that I was relieved. It seemed a little inexplicable for him to articulate the whole landscape of his judgement, and a little ungraspable for me to master all of that. But the core he expressed was a kind of a price range based on quality in his own standard. Tongtong insinuated that jadeite with great quality would not lose that much value, that anyone who knows how to pitch upon jadeite quality is good at what they do with their business. He also brought up a strange phenomenon that some products in some people hands can be stuck for a long time, but once they are transposed to other traders' hands, they can be highly sellable. From Tongtong's experiences, I found out it is true that different traders have different bargaining techniques, sales strategies, and different trade networks outside of Ruili as well.

Mr. Tongtong also implied that many long-term traders are familiar with each other (at least with their faces), with a length of time people remember each other. Mr. Tongtong's

bargain was rather simple and efficient, as he told me that "insiders/adepts know what they are looking for." I did not ponder this bargain too much, but I particularly noted Tongtong's bargaining story because most of the time he was a seller and this was the only time I saw him buying.

3. Other aspects of bargaining in Ruili's jadeite market

As explained, in most of my observations in the marketplace, the price of jadeite commodities is primarily based upon the qualia of jadeite. Mr. Tongtong's story revealed that knowledge towards jadeite and a grasp of the market makes a trader bargain well. What other factors affects the price of jadeite commodities? Mr. Hu whom I previously introduced owns a mini-factory processing jadeite cabochons in Pingzhou City and comes to Ruili often to distribute his goods. He explained to me at length about how he sets a fair price for his goods, which are not limited to labor cost and other factors. This would be analyzed by economists as marginal cost. He goes to buy semi-open sheets of jadeite and makes batches of bangles from them. For instance, a cut-open piece of jadeite sheet is bought at 30,000 *yuan*, and made into 10 bracelets, then ideally the average cost of each bracelet is reckoned as primarily 3,000 just for material; the other costs include labor, salary, and machining cost, etc. However, Mr. Hu underlined how if the processed bracelets do not possess excellent qualities, he would end up underpricing each bracelet. Vice versa, if each piece contains excellent quality, then the price goes up to a regular price range circulating in the market where there's profit to be made. In other cases, pricing is affected by individual sales strategies.

As a cash-and-carry marketplace, daily bargaining in Ruili in most situations is short. There are exceptions though. In other cases, a bargain can also last several days. Mr. Kang, introduced in a previous chapter shared an old rule of bargaining with me. One of the times I was hanging out at his store I noticed a stone wrapped with pieces of cyan gunnysack with tape circled around on his tea table. I asked and learned that he was in the middle of a bargain. He referred it as da bao (打包 literally translated as packed-up), implying the stone is in the middle of negotiation, and in this process of bargaining the owner consented to entitle his/her potential buyer a length of time to bargain until both parties made a final decision, like a pending process; and in the course of the bargain, the stone should not be viewed by a third party or any new buyer. Until the bargain is closed or if the deal is not made, the owner can unpack the stone and

display it in public. Mr. Kang explained this is a well-known and accepted business rule and ethic for trading specialists. He commented that the earlier generations of traders are loyal followers who closely conform to these trade rules, unlike under the thriving of streaming sales which is causing a lot of these things to change.

It is worth noting that the current streaming bargaining operates in somewhat vehement and radical way, thus bargainers in streaming bases are inclined to be impulsive, straightforward, and apace to the quick rhythm of streaming. Not to exaggerate, but visitors from the West might find it almost uncouth and insolent. While in Ruili, after a length of time in streaming bases, one can find that this sort of ostentatious reveling and wrangling is common and acceptable. Sometimes bargaining is only a banter, sometimes a real barb. Madness from each party can be real since each party has their own standards. The "bargaining anger" recklessly comes and goes fast conforming to the pace of streaming. People seem to habitually bear a great deal of magnanimity, no matter how fierce a bargain was/is, once it ends, they reset themselves very well into the next bargain. Streamers and "product owners" can brawl over something swiftly and then move to the next target with a reset calmness.

In their quarrelsome and dramatic way, bargaining in streaming broadcasts is like a farce, with each party "chopping" (kanjia 状物) price ferociously, and they do so furiously at the same time reasonably without worrying about upsetting their counterpart. If streamers do not own products, their roles are as middle agents means they have to bargain for and with both online viewers and "product owners." With so many choices in an open bawling marketplace, one can easily accept the act that bargainers desire to "make a scene" in an open space, making themselves to be audible or attractive. Outcries in the roiling streaming base are everywhere. Sometimes traders contrive to perform a gimmick in the live show to attract viewers online, making pleasant efforts to entertain and to promote sales. Or sometimes it is a smokescreen serving as a bait, showing off streamers' relentless toiling to bargain for their customers. To recap, the chief element of an instance of bargaining is the ultimate confrontation or agreement on price, with each party maximizing their own cost and profit. But the price is not merely determined by the physicality and materiality of jadeite stone, for bargaining is an individualistic act and thus there are individual factors that play into bargaining as well. It is the interplay of human and non-human actors and how they each play a role in bargaining in Ruili's jadeite market. In next section, I further introduce bargaining in a special circumstance. I attempt to highlight how bargaining is not only economically set, but also culturally and socially constituted.

III. Bargaining in "Day's Opening-up Business"

It was a damp, drizzling morning in Jiegao in late September. The marketplace was back in full resumption from a second short moratorium as result of COVID-19 lockdowns in 2020. I arrived at Yucheng marketplace around 7:30 for my daily lingering, exchanging pleasantries with my informants and treading through stalls here and there searching for chances I could barge in for a fluke instant interview. I had gotten used to immersing myself in the hustle and bustle of the marketplace, the incessant flow of crowds and goods made me feel elated, and I was constantly bestirred by the skylarking of the morning marketplace activities.

1. The first bargaining episode

A brisk zephyr sprang up in the marketplace as the scorching summer heat was abating. I was at Mr. Ruyi's stall at the Garden Area in Yucheng marketplace, a rectangular shaped marketplace-cluster in Jiegao. As detailed in Chapter 2, this area is a closed, low, modern bazar with old-fashioned looking stores built on the walls around the sides and with stalls set up throughout the middle areas. But by and large, this area is well known for high-quality ring pieces and for the many Rohingya traders working here. An old green oil painting advertisement board with white calligraphy says, "Dream Jewelry Designing and Processing," hovering high in center of the shop, at the sharp bleak corner in the middle area of Yucheng marketplace. Ruyi rents a two-meter-long stall in front of this shop. I came here for a lull whenever I was in Jiegao or when sometimes I needed to scribble notes down quickly. Sometimes I just jumped into Ruyi's stall and seated myself with a dealer's view facing towards Garden Area to enjoy my chances to be consigned shortly to watch his stall when he might occasionally be away running errands. I found this is quite a chance to be able to "participate" in my research and at the same time not overstep my informants' business.

On this morning, a cryptic deal strikes me. I was sitting next to Ruyi who was recommending a visit to a temple the following week. Two young ladies paused at the front of the stall, bewitched by a small oblong shaped pendant carved in the image of a monkey. With undivided attention on the pedant, one of them reached out to the totally open-air stall white

gradient display frame and grabbed the monkey pedant with curiosity. Staring for an instant they inquired about price. Ruyi reeled off 5000 *yuan* for his first offer. These two ladies continued examine the jadeite pedant closely as they muttered something to each other, and one of them then noticed a tiger pedant on the display board and fetched it in her hand as well.

I had sat myself in the seller's seat and was thus closely scanning them: both of them looked about mid-20's to mid-30's, one with a long curl in her T-shirt and the other ponytail ringlet bundles with a shirt topped dress. From their light complexion and countenance, they were very likely from an east past of China. Ruyi watched them at ease, and no sooner did he intersperse politely that these pieces were from the same batch made from one boulder. Seemingly utmost interested, the potential buyer groped the monkey pendant, and took it high above her forehead trying to get a sight under the sunlight, and a few seconds later she put it down against her companion's chest as if she had something carefully going on in her mind. Ruyi started to praise the beauty of his jewelry, with only brief words and a genuine smile in a kind of tepid manner like he usually does. Unlike other traders who are often ebullient and anguine in very talkative way, Ruyi is a more like an imperturbable dealer who is of few words, very amiable and unassuming, speaking in low pitch and guttural voice. He is innately urbane and deliberate in his demeaner.

Halting for an instant, the ponytail lady began to inquire about the price for the tiger pedant as well, getting the same response of 5000 from Ruyi this lady put the tiger pedant back. They whispered something to each other. Ruyi now loosened up a little implying he could offer a little discount if they were buying two pedants together. The customers did not bargain back immediately, and after a moment of hesitance and whispering, they asked about whether there was a quality assessment certification for the monkey pedant (quite often some certifications are provided during a deal). Ensured by Ruyi that the certification book would be sold along with the pieces, the monkey pedant holder put it back and started to bargain in a conceited and determined attitude: "2000 at most!" Ruyi chuckled and shook his head while eying on his display board. Sounding a little conceited (to me) the two women swayed to Ruyi by saying they had sauntered in the marketplace and targeted upon a few choices already, insinuating they had a genuine interest as "real buyers," pitching upon this monkey pedant for their relative who wanted it for her grandson's birthday. Ruyi continued to praise the preferable character of the pedant and rejected again in a sincere and humble way, insisting that there was no "cotton" in the pendant

and that he did not overprice it at all. But all in vain, the two ladies again asserted they were determined to buy but for no more than their initial offer of 2000. Seeing that these customers had real interest, Ruyi grudgingly rejected while confessing that his initial cost for the monkey pedant was 900 hundred more, and that an offer of 3000 thousand *yuan* was the lowest price. The bargain entered an impasse. On second thoughts, these two bargainers looked at each grimly and by dint of tacit consent they started to go, or perhaps just feigned to leave.

They were now just a few steps away. Ruyi was looking down frowning upon the pedant, and suddenly, he changed his idea. Out of his stall he strode like a flash, with one of his arms lifted and wavering them back, he relented: "okay, okay, sister, come back!" These two ladies turned back promptly, a growing grin they capered back jauntily. "This is my Opening-up Business! You guys are lucky" said Ruyi in his glittering expression. They agreed to take the offer with alacrity. From there, Ruyi and these two young customers started to jabber with more eye contact in courtesy, and the tension relieved from their previous bargaining battle. Their conversation lighted up immediately in a more causal way. As Ruyi crouched down deftly under the stall rummaging for a wrapping box, he painstakingly praised the quality and beauty of this pedant emphasizing he only offered this price as his "kai zhang sheng yi 开张生意" (literally translated as "day's opening business"), the first deal this morning. But seemingly, these two ladies did not care about much this as long he chalked up the deal. From their post-bargaining conversation, I learned these two buyers were from Zhejiang Province and the pedant buyer was running a boutique store and just came to Ruili for a sightseeing sojourn with her cousin. For them there was no difference from a normal bargain. Ruyi wrapped the monkey pedant in a sliver pouch, put it in a little wood casket, and then he put it in a light green plastic bag along with a plastic card certification sealed by a hyperthermal ironing pressor. As he handed it to these ladies, he again stressed how lucky they were in their conversation as his "day's opening customer," farewell thanks from both parties ended the transaction.

2. A second bargaining episode—the deal strikes back

Ruyi gasped, seemed a little relieved when they left and as we sat back behind the stall, he explained that this week he did not have any cash-and-carry deals from tourists, because apparently the COVID-19 pandemic had impeded traveling and tourist numbers had plunged to their lowest in years. Ruyi's major sales nowadays relied on contracts with streamers and some

retail sales introduced by his old networks. As we were prating on about something, the two buyers abruptly showed up again standing in front of the stall. Before Ruyi said anything, the pony-tail lady outrightly confessed she was interested in the "tiger pedant" as well and was thinking to buy it for herself. Politely probing Ruyi, she inquired whether she could get the pedant as her cousin just did a while ago for same price as of 2000. But this time she received an oblique but clear rejection, Ruyi shook his head vacantly. These two ladies were completely boggled by such a blunt refusal, as they cringed in a short interval. Unwittingly they made eye contact with each other, then they turned to Ruyi and tentatively gnawed upon the price. Ruyi insisted that it was 900 hundred more than the original production costs plus a transporting fee and that 3000 was the final price otherwise he would not make profit from them. They stood in front of the counter incredulously with perhaps a lot going on in their mind.

Rather than haggling over price, Ruyi earnestly explained that the price they got the previous monkey pendant for was a worthy deal and that they would find no lesser a price in this market for similar quality. Ruyi placed utmost confidence in his jadeite and said that in several years their monkey pendant would continue going up in value based on the quality. "Please, boss, just for a friendly help (to us)." "In the future we will come her to buy your jadeite more often" these two ladies harped. Fetching a long breath, Ruyi casted a complicated look upwards with his face twitching a little, and still gave headshake in rejoinder, he accentuated keenly that the first deal was his "Day's Opening Business" that he already underpriced his product. The two sisters persistently kept badgering Ruyi by referring to themselves as "old customer" as a way of connection, and the lady conceded that she was willing to add 200 hundred for a total price of 2200. Ruyi insisted that he would not budge, and it was 9 hundred *yuan* short of his primary investment cost on the pedant. Ruyi rejected them firmly. The lady was holding the pedant askance and turned to her cousin and mumbled something standing irresolute for a moment. A muffled silence reigned. Apparently, their blandishments produced no effect upon Ruyi, he sat still, stern about his jadeite. Seeing Ruyi was sturdy and of no compliance, either feeling recalcitrated or distrusted, the two cousins retreated. Ruyi was not agitated, and he reiterated again in his guttural voice kindly that "anyone who actually knows about jadeite knows that it was a good deal." He did not make any profit at a price of 3000, and he offered 2000 for the first deal to kick off his day.

I pondered for some time without fully comprehending these events. Right after these cousins left, I fathomed out Ruyi's deal. Ruyi explained a cheerless aspect of this deal was that even for 3000 he was not hankering to make that deal. It was the price he had paid for each for a batch of animal carved pedants. He normally sells them as long as they are slightly more than his cost, but that day he underpriced the first pendant inasmuch for his "Day's Opening Business." He was willing to sacrifice his cost to win the bargain, for wining to start off a day is considered auspicious for a good day. Conversely, losing will be a harbinger for a bad day. Like Ruyi, to many traders, a failure in the "Day's Opening Business" will prick them emotionally as somewhat of a predicament, making it more likely the deals for the rest of the day will be portentously doomed. The first deal in a day "opens a day."

I was staggered by this morning deal. As a matter of fact, as a mainland Chinese, every now and then I definitely have heard and experienced traders in all kinds of marketplaces use the pet phrase "Day's Opening Business." Never did I pay much attention to what it meant to them. It was engrained in me by my mother since I was young that bargaining is worth trying in any context. It is "no harm no foul," to try. But as a young child, I was never good at battling with merchants. That is mostly why I personally prefer to go to a supermarket with fixed prices where sales discounts satisfy me fairly. I took it for granted that sayings like "Day's Opening Business" is just a go-to blandishment. However, Ruyi's morning elicited how meaningful for a trader a "Day's Opening Business," bargain can be. For in fact, I did not see cash-and-carry transactions made so frequently with Ruyi often in the year of 2020 (with COVID impacts). He was never too stubborn about his sales and he told me he makes every sale as long as it is close to his primary cost or sometimes even a slight short is fine. I knew Ruyi had always been a modest and unassuming trader, not a speculator. It is rather simple for his sales strategies: Even if the price for one piece is a little short, if another piece sells well, there is still a total profit. During my fieldwork, I also learned that most traders in marketplaces try their best to promote sales even when the profit is limited, to many of them, to keep their goods flowing frequently is also a steady way to run business.

While for other people this "Day's Opening Business" may be more about just a sales strategy or a placebo, from what Ruyi explained to me it was a ritual and creed to him. Here I sketch out Ruiyi's foreground that informs this thinking. Ruyi is from Fujian province and has lived in Ruili for almost 18 years. He was brought to business by his relatives and friends who

were active in commerce. He married a Fujianese wife with four kids. Ruyi and his family are pious Buddhists. We were first put into contact by a common friend Quanquan (whom I introduce in the next chapter) through their religious group. A group that is informally organized by some local practitioners for communal religious activities, for instance, to go to the temple for various rituals on special occasions. One of the major activities that binds these groups outside temples are called "freeing captive lives," where they donate money to buy living animals most commonly fresh-water fish, turtles, eels etc. to free them in the Ruili river. They also do the almsgiving on occasions by providing meals that welcomes anyone in Ruili. I joined their "free captive lives" meetings regularly, as I found that not only was it a way to develop a cordial relationship outside of the market, but also a way of repaying my informants by donating a few hundred *yuan* each time as what they needed practically for their religious endeavors. They are a group of Buddhists who believe in education, modern medicine, and technology, and have additional rules for their religious life.

Ruyi now lives in downtown Ruili and comes to his stall in Garden Area in Yucheng marketplace from 8 am to 3pm. Ruyi sells (relatively) lower grade jadeite jewelry, mostly pendants and a few cabochons, and occasionally he collects a few pieces of middle to high quality jewelry. He explained that since 2018 with the live stream sales as a new means of sales, his business has gone down, but he has no desire to transfer his business into online trade. He wants to maintain a steady business while still having time for his family. As a Buddhist practitioner, Ruyi does not take anything for granted. Daily activities including business will be read into his beliefs.

Inspired by Ruiyi I followed up with a series of interviews about "Day's opening business" and garnered answers from many individuals. Some traders choose to doubtlessly follow this as a "market rule" without much deliberate thought for its logic; some traders rolled their eyes round big and intently told me it is real but magically and unearthly inexplicable; there are some traders who admit it is some "psychological condolence/placebo" rather than "superstition."

Mr. Lei, an atheist who runs a retail company of 54 employees covering major businesses through live streaming (mixed with some offline retailing), proffered a practical perspective about "day's opening business." He still follows the ideology of "day's opening business" because it is a commonly accepted view in many retail businesses, and it is accentuated in the

marketplace as something market special. He quoted geomantic omens to explain why some people choose to believe "day's opening business" as an augur of their day, but not necessarily in a "superstitious" way. It is "no harm" to buy a peaceful or positive start. To him, rather than being tormented by a predicament he tends to have "positive energy" and "special self-encouragement" for a peaceful mind. The success of a first deal of a business day is accounted as a lucky omen. He calls it "market doctrine" in the sense that, those who believe will perform it as a rule. Though keenly different in their perceptions towards why, traders regard their first deal of their day's business as something special, as a rather sort of "ritual" that they are made to be obliged and acquiesce to in practice.

To summarize, "day's opening business" refers to the first transaction of the day for sellers in their business, which henceforth can be in the morning (more often) or anytime depending on when one starts. In the so-called "day's opening business" bargain, sellers are less likely to "rationalize" their deal, and sellers rather try their best to strike a deal over reconciling an ideal profit or sometimes even the cost for their products. The success or failure of a day's first business is inclined to be rendered as an exception, or as auspicious or ominous for the rest of the day by traders themselves. Whether it is psychological condolence, economic strategy, or to some traders a superstition, when traders are reconciled to make the deal complete, it is a like "ritual transaction" (Calvão 2015) that goes beyond the logic of "sell high and buy cheap." It creates a moment in which the bargaining power of sellers is re-positioned by social norms and cultural factors.

Conclusion

In this chapter I have highlighted how bargaining is a featured type of tug-of-war and a trading paradigm in Ruili's jadeite market. Bargaining behaviors exemplify "qualia in markets" in a way that the price of jadeite is primarily bargained based upon the qualia of jadeite commodities that individual traders hold. In practice, a bargain is also affected by agents' knowledge (for instance their expertise that allows them to find potentials from jadeite commodities), capital, or individual preference that ultimately leads to how much an agent is willing to pay.

Bargaining offers a unique way to understand how individual agents negotiate and judge jadeite based on, for instance, their knowledge of jadeite (and market distribution), their

business/sales strategies, their own needs (as gift or purchase), and other social and cultural factors that shape their way of bargaining. There are multiple factors affecting the bargaining and the final pricing made on pieces of jadeite commodities. In Callon's analysis, he frames how goods are sold to buyers through "pitching," what he termed as singularization (Callon 2021:18). This is how goods are rendered desirable through prices agreed upon between a buyer and a seller. Callon's concern with singularization reminds us that the ultimate price itself, can be important, especially to buyers, along with valuation standards. As I have shown, various factors play into bargaining mechanisms. But this is not to say bargaining indicates an unaccountable price system in Ruili. On the contrary, it ultimately reflects the importance of sets of knowledge of jadeite, and experience and practice that confer these traders as specialists (or not). This can basically be understood as "the economics of jadeite," which might perhaps be different from orthodox economics (supply and demand or scarcity governing an economy).

There is an abstract aspect of bargaining that makes me ponders further on the relations between market rules/structure and individual agency. In any situation, there may be no agreed upon standards or valuation parameters and as explained in preceding chapters, there can often hardly any agreement among traders. The calculative agency of individual traders, for why he or she is willing to buy a piece of jadeite jewelry is diverse. (I do not intend to explore why individuals, for various reasons, value jadeite in this dissertation) Some are interested and influenced either by their families, media, their friends, and from experiences at a time in their lives, that ultimately motivate them to buy jadeite. This can be best understood in Giddens' (1984) structuration theory more broadly. It is the interplay of both non-human (jadeite items) and human actors that play out in a bargaining. In the third section, bargaining is further affected by ritual transactions, "Day's opening business" that often convert regular principles of bargaining technique. It is a way of understanding how other layers of social and cultural settings are weaved into economic life in Ruili.

In next chapter, I turn to look at private market organizations/unions, government institutions, and firms that how they play out in trade disputes, to further highlight "qualia in markets" in market management.

CHAPTER 6. THE ROLE OF MARKET ORGANIZATIONS IN THE MARKET-STATE COMPLEX

On June 27, 2017, news about a tourist in Ruili accidently breaking a pricy jadeite bangle was all over mass media nationwide. One middle aged female customer was trying a jadeite bangle in Yucheng marketplace and somehow the bangle slipped off her wrist to the ground and instantaneously broke into pieces. The seller claimed the price of the broken cabochon was 300,000 *yuan* (fifty thousand US dollars), the customer to panicked, fainted, and keeled over right in front of the counter. People on the scene called an ambulance and this woman was sent to a hospital and revived. Afterwards the incident raised a trade dispute over how much compensation should be paid for the broken piece? What institutions are involved in dealing with such disputes?

In this chapter I introduce how different actors and agents in Ruili's jadeite market adjudicate trade disputes and explain how these different actors and agents consort with each other to negotiate and cooperate in market management, regarding what I call as a "market-state complex." These private organizations, the Gemstone and Jadestone Association of Ruili (GJAR) and various "Gem and Jadeite Quality Inspection" organizations have played an indispensable role, (for instance in quality inspection and appraisal) in market management. Thus, "qualia in markets" highlights the specialization and expertise on the knowledge of jadeite in these market organization, and I argue the master of knowledge of jadeite (chapter 3 and 4) are at the core of current market management. Given the indeterminate aspects of pricing of jadeite highlighted in the preceding chapters, this chapter showcases the liabilities of Ruili's jadeite market and how this market operates to regulate trade on the ground.

This chapter engages with current scholarship on state-market relations in China that previous scholars have discussed, which will be reviewed in the first section. The second part provides a synchronic snapshot of current market management in Ruili's jadeite market, and what multiple agents are and what do they do in current market management. By saying market management, I refer to strategies and regulations that are established to maintain market order, and actions carried out by these institutions in cracking down on unlawful trade and counterfeits, to protect the rights of both consumers and traders. In the third section, I specify and describe two private organizations to highlight their prominent role in trade disputes in market

management. I show how the role of these two organizations is consolidated by the thriving of livestreaming sales and the contingency of trade disputes that are produced.

I. Ouestion

As a member of the public, I was curious how the above incident described in the opening of this chapter was settled. I followed up with details during my fieldwork and interviewed Mr. Shan, secretary of the Gemstone and Jadestone Association of Ruili (GJAR), which was directly involved in the case assisting with appraisal and finalizing compensation in the dispute. I learned that shortly after the customer recovered in the hospital, questions regarding compensation and responsibility between this customer and the jadeite owner were brought to the table by these two parties themselves. The accident was clear: This female customer, Ms. Fei from Jiangxi Province was on a short trip in Ruili for sightseeing. While strolling at Yucheng marketplace one an early morning, she rested at a counter, enticed by a jadeite bangle she grabbed and put it on her wrist. She inquired about the price and was told that it was worth up to 300,000 *yuan*. Ms. Fei then tried to take it off. However, in the next instant the bangle accidently slipped off her hand and dropped on the concrete ground and shattered into pieces.

At the beginning, the two parties, Ms. Fei and Mr. Liu tried to settle the dispute over compensation on their own, but it did not work out due to such expensive cost. According to Mr. Shan, Ms. Fei was only willing to pay to 30,000 (5 thousand US dollars), and the owner Mr. Lin wanted a full compensation. Since the two parties did not budge, the case was reported to the Market Regulation Center (of the Industrial and Commercial Bureau of the Ruili government), where a mediation process was initiated along with the Consumer Association, the police, and GJAR Board. The mediation procedures went through several rounds of consultations and several negotiations, but still, after several days these two parties could not reach an agreement. Eventually the case was handed to the local court. However, no matter what institutions take charge, one of the key issues was the appraised value of the jadeite bangle, that is, an appraisal of how much did it was really worth/costed, and what institution or person had authority to finalize the price and the compensation?

In court, there was more evidence taken into consideration during arguments for the lawsuit, but the key in court's final decision were deliberations around the appraisal of the

broken bangle, a determination that judges and attorneys could not merely determine on their own. The primary resolution was that the material from the broken bangle was to be inspected again, along with its previous certification card provided by a gemological lab, and the committee of the GJAR then took major roles in appraisal (of quality and price). With GJAR's appraisal statement, the local court decreed that Ms. Fei was responsible for 70 percent of the cost of the broken bangle and that Mr. Lin would a absorb the costs of the remaining 30 percent. In the verdict the total price was finalized at 180,000 *yuan* (30 thousand US dollars). After the final court order, the two parties finally signed off on the verdict and the case was closed²¹. This incident has gone viral on the internet, and the appraisal on the broken bangle arose attention nationwide on the mass media. In the appraisal process, several appraisers (trade specialists and gemologists) from Beijing were also invited to consultations to ensure transparency given the circumspection of the case.

This case revealed, jadeite appraisals cannot be merely assessed by attorneys or juries, or simply any other government institutions²². The local market organizations, the Gemstone and Jadestone Association of Ruili (GJAR) and quality inspection labs (more details in section three below) played a key role in this case. The importance of these private organizations in Ruili's jadeite market is quite distinguishable, because unlike other industries, such as with clothing or electronic devices where the appraisal can at least be primarily judged by set price, which is determined by several government institutions, such as the Price Bureau 物价局 (The Appraisal Commission 价格认证中心), the Bureau of Quality and Technical Supervision(质量技术监督局), and authoritative research institutions etc. that work together through their assorted procedures to finalize assessment. The vital role of GJAR, and its ascending importance in jadeite and gem market management and regulation is thus critical, and to some extent, quite exclusive. The committee members of GJAR cannot be purely gemologists or geologists, but rather their competency needs to be fulfilled with in-depth knowledge of jadeite stone, lengthy trading experience, and systematic views of jadeite markets as well.

The relation between GJAR and government institutions touches on the current discussion on market-state relations in China. Earlier trends studying market-state relations in

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²¹ This is the first part of the story ending. Later there was a third party that stepped in with a different strategy agreed upon by three parties.

agreed upon by three parties.

22 In Chinese political system, legislation, administration, and judicature are in general recognized as public/government institutions.

China have focused on the period since the 1980s with "market reform" (shichang gaige 市场改 革) and "opening up" (duiwai kaifang 对外开放), also referred to as post-Mao China. These studies examine how the economy was transformed and adjusted into a marketized form more broadly and its influence on life, contrasted with the previous planned economy (Kipnis 1997; Yan 1996, 2003, 2009; Rofel 2007). Some of these studies have looked at how market reforms have configured social relations such as *guanxi* in post-socialist China (Yang 1994; Yan 1996; Kipnis). Yang (1994) unravels the specific cultural, historical, political, and economic forces in socialist urban (not rural) China between 1980 and 1990, and how they have come to mobilize and amplify *guanxi* practices, deploying and attending to a multivocal discourse in the Chinese cultural repertoire. Yang (1994) treats guanxi as a description of social fact for depicting the interpersonal relations, or networks of personal connection in China. She proposes understanding these interpersonal relations from civilians' perspectives, as a "people's realm," as a way of mitigating state power and control (1994: 174). In a different perspective, Kipnis (1997) argues the practice of everyday social relations in post-socialist China should be seen as a process of subject-making, and that "both objectivism, which lays out rules of human behavior independent of individual consciousness, and subjectivism, which presupposes an individual will that transcends social and historical inertia, omit processes of self-formation from social analysis (1997: 9)". Kipnis (1997) argues that it is in and though *guanxi* practice that a certain type of subject is made.

The emphasis on subjectivity is also seen in Rofel's work. Rofel (2007) has insightfully captured China's 90's as "desiring China." She argues that in post-Mao China, Chinese citizens were desiring subjects casting off socialism to find their true inner selves, and that these inner selves occurred through public allegories. These new forms of subjectivity have developed along with post-socialist transformation, some of which are connected to neoliberalism and its associated privatizations. The specificity of desiring practices in China lies in the efforts by the Chinese state and its citizens to overcome their socialist past. In Rofel's analysis, post-Mao China was not confronted with a seamless totality called neoliberalism that it merely adopted from the West. Nor did the Chinese state impose a set of neoliberal policies that then shifted citizens' desire. Rather, the 1990s in China witnessed a historically specific self-conscious enthusiasm for coherence through the search for a novel cosmopolitan humanity.

The above studies have revealed how China's social transformation, from planned economy to market reform, have had a profound influence on the social change of life. Markets here are implied as a meta-category of economic system in post-Mao China. Ong and Zhang (2008: 2-3) argue that market reforms in China have created a paradox in the pursuit of privatized initiatives, private gains, and that private lives coexist within political limits from state control. Ong and Zhang (2008) use "socialism from afar" to refer to the interplay of the power of the state and the power of the self to reveal the crisscrossing and interweavement between privatization and state control/rule that is not limited to "market activities." These activities include a diverse range of techniques that optimize economic gains by priming the power of the private self with multiple meanings and localizations as entanglements of privatization in contemporary China beyond purely economic discourse.

We can draw a common theme from these studies, that a meta market system established since post-Mao China after 1978, has created social transformations, contradictions, and new traits in different aspects in various parts of Chinese society. Ong and Zhang (2008) have revealed that in contemporary China, markets do not dismantle the socialist apparatus but rather create a space to offer individuals the chance to exercise their private choices within which political limits are still often set by state. Ong and Zhang (2008) unfold that markets in China can be reviewed as a governing strategy of the state to set the citizens free from some constraints and to promote economic growth.

In another central theme, a debate centers on state and market relations more directly by looking at market-driven entrepreneurial capitalism and state-dominated crony capitalism. On one side, there is a view that the state-controlled economy has widened rural-urban disparity and increased China's inequality (Huang 2008 cited in Osburg 2013b). On the other side is the opposite view exemplified by Andreas (2010 cited in Osburg 2013b) who argues that the privatization at all levels of the economy, including state-owned enterprises and the privatization of rural economy is what has caused the economic inequality in China (Osburg, 2013b: 2). In between these two opposed views, Osburg (2013) insightfully captures the complexity of market-state relations in China as he argues for a perspective of "informal state-business networks" to understand the permeating of two opposed views in Chinese economy and market. He states "State-imposed controls of the economy can theoretically help shield ordinary Chinese from the sharp edges of the global market and the highly uneven playing field of domestic

capitalism. But these same controls can also facilitate the dispossession of ordinary citizens and accumulation by both private and state-owned positions" (Osburg 2013b: 3). From a micro perspective, his ethnography exemplifies in the real-estate market in China, how government officials and business elite, entangled through moral economies of *guanxi*-networks are at the heart of "capitalist" development in Chinese society, rooted in kinship, bureaucratic hierarchies etc. Osburg (2013a, 2013b) in some way shares a similar stance with Nonini (2008: 161) that "*guanxi*" creates intimate engagements in contemporary China with the state, markets, and persons in everyday life.

Public media tends to view economics and markets in China as under an "authoritarian political system" and as a form of "state capitalism." It is said the current state takes an interventionist approach towards markets strongly, which involves intensive industrial policies across a range of sectors, a clampdown on the private sector, and greater support for state-owned enterprises²³ (Mazzocco and Kennedy 2022).

These studies have stayed within, or outside of a market to explore market-state relations. In this chapter, I take a market as a direct research object, to further unravel how market and the state work in market management in a hybrid form of both state-monitored and a privatized market system. Instead of saying "market versus state," I emphasize "market and state:" China's emergent form of capitalism and market should be conceived of oriented by multifarious forces, both neo-statist *and* neo-liberal; the Chinese market system combines private capital and unfettered market force with neo-statist reinsertion of government management (McNally 2019). This chapter provides an example to show, to what extent, state and market are entangled in economic settings. How do they each occupy their role, generating their own forms of power?

II. Market-State Complex:

Management and regulation among multiple institutions

In Chapter two I introduced Ruili's jadeite market as a nexus node in cross-border jadeite trade networks from production (in Myanmar) to consumption (in China) over the past two decades, and I highlighted how I regard Ruili's jadeite market as a competitive retailing/wholesaling market with a small-scale carving and processing industry. Here from

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²³ Big Data China https://www.csis.org/features/public-opinion-china-liberal-silent-majority

inside of Ruili's jadeite market, I explore how different actors and agents, firms (including traders from Myanmar) and organizations together play their roles as both a "visible hand" (administration and management from government) and an "invisible hand" to sustain the operation of the current jadeite market. To put it another way, I investigate how Ruili's jadeite market operates on the ground, how it is set up, and regulated.

Ruili's jadeite market is directly controlled by state regulation (with business permits, administrative market orders/policies, verdicts and appeals in lawsuits etc., which in China all belongs to Party-state institutions). These actions are also monitored by the eyes of private market organizations (such as the GJAR, and several gemstone and jadestone quality supervision and assessment institutions that produce quality and grading certifications). I discovered that both state institutions and market organizations play a role as a "visible hand" in market management. But this is not to say, there aren't "invisible hands" like Bestor (2014) highlights in the Tsukiji fish market in Japan. Social ties such as family firms and *guanxi* are important "institutional structures" that govern the operation of interpersonal relations in Ruili's jadeite market. My emphasis here is rather focused though on the "visible hands" and how they secure a healthy trading environment in Ruili's jadeite market.

One of the important features of Ruili's jadeite market is the expansion from traditional in person cash-and-carry transactions to newly developed live streaming sales, which has directly triggered new modes of market management. To expound on how the new transformation to live streaming sales have wrought the interlace of different institutions, I provide a foreground of this transformation to new online sales.

1. The transformation from face-to-face trade to live streaming sales

So potent are the influence of new e-commerce models and live-streaming sales in China that they have become a push-and-pull force in Ruili's jadeite market. On the one hand, the influence of live-streaming sales in other types of business is a lure to traders, and the efficiency of live-streaming sales entices jadeite traders for innovation. For instance, even rural farmers have embraced live streaming to promote goods ranging from rice to smoked beef, as "local specialties." On the other hand, with the impacts of COVID-19, rigorous travel bans, and temporary closures of the border have pushed jadeite traders to seek new ways of expanding business to keep their goods flowing. The ultimate thriving of live-streaming sales has directly

set off the building of several streaming bases, and above all things, has engendered new challenges in market management. Subsequently, I suggest, that live streaming trade has propelled different institutions to come together in more significant ways than before. Below I will explain how this transformation occurred based on interviews with entrepreneurs who were in direct charge of the establishment of the streaming base and its supervision. I also tell stories about how individual traders are grappling with this transformation.

The booming live-streaming sales have taken place under the big picture of overall ecommerce development and digitalization in China since 2005. China's e-commerce has developed from earlier website forms, to diversified direct-sales modes, such as popularized WeChat sales and cellphone apps, to most recent live-streaming sales. The major online shopping websites such as Alibaba and JD.com are the earliest online platforms in e-commerce in China. WeChat was launched in 2011 and quickly since just later two years has dominated China's online communication as major tool outranking text messages and other online applications such as QQ. Beginning in 2016, many tech companies launched live streaming apps such as Douyin (Tiktok in the US), and since 2018 almost all mass media (Such as Weibo or Wechat) and e-commerce platforms have added live streaming channels. Livestream ecommerce describes the fusion of interactive video with online buying and selling, a new sales model in which retailers or producers can sell products and services via directly online video streaming, that enables buyers to place the order without having to navigate away from the streaming. It offers an immersive experience and interaction compared to isolated and passive modes of traditional website e-commerce. In streaming, online viewers/buyers can video-chat with streamers, asking questions, and share their questions with other online subscribers as well. At any given time, streamers can perform their skills, such as singing, dancing etc. to attract their viewers and entertain their audience. Currently, popular streaming platforms such as Douyin (Tikto in the US), Taobao and T-mall Live, JD-Live, Kuaishou, Yi-live etc., since launching, have played a major portion in online retail with billions of subscribers. Early on, these livestreaming channels targeted recreational use and entertainment to attract users and with more and more followers they then developed targeted business and sales channels.

Unlike other streaming sales categories such as clothing, electronics, furniture or any other types of groceries sold online which are easily accepted by Chinese consumers, online jadeite sales especially in Ruili have grown at a much slower pace. One of my informant's

insights offers a reasonable explanation. He explained how if he is spending thousands of dollars on something precious, he intends to go to a brick-and-mortar store for closer inspection and with multiple choices where he can experience, touch, and feel the jadeite with his hands. To him, buying jadeite online would be too far-fetched. He also considers that in a store it is likely easier to return items and acquire a legal paper warranty. Most traders in Ruili did not expect that online sales could occupy a significant portion of their business. To many dealers, "Ruili" itself has been a brand, and Ruili's jadeite market is one of the largest face-to-face jadeite markets in China, denizens and tourists from all over the world come to Ruili in quest for their precious fortunes.

Mr. Lee, the manager of Yucheng Ltd. who was in direct charge of the building of the very first live streaming base in Ruili unveiled how the rise of streaming took place in Ruili's jadeite market a rapid-fire speed overnight. According to him, prior to the streaming populace, traditional styles of e-commerce such as through website sales of jadeite on Alibaba, Taobao, and T-mall existed, but were very limited and mostly occupied by some big companies outside Ruili. These companies had access and capital to launch their marketing online. In 2015, there were only maybe 4 or 5 shop owners in Yucheng marketplace that had partaken in running streaming sales. Most of traders had no interest in expanding their business digitally at all. By late 2016, a few traders initiated lucrative sales in live streaming and their stories soon began to spread among their peers, wherein suddenly, streaming sales ballooned in Ruili in the beginning of 2017. One of the factors to this growth is that social media influencers (called cyber stars in Ruili) with numerous followers played a huge role in promoting sales, and some big companies started to hire these influencers for sales. Some of these influencers have ascended to celebritylike status. More and more streamers from outside Ruili, many of them who did not own any jadeite products, gravitated to Ruili; some chose to work for big bosses in Ruili and some sought to pursue their own business. With the rise in streaming sales, Yucheng announced the building of the first streaming base in the fall of 2017.

The building of the streaming base marks an official turning point in the transformation of Ruili's jadeite market. This transformation has triggered new explorations in market management and regulations in adjusting to new models of sales. As a new way of doing business, particularly with so many streamers who perhaps did not have much experience with jadeite, there is an increase in trade disputes between online buyers and sellers. Consumers file

complaints and grievances revolving around warranties, returns, price disputes etc. to the Industry and Commerce Bureau of Ruili. Mr. Shan, the executive secretary of GJAR, explained that trade disputes occur more often due to the complex web of these new agents and ways of doing business (shipping, returns, etc. within an online system). "In the old face-to-face model, there was not much returning of goods because traders and consumers agreed face to face," he explained. The open internet stage has drawn immensely diversified traders, novices, tyrants, dilettantes, and streamers all mixing their lives up with jadeite specialists, and highly differentiated jadeite commodities. Anyone with legal registration and an account can set up (or terminate) their own jadeite business; any products with or without quality assessment and certification can be delivered to their customers.

To regulate streaming sales and crack down on counterfeits, exorbitant profits, and to obstruct fraudulent acts, unlawful trade and malicious competition, the Industry and Commerce Bureau of Ruili presided over a set of conferences, inviting three main parties: headquarters of market enterprises such as Yucheng Ltd., GJAR, and other relevant government institutions to a scheme in terms of managing the ongoing transforming market. The convergence of multiple voices and opinions, soon led to the development of a league for these organizations to work together and orchestrated their first strategy to centralize dispersed streaming sales: the building of centralized streaming base in the marketplace. In this extended process, the government delegations and GJAR board members also reached out to tech companies such as Byte-dance (Douyin and Tiktok) and the Taobao online management center in Shanghai, to negotiate cooperation in promoting online streaming sales for jadeite. Thereby, the streaming base was initially designated as an area at the marketplace for live streaming broadcasting, requiring that all streamers come to the streaming base to run their online sales when it was first put into operation to ensure better unified training and supervision etc.

At the beginning of 2017, the Yucheng Marketplace streaming base supported streaming channels on T-mall and Taobao, and all the streamers were encouraged to come to the designated area in the basement to broadcast. Streamers had to register with a streaming certificate after basic training and rent (or share rent with other streamers) a stall, and they had to pay a deposit to vouch for their business. Streamers do not necessarily own jadeite products, he/she might have no products at all but come to the marketplace to broadcast other people's products. If one can make a sale, he/she shares a profit with the real product owners. These product owners who have

no interest or skill/knowledge in streaming business, can come to the base and consign their products to these streamers. This is considered an efficient way of cooperating between products owners and streamers.

In 2018, the streaming base of Douyin (Tiktok in US) at Jinxing Mall in Ruili was established, and later the Yangyanghao streaming base specialized in raw materials of jadeite was duly approved at the beginning of 2019. Many people commented that the year 2017 was the vintage "streaming year" when streamers made "daring money." The renowned Jade Sister, a streamer that works for Jade Sister Streaming Team at Jinxing Mall earned up to 40 thousand US dollars monthly between 2017 and 2018. The streamer Jade Sister herself, in fact does not own any products herself but has excellent skills in promoting online sales. In 2020 she still maintained a high sales-volume and was sometimes invited to speak to local media as a role model of this newly developed commerce.

Since 2019 as more streamers have come in to Ruili, and more streaming platforms sprang up, streamers in Ruili's market rolled into a candescent competition, vying for sales. I have met traders from a variety of backgrounds, successful streamers, traders who were indifferent to online business, or traders who are at a threshold of locating their future business paths (online or offline); they all face different challenges in the ongoing transformations of the market (as I have described as their uncertainty in chapter 4). It is commonly agreed that streaming sales are initiated by younger traders, a newer generation who are propelling a new force in online e-commerce. In this view, new streamers in Ruili are very different from long-term senior traders.

Quanquan's story

Quanquan came to Ruili in late 2018 in a quest for her own fortune, and she is one of the most assiduous streamers who strives to find her own path. She is in her early 30s and has only been in the jadeite market business for two years. Before she came to Ruili, she had no experience working in the gem and jadeite industry. Quanquan has rich life experience. She graduated from middle school and did not continue her education. She became a Buddhist practitioner and worked in temples for charity/volunteer work a few years. In her late 20s she experienced working in supermarkets and lingerie stores where she learned basics about sales and resolved to become a self-employed businessperson as her career goal. In 2018 she came to

Ruili to partake in the new jadeite streaming life. As she stated, as a new streamer she thought the only threshold for streaming seemed to be subscribers and fans in the sense that if one can attract followers, promoting sales on live video broadcasts will come to fruition. Unlike traditional business models, she did not need to rent a store or stall or purchase her own goods at high expense for streaming.

She registered two accounts on Douyin and Taobao streaming sites and specialized in refined jadeite jewelry. She "borrows" products from owners through contractual relationships vouched for and by her personal credit, registration with the local government, and through a deposit she paid for her streaming accounts. Unlike many streamers who choose to broadcast in the streaming base, Quanquan set up her business at her abode. For one she can lower the cost, such as to avoid rent fees for the counter at the base; and second, she prefers a placid and tranquil surrounding to operate her broadcasting for her own unique streaming style, thus she can talk in an even, unexhilarated voice with soft music on the side, and sometimes she gets to invite raconteurs or products owners to enliven her special sessions.

She registered at Yucheng Streaming Base and pays a deposit to them to vouch for her online business security so that if her online sales involve disputes or illegal procedures she is obligated and accountable in coping with management. Her daily routine is simply laid out according to her working schedule. She sets up live broadcasting around 5 pm every day after her dinner, which she explains is the best time for more potential customers as people get off work and start to play on their cellphones. She works till late night usually around 1 to 2 am the next morning depending on the day's sales. In the morning she sleeps in till around 10 to 11 am to rehabilitate herself. She cooks lunch at home, and after eating she rides on her scooter to Jiegao marketplace to "borrow" jewelry pieces from store/stall owners. I frame this as "borrowing" because I witnessed on the spot that there are occasions where she basically takes away some piece with only a verbal contract without depositing anything. If products are worth a few thousand dollars she leaves her ID card as a pledge. Normally she is required to return these products the next day if sales are not made. But there were times I witnessed she was also rejected by some product owners for borrowing. The "borrowing" activity takes up about two hours in her daily schedule, and afterwards she has a relatively flexible afternoon to work on packaging her sales for delivery, meeting up with her business partners or friends etc. This "borrowing" activity happens with quite several home-based streamers. According to them, they

are still regulated through their registrations both online and offline and could hardly vanish into thin air if trade disputes occurred.

Until 2020, Quanquan was faced with a bottle neck in her business in vying for streaming sales during the COVID-19 pandemic. After more than one year of trying to develop her business, her sales did not move forward as she had anticipated and hoped. More and more people were forced into streaming sales. It is both an opportunity and a crucible. Many of the successful streaming businesses are in fact run by teams, which have more capital for "speculating" with their accounts, and with a few extra streamers who take turns broadcasting on multiple accounts. There is a high cost of maintaining a live streaming account and various procedures involved in streaming such as keeping up with followers and fans, dealing with aftersales services, which involve advertising, broadcasting, delivering, developing more subscribers etc. Quanquan also stated that there are disturbances in Ruili's jadeite streaming market: there are those who do not unite under the administration of centralized streaming bases and advice of the AGJR, but claim they are "Ruili Brand," i.e., independent streamers who exist outside this network like scammers who often violate online sales policies, creating problems harming the reputation and order of streaming sales.

Kosaline's perception and confrontation with online jadeite business

Today Ruili's jadeite market has a juxtaposition of both online and offline trade areas, with each occupying their own role. Kosaline, a senior Burmese trader, speaks fluent Chinese and has lived and dealt jadeite in Ruili since the 1990s. He maintains his unheeded tiny corner store wedged at the back of Jewelry Street where a few storefronts recede to a street of grocery stores and restaurants. Kosaline strongly adheres to the idea that traditional face-to-face trade of jadeite is the "right" way in Ruili's jadeite market. It is and should be a spot market, where buyers come to shops, closely scrutinize products, haggle on price, and where there is no deception. He thinks in previous times, traders were well trained specialists, or at least most people were experienced traders who stuck to market ethos. To quote Kosaline's strong stance "Unlike nowadays where pseudo traders, new streamers as tyros and dilettantes know nothing about jadeite invade this market... These people want to learn and talk about jadeite in one night... Unbelievable". Kosaline also thinks these new streamers are quite a disturbance to Ruili's jadeite market.

According to him, in past times traders maintained long-term business where "credit, honesty, and quality" were the key of "personal brand" where buyers from all over would come back, and traders would not want to downplay their brand and trust. "The old market was a well-regulated market, and the new market is a maelstrom." Even though his store is hidden in a back corner, location was not a problem in Jewelry Street. During rush years all his partners from Guangdong and Shanghai would still come to Ruili and work with him. Kosaline views streaming as a whim, a tide in Ruili's marketplaces, and believes that eventually in-person sales as "quality sales" will return.

Kosaline's thoughts are also strongly supported by some of my other experienced informants. They refer to the marketplace of past days as regulated by trade ethics and norms and feel that new elements in the market remain incomprehensible and unacceptable to them. Quanquan and Kosaline's different experiences demonstrate some of the challenges that small-scale business and old ways of business currently face in the changing scenario of the marketplace. There are traders who constantly seek their own ways and succeeded in coping with the transformation of the market.

The above two cases illustrate current reactions to and the growth of diversified trade modes in Ruili's jadeite market. Individual traders, with their own backgrounds and perceptibility, respond to the current transformation differently. The changing dynamics in Ruili's jadeite market are contributed by proliferating technological advances, such as efficient consignment and delivery, the low cost of equipment (smart phones are the primary tools for online business), and the popularity of mass media. It is the thriving of streaming business models that brings challenges not only for individual traders themselves, but also for market management as well.

2. Multiple institutions drawn together in market management

In traditional cash-and-carry transactions in the past, the management and regulation of the marketplace fell more directly on government institutions in monitoring operation and regulating excessive prices etc., and as a matter of fact, trade disputes were way less in number. Circumstantially, if a trade dispute happened and people themselves could tackle the issue, cases were handed to government institutions such as the police department, the special Price Management Center of the local Development and Reform Bureau, and the local Industry and

Business Bureau, etc. These departments each have their own responsibility, for instance when the police are called, they carry out and investigation and collect evidence; the Price Management Bureau will provide policy-oriented service analysis revolving around excessive price or cutthroat competition. When litigants do not accept or comply with dispute settlement, then the case will be handed to the court. In either administrative procedures or court proceedings, if the case involves a price dispute, appraisal consultation would be obtained by reaching out to GJAR or quality supervision and assessment organizations. Previously, the role of GJAR was relatively inferior (compared to now), the main reason being the number of trade disputes were fewer, and a rue of "no returns" was recognized by traders and customers. Before Ruili's new streaming era, GJAR's role was more conspicuous in terms of organizing public events and activities, such as annual festivals and awards for Master Carver in jadeite artwork. As a trade confederation, GJAR's committee consults with the government and petitions on behalf of its delegates and members.

Table 4. Major government institutions in market management and trade regulation

Institute	Role	
Ruili Municipal Bureau of	The general management of the market and business	Local government
Industry and Commerce	(such as issuing business permit, and issue trade	institution
瑞丽市工商局	regulation and restrictions, supervise and monitor	
	market organizations)	
Ruili Municipal Bureau of Tax	Tax report of general business in jadeite market	Local government
瑞丽市税务局		institution
National Tariff of Ruili Port	Import and export tariff on jadeite commodities	State-level
国家海关瑞丽口岸		government
		institution
Publicity Department of CPC	In market management, PDPC is aiming to trumpet	Local government
Party Committee of Ruili	and publicize jadeite industry and market	institution
瑞丽市委宣传部		
Ruili Municipal Bureau of	Supervision and monitoring price grades	Local government
Development and Reform		institution
瑞丽市发改局		
Ruili Municipal Bureau of Justice	Involved in dispute and arbitrate settlement	Local government
(department)		institution
瑞丽司法局		
Ruili Municipal Bureau of Police	Crack down on counterfeits and trafficking	Local government
(department)		institution
瑞丽市公安局		

With the advent of live-streaming, the internet absorbs a hodgepodge of diverse traders and consumers with diversified needs and values, and most importantly, the live-streaming automatically comes along with a returns policy that is well applied in other categories in e-commerce. Contingently, there are more trade disputes. The role of GJAR is now more significant in dealing with these trade disputes. In order to enhance the online sector of Ruili's jadeite market, Ruili government institutions²⁴ and GJAR have drawn up a new act and designed a new management model with different organizations working together. For instance, the streaming bases are directly managed by marketplace proprietors, such as Yucheng marketplace by Yucheng Ltd. in Jiegao. Each streaming base cooperates with specific live-streaming channels, such as Yucheng Streaming base designating that their streamers may only use Taobao Live. There is cooperation between tech companies and marketplace proprietors. There are four major parties below as in Table 5 below:

ONLINE Streaming Platform or social medial platform (such as Taobao of Alibaba, Douyin of Bytedance etc. major flatstage);

ROLE: 1) directly deal with online sales (of jadeite) procedures as primary internet stage; 2)the management center of jadeite sales of Taobao (or Douyin etc.) directly ratify/saction the registration and operation of streaming account for traders from Ruili's marketplaces in compliance with live streaming bases in Ruili's marketplaces

OFFLINE Live-streaming Bases formed by private companies (such as Yucheng Live-streaming Base and Yangyanghao Base in marketplace)

ROLE: In charge of reviewing account registration, attestation and authentication etc.; **ONILINE** supervision of broadcasting rules; Deposit fee managment (to ward off illegal accounts and to make sure the account bears no scam)

GJAR ROLE: participate in various activites resulting to both online and offline issues

There are different committees in GJAR, with each secializing in different fields at different circumstances: such as the Judge and Arbitrate Committe plays a major role in price/quality disputes and arbitrations; Committe of raw materials of jadeite stones; Streaming Training Center for iussing streaming licese; Art Committe etc.

Several Quality Supervision and Inspection Centers

ROLE: issue quality certifications

Government Institutions

Including Ruili Municipal Bureau of Industry and Commerce, Devleopment and Reform, police insitution, and local courts in different situations etc. as aforementioned

Table 5. Cooperation amid four parties

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²⁴ The marketplace is under direct management and supervision of the Ruili Industry and Business Bureau and another institution is Ruili Development and Reform Bureau; In local administration systems, other institutions such as the Publicity Department in the Communist Party Committee of City Hall is involved as a responsible advisory institution in branding local business. I refer all these different departments as government institutions.

As shown in this Table 5, in addition to (1) government institutions, Ruili's jadeite market is coregulated by other privatized organizations: (2) Streaming tech companies, and (3) proprietors of streaming bases, which together work to issue or suspend streaming accounts; (4) Quality Supervision and Assessment institutions provide quality certifications; GJAR participates and serves in various events in consultation leading in the administration among these organizations. This new management model for Ruili's jadeite market aims to safeguard a lawful trading environment and to bolster transparency.

This is what I call a "market-state complex" in Ruili's jadeite market. Committee members from GJAR comment that GJAR has functioned "like a bureau" since the thriving of the live-streaming sector. I stress that the role of GJAR is quite unique in the big picture of China's economic system. Because elsewhere, the role of private organization or unions²⁵ do not possess a similar, or a stronger role of governance, particularly under China's political system. Media and scholars normally frame China's "state capitalism" (Mazzocco and Kennedy 2022) as being how the states takes an interventionist approach to strengthen its authoritarian control, particularly in maintaining the public state-control economic sectors in in various domains in the economy. In addition, the state endures as a powerful institution in the paradox of suppression and responsivity to its people (Dickson 2021) — the state dominates through power and control in political life with its surprising responsiveness to its people, when confronting local economic or social unrest. This tenuous binary is useful to understand the overall relations in the current political economy in China. However, I seek to add to these ideas and discussion with this concept of "state-market complex" to understand the relation between state institutions and (smaller scale) privatized markets on the ground. The prominent role of GJAR in market management supports this claim. Knowledge of jadeite can only be attained through years of practice in trade and cutting, and the magnitude of valuation parameters, have conferred the indispensable role of a group of erudite trading specialists. Their authority and charisma give a powerful role to GJAR. The uncertainty aspects of trading life and the thriving of live-streaming sections in Ruili's jadeite market have again constituted a prominent role for market organizations themselves, to some degree, independent from state control.

²⁵ I do not want to exclude some exceptions of the leading role of privatized organizations in big cities, but I only want to refer to a generalized situation most ordinary in China from my own observation: In most situations, public institutions have more authority and power in governance in various fields, for instance in schools, hospitals, college, and research institutions which is typical in China.

But this is not to say that GJAR and government regulation are opposed. GJAR directly supervises online trading behaviors to potentially starve off the breaching of online trading policies. For instance, GJAR stipulates that streamers are forbidden from coaxing buyers into luxury jewelry by harping on the "spiritual" and "healing power" of jadeite, otherwise they would then be more likely to be found guilty in trade disputes. Streamers are encouraged to objectively describe jadeite as a type of "regular" commodity. On the other hand, when a trade dispute occurs, the GJAR's appraisal is corroborated and acknowledged by government institutions as a legal documents and reference. This is how GJAR functions as a "visible hand" in Ruili's jadeite market.

III. Two major market organizations in Ruili's jadeite marketplaces

How do private market organizations play a prominent role in market management in Ruili's jadeite market? There are several private market organizations that participate in market management in different domains. The Burmese Association of Business and Commerce in Ruili directly represents Burmese traders, protecting their rights in negotiating and assisting with government institutions, organizing public events for Burmese traders, etc. Other institutions such as the Chambers of Commerce, usually compartmentalized by jurisdictional region, such as the Guangdong (province) Chamber of Commerce, Henan, Fujian etc. also play a role in organize trading diasporas on occasion. Below I introduce the two leading organizations, the GJAR and quality supervision and inspection organizations in Ruili's jadeite market.

1.Gems and Jadestones Association of Ruili (GJAR)

Here I provide a vignette on the historical background of GJAR, in order to accentuate how this organization has gained a more profound role in market management in recent years. In the 1990s, under the circumstance of the national policies of continuous "Opening Up" and the increasing flow of gemstone and jadeite business, the local government established a trade union, as an organization that could unify traders and companies in an informal way, to facilitate the management of the jadeite and gemstone industry. The role of this market union was purported as to "encourage traders themselves" to promote the operation of business in compliance with the laws and policies, establish the integrated market, and protect the legitimate rights and interests of consumers and operators. On June 9th, 1994, the administrative department for Industry and

Commerce of Ruili lodged a proposal for the building of the Gem and Jade Trade Union, to the Ruili Municipal Party Committee, and from there the approval was submitted to an upper-level government, the Dehong Prefecture Committee (local documents from GJAR, 2020). All these agendas were finally subject to approval by various government institutions, and GJAR was officially ratified as a formal independent social organization constituted by a group of trading specialists and experts. Given the administration system, GJAR is directly supervised and monitored by the Industry and Commerce Bureau of Ruili. Since its establishment, this organization has gone through several renaming processes while sustaining its major role in representing local market interests and participating in some public events. Through continuous trials, GJAR gained its multiple roles and functions, such as, in accordance with the purpose of uniting and educating members, assisting traders/markets to abide by national policies and decrees, strengthening the self-discipline mechanisms of the industry, adhering to the principles of operating in good faith according to law, and protecting the rights and interests of consumers and members (local documents from GJAR, 2020).

Over the years, GJAR has been widely acknowledged as a trade union and association that unites and represents traders, an organization for communications and innovations in jadeite trade, market development, and sustainability. From the 2000's onwards, the decade regarded as the greatest for Ruili's jadeite market expansions, the GJAR obtained wider influence. In 2007, the first Festival Jade Carving Competition in Ruili was organized by GJAR, a carving contest that is judged and peer reviewed by artists and carving specialists nationwide, which further marked the influence of GJAR. Since then, this carving festival has become an annual event (before the pandemic), and trophies were awarded for excellent jadeite craftsmanship in innovation, peculiarity and exquisiteness in design and craft. In 2017, the award was officially upgraded (informally) as "China's Jade Master Carving Award" and began to enamor carvers and artists nationwide.

Councils of GJAR work as advisors and mediators in dispute settlement

My opening anecdote in this chapter, the story of an accident of Ms. Fei raised a question about who gets to decide, how much that jadeite bangle was worth, and who's responsibility was it to replace the broken piece. RJAR plays a leading role along with bureaucratic procedures in these trade disputes. The streaming sector adds to the complexity with a returns policy, but it is

even more complex when "betting" stones get on streaming channels. "Betting" stones have gradually been brought onto the online stage and hitherto have led to the most trade disputes. Normally most online sales provide a 7-day free returns policy, with only a few exceptions in food categories. The "betting" stone is the most unique item in Ruili's jadeite market. Given the economic value of "betting" stones is not truly determined until they are cut open, they remain most imperceptible in terms of value especially to laymen. Once cut open though, they also no longer qualify as an intact piece to be returned for a refund.

In these dispute settlements, core issues revolve around the price of jadeite commodities, either refined jewelry or "betting" stones, and a committee from GJAR along with government institutions provide an appraisal by collecting detailed evidence to decide the compensation, fines, and rebates. GJAR also directly supervises streaming bases in their administration and regulation.

Should "betting" stones not be sanctioned for online sales, just like Mr. Kosaline or those who are strongly against online sales suggest? The trade disputes around "betting" stones are the most thorny and knotty. Previously, trade of "betting" stones was regarded as a game monopolized by "adept insiders" (neihang 內行) and specialists and "outsiders or layman (waihang 外行) were nearly excluded. If a trader has no understanding about rough jadeite, his/her purchase will be more likely a predictable loss in a game of roulette. How then are market administrators accountable to these consumers? How should the streaming of "betting" stones be organized or regulated?

Currently, Yangyanghao streaming base has been certified for launching streaming sales in "betting" stones, and Yangyanghao Ltd. now bears the brunt of such a challenge. Going through all files compiled in the office of Yangyanghao Ltd., Mr. Zhang, the executive sectary of Yangyanghao disclosed some of the challenges and difficulties in their current business. Mr. Zhang explained that trade disputes of "betting" stones certainly have much to do with the characteristics of "betting" stones themselves, but also have much to do with the streaming process, (i.e., the process of how the deal is sealed), how traders introduce their products, (i.e. the pitching process) and how individual customers understand rough jadeite and in what circumstances they place the order. It is a complicated process even further marred by uncertainty with "betting" stones.

According to GJAR's regulating policy, traders need to be circumspect and discreet, objectively introduce the pros and cons of trading rough jadeite in streaming, and the prospect of winning but the high risk of losing in cutting a piece of rough jadeite. For streamers: any spiel is forbidden, any blandishment in leading consumers into the deal will be more likely found guilty (if a trade dispute occurs). Regulations are particularly rigorous in streaming "betting" stones, streamers are not allowed to fabricate and fictitiously hyperbolize the "spiritual or metaphysical" qualities of jadeite, any introduction in sales that goes beyond describing jadeite as commodities will be accused of having created misleading inducements, and thus a streamer will be more



Figure 21. People's Mediation Committee of Yangyanghao, photo by author 2020

likely held responsible if a sales dispute is invoked. In any case, if streamers contrive to gouge a buyer by any gimmick, juggling, or tricks in a sale, full responsibility will likely be alleged towards them.

On the buyers' side, there is a different kind of expectation. It is quite plausible that many buyers, though it is a bet, hope a fluke of luck to win with "betting" stones. Thereby, many trade disputes occur with trade of "betting" stones in this

circumstance, when a stone is cut, and its economic value and quality is not as promising as previously expected. Some buyers appeal for arbitration if they think the deal is not fair. In some cases, buyers complain that streamers have misled or intentionally misrepresented their stones.

Yangyanghao Streaming Base was founded in in January 2019 at Wenbang Road in Ruili. The establishment of Yangyanghao Base aims to assemble all individual streamers and companies specialized in streaming of "betting" stones in more disciplined trading and training and assails to provide a reliable stage for consumers. The committee of GJAR directly supervises Yangyanghao Streaming Base and solves their trade disputes. The administration office of Yangyanghao Streaming Base even has an arbitration center tasked with: controlling the streaming system with rules and regulating policies; promoting any parties in a dispute

settlement to reach an agreement on the basis of equal consultation; timely and effectively safeguarding the legitimate rights and interests of the trade parties; maintaining the stability of the industry and reducing the occurrence of trade disputes (Documents from Yangyanghao Streaming Base 2020). Below I give an example of a trade dispute to specify the role of these different actors and agents and how they negotiate in market management.

Mr. Liu's trade dispute

On May 29, 2019, the arbitration center of Yangyanghao received a grievance from a Hongkongnese consumer: Mr. Liu said that there was a shop selling raw stones of jadeite in WeChat's streaming channel, and this shop claimed to be selling reliable products. However, the shop owner swindled him for about 1.3 million *yuan* (222 thousand US dollars) when he purchased a "betting" stone. Transactions were made through online Alipay payment, and the payment receiver was Mr. Peng, a trader who was later tracked to be found operating his business at Yangyanghao.

More evidence was collected in the later arbitration process. This Hongkongnese buyer, Mr. Liu was residing in Hong Kong. In April 2019, he incidentally followed an advertisement from a jadeite jewelry streaming shop on Baidu, and from online registration records, it seemed like this shop had lengthy years of experience in trading jadeite raw stones at the China-Myanmar border. After brief communications online, he added this company's private WeChat account, and then a woman named Ziqi explained to Mr. Liu about of their business. Mr. Liu was then offered another WeChat-streaming account to watch their live broadcasts.

On the first day of watching the live broadcasts, Liu bought one "betting" stone. The next day, an after-sales service person named Jiuge added Liu's WeChat. From the following day during one to two weeks length of watching their streaming sales, Liu bought six more "betting" stones, which cost more than 1.3 million *yuan*. At first, these purchased pieces were temporarily stored where the shop was based in Ruili, because items like "betting" stones must be sent on special shipping consignment to Hong Kong in an extremely complicated process. Mr. Liu trusted the streamers and decided to store his purchased goods in Ruili until he could retrieve them himself. I'd like to insert here, my own understanding why Mr. Liu entrusted this company to store his purchased goods at the owner's shop, which perhaps sounds like a bold decision. The overall online trading environment in China is manageable, particularly through these valid

online platforms, because for a trader or a company to enter these internet stages there is an excessive rigid procedure, that one's ID and one's legitimacy are generally traceable in police networking systems. I am not saying there is no online spam. I just want to explain sales go through these valid channels and are identifiable. Tech companies and their mandatory control in cyber systems work at a high level, and their cooperation with government is in one way efficient in regulating the trade environment. That's perhaps the primary reason, that Mr. Liu knew that if he was swindled, he could contact customer sales services at WeChat Tech (Tecent Ltd).

In March 2020, when COVID-19 broke out, the merchant in this shop said that the streaming was temporarily banned for a period of time in Ruili, and streamers in this shop decided to deliver the six "betting" stones to Liu. Thinking of lowering the logistical fees, Liu asked the streamer to send his purchased pieces to his friend in Shenzhen. With his friend's help in Shenzhen, Mr. Liu finally received his six pieces, however after cutting two open, he felt that the quality was contrastively inconsistent with the price the streamers previously described. Liu felt that he was swindled. When he contacted the shop, the staff who responded to him were no longer Ziqi and Jiuge. Mr. Liu traced this live streaming account and found the contact of Yangyanghao Base and submitted his compliant.

After receiving the complaint from Mr. Liu, the administration center of Yangyanghao reported to the committee of GJAR and they instantly commenced an arbitration proceeding. They tracked the streaming account and sought out the streamers quickly. Yangyanghao Commission managed to contact the different parties and track previous video records, etc. as preparational work, and then initiated the primary arbitration from an entrepreneur management standpoint.

The committee of GJAR supervises the arbitration process, and when necessary, will be directly in charge of the arbitration. The committee assesses whether the price a jadeite commodity sold for is commensurate to a moderate market price. There are usually more trivial arguments involved, because as Mr. Shan stated, with the appraisal of economic valuation there are different concerns. For instance, the trader's original cost (particularly when trader had a lower cost than average price), and the average market price. The GJAR will authenticate an average market price, and an arbitration will also concern the primary cost of a product. This might be the most intricate aspect in a trade dispute of jadeite. Mr. Shan explained, revolving

around "betting" stones, the responsibility falls more on buyers especially if the stone is already cut-open.

With the unremitting efforts and a succession of thorough examinations and proceedings, the verdict of this arbitration initiated by Yangyanghao and GJAR was casted as follow:

- 1) The Hongkongese consumer Mr. Liu had purchased a total of 7 pieces of raw jadeite stones, 2 of which had been cut open and processed and could not be returned by Mr. Liu which he agreed to.
- 2) The remaining 5 pieces, worth a total of 1,113,776 *yuan*, were to be returned and with refunds to Mr. Liu, as he requested. The streamers were judged to have not comprehensively stated the risk of the potential products, an infringement of their liability. Consequently, the committee issued an immediate implementation plan: once the arbitration was executed, 80% of the total payment was urged to be refunded instantly, in addition to 80 thousand *yuan* in purchasing tax and fees, as a total of 971,020.8 *yuan*.
- 3) The remaining 20% of payment would only be refunded to Mr. Liu after he returned all 5 un-cut pieces.

The arbitration result was compiled in legal paper documents, and was handed over to, and acknowledged by relevant local government institutions. This story unveiled that the existence of a streaming base, and its administration with the association of GJAR works in an efficient manner in market management in Ruili. The intention of regulating a healthy and safe market order is a long-term goal in the eyes of the local government, and doing so has brought multiple institutions together, including state and non-state/market organizations. The role of GJAR is distinct, and the committee of GJAR trading specialists, who have in-depth knowledge and experience in the jadeite market, were considered irreplaceable by government officials.

2.Organizations for quality assessment and inspection of jadeite

To common consumers it is nearly impossible to spot the difference between natural and treated jadeite. In prior times, experienced jade traders could tell the difference based on slight changes in weight and color after various treatments. For instance, there is a weight difference for treated jade as it is infused with polymer resin. But in recent years, counterfeiters threaten the

market with their adoption of advanced treatment technologies. Thereby, in Ruili, nearly all refined jadeite jewelry is sold along with a quality certificate, or at least to any prudent buyers who normally request that their products come with a quality certification. These certifications are issued by professionals in the lab after quality assessment using gemological tools and technologies. As the materiality and physicality of natural jadeite presents a diversity of characteristics, the primary goal of these certifications is to merely prove the quality of jadeite as raw/natural versus treated/artificial. The certification of jadeite is leveled into three categories: Type A, Type B and Type C (provided in more detail in chapter 3) in nearly all cases only a Type A certificate is produced to prove the authenticity of natural jadeite materials.



Figure 22. Pictures of quality supervision and inspection organizations. photos by author 2020

In past years, organizations specialized in quality assessment and inspection in Ruili were mainly operated by two major state-run institutions: the national level and provincial level of gemological and geological research and testing facilities. The main differences between these two institutions were presumably about jurisdictional administration in that the higher one could acquire more resources and public funding etc. These two intuitions set up a few offices in Ruili City, conducting jadeite quality inspection and issuing certification cards. Some of my informants told me that previously, government institutions were more reliable on account of

their better equipment, advanced technology, and technicians, and most importantly, "they would not vanish into air, like private dealers who might leave an empty office with nothing left to do but life-long pursuit of lawsuits," said my informant.

One of the major changes I found though in the past decade, is that there are now 12 private organizations conducting quality assessment and inspection business. All these institutions are now under the administration and supervision of the Ruili Municipal Bureau of Industry and Commerce. The vice president of this bureau explained any organization or company can apply for a business permit for jadeite quality assessment if they reach various operating standards and conditions. The core of these qualifications is twofold: They must have (1) trained technicians and (2) technological equipment such as chemical composition detectors and spectrophotometers, which support reliable identification and assessment of jadeite quality. The role of the government is to advise and secure the operation of these organizations through legal procedures; it is also highly transparent though that these organizations are independent and marketized.

I inquired with government officials about why that government allows the privatization of these organizations, or the devolvement of their power to these companies. Officials explained that the reasons behind the privatization are basically twofold: the first is due to the rapid expansion of the marketplace and the growing needs of quality assessment and inspection (in contrast to past decades). The second is that the government started to realize the privatization of these institutions can induce a wide range of advanced technologies, efficiency, and more open competition for the future. In addition, officials said this is partly due to the constant "innovation of reform in the inner political system" that many similar functions of institutions have been privatized in past years.

The current provincial institution is named The Yunnan Research Institution of Gem and Jade Quality Supervision and Inspection, and it has one office located on the second floor of Taili Jewelry. Ms. Lan, the leading technician who has worked here for nearly 20 years introduced the basics for the process of testing jadeite to me. The identification and inspection of both colored gems and jadeite complies and keeps pace with the national inspection standards for the physical and geological composition, issued by General Administration of Quality Management and Supervision of the People's Republic of China, and the China National Standardization Administration Committee.

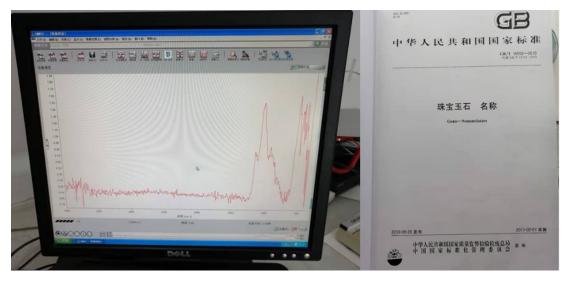


Figure 3. Photos of quality supervision and inspection devices, by author 2020

All the private organization follow the same standards and requirements. The regular method for jadeite identification and detection relies on a prism refractometer, gemological microscope, a Chelsea color filter, GEM-3000²⁶, and spectroscope, but these are hard to utilize on bleached jadeite. In recent years, infrared spectra and spectrophotometers are two major types of equipment and most common in these institutions. A Raman Spectra is the most expensive and reliable equipment and only higher-level public institutions have them, but access is not a problem. Under China's vertical administration system, these tools can be acquired for use from upper-level administration when necessary. Ms. Lan explained all the tests rely heavily on these devices and equipment. To her, the process is simple. Once jewelry or a piece of jadeite is set under an infrared spectrum and spectrophotometer, the spectrogram immediately tells her a primary result, and the following procedures are followed. Sometimes, if there are concerns, she will send the product to another office that uses other devices for a further test. The cost of quality assessments is very low, and the price depends on the size and items themselves. For jadeite bangles, the flat price is 10-30 yuan per piece and, depending on the quantity traders can get a discount for a batch. Normally, consumers prefer to buy jadeite jewelry with a quality certification card as a warranty. Organizations who produce these cards share a primary legal responsibility.

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²⁶ GEM-3000 is a desktop diamond verification instrument designed to separate natural diamonds, synthetic diamonds, and diamond simulants. It is also used to test the (light) weight verification for all kinds of stone.

Conclusion

The transformation from traditional face-to-face trade modes to online live-streaming sales in Ruili's jadeite market in past years has stimulated different institutions coming together working to regulate the market. This transformation is a push-and-pull factor in the changing dynamics of Ruili's jadeite market. The popularized live-streaming sales and their efficiency during travel bans and border closures resulting from the impact of the COVID-19 pandemic have all contributed to this rapid change.

Contingently, more trade disputes have occurred with the newly thriving live-streaming sales, especially with products like "betting" stones. In solving these trade disputes, private organizations such as GJAR play an indispensable role in price appraisal, quality assessment, and other issues that arise. The expertise and specialization are conferred ultimately by the mater and assessment about the qualia of jadeite. Here privatized market organizations and state organizations work closely with each of them occupying a particular role in market management in what I call "state-market complex." According to Callon (1990:134), what links different actors and agents such as these are intermediaries, "anything passing between actors that defines the relationship between them." In Ruili's jadeite market, intermediaries are agreed valuation criteria of jadeite, rules of market management and technological tools and equipment that are applied in market transformation and market management, which are reflections of market agencement.

CHAPTER 7. CONCLUSION

My fieldwork in Ruili's jadeite market extended from 2015 till 2021. In chapter 6 as I have explained, the impacts of COVID-19 resulted in travel bans that have accelerated the transformation of the digital economy in Ruili. At the end of this writing, I'd like to follow up with an overall image of COVID-19 in Ruili.

I. Ruili's jadeite market through the COVID-19 Pandemic

I am grateful that I was able to complete long stints of fieldwork between October 2019 and December 2020 before the COVID-19 pandemic had more impacts in Ruili which later followed. During this period, Ruili went through two major lockdowns. The first occurred with the initial outbreak of COVID-19 in Wuhan in early 2020, from January 26 to March 1 while I happened to take 2 weeks off for Lunar New Year and was temporarily prevented from returning to Ruili. I left Ruili for Kunming on January 22 for a reunion with my family, and right after I arrived in Kunming the central government in Beijing announced a top-down stay-home order and ban on social and economic activities nationwide, resulting from the highly contagious coronavirus pneumonia. Literally, everything was paused nationwide like a button pressed on a machine. News about what happened in Wuhan was terrifying, especially hearing about cases and symptoms among those who were fatally infected. From my own point of view, Chinese mainlanders are well disciplined people under the state's effective governance, which perhaps sounds too generalized, but I'm only claiming this to describe how people tented to respond to COVID policy for the first three years (2019-2021). When the central government eventually announced a serious infectious and highly transmissive disease spreading in Wuhan, (though some complained, people took it seriously and immediately responded to mandatory policies for their own sake: stay-home orders, travel bans, mask wearing etc., were generally respected and the rest of the country in not so highly affected areas, was also under a cautious policy to "recuperate in order" (有序复工复产) after such a worrying tremor. It seemed efficient because after just a few months, COVID-19 was not spreading in the rest of the country. I'm generalizing the situation but this is what I experienced and witnessed in China.

When the central government announced a nationwide emergency, (most) people complied and the government was able to start off with effective mandatory policies. In the beginning of the epidemic, only a few specific regions near Wuhan, or big cities such as Beijing

and Shanghai were predominantly affected by the spread of COVID-19. By that time, Ruili, like other places in China carried out a stringent non-entry prohibition/order under central command in Beijing for outsiders till March 2020. Except for Wuhan, most places in China eased back open after one month (under protocol and prevention strategies) and resumed normal activities carefully. Ruili reopened in March 2020, and I returned to my fieldwork.

The second short lockdown in Ruili in 2020 was between September 14 and 21, a respite of 8 days when an imported case from across the border tested positive in one of the city's residential neighborhoods. The case was quarantined and treated right after being diagnosed, and to detect whether there was transmission from this case, the whole city of Ruili went through mandatory COVID-tests. Fortunately, only the most intimate contacts with this case were affected, and Ruili orderly returned to its normal life after September 21. I was grateful that through 2020, Ruili, like many places in China was able to resume to normal life after two intervals of lockdown and I was able to maintain my fieldwork there. The most direct impact through this time span, has been decreased numbers of tourists in Ruili's jadeite market, and a ban on cross-border travel that has impeded the influx of people, particularly jadeite traders in Ruili. During 2020, myself and my informants weathered these pandemic impacts in Ruili rather well.

In 2021 things changed and unintermittent bans on various activities and a moratorium on cross border trade and trave due to the pandemic nearly wrecked Ruili's jadeite market after over six lockdowns. Other external factors also included the military coup and deteriorating spread of COVID-19 in Myanmar in the beginning of 2021. The civil strife and upheaval in Myanmar aggravated illegal border crossings, particularly by Burmese illegally entering porous Ruili, which was considered a "COVID spread threat" under China's rigorous COVID prevention policies. Though the local government in Ruili deployed extra patrols on the borderline to fortify the surveillance of illegal entering of foreigners, there were still several cases of illegal entry. With many returned overseas Chinese and located right along the border, Ruili was considered to be under high risk from COVID compared to the previous year when it remained nearly COVID free. Ruili became one of the most challenging areas to visit and spend time in, heavily loaded with prevention strategies and surveillance along China's southwest borders.

Under these circumstances, external factors have mangled the operation of the jadeite market in Ruili in since 2021, with the stringent and inexorable lockdowns. The anti-COVID

combat was perhaps most efficient and successful but with costs and sacrifices for the economy. In 2021, the Chinese government developed and implemented a targeted, tiered, and regionspecific prevention and control system. This is to say, in prefectures or counties other than Ruili restrictions were eased, but in high-risk regions like Ruili, especially with a few infected cases confirmed, more straitlaced prohibition on social activities and moratoriums on all kinds of business persisted. In such affected regions, all those in need were hospitalized, treated, tested, and quarantined as appropriate, and at the same time, schools turned to online learning, with nearly all retailing business forbidden including online businesses because of prohibitions on delivery services. The jadeite marketplaces were paralyzed. Adhering to a steady compliance with anti-COVID policies, most traders remained in Ruili fighting a battle in the first half of the year in 2021. However, by fall, the lockdowns finally pushed many traders out of Ruili. According to unofficial statistics from traders, nearly 80 percent of 80 thousand resident traders left. Many traders were no longer optimistic about when the jadeite market would reopen, and they had to relocate to other locales where they could carry out their business. Some traders rented spaces in a nearby prefecture in the city of Tengchong, or many of them chose to go to Pingzhou and Sihui in Guangdong province. When I followed up with some my informants after they were settled in Guangdong, many of them were still considering returning to Ruili sometime in the future after the pandemic clears. Given the fact that some of them have relocated their children in schools and rental contracts in stalls or shops for at least a year, moving back to Ruili will not occur instantly. After a sustained fight against COVID with heavy restrictions in 2021, the Ruili Industry and Commerce Bureau finally lifted bans on January 8, 2022, before the Lunar New Year. The jadeite market was reopened on March 23, and those who remained are trying to slowly set up their businesses again.

II. Qualia in Markets

The Chinese word yushi, $\pm \pi$ refers to distinct cultural objects in Chinese society since ancient times. Thousands of years later, yushi appear as precious commodities exchanged in markets in various places in China. The assessment and valuation of jade is unique in China, and it also remains nearly inscrutable to outsiders. Chinese jadeite markets occupy an important portion in the international jade economy, as do the Chinese qualia of jadeite.

Qualia in markets describes the qualitative dimensions of markets across cultures more broadly: the qualia of spatial structure of a marketplace (chapter 2), the qualia of commodities (chapter 3 and 4), trading forms (chapter 5) and market regulation (chapter 6). This is framed by economists as market quality, for instance, which might appear differently in a flower market, a fish market or a housing market. Therefore, in one sense, this research tells the story of a jadeite market and its economic setting: its operation, its regulation and its transformation in wider structures of social economic life.

In a second sense, qualia in markets provides one way of understanding contemporary jade culture in China through a market lens, where the abstraction of jade as valuable, is embodied into actions and instantiated into specific commodities that are designed, desired, traded and betted upon. Third, the management and regulation of a market in the ongoing transformation provides a way of understanding state-market relations in China. Scholarly work has contended that state-market relations particularly China might be framed as "socialist market economy," "state capitalism," "socialism with Chinese characteristics," or "capitalism with Chinese characteristics," etc. In the case of Ruili's jadeite markets, where individuals and households are the major units, I provide a picture of the state-market entanglement in micro levels in economic settings. Studies about Chinese markets can contribute to contemporary theory in economics, anthropology and sociology more broadly.

To recap the argument in this dissertation, a piece of jadeite does not lose its intrinsic quality (such as greenness) when stored at home, or in any other case may became "inalienable objects" to its owner, yet when they are circulated in markets, their qualitive aspects are further highlighted as price, feelings, experiences that are instantiated in commodities. The qualia of jadeite commodities are constantly made and remade through market agencement. The idea of market agencement does not treat agency as existing in atomized individuals, or separated in goods or research labs but is distributed among the heterogenous actors and agents, involving human, material, and technical devices. Market agencement emphasize the interplay of these different actors. Agents must have the equipment to do their work, such as know-how, manuals, comparative guides, accounting tools, management instruments, and cost-benefit analysis methods, data, algorithms and so on (Callon 2021: 60). Callon's work provides an innovative way of thinking through market processes.

In markets, Callon (2021) says, the process of design, production, and commercialization, along with the supplies and demands are constantly in the making, as what he calls the qualification. But the qualification of goods does not precede the establishment of markets, rather activities and a series of actions and its operations are at the heart (Callon 2021:53). This is basically about what he regards as markets being constantly in the making. In this view, there is a difference between products and goods: "Products are made up of a series of actions, a succession of operations that transform and displace them, passing them from hand to hand through a series of metamorphoses that work out forms judged attractive by economic agents who pay to enjoy their benefits...The career of a product has no other purpose than to be transformed into a good, that is, a thing that is sought after, researched, desired, and deserving of being purchased" (Callon 2021: 54).

III. The difficulty of studying markets

Markets are ideal (research) objects to study complicated, sometimes intricate, or even chaotic webs of relations. For instance, a deal sealed by a buyer and seller is in many ways is neither purely cooperative, nor competitive. Their interests are opposed, and their actions are in agreement. The term market arises as an ideal concept to think about the fallacy of the dualism of cooperation—competition, certainty-uncertainty etc. At times, there is an uncertain or indeterminant aspect to a market, when traders do not know enough information or have enough knowledge to help them to calculate and make a decision in a deal (Callon 1986 explains how they rely on a network to make their calculation). Even in a macro-scope of stability in a market there is a chance or a situation when individuals may not always make their calculations rationally. In a market there are numerous possibilities and factors that play into consideration that leads to a purchase, or not!

This dissertation captures fragments of a dispersed marketplace of jadeite trading in the city of Ruili, in Yunnan province alongside the China-Myanmar borderland. Taking market complexities as vantage points, this dissertation also tries to enhance broader arguments about how we can possibly conceptualize markets, and how the anthropology of markets can contribute to epistemology of markets in the contemporary global economy. It delineates an open market, present with the rise of retail business, live-stream ecommerce, associations, government roles,

and schemes of jadeite knowledge through stories about traders, firm mangers, different workers, and government officials involved in the jadeite trading marketplaces.

"Qulia in markets" captures something essential about markets, the heterogeneity, and the sets of structures and relations across cultures. By looking at "qualia in markets", I could possibly go and study a gem marketplace in Bangkok, or look at an emerald marketplace in India, or a fresh flower market in Malaysia. The methodology for this market framework is simple: treating market as a direct research object and as a whole while at the same time breaking it down into multiple components. Within markets, there are power-laden structures, which are imbued with challenges, such as power, politics, ethics, positionality, legitimacy, accountability, and knowledge in both methodological techniques and theoretical concerns in the process of research and analysis.

To quote Callon (2021:46) here:

Rules, conventions, norms, and values, the nature of laws, the forms of social-relationship networks are, as we noted, so many variables, alongside those of need, the calculation of interests, the search for distinctiveness, and the desire for imitation that analysts invoke to give an account both of the ways markets function and of the diversity of their forms of organization."

The difficulty and the challenge of studying markets first comes from such diversified markets in real life in the world. How can we make sure we do not stereotype them? I am aware of the limitations of my argument, and "qualia in markets" is not meant as a universal model or infinite explanation of complexities and relations. This is perhaps the strength of the anthropology of market, it allows for geographic specificity, immersed participant observation, and gives us a most life-real, yet diversified perspective of understanding entangled socioeconomic worlds in the global economy and in globally influential markets such as those in China. However, another limitation rises: in a geographically specific marketplace, one can overlook other complexities perhaps outside a marketplace, that is, to what degree, can the mobility of these actors and agents, and their extended networks outside a marketplace affect how we perceive qualia in markets. I do not have a clear answer in this dissertation, yet hope this will open the door for more future studies.

BIBLIOGRAPHY

Abolafia, Mitchel Y. 1998. "Markets as Cultures: An Ethnographic Approach." *The Sociological Review* 46(1): 69-85

Appadurai, Arjun. 1986. "Introduction: Commodities and the Politics of Value." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by Arjun Appadurai, 3–63. Cambridge: Cambridge University Press.

Apter, Andrew. 2005. *The Pan-African Nation: Oil and the Spectacle of Culture in Nigeria*. Chicago: University of Chicago Press.

Aspers, Patrik. 2005. Markets in Fashion, A Phenomenological Approach. London: Routledge.

Aspers, Patrik. 2011. Markets. Cambridge: Polity.

Babb, Lawrence A. 2013. Emerald City: The Birth and Evolution of an Indian Gemstone Industry. Albany: SUNY Press.

Bair, J., C. Berndt, M. Boeckler, and M. Werner. 2013. "Dis/articulating Producers, Markets, and Regions: New Directions in Critical Studies of Commodity Chains. *Environment and Planning A* 45(11): 2544-2552.

Bauman, Zygmunt. 2002. "Preface: Individuality, Together." In *Individualization: Institutionalized Individualism and Its Social and Political Consequences*, by Ulrich Beck and Elizabeth Beck-Gernsheim. Thousand Oaks: SAGE Publications.

Beck, Ulrich and Elizabeth Beck-Gernsheim. 2002. *Individualization: Institutionalized Individualism and Its Social and Political Consequences*. Thousand Oaks: SAGE Publications

Beckert, Jens. 2009. "The Social Order of Markets." *Theory and Society* 38: 245–269.

Beckert, Jens. 2010. "How Do Fields Change? The Interrelations of Institutions, Networks, and Cognition in the Dynamics of Markets." *Organization Studies* 31: 605-627.

Berndt, C. and M. Boeckler. 2009. "Geographies of Circulation and Exchange: Constructions of Markets." *Progress in Human Geography* 33(4): 535–551.

Berndt, C. and M. Boeckler. 2012. "Geographies of Marketization." In *The Wiley-Blackwell Companion to Economic Geography*, edited by T. Barnes, L. Peck, and E. Sheppard, E., 199-212. Oxford: Wiley-Blackwell.

Bestor, Theodore. 2001. "Markets: Anthropological Aspects." In *International Encyclopedia of the Social & Behavioral Sciences*, edited by Neil J. Smelser and Paul B. Baltes, 9227-9231. Amsterdam: Elsevier.

Bestor, Theodore. 2004. *Tsukiji: The Fish Market at the Center of the World*. Berkeley: University of California Press.

Bennett, J. 2010. Vibrant Matter: A Political Ecology of Things. Durham: Duke University Press.

Bie, Qianlong, Casong Li, and Shangyi Zhou. 2014. Evaluation of the Effectiveness of Border Policies in Dehong Prefecture of Yunnan, China. *Sustainability* 6(8): 5284-5299.

Bourdieu, Pierre. 1990. *The Logic of Practice*. Translated by Richard Nice. Stanford: Stanford University Press.

Cai, Jingquan. 2017. "Jade Wares of Chengbeixi Culture in the Early Neolithic Age in Jianghan Area." *Journal of China Three Gorges University (Humanities & Social Science)* 39(6): 99-103. 江汉地区新石器时代早期的城背溪文化玉石器 [J]. 三峡大学学报(人文社会科学版). 2017 年第 39 卷第 6 期.

Çalişkan, Koray. 2010. Market Threads: How Cotton Farmers and Traders Create a Global Commodity. Princeton: Princeton University Press

Callon, Michel. 1986a. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St. Brieuc Bay." *The Sociological Review* 32(S1): 196–223.

Callon, Michel. 1986b. "The Sociology of an Actor-Network: The Case of the Electric Vehicle." In *Mapping the Dynamics of Science and Technology: Sociology of Science in the Real World*, edited by Michael Callon, M., John Law, and Arie Rip, 19-34. London: Palgrave Macillan.

Callon, Michel. 1990. "Techno-Economic Networks and Irreversibility." *The Sociological Review* 38(S1): 132-161.

Callon, Michel. 1998. "Introduction: The Embeddedness of Economic Markets in Economics. In *The Laws of the Markets*, edited by Michael Callon, 1–57. Oxford: Wiley-Blackwell.

Callon, Michel. 1999. "Actor-Network Theory—the Market Test." *The Sociological Review* 47 (S1): 181–S95.

Callon, Michel. 2005. "Why Virtualism Paves the Way to Political Impotence: A Reply to Daniel Miller's Critique of "The Laws of the Market." *Economic Sociology: Perspectives and Conversations* 6(2): 3-20.

Callon, Michel. 2009. "Elaborating on the Notion of Performativity." *Le Libellio d'AEGIS* 5 (1): 18–29.

Callon, Michel. 2021. *Markets in the Making: Rethinking Competition, Goods, and Innovation*. Translated by Olivia Custer. Princeton: Princeton University Press.

Callon, Michel, and F. Muniesa. 2005. "Peripheral Vision Economic Markets as Calculative Collective Devices." *Organization Studies* 26 (8): 1229–50.

Calvão, Filipe. 2013. "The transporter, the Agitator, and the Kamanguista: Qualia and the In/Visible Materiality of Diamonds." *Anthropological Theory* 13(1/2): 119–136.

Calvão, Filipe. 2015. "Diamonds, Machines, and Colors: Moving Materials in Ritual Exchange. In *The Social Life of Materials: Studies in Materials and Society* edited by Susanne Kuechler and Adam Drazin, 193-208. New York: Bloomsbury.

Carrier, James G. 1997. "Preface." In *Meanings of the Market. The Free Market in Western Culture*, edited by. James G. Carrier, vii–xv. Oxford: Berg.

Chang, Wen-chin. 2006. "The Trading Cultures of Jade Stones Among the Yunnanese in Burma and Thailand, 1962-88." *Journal of Chinese Overseas* 2(2): 269–293.

Chang, Wen-chin. 2009. "Venturing into 'Barbarous' Regions: Transborder Trade among Migrant Yunnanese between Thailand and Burma, 1960s-1980s." *The Journal of Asian Studies* 68(2): 543-572.

Chang, Wen-chin. 2011. "From a Shiji Episode to the Forbidden Jade Trade During the Socialist Regime in Burma." In *Chinese Circulations: Capital, Commodities, and Networks in Southeast Asia*, edited by Eric Tagliacozzo and Wen-chin Chang, 455-479. Durham: Duke University Press.

Chang, Wen-chin. 2013. "The Everyday Politics of the Underground Trade in Burma by the Yunnanese Chinese since the Burmese Socialist Era." *Journal of Southeast Asian Studies* 44: 292-314.

Chang, Wen-chin. 2014. *Beyond Borders: Stories of Yunnanese Chinese Migrants in Burma*. Ithaca: Cornell University Press.

Chen, Anze, Young Ng, Erkuang Zhang, and Mingzhong Tian. 2020. "Jadeite." In *Dictionary of Geotourism*, edited by Anze Chen, Young Ng, Erkuang Zhang, and Minigzhong Tian, 285. New York: Springer.

Chibnik, Michael. 2011. *Anthropology, Economics, and Choice*. Austin: University of Texas Press.

Chumley, Lily Hope. 2013. "Evaluation Regimes and the Qualia of Quality." *Anthropological Theory* 13(1/2): 169–183.

Chumley, Lily Hope and Nicholas Harkness. 2013. "Introduction: QUALIA." *Anthropological Theory* 13(1/2): 3–11.

Clayton, Cathryn. 2009. *Sovereignty at the Edge: Macau and the Question of Chineseness*. Cambridge: Harvard University Press.

Coccato, Alessia, Stefanos Karampelas, Marie Worle, Samuel van Willigen, and Pierre Petrequin. "Gem Quality and Archeological Green 'Jadeite Jade' versus 'Omphacite jade."" *Journal Raman Spectroscopy* 45(11-12): 1260–1265.

Coles, Benjamin. 2014. Making Markets Making Place: Geography, Topography and the Reproduction of an Urban Marketplace. New York: Springer.

Crozier, M., and E. Friedberg, E. 1977. L'acteur et le Système. Paris: Seuil.

Dana, James and Yuk-Fai Fong. 2011. "Product Quality, Reputation and Market Structure." *International Economic Review* 52(4): 1059-1076.

de Waal, Malefyt T and Robert L Morais. 2012. *Advertising and Anthropology: Ethnographic Practice and Cultural Perspectives*. Oxford: Taylor & Francis.

Deng, Shuping. 1988. "From Earth to Heaven and Communication Between Heaven and Earth." *National Museum Periodicals*(67):17-31. 邓淑苹. 由"绝地通天"到"沟通天地"[J]. 台北:故宫文物月刊. 1987 年第 67 期.

Deng, Shuping. 1999. "Enlightenment from Dongyi Jade Unearthed in Shanxi and Shaanxi." 15-27 晋、陕出土东夷系玉器的启示[J]. 考古与文物 1999 年第 005 期.

Deng, Shipping. 2017. "Discussions on Jade Artifacts and Rituals". *Southern Artifacts (Nan fang Wen Wu)* 01: 210-236 玉礼器与玉礼制初探[J].南方文物.

Deng, Shuping. 2019. "Dialectics on Six Qi and Jade Cong". *Research of Jade Culture* 206: 56-75. "六器"探索与"琮"的思辨[J].中原文物(玉文化研究)

Dewey, John. 1935. "Peirce's Theory of Quality." Journal of Philosophy 32(20): 701-708.

Dickson, Bruce. 2021. The Party and the People. Princeton: Princeton University Press

Durkheim, Emile. 1933. *The Division of Labour in Society*. Translated by George Simpson. Glencoe: The Free Press.

Eng, Kuah Khun. 2000. "Negotiating Central, Provincial, and Country Policies: Border Trading in South China." In *Where China Meets Southeast Asia: Social and Cultural Change in the Border Regions*, edited by Grant Evans, Christopher Hutton, and Kuah-Pearce Khun Eng, 72-97. New York: Palgrave Macmillan.

Ferraris, Cristiano, Gian Carlo Parodi, Sylvain Pont, Benjamin Rondeau, and Jean-Pierre Lorand. 2014. "Trinepheline and Fabriesite: Two New Mineral Species from the Jadeite Deposit of Tawmaw (Myanmar)." *European Journal of Mineralogy* 26(2): 257–265.

Fligstein, Neil. 1996. "Markets as Politics: A Political-Cultural Approach to Market Institutions." *American Sociological Review* 61: 656–673.

Fligstein, Neil. 2001. The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies. Princeton: Princeton University Press.

Fligstein, Neil. and L. Dauter. 2007. "The Sociology of Markets." *Annual Review of Sociology* 33(1): 105–128.

Flores, Kennet E., Uwe C. Martens, George E. Harlow, Hannes K. Brueckner, and Norman J. Pearson. 2013. "Jadeite Formed During Subduction: In Situ Zircon Geochronology Constraints

from two Different Tectonic Events within the Guatemala Suture Zone." *Earth and Planetary Science Letters* 371–372: 67–81.

Fourcade, Marion. 2007. "Theories of Markets and Theories of Society." *American Behavioral Scientist* 50(8): 1015–1034.

French, Brigittine M. 2000. "The Symbolic Capital of Social Identities: The Genre of Bargaining in an Urban Guatemalan Market." *Journal of Linguistic Anthropology* 10(2): 155-189.

Fritsch, Emmanuel, Shu-Tien Ten Wu, Thomas Moses, Shane F. McClure, and Mike Moon. 1999. "Identification of Bleached and Ploymer-Impregnated Jadeite." *Gems & Gemology* 28(3): 176-182.

Furukawa, Yuichi and Makoto Yano. 2014. "Market Quality and Market Infrastructure in the South and Technology Diffusion." *International Journal of Economic Theory* 10: 139-146.

Gal, Susan. 2013. "Tastes of Talk: Qualia and the Moral Flavor of Signs." *Anthropological Theory* 13(1/2): 31–48.

Gal, Susan. 2017. "Qualia as Value and Knowledge: Histories of European Porcelain." *Signs and Society* 5(S1): 128–153.

Garcia, M-F. 1986. "La Construction Sociale d'un Marche Parfait: Le Marche au cad- ran de Fontaines-en-Sologne." *Actes de la Recherche en Science Sociales* 65: 2-13.

Geertz, Clifford. 1978. "Bazaar Economy: Information and Search in Peasant Marketing." *The American Economic Review* 68(2): 28-32.

Gibson-Graham, J. K. 2006. *The End of Capitalism as We Knew It*, 2nd edition. Minneapolis: University of Minnesota Press.

Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: University of California Press.

Global Witness. 2015. "Jade: A Global Witness Investigation into Myanmar's 'Big State Secret." *Global Witness Website*. https://www.globalwitness.org/jade-story/. Accessed April 29, 2023.

Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91(3): 481–510.

Gregory, Chris. 1997. Savage Money: The Anthropology and Politics of Commodity Exchange. Amsterdam: Harwood Academic Publishers.

Gusterson, Hugh. 1997. "Studying Up Revisited." *Political and Legal Anthropology Review* 20(1): 114-119.

Hahn, Peter H. and Geraldine Schmitz. 2018. *Market as Place and Space of Economic Exchange: Perspectives from Archaeology and Anthropology*. Havertown: Oxbow Books.

Haraway, Donna. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14(3): 575–599.

Harkness, Nicholas. 2013. "Softer soju in South Korea." Anthropological Theory 13(1/2): 12–30

Harkness, Nicholas. 2015. "The Pragmatics of Qualia in Practice." *Annual Review of Anthropology* 44: 573–589.

Harkness, Nicholas. 2021. "Qualia." In *The International Encyclopedia of Linguistic Anthropology*, edited by James Stanlaw. London: John Wiley & Sons. DOI: 10.1002/9781118786093.iela0330

Harlow, George E. and Sorensen, Sorena S.

2001 Jade: Occurrence and metasomatic origin — extended abstract from International Geological Congress 2000. The Australian Gemmologist 21:7-10.

He, Shengda. 2014. *The History of Burma*. Kunming: Yunnan People's Publishing House 缅甸史[M]. 云南人民出版社.

He, Shendga. 2016. "The Historical Experience and Lessons of Sino-Burmese Relations and the Opening - up of China 's Southwest during the Yuan, Ming and Qing Dynasties." *Journal of Yunnan Normal University (Humanities and Social Sciences)* 48(1):1-14. 元明清时期中缅关系与中国西南开放的历史经验与教训[J].云南师范大学学报(哲学社会科学版)2016 年第 1期.

Hu, Pingsheng and Meng Zhang. 2017. *Book of Rites*. Chinese Classic Serials. Zhonghua Book Company Press. 胡平生、张萌译著. 礼记[M].中华名著经典系列.中华书局出版社.

Hughes, Richard W., Olivier Galibert, George Bosshart, Fred Ward, Thet Oo, Mark Smith, Tay Thye Sun, and George E. Harlow. 2000. "Burmese Jade: The Inscrutable Gem." *Gems and Gemology* 26(1): 2-26.

Jackson, William A. 2019. *Markets: Perspectives from Economic and Social Theory*. Oxford: Taylor & Francis.

Jin, Yuanpu et al. 2014. *Outline of Chinese Culture*. Beijing: Remin University Press.中国文化概论: 精编版/金元浦主编[M]. 中国人民大学出版社 2016 年 6 月.

Karnøe, Peter, Julia Kirch Kirkegaard, and Koray Caliskan. 2022. "Introducing the Lens of Markets-in-the-Making to Transition Studies: The Case of the Danish Wind Power Market Agencement." *Environmental Innovation and Societal Transitions* 44: 79-91.

Keane, Webb. 2003. "Semiotics and the Social Analysis of Material Things. *Language & Communication* 23: 409–425.

Keane, Webb. 2008. "Market, Materiality and Moral Metalanguage." *Anthropological Theory* 8(1): 27-42.

Khuri, Fuad I. 1968. "The Etiquette of Bargaining in the Middle East." *American Anthropologist* 70(4): 698-766.

Kipnis, Andrew B. 1997. *Producing Guanxi: Sentiment, Self, and Subculture in a North China Village*. Durham: Duke University Press.

Kipnis, Andrew B. 2007. "Neoliberalism Reified: Suzhi Discourse and Tropes of Neoliberalism in the People's Republic of China." *Journal of the Royal Anthropological Institute* 13(2): 383–400.

Lantham, Robert. 2000. "Social Sovereignty." Theory, Culture & Society 17(4): 1–18.

Laozi. 2016. *Dao De Jing: The United Version*. Translated by Yang Peng. Barrytown, NY: Station Hill Press.

Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Lemon, Alaina. 2013. "Touching the Gap: Social Qualia and Cold War Contact." *Anthropological Theory* 13(1/2): 67–88.

Li, Xiuqiang. 2020. "The Jade Age in the History of Chinese Civilization and the Origin of Kingship." *Journal of University of Jinan (Social Science Edition)* 30(5): 59-65. 中华文明史的 玉器时代和王权起源[J].济南大学学报(社会科学版),2020年第 30 卷第 5 期.

Lin, Huadong. 1996. "Jade Era." *Zhejiang Social Science* 04(010): 44-47. "玉器时代"管窥[J]. 浙江社会科学.1996 年第 4 期.

Lin, Paul J. 1977. *A Translation of Lao Tzu's Tao Te Ching and Wang Pi's Commentary*. Ann Arbor: University of Michigan Press.

Liu, Guoxiang. 2019. "The Methodology and Case Study on Chinese Jade." *Jianghan Archaeology* 5(164): 138-144. 中国玉器考古研究方法与实例探析[J].江汉考古.2019 年第 5 期(总第 164 期).

Liu, Li. 2005. *The Chinese Neolithic: Trajectories to Early States*. Cambridge: Cambridge University Press.

Liu, Suqin. 1994. "On Integration of Confucianism-Buddhism-Daoism and Jade Culture." *Journal of Chinese History Museum* 9(1): 38-45. 儒释道与玉文化[J].中国国家博物馆馆刊.1994年01期.

Liu, Yuqing and Li Xi. 2011. *The Book of Songs*. Chinese Classic Serials. Zhonghua Book Company. 刘毓庆、李蹊著. 诗经[M]. 中华名著经典系列. 中华书局出版社.

Lu, Jianying. 2008. "Rethinking on Jade Age." *Journal of Shaoguan University* 29(2): 48-51. 关于"玉器时代"的再思考[J].韶关学院学报-社会科学 2008 年第 29 卷第 2 期.

Madison, D. Soyini. 2012. *Critical Ethnography: Method, Ethics, and Performance*. Thousand Oaks: Sage Publications.

Malinowski, Bronislaw. 1922. Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea. London: Routledge.

Marx, Karl. 1955[1867]. *Capital*. Edited by Friedrich Engels and Translated by Samuel Moore and Edward Aveling. Chicago: Encyclopedia Britannica.

Mauss, Marcel. 1954 (1925). *The Gift: Forms and Functions of Exchange in Archaic Societies*. Translated by Ian Cunnison. Eastford, CT: Martino Fine Books.

Mazzocco, Ilaria and Scott Kennedy. 2022. "Public Opinion in China: A Liberal Silent Majority?" Center for Strategic and International Studies. https://www.csis.org/features/public-opinion-china-liberal-silent-majority. Accessed April 29, 2023.

McMichael, P. 2013. "Value-chain Agriculture and Debt Relations: Contradictory Outcomes." *Third World Quarterly* 34 (4): 671–690.

McNally, Christopher A. 2019. "Chaotic Mélange: Neo-:iberalism and Neo-Statism in the Age of Sino-Capitalism." *Review of International Political Economy* 27(2): 281-301

Miller, Daniel. 2002. "Turning Callon the Right Way Up." Economy and Society 31(2): 218-233.

Mitchell, Timothy. 2007. "The Properties of the Markets." In *Do Economists Make Markets? On the Performativity of Economics*, edited by Donald MacKenzie, Fabian Muniesa, and Lucia Siu, 245-279. Princeton: Princeton University Press.

Møller, Henrik. 2017. "The Potentials of Feicui: Indeterminacy and Determination in Human-Jade Interaction in Southwest China. In *Emptiness and Fullness: Ethnographies of Lack and Desire in Contemporary China*, edited by Susan Bregnback and Mikkel Bukenborg, 120-139. New York: Berghahn Books.

Møller, Henrik. 2019. Spectral Jade: Materiality, Conceptualization, and Value in the Myanmar-China Jadeite Trade. Doctoral Dissertation. Lund: Lund University.

Müller, Juliane. 2021. "The Limits of Corporate Chains and Brand Management: 'Loyalty' and Efficacy of Vernacular Markets in the Andes." *Cultural Anthropology* 36(2): 252–281.

Munn, Nancy. 1986. The Fame of Gawa: A Symbolic Study of Value Transformation in a Massim Society (Papua New Guinea). Durham: Duke University Press.

Muthoo, Abhinary. 2000. "A Non-Technical Introduction to Bargaining Theory." World Economics 1(2): 145-166

Neilson, Jeffrey. 2014. "Value Chains, Neoliberalism and Development Practice: The Indonesian Experience." *Review of International Political Economy* 21(1): 38–69.

Nader, Laura. 1969. "Up the Anthropologist: Perspectives Gained from 'Studying Up." In *Reinventing Anthropology*, edited by Dell Hymes, 284-311. New York: Random House.

Nader, Laura. 1980. "The Vertical Slice: Hierarchies and Children." In *Hierarchy and Society: Anthropological Perspectives on Bureaucracy*, edited by Gerald M. Britan and Ronald Cohen, 31-43. Philadelphia: Institute for the Study of Human Issues.

Nader, Laura. 1997. "Controlling Processes: Tracing the Dynamic Components of Power." *Current Anthropology* 38(5): 711–737.

Nonini, Donald. 2008. "Is China Becoming Neoliberal?" *Critique of Anthropology* 28(2): 145-176.

Nyiri, Pal. 2012. "Enclaves of Improvement: Sovereignty and Developmentalism in the Special Zones of the China-Lao Borderlands. *Comparative Studies in Society and History* 54(3): 633-562.

Ong, Aihwa. 1999. Flexible Citizenship: The Culture Logic of Transnationality. Durham: Duke University Press.

Ong, Aihwa. 2000. "Graduated Sovereignty in South-East Asia." *Theory, Culture and Society* 17(4):55-75.

Osburg, John. 2013a. *Anxious Wealth: Money and Morality Among China's New Rich*. Stanford: Stanford University Press.

Osburg, John. 2013b. "Global Capitalisms in Asia: Beyond State and Market in China." *The Journal of Asian Studies* 72(4): 813-829.

Parsons, Talcott. 1977. The Evolution of Societies. Englewood Cliffs, NJ: Prentice Hall.

Peirce, Charles Sanders, and Justus Buchler. 1955. *Philosophical writings of Peirce*: Selected and edited, with and Introduction, by Justus Buchler, 98-119, Dover Publications.

Polanyi, Karl. 1944. *The Great Transformation: The Political and Economics Origins of our Time*. Boston: Beacon Press.

Polanyi, Karl. 1957. *Trade and Market in the Early Empires: Economies in History and Theory*. Glencoe: Free Press.

Proctor, Robert N. 2001. "Anti-Agate: The Great Diamond Hoax and the Semiprecious Stone Scam." *Configurations* 9(3): 381-412.

Ralph, Laurence. 2013. "The Qualia of Pain: How Police Torture Shapes Historical Consciousness." *Anthropological Theory* 13(1/2):104–118.

Rawson, Jessica. 1995. *Chinese Jade: From Neolithic to the Qing*. London: British Museum Press.

Rippa, Alessandro and Yi Yang. 2017. "The Amber Road: Cross-Border Trade and the Regulation of the Burmite Market in Tengchong, Yunnan." *Trans–Regional and–National Studies of Southeast Asia* 5(2): 243–267.

Rofel, Lisa. 2007. *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture*. Durham: Duke University Press.

Rubin, Jeffrey. Z. and Bert R. Brown. 1975. *The Social Psychology of Bargaining and Negotiation*. New York: Academic Press.

Ruili City People's Government Portal. http://www.rl.gov.cn/web/index.aspx. Accessed April 29, 2023.

Sahlins, Marshall. 1972. Stone Age Economics. London: Routledge.

Sahlins, Marshall. 1994. "Cosmologies of Capitalism: The Trans-Pacific Sector of 'The World System." In *Culture/Power/History: A Reader in Contemporary Social Theory*, edited by Nicholas B. Dirks, Geoff Eley, and Sherry B. Ortner, 412-455. Princeton: Princeton University Press.

Scott, James. 2009. The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia. New Heaven: Yale University Press

Schumpeter, Joseph. 1934. *The theory of economic development – An inquiry into profits, capital, credit, interest, and the business cycle.* Cambridge, MA: Harvard University

Schumpeter, Joseph. 1942. Capitalism, socialism and democracy. New York: Harper & Row.

Shao, Wangping. 2005. "The Formation of Civilization: The Interaction Sphere of the Longshan Period." *The Formation of Chinese Civilization: An Archaeological Perspective*, edited by Kwang-chih Chang and Pingfang Xu, and Sarah Allan, 85-123. New Haven: Yale University Press.

Shi, Guanghai, Xia Wang, Bingbing Chu, and Wenyuan Cui. 2009. "Jadeite Jade from Myanmar: Its Texture and Gemological iImplications." *The Journal of Gemology* 31(5-8): 185-195.

Shi, Guanghai, George E. Harlow, Jing Wang, Jun Wang, NG Enoch, Xia Wang, Shu Min Cao, and W. Enyuancui. 2012. "Mineralogy of Jadeite and Related Rocks from Myanmar: A Review with New Data." *European Journal of Mineralogy* 3(24): 345-370.

Skinner, G. William. 1964–65. "Marketing and Social Structure in Rural China." Journal of Asian Studies 24(1-3).

Slater, Don. 2011. "From Calculation to Alienation: Disentangling Economic Abstractions." *Economy and Society* 31(2):234-249.

Smith, Adam. 2007[1776]. An Inquiry in the Nature and Causes of the Wealth of Nations. London: Harriman House.

Smith, James H. 2011. "Tantalus in the Digital Age: Coltan Ore, Temporal Dispossession, and 'Movement' in the Eastern Democratic Republic of Congo." *American Ethnologist* 38(1): 17-35.

Storr, Virgil Henry. 2010. "The Social Construction of the Market." Society 47: 200–206.

Streinzer, Andreas. 2018. "Relations with the Market: On Cosmologies of Capitalism in Greece." In *Market Versus Society: Anthropological Insights*, edited by Manos Spyridakis, 113-131. New York: Palgrave Macmillan.

Song, Tao, Teresa Chahine, and Man Sun. 2020. "Ruili, China: The China–Myanmar Nexus Hub at the Crossroads." *Cities* 104: 102766.

Sun, Laichen. 2011. "From Baoshi to Feicui: Qing-Burmese Gem Trade c1644-1800." In *Chinese Circulations: Capital, Commodities, and Networks in Southeast Asia*, edited by Eric Tagliacozzo and Wen-chin Chang, 203-220. Durham: Duke University Press.

Sweeney, James. 1974. "Quality, Commodity Hierarchies, and Housing Markets." *Econometrica* 42(1):147-167.

Tagliacozzo, Eric. 2001. "Border Permeability and the State in Southeast Asia: Contraband and Regional Security." *Contemporary Southeast Asia* 23(2): 254-274.

Tang, Qicui. 2013. "Review on the Research of the 'Jade Route'." *Journal of Shanghai Jiaotong University (Philosophy and Social Sciences)* 6(21): 27-36. 玉石之路研究与回展[J].上海交通大学学报(哲学社会科学版)2013 年第 21 卷第 94 期

Toyota, Mika. 2000. "Cross-Border Mobility and Social Networks: Akha Caravan Traders." In *Where China Meets Southeast Asia: Social and Cultural Change in the Border Regions*, edited by Grant Evans, Christopher Hutton, and Kuah-Pearce Khun Eng, 204-211. New York: Palgrave Macmillan.

Tsing, Anna Lowenhaupt. 2005. Friction: An Ethnography of Global Connection. Princeton: Princeton University Press.

Vallard, Annabel. 2019. "When Stones Become Gems: Valuations of Minerals in Thailand." In *The Anthropology of Precious Minerals*, edited by Elizabeth Ferry, Annabel Vallard, and Andrew Walsh, 118-146. Toronto: University of Toronto Press.

Walker, Andrew. 2000. "Regional Trade in Northwestern Laos: An Initial Assessment of the Economic Quadrangle." *In Where China Meets Southeast Asia: Social and Cultural Change in the Border Regions*, edited by Grant Evans, Christopher Hutton, Kuah-Pearce Khun Eng, 1220144. New York: Palgrave Macmillan.

Walsh, Andrew. 2004. "In the Wake of Things: Speculating in and about Sapphires in Northern Madagascar." *American Anthropologist* 106(2): 225-237.

Walsh, Andrew. 2010. "The Commodification of Fetishes: Telling the Difference Between Natural and Synthetic Sapphires." *American Ethnologist* 37(1): 98-114.

Weber, Marx. 2001(1905). *The Protestant Ethic and the Spirit of Capitalism*. Translated by Stephen Kalberg. Chicago: Fitzroy Deaborn Publishers.

Wei, Zhen. 2004. "Remark on 'Jade Article Era." *Henan Social Science* 12(5):129-131. "玉器 时代"研究述评[J]. 河南社会科学.2004 年 9 月第 12 卷第 5 期.

White, H. C. 1981. "Where Do Markets Come From?" *The American Journal of Sociology* 87 (3): 517–547.

Wilk, Richard R, and Lisa C. Cliggett. 2009. *Economies and Cultures*. Boulder: Westview Press.

Woods, Kevin. 2011. "Ceasefire Capitalism: Military-Private Partnerships, Resources Concessions and Military-State Building in the Burma-China Borderlands." *The Journal of Peasant Studies* 38 (4): 747-770.

Xie, Zhongli. 1994. "Jade Age—An Analysis on a New Concept." *Journal of Archaeology* (09):832-836. "玉器时代"一个新概念的分析[J]. 考古.1994 年第 9 期.

Xu, Yihua. 2018. "Jade Culture in Oracle Bone Scripts." *Museum* 05:026-036. 甲骨文中的玉文化[J]. 博物院. 2018 年第 5 期专题.

Yan, Yunxiang. 1996. *The Flow of Gifts: Reciprocity and Social Networks in a Chinese Village*. Stanford: Stanford University Press

Yan, Yunxiang. 2003. Private Life Under Socialism: Love, Intimacy, and Family Change in a Chinese Village, 1949—1999. Stanford: Stanford University Press

Yan, Yunxiang. 2009. The Individualization of Chinese Society. Oxford: Berg.

Yang, Bin. 2004. "Horses, Silver, and Cowries: Yunnan in Global Perspective." *Journal of World History* 15(3): 281-322.

Yang, Boda. 1989. "Aspects of Ancient Chinese Jade Wares." *Journal of the Palace Museum* 1989(1): 32-48. 中国古代玉器面面观[J].故宫博物院院刊.

Yang, Boda. 2004. "On the Position and Network of 'the Jade Road." *Academic Forum of Nan Du (Journal of the Humanities and Social Sciences)* 24(3): 113-117. "玉 石 之 路"的 布 局 及 其 网 络[J].南 都 学 坛 (人 文 社会 科 学 学 报). 2004 年第 3 期.

Yang, Mayfair. 1994. *Gifts, Favors, and Banquets: The Art of Social Relationships in China*. Ithaca: Cornell University Press.

Yang, Shenghe and Yingbo Li. 2005. "China's First Jewelry Street." *Guangcai* 2005(9): 12-14. 中华翡翠第一街[J]. 光彩.2005 年第 09 期.

Yang, Yang and Xiaoyu Jiang. 2013. "Discussions on 'Jade Age." *Journal of Shaanxi University of Technology* 31(4):32-36. "玉器时代"研究述评[J].陕西理工学院学报.2013 年 11 月第 31 卷第 4 期.

Yao, Haitao. 2018. "Different Perspective on Jade of Confucianism in Pre-Qin Period." *Journal of Taiyuan Normal University (Social Scient Edition)* 17(1): 5-10. 先秦儒家论玉的思想视界[J]. 太原师范学院学报(社会科学版). 2018年1月第17卷第1期.

Ye, Xianshu. 2011. "The Story of Goddess Nuwa Mending the Sky and the Mythology of Jade as Sky." *Ethnic Art Quarterly* 2011: 20-39. 女娲补天和玉石为天的神话观[J]. 神话-图像.

Ye, Xianshu. 2014a. "The Birth of Jade Culture in East Asia and Timeline." *Henan Social Science* 22(9):74-82. 东亚玉文化的发生与玉器时代分期[J].河南社会科学2014年9月第22卷第9期.

Ye, Xianshu. 2014b. "Jade Cult Mythology and China's Core Values——From the Great Tradition of the Jade Age to the Small Tradition of the Bronze Age." *Social Scientist* 12: 127-132. 玉教神话与华夏核心价值——从玉器时代大传统到青铜时代小传统[J].社会科学家 2014年 12 月第 12 期.

Ye, Xianshu. 2018. "An Acquaintance with the Jades Unearthed from Dadiwan Ruins ——The Qin'an Station Briefing of the 13th Cultural Investigation on Road of Jade and Silk." *Journal of Baise University* 31(1):1-8.

Ye, Xianshu. 2019a. "On the Three Waves of Unifying China: New Theoretical Construction from the Perspective of Cultural Tradition. *Shanghai Culture*(10): 005-012. 统一中国的三大浪潮说—文化大传统的新理论视角建构[J].学术专题(神话学研究)2019 年第 10 期.

Ye, Xianshu. 2019b. "Ritual Artifacts Jade: Original Coding China—on the Attestation of Six Artifacts in Rites of Zhou. *Cultural Heritage* (5): 106-112.

Yi, Hua. 2019. "Liang Culture and Huaxia Civilization." *The Central Plains Cultural Research* 5: 5-13. 良渚文化与华夏文明[J].中原文化研究.2019 年第 5 期.

Yu, Ming. 2011. Chinese Jade. Cambridge: Cambridge University Press

Zaloom, Caitlin. 2005. Out of the Pits: Traders and Technology from Chicago to London. Chicago: University of Chicago Press.

Zhang, Kwang-Chih. 1983. *Chinese Bronze Age*. Beijing: SDX Joint Publishing. 中国青铜时代 [M].北京:三联书店

Zhang, Kwang-Chih. 1986. On "Cong" and its Significance in Ancient Chinese History. Beijing: Wenwu. 张光直. 谈"琮"及其在中国古史上的意义[M]. 文物与考古论集. 北京: 文物出版社.

Zhang, Li. 2010. *In Search of Paradise: Middle Class Living in a Chinese Metropolis*. Ithaca: Cornell University Press.

Zhang, Li, and Aihwa Ong. 2008. *Privatizing China: Socialism from Afar*. Ithaca: Cornell University Press.

Zhong, Huabang. 2014. "Doubt on 'Jade Road' of Ancient China." *Journal of Gems and Gemology* 16(3): 75-77. 中国古代"玉石之路"的质疑[J].宝石和宝石学杂,2014年6月第16卷第3期.

Zhou, Kevin Zheng, Chengting Su, and Yeqing Bao. 2002. "A Paradox of Price—Quality and Market Efficiency: A Comparative Study of the US and China Markets." *International Journal of Research in Marketing* 19(4): 349–365

Zhu, Yifang. 2008. *The Research on Tradition of Chinese Jade Culture*. Doctoral dissertation. Beijing: Tsinghua University. 朱怡芳.中国玉石文化传统研究[D],北京:清华大学, 2008.