

SNAKEHEADS AND THE CARTWHEEL NETWORK  
—FUNCTIONAL FLUIDITY AS OPPOSED TO STRUCTURAL FLEXIBILITY

Sheldon X. Zhang  
Department of Sociology  
San Diego State University  
5500 Campanile Drive  
San Diego, CA 92182-4423  
Tel: (619) 594-5448; Fax: (619) 594-1325  
Email: [szhang@mail.sdsu.edu](mailto:szhang@mail.sdsu.edu)

## ABSTRACT

Research has shown that Chinese human smugglers (or snakeheads) are mostly enterprising individuals who use their social networks to provide underground travel service to facilitate the migration of their compatriots to their destination countries. These circles of social contacts resemble a series of cartwheels connected through their central nodes—a process comprising multiple groups of entrepreneurs, each doing their part to move their clients forward. These snakeheads provide as well as broker resources required of a smuggling operation, and their transactions are mostly dyadic for safety reasons as well as profit protection. The chain-like smuggling process hinges heavily on the successful delivery of the required services at each and every stage, anyone of which can bring down the entire operation should it fail. While the enterprise of human smuggling as a whole exhibits much flexibility and resiliency towards market uncertainties and constraints, individual networks nonetheless are highly vulnerable to structural disturbances. From a law enforcement perspective, it is far more effective to target these brokers than any prolonged investigations aimed at capturing major smuggling kingpins.

## BACKGROUND

Chinese human smuggling emerged and prospered in the past few decades because of the increased demand for transnational migration in China. The restrictive immigration procedures imposed by most western countries, the U.S. in particular, have only fueled the demand for services provided human smugglers (Zhang 2007). This was coupled with a reformulated conceptualization of emigration in China: no longer considered a traitorous act, it is now encouraged as a means of bringing foreign revenue into the country (Landolt and Da, 2005).

Research by Zhang (2008) and Chin (1999) suggest that Chinese human smuggling activities mostly consist of serial transactions in which one snakehead brings forth the desired goods or service to the next who in turn sells to yet another. The process goes on and on until the migrant reaches his/her final destination. Compared to traditional criminal organizations such as the Hong Kong triads or Italian mafia, empirical research thus far indicates that Chinese smuggling organizations are made up by loosely affiliated individuals who, through fortuitous opportunities and social connections, pool their resources to provide underground travel services. One special feature of these smuggling organizations is their adaptability and flexibility in a hostile business environment. Zhang and Chin (2002) argued that there are many structural advantages in favor of these loosely structured organizations, in contrast to the traditional criminal organizations. However much more conceptual development and elaboration are needed to explain what makes the Chinese human smuggling organizations flexible and adaptive.

### *Morselli's Work on Brokers in Car Theft and Exportation Operations*

An influential article by Morselli and Roy (2008), who studied automobile theft and exportation businesses (or the ringing operations), found that individuals occupying brokering

positions inside criminal networks were most responsible for smoothing or lubricating otherwise disjointed facets of the illicit enterprise—from stealing and pawning the stolen vehicles to arranging for their exportations. The work by Morselli and Roy was informed by Burt (2005) who posited that brokers are advantageous in a competitive environment because of their ability to connect otherwise disjointed partners for business transactions. Brokers occupy a position that separates participants from access to their desired services or goods; as long as the asymmetries of information and access remain, the broker will benefit from this competitive edge (Burt 1992).

Morselli and Roy (2008) observed similar functions in criminal enterprises because disconnected participants must rely on brokers to complete their transactions. By analyzing both the crime process and social-networks, Morselli and Roy (2008) found that the simple removal of a few brokers would cause major disruptions to the ringing operations and significantly reducing the options for others involved in the enterprise. In other words, the criminal network would simply fall apart without the hinges provided by these brokers. The flexibility often found in illicit enterprises is therefore a product of such brokerage functions.

This study reexamines previously collected data on Chinese human smugglers (also known as snakeheads) and attempts to understand how snakeheads provide flexibility to the illicit enterprise. Recent law enforcement intelligence suggests that Chinese humans smuggling into the U.S. is not only alive and well but also remains adaptable to law enforcement efforts. For instance, maritime-based smuggling operations directly to the U.S. shores have largely vanished. Instead, Chinese human smugglers are now using Latin American countries to off-load their cargoes. For more than a century, Chinese human smugglers have used the porous borders between U.S. and Mexico to transport their clients (Chao 2005; Zhang 2008). But rarely were they found to mix with local migrants. In a recent case, more than five hundred migrants were

found in two trailers crossing from Guatemala into Chiapas, Mexico, among whom were scores of Chinese nationals mixed with Guatemalans, Nepalese, and Indians (Corcoran 2011). While Chinese human smuggling has received much news coverage and some academic attention, the flexibility and adaptability observed among the smuggling organizations are not well understood.

## METHOD

The data in this paper were based on interviews with 129 human smugglers who were directly involved in organizing and transporting Chinese nationals to the U.S. Interviews were conducted in three primary sites: New York City, Los Angeles, and Fuzhou (China). Purposive sampling was used to recruit participants through personal networks of the project staff. Two types of interviews were conducted in both countries—formal and informal. Formal interviews used an instrument with semi-structured questions. Informal interviews often took place over tea or dinner tables, where formal inquiries were neither feasible nor socially acceptable. Interviewers therefore had to jot down the details immediately after these informal meetings. All interviews were conducted in the subjects' native language.

Several strategies were used to improve the validity and reliability of the data collected in this study. As with all field research involving face-to-face interactions with study participants, the primary goal is to build rapport and trust. Research staff in this study spent significant amount of time in the field meeting and talking to their social contacts who were in the smuggling business. Moreover, several interviewers hired by the project were themselves at one time illegal immigrants smuggled into the U.S. As a result, this study was able to reach a much larger smuggler population through their direct connections in the communities.

Internal validity was further strengthened by crosschecking different data sources as well as field observations. All formal interviews were conducted individually with no one else knowing when, where, or whether the conversation would take place. The informal interviews were either conducted spontaneously or scheduled, depending on the availability of the participants, without the knowledge of their referrals. Therefore it would be all but impossible for study participants to conspire to mislead the interviewers. Although deficient in many aspects, the methods employed in this study were probably the only viable way to gain entrance into the secret world of human smuggling.

### SMUGGLERS AND THEIR BROKERING ROLES

Multiple tasks are involved in a smuggling operation. Depending on the complexity of the transportation plan, some smuggling operations involve more specialized tasks than others. The complexity in business arrangements and corresponding tasks often make it difficult to separate snakeheads into meaningful categories. For instance, one respondent in Fuzhou acted as a recruiter, but he also provided transportation for his clients to meet with his partner. When the parties reached an agreement, he collected the down payments. At the end of a smuggling operation, he was also responsible for collecting the remaining balance from the relatives in China. Therefore, this snakehead played multiple roles—a recruiter, a payment collector, and a transporter. Although some snakeheads can play multiple roles, others are responsible for only one task, such as procuring travel documents or bribing security personnel at an exit checkpoint. To avoid glossing over crucial details of the many specific tasks snakeheads undertake, respondents in this study were grouped by their primary responsibilities, as shown in Table 1.

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Table 1 about here  
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The largest three categories were recruiters, document vendors, and payment collectors, and these roles can be further divided into more specific groups of tasks. One cannot assume that all recruiters are the same, as they tend to target different clients and use variant methods of recruitment. Some only approach would-be clients, while others recruit U.S. passport or green card holders in order to procure their legal documents. Still others look only for eligible bachelors willing to enter into fraudulent marriages. For the document vendors, some specialize in preparing documents for business delegations or securing certificates for fraudulent marriages. Others produce paperwork for various student or trainee visa applications or arrange for photo-substitutions. Irrespective of their specific tasks, recruiters generally perform either of two functions in the smuggling business, enlisting fee-paying clients or acquiring legal papers that enable clients to travel.

Document vendors also fall into different specializations, depending on their connections and the type of legal papers required for each smuggling operation. Because many government agencies and commercial entities can produce legal documents that facilitate smuggling activities (i.e., passports, birth certificates, marriage licenses, business letters, and financial affidavits), document vendors are of a mixed bunch. Some are only tangentially involved because the value of their documents is limited (such as providing business letters and company descriptions), but others play influential roles in smuggling operations by supplying birth certificates and passports. Then there are counterfeit artists, who either alter authentic legal documents or

produce entirely bogus ones. Document vendors command essential positions in the smuggling business and are also the most diverse in their compositions.

Payment collectors also fall under different categories. Some collect down payments when clients sign up with their smugglers, and others collect the remaining fees at the end of an operation. In sum, not all snakeheads engage in identical activities. Most carry out activities determined by the resources at their disposal. The specific players needed for a smuggling operation vary, depending on its complexity and the transportation method. These roles usually play out in successive stages according to the sequence of a smuggling operation.

### *Broker-Dominated Business Environment*

In the course of the data collection, a common finding quickly emerged. Transactions among snakeheads typically terminate at the next contact point. Snakeheads were found to deal with each other mostly one on one, or on dyadic basis. This style of transactions becomes the tell-tale sign of a business environment where brokers are playing the dominant role. The question of resource sharing (such as “do you have a backup plan” or “who your partner is dealing with”) was repeatedly put forth to the respondents; but snakeheads simply looked incredulous—why would anyone give up their advantageous position? As explained in the later sections, this practice of one-on-one relationships is dictated by two essential requisites for survival in the business—profit protection and risk management.

It should be noted that this broker-dominant environment doesn't mean that snakeheads are stuck in one role forever. As they expand their social networks and become established in the smuggling business, their tasks and responsibilities also seem to multiply. Most of the changes appeared to evolve from low-level activities such as making referrals and recruiting clients to

more complex tasks such as coordinating several partners and making arrangements for transportation and payment guaranty tasks. The gradual accumulation in experiences and social contacts in the smuggling business appear to be the main impetus behind the shift in roles. A 36-year-old snakehead in Lianjian County, who also owned and operated a brick factory, described how his roles in the smuggling business changed over time:

At first I was merely looking for would-be clients for other snakeheads. I don't recruit any more. Instead, I gather information in my village or neighboring villages about those villagers who have already obtained U.S. citizenship, and find out if any of them are about to come home for a visit from the U.S. As soon as they return, I approach them and try to buy their passports. Once I obtain a passport, I inform my recruiters, who will in turn look for a client whose appearance and age will best match those in the passport.

Another indicator of this broker-controlled market is that almost no respondents in this study were working for a “godfather” who dictated their schedule or assignment. Although there were a few “big” snakeheads in this study, none considered themselves the boss. Most respondents would describe others in their network as their friends or business partners. Because of the specialized tasks, there were multiple layers of operatives, each revolving around an inner core—the broker. Because transnational human smuggling involves several stages—recruitment, travel preparation, departure, transit, arrival, and payment collection—each is coordinated by snakeheads supported by additional networks of friends and partners.

A third indicator that Chinese smuggling organizations are dominated by brokers is the snakeheads' self-identity with regard to their group affiliation. As Table 2 shows, all respondents claimed to be working within a group of varying size. More than one third claimed that they

worked closely with two to five partners. Another 17 percent claimed that their core members numbered six or more. Surprisingly, 40 percent of the respondents did not acknowledge the concept of group in any way; they were simply working with friends or business associates. These respondents truly believed that the casual and sporadic nature of their business activities, and their get-togethers in restaurants or teahouses, were nothing more than routine social activities. These were the same activities that they would have done with their friends anyway, with or without any business prospect. One female snakehead in Fuzhou stated:

Most of us in this business do not deal with each other like a formal business. When I get together with my friends (other snakeheads), we typically eat out and we take turns to treat one another. When I am with my friends [female snakeheads], we sometimes go to sauna, take a hot bath, get a massage, and then we play cards or drink tea and chat. It is very relaxing that way. We don't always do business. If we have business, we will take care of it.

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Table 2 about here

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#### MARKET CONSTRAINTS IN A TRANSNATIONAL ENVIRONMENT

Smith (1980) argued that the study of organized crime should focus on the activities (i.e., the enterprise) rather than the group or groups of individuals undertaking the enterprise. Along the same line, the best way to understand the organizational and operational attributes of Chinese human smuggling is perhaps to examine the nature of the smuggling business and its market environment. Oliver Williamson (1975), in his analysis of entrepreneurships and organizational

hierarchies, argued that a business entity takes the structural form most conducive to facilitating optimal exchange relations under existing market conditions. Similarly, transnational human smuggling as an illicit business has its own market conditions, which dictate the organizational as well as operational characteristics of the smuggling organizations. Successful transactions, therefore, require snakeheads to overcome these obstacles in order to reach the eventual profit.

**Law Enforcement Interference.** The fear of law enforcement crackdowns is pervasive among all snakeheads, both in China and the U.S. For instance, the U.S. Congress passed the Violent Crime Control and Law Enforcement Act of 1994, which stipulates that illegal migrant smuggling faces a possible imprisonment term of ten years (and/or fines), and the penalty is increased to twenty years per illegal immigrant if bodily injury occurs or life is placed in jeopardy in connection with the smuggling offense (U.S. Commission on Immigration Reform 1994, 48). To raise the financial stakes further, the U.S. Senate in 1995 allowed law enforcement agencies to use the tools authorized under the RICO (Racketeering-Influenced and Corrupt Organizations) legislation to combat human smuggling.<sup>1</sup> The RICO legislation has for decades been reserved for fighting the most notorious organized crime groups in cities such as New York and Chicago. As a result, smugglers strive to keep their transactions clandestine, thus restricting most activities to those of immediate social networks.

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<sup>1</sup> The Senate bill (S.754—104<sup>th</sup> Congress) was introduced by Edward Kennedy, D-Mass., on 5/3/1995 and sought to amend the Immigration and Nationality Act to more effectively control U.S. land borders, prevent the employment of illegal aliens, expedite the removal of illegal aliens, provide wiretap and asset forfeiture authority to combat alien smuggling and related crimes, and increase penalties for human smuggling activities. The full text can be found at the Library of Congress website: <http://thomas.loc.gov/cgi-bin/thomas>.

**Limited Clientele.** Human smuggling as a business offers poor prospects for growth because of its limited clientele. Although this assertion appears counter-intuitive, because one expects that millions in China would be eager to come to America, the reality is that only a handful may be considered worthy of being smuggled. A prospective client must have the financial wherewithal to even begin looking for a snakehead. Snakeheads have also developed elaborate procedures to verify whether prospective clients can pay. The most common way to prove one's financial means is to provide evidence that one has family members or close relatives in America with enough savings. Otherwise, a prospective client must find a relative or friend of significant social standing in the community to convince the snakehead that enough money can be raised from friends and relatives.

Financial screening is only one aspect of this unstable business. A snakehead must first identify "worthy" clients, a different task, because there are no open markets for smugglers and would-be migrants to meet one another. As a result, most illegal Chinese immigrants come from a limited number of regions in China. The fact that Chinese human smuggling activities are not a widespread phenomenon in China is in line with existing literature on international migration. As Massey et al. (2002, 143) point out, wage differentials do not necessarily cause international migration and the poorest countries "do not yield significant migration streams, even in the absence of formal barriers." International migration relies on the infrastructure that is often built through kinship networks and friendship. A relative or a member from the same home village becomes a contact as well as a source of social capital for others to migrate. The volume of the migration is limited to the capacity of the existing social networks already overseas. For instance, Chin and Kelly (1997) found, in their survey of illegal Chinese immigrants in the New York City, that almost 90 percent of the respondents were from regions within 50 kilometers of

Fuzhou, the capital city of Fujian province. The clandestine nature of the business, the need to screen prospective clients, and the small regions where eligible clients may be found combine to restrict the scope of the smuggling business and service territories.

**Operational Complexity.** The movement of undocumented immigrants across borders faces many logistical challenges. To launch an operation, snakeheads must plan their trips, acquire proper documents, and coordinate schedules with partners at transit points. This process does not take into account possible interferences by law enforcement activities, which often disrupt or delay smuggling activities. Although most would-be migrants would prefer direct flights to the United States (typically through the use of identity substitution), this smuggling method is rarely available and finding snakeheads capable of arranging such trips is difficult. Chin and Kelly (1997), after interviewing 300 smuggled Chinese immigrants in New York, found that only seven flew directly from China to America. The rest had to go through multiple and often treacherous transits.

One of the few findings that news media accounts, government reports, and academic studies all seem to agree is that snakeheads use elaborate transportation routes to exploit international border control inadequacies and avoid detection. These routes extend around the world, often involving ethnic Chinese enclaves in various nations that provide shelter, cultural and culinary comfort, and technical know-how to facilitate the movement of their countrymen to their destination. Ethnic enclaves overseas provide the most important infrastructure required to sustain international migration, legal or illegal (Massey and Zenteno 1999).

**Operational Hazards.** Inherent in all cross-border smuggling activities is the danger of accidents and mishaps. Although all snakeheads strive to safeguard their “cargoes,” the clandestine nature of the business almost makes accidents unavoidable. In 1999, 58 illegal

Chinese immigrants, all from Fujian Province, asphyxiated to death inside a refrigerator truck into Dover, England; the shipment was traced back to the Netherlands and Belgium (Woods 2000). McCarthy (2000) reported that when illegal immigrants fell ill and died during a long sea journey to the United States, their bodies were simply pushed off board. Stories like these appear from time to time in the news, although they most likely represent a small number of actual accidents. During this study, there have been many stories about people whose whereabouts remained unknown after having left the villages for years. A smuggler in China told this story:

A guy from my village crossed the border into Vietnam with the help of a snakehead and stayed there for weeks, waiting to start the next leg of the journey. The group he was traveling with walked for many days in thick wooded areas. Many of them fell ill, throwing up and having fevers. One man in the group later died, supposedly bitten to death by a swarm of mosquitoes in the jungle. People back at home couldn't believe what they heard. Have you ever heard of anyone being eaten alive by mosquitoes?

Small but non-fatal incidents happen even more frequently. A simple glitch (e.g., failing to pick up clients at a pre-arranged location, or staff changes at a border checkpoint) can cause the entire operation to fall apart. For instance, in August 1999, 82 Chinese nationals were taken into custody by Mexican authorities in Ensenada, Baja California after the police found them wandering near a highway (Lau and Dibble 1999). The group had arrived by boat five days earlier but the local collaborator failed to show up. After four days without food, these immigrants had to leave their hideout and venture out on their own.

**Sporadic Smuggling Opportunities.** Human smuggling is a business of opportunities. Eligible clients are not always available, even when a snakehead has the proper contacts to

launch a smuggling operation. The snakehead needs to verify the financial wherewithal of prospective clients. Preparations such as acquiring travel documents and notifying transit coordinators all take time. Long waiting periods exist between operations, thus making the business protracted in operation as well as unpredictable in outcome. Such an unstable business environment helps explain why most of the respondents in this study had other jobs or ran other businesses. It also explains why most smuggling organizations are nothing more than temporary alliances oriented towards one operation at a time, and snakeheads usually focus on carrying out one operation or one set of related tasks at a time.

#### RISK MANAGEMENT AND STRUCTURAL VULNERABILITY

As described earlier, transnational human smuggling is replete with uncertainties and risks. Chin (1999, 33) once quoted a snakehead who characterized Chinese smuggling process as a dragon: "... although it's a lengthy creature, various organic parts (of the body) are tightly linked." If any joint of this lengthy creature becomes disconnected, the entire operation will be paralyzed, stranding clients in transit countries. Therefore it is important to understand how snakeheads manage the risks and protect their profits.

A criminal organization, whether composed of complex command structures or simple peer groups, must reduce uncertainties and risk-bearing factors in the market place in order to achieve successful transactions. Accordingly, snakeheads almost always choose to interact with their partners on a one-on-one basis and share as little information as possible about their smuggling resources. This is for insurance purposes, because such arrangements guarantee a buffer for unanticipated events and provide contingency plans during a smuggling operation.

One recruitment coordinator in China, who specialized in sea-based smuggling operations, explained how he managed the risk of detection by law enforcement agencies:

What I am most afraid of are two things—one, when some of my clients change their minds and don't want to go anymore, in which case they can expose my action plan; and two, probably the worst, there might be informants among my clients working for the border patrol police. Therefore I never tell my clients in advance when they will leave or where to meet. I always make last-minute announcements to get them to the gathering location, and I do not allow them to contact anyone, not even their families. I usually give out only my pager numbers and use payphones to give instructions.

Because of the illicit nature of the business, the absence of formal legal protection, and the fear of law enforcement activities, people involved in the smuggling business must stay inconspicuous and seek as little attention as possible. Risk management becomes the defining factor in their group structure and operational style. It begins at the very front of an operation (i.e., client recruitment and screening) and continues until the very end, when the smuggling fees are collected. Once an opportunity arises, risk management by all snakeheads participating in the operation becomes the focal point in every stage of the smuggling process. To a great extent this mediates not only the organizational structure but also individual behavior within the organization. Snakeheads use several protective strategies for risk management purposes.

### *Protective Strategies*

Snakeheads have developed strategies to increase safety and reduce uncertainties inherent in the business. These include ethnic exclusivity (i.e., hometown dialects, ancestral lineage, and familial relationships), one-on-one business relations, underground banking, frequent change of cell phone and pager numbers, and spontaneous meeting locations. Many of these strategies are innovative as well as unique.

An example is the way large sums of money are exchanged. In addition to direct cash transactions, which remain the predominant payment method in the smuggling business, there are two common methods involving legitimate entities to handle payment issues. Both methods reportedly have emerged in response to occasional fraud or fraudulent representation in the smuggling business—a con artist may portray himself as a snakehead and request a down payment from his or her clients, then disappears. In one method, to ensure service provision and payment receipt, the client and the snakehead will go to a bank to open a joint account requiring both signatures to withdraw money. When the smuggling operation is completed or the agreed-upon tasks fulfilled, both parties return to the bank to settle the payment. In the second method, the client (usually a relative of the smuggled client) opens a bank account and deposits the agreed-upon sum of money, then gives the passbook—but not the password—to the snakehead. Without the password the snakehead cannot make a withdrawal, but neither can the client without the passbook. When the smuggling operation is completed, the client will supply the password to the snakehead, who can then withdraw the money. Because of the expanding economy in China, such financial transactions rarely arouse suspicion from the authorities. Furthermore, because most smuggling operations take months, if not years (e.g., fraudulent marriages) to complete, these bank deposits are usually long term and hence even less visible to any official scrutiny.

Despite huge profit potential, most subjects in this study remained extremely cautious and conservative in their business approach. Many seemed to have developed certain profiles to scrutinize prospective clients; others preferred a particular style in carrying out smuggling activities. As one smuggler in Fuzhou described:

I only do a small-scale smuggling business because I am not greedy. Some people, after they've succeeded in few cases, become so carried away that they drastically increase the number of clients in subsequent operations. That's how they get into trouble. These aggressive snakeheads are mostly young guys. I am more conservative. I don't get involved if I am not 100 percent sure, nor do I do business with strangers. That's why I've been able to stay in this business for such a long time.

Secrecy in this business is an absolute necessity. The snakeheads in this study mostly used mobile phones and pagers to communicate with their clients and partners. Some snakeheads even avoided dealing with clients in the townships where they lived. They would arrange to meet in a public place first, such as a restaurant or hotel lobby, and then proceed to a mutually comfortable location to discuss details. Since there are no venues for public announcement or open advertising in this business, snakeheads' networking and self-promotion takes place only under circumstances in which trust can be easily built—among members of a family clan or people from the same village. Secrecy is also ensured when snakeheads deal only with their partners or clients on a one-on-one basis, for self-protection and from being cut out of a deal. As one document vendor in Fuzhou described an interaction with his higher-up partner:

Whenever I want to see my “big brother,” I always call his cell phone. He never tells me where he is except right before he wants to meet me. He calls me and tells me where to meet him and at what time. When I deliver my documents (photo-substituted passports) to him, he usually drops them into his briefcase where I often see dozens of other different passports bundled together. There have been a few times when I asked about his other contacts, and he would snap at me, “Why are you asking? It is none of your business.” In this business, as long as you can provide the service as promised, no one will ask about how things come about.

Such one-on-one interactions, although conducive to protecting individual smugglers, also seem to make the smuggling organization vulnerable to structural disturbances. Few snakeheads know anyone above or below their direct contacts. Smuggling networks generally consist of a tight inner circle that few are able to infiltrate. Smugglers who are well known in one village are usually strangers in neighboring townships. They operate mostly within their own circles of contacts and seldom know what other snakeheads are doing. One’s reputation as a snakehead typically goes only as far as his or her social networks.

Another defensive measure for snakeheads and their operatives is to temporarily suspend all activities, a typical response to crackdowns by Chinese or U.S. authorities on human smuggling activities. It reduces their visibility in the community and deflects attention from their social networks. For example, soon after the Dover incident, a massive manhunt was launched in China to catch those responsible for the smuggling operation. The word of the crackdown immediately spread to the smuggling communities and sent most, if not all,

snakeheads into hiding. Almost all of the community contacts in this study in China as well as in the United States disappeared. Attempts to reach these people went nowhere. Their cell phones were cancelled and pagers turned off. Previously scheduled interviews and meetings were cancelled without notice. The impact was also evident on many would-be migrants who were in the middle of their smuggling preparation, as one such client in Fuzhou complained:

I am really disappointed after [name of a snakehead] told me today what has happened in Dover, England. I mean my plan to go to the U.S. is in limbo now. I have called my snakehead several times today and I have not been able to get through to him. His wife answered the phone when I called his home and she said: "I am not his wife. The family has already moved and I've just moved in. I don't know where they are." I knew that it was his wife, but she would not acknowledge it. I tried his mobile phone but it's been turned off. You see, he has my passport, but I can't find him.

Finally, being a member of a unique cultural group provides one of the best assurances and protection for people as to who can be trusted within an illicit business (Smith 1980), although some scholars question the notion of ethnic ties as a key component of organized crime (Potter 1994). In the context of Chinese human smuggling, having a common ancestral lineage or hometown carries considerable influence among snakeheads in determining whose clients are trustworthy. Speaking the same dialect and knowing each other's social circles can greatly strengthen the expectations of mutual interests and commitment to the illicit activities. It is also the best way to prevent the infiltration of outsiders.

*The Cartwheel and Circle of Social Networks*

The market conditions described above illustrate the kind of challenges and obstacles snakeheads must overcome to complete their transactions. Human smuggling operations are mostly task-oriented, which help those involved focus their energy and resource on their immediate jobs. In accordance with Williamson’s analysis of peer groups in economic activities (1975), human smuggling operations can be perceived as exchanges among peers. Activities among these peers require minimal organizational structure and a limited hierarchy. However, unlike peer groups in legal and normal economic activities, members of a smuggling organization rarely engage in teamwork (i.e., collective engagement in similar tasks and resource sharing). Their relations with each other are usually secretive and involve dyadic transactions. Each individual snakehead develops and maintains additional contacts and resources that are also clandestine in nature and dyadic in format. The following diagram illustrates the *dyadic cartwheel network perspective* on the multi-levels of one-on-one relationships characteristic of Chinese human smuggling organizations.

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Figure 1 about here: Dyadic Cartwheel Network

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Such an organizational structure, containing members of one’s close social network and oriented toward specific tasks, appears to have many advantages. First of all, in a business environment in which contractual relationships consist of mere spoken agreements (and are thus without formal legal protection), interactions within a small group of one’s friends and relatives

serve to increase shared understanding of the tasks that need to be completed. Two parties must reach an agreement that spells out service and financial requirements or the dyadic transaction will not occur. The dyadic cartwheel network effectively minimizes interpersonal tension and increases personal accountability. A favorable trading atmosphere, therefore, is easy to achieve and maintain because only individuals who can perform and deliver agreed-upon services can join and stay in the network. Those who cannot perform will be excluded because there won't be any meaningful roles for them to play. Shared expectations are easily promoted in these small groups. The resultant mutual understanding reduces uncertainty, increases collective commitment, and produces smooth transactions. This is particularly true when the core members of a smuggling organization speak the same dialect and grew up in the same ancestral township.

Second, small group interactions expedite information gathering and forwarding, improve communication, and facilitate decision making, particularly when most transactions take place on a dyadic basis, i.e. through brokers. The one-on-one transactions common to most smuggling operations, by definition, prevent any large complex organizations from emerging.

Because of their deliberate efforts to evade law enforcement activities, snakeheads often plan complex transportation routes and rendezvous points. Completion of each stage of a smuggling operation relies solely on successfully getting through the previous stage. Small group interactions can therefore reduce sequential complexity in smuggling operations. Each cluster of individuals (or task force) focuses on completing one phase or one set of tasks, such as obtaining fraudulent documents, arranging transportation, or securing cooperation from corrupt officials at border checkpoints. Timely adaptation in decision making is therefore possible when there are only a small number of brokers involved in a limited number of tasks. Maximum

efficiency is possible with a minimal number of players because any transaction or exchange occurs over the shortest distance—between two individuals.

Third, the dyadic cartwheel network can achieve maximum security with minimal exposure to law enforcement personnel or other operational hazards. Because of the restricted flow of information and limited contact with other members along the smuggling chain, individuals or clusters of individuals in a smuggling ring are insulated from one another. When one snakehead is arrested or one stage falls apart, the remaining members of the smuggling group will not likely face any imminent danger.

Additionally, the dyadic cartwheel network increases transactional security against unscrupulous snakeheads. When any pair of snakeheads engages in a transaction, one expresses what service she needs and the other indicates whether he and only he can supply the service. Even if he cannot provide the requested service himself, the information about where the needed service can be obtained is deliberately withheld. Instead, the broker will find and acquire the needed service from someone else. Services or goods vital to smuggling activities are exclusively held and carefully guarded by these brokers. As long as the asymmetries of information and access are maintained by the brokers, both safety and profit can be maximized.

### *Structural Vulnerability and Need for Additional Conceptual Clarification*

As described earlier, the success of a human smuggling operation relies on the success of each and every stage along the process. The dyadic cartwheel network is made up of snakehead brokers with their own networks and resources. There is minimal redundancy, and one-on-one transactions ensure maximum profits for all parties involved. Because of the illicit nature of the business, there are few opportunities to shop around, although over time a snakehead may

expand his or her network of resources. Protection of one's profit therefore relies solely on one's ability to keep his or her resources inaccessible to others. However, such a business arrangement is highly vulnerable to external threats and structural disturbances. The many stories on failed operations uncovered in this study and reported in the news were mostly due to a failed linkage in this dragon-like smuggling process. An entire operation collapses if one broker fails to deliver the needed service.

One must then ask what about the flexibility and adaptability touted earlier. Brokers seem only able to facilitate business transactions among those of their own social networks. Therefore, any flexibility observed is restricted to specific networks. If the cartwheel network holds any truth, smuggling organizations are not flexible as individuals but highly vulnerable.

Perhaps one may argue that the survival of human smuggling as a business in general does not hinge upon the success of any specific organization, but rather on the collective entrepreneurial efforts of the many groups of individuals involved. In circumstances where contingent transactions are the norm and sequential operations are unpredictable and vulnerable to disruption, small groups as a whole are capable of expanding and contracting in response to market demands. Small groups of entrepreneurs (as opposed to any specific smuggling organization) can emerge to take advantage of new opportunities and adjust to different client demands and transportation strategies. Most snakeheads operate other legitimate or illicit businesses and only gather for a viable opportunity. After the smuggling operation is complete, the group of snakeheads will disband or remain social friends and go about their daily business as usual. Therefore, small exchange relations (with minimal organizational structure and simple hierarchies) can withstand the few opportunities in an uncertain market.

## DISCUSSION

Chinese human smuggling organizations are made up of peer-group entrepreneurs. However, unlike peer groups in legitimate businesses, smugglers rarely engage in teamwork (i.e., collective engagement in similar tasks or resource sharing), their relations with each other involve mostly one-on-one (i.e., dyadic) transactions. Each human smuggler has additional circles of contacts and resources that are also clandestine in nature and dyadic in format. Many specialized roles have emerged in response to specific tasks in smuggling operations such as those who acquire fraudulent documents, recruit prospective migrants, serve as border crossing guides, drive smuggling vehicles, and guard safe houses. Some smuggling operations involve more specialized tasks than others. These roles are usually played out in successive stages following the sequence of a smuggling operation, with the recruiter working in the front and the debt collector coming in the end. In re-analyzing the data previously collected from interviews with Chinese human smugglers, this paper confirms the findings by Morselli and Roy (2008) in that brokers are vital in connecting otherwise disjointed players in the criminal enterprise. The removal of any broker at any stage can lead to the collapse of an entire smuggling operation.

This paper, however, attempts to expand the work by Morselli and Roy and argues that, as far as Chinese human smuggling is concerned, the snakehead networks are neither flexible nor adaptable in and of themselves in response to external threats and socio-legal obstacles inherent in the market place. In fact smuggling organizations are precariously assembled by brokers who happen to have the right connections at the right time.

Since dyadic relationships prevent resource sharing, a smuggling operation can only be carried out by individuals who fulfill specific roles. Their secrecy and self-preservation thus make individual smuggling rings vulnerable to changes in external conditions. Because

transnational human smuggling takes place over vast distances and through mostly one-on-one transactions, the loss of a key player or any mishap during any of the stages will severely weaken or even cause the demise of the entire smuggling group. Unlike legitimate businesses where aspiring corporate businessmen may compete to occupy brokering positions, how snakeheads take up brokering positions is often a product of fortuitous circumstances and of their social resources. Also unlike legitimate businesses where positions can be advertised and services procured through open channels, snakeheads within an organization cannot be replaced easily and the resources unique to specific smuggling tasks cannot be swapped or substituted. However, small exchange relationships such those of human smugglers depend on brokers' ability to link one another, and consequently the interests of all parties are realized. Although individual smuggling groups may lack the ability to respond to structural disruptions, their temporary alliances and dyadic interactions ensure that the enterprise as a whole can respond collectively and effectively to uncertain market conditions, reduce exposure to law enforcement activities, and offer favorable financial terms for individual snakeheads. The flexibility of the smuggling enterprise therefore does not necessarily reside within any given snakehead network, but rather in the entrepreneurial environment in general. The demand for these underground travel services continues to flourish in contemporary China. As a result, groups of entrepreneurs will rise to take advantage of it. Some of them will take up brokerage positions because of their positions in their social networks. Multiple cartwheel networks will then fill in the position vacated by other collapsed networks. The business as a whole thus evolves and adapts.

From a law enforcement perspective, the implication of understanding the brokerage functions in human smuggling is clear. It is perhaps more effective to target these brokers than any prolonged investigations aimed at capturing a few major smuggling kingpins. Knowing the

weaknesses of their structural arrangement, law enforcement efforts can therefore have immediate and pronounced impact.

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Table 1. Specific Roles among Chinese Human Smugglers (N=129)

	Frequency	Percent
<u>Primary Roles in Smuggling Business</u>		
Recruiter	29	22.5
Document Vendor	16	12.4
Payment Collector	15	11.6
Coordinator	11	8.5
Transporter	8	6.2
Arrange Fraudulent Business Delegation	5	3.9
Secure Deposit	5	3.9
Escort	4	3.1
Fraudulent Marriage Matchmaker	4	3.1
Guard	3	2.3
Arrange Travel	2	1.6
Guarantor	2	1.6
Lease Boat	2	1.6
Receive Clients	2	1.6
Corrupt Official	1	0.8
Arrange Stoaways	1	0.8
Student Visa Fraud	1	0.8
Unable to Determine	18	14.0
Total	129	100.0
<u>Role Changes Overtime</u>		
Yes	47	36.6
No	45	34.9
No Longer in Business	13	10.1
Unable to Determine	24	18.6
Total	129	100.0
<u>Role Complexity</u>		
Single Role	83	64.3
Multiple Roles	28	21.7
Unable to Determine	18	14.0
Total	129	100.0

Table 2. Characteristics of Smuggling Organizations

	Frequency*	Percent
<u>Number of Core Members</u>		
Denied any group identity	45	40.9
2-3 core members	30	27.3
4-5 core members	18	16.4
6-7 core members	6	5.5
8-10 core members	4	3.6
11-20 core members	3	2.7
More than 20 members	4	3.6
Total	110	100.0
<u>Decision Makers</u>		
Independent decision	18	16.5
Collective decision	21	19.3
Snakehead in charge	50	45.9
Follow boss instruction	10	9.2
Depends on contribution/ability	3	2.8
No idea	7	6.4
Total	109	100.0
<u>Clarity in Division of Labor</u>		
Clear division of labor	76	72.4
Somewhat clear division of labor	5	4.8
Unclear division of labor	14	13.3
Difficult to describe	2	1.9
No idea	8	7.6
Total	105	100.0
<u>Collaboration with Other Smuggling Groups</u>		
Yes	30	28.8
No	74	71.2
Total	104	100.0
<u>Partners</u>		
Stable Partners	70	63.6
Unstable Partners	40	36.4
Total	110	100.0

\*. Effective sample size. Refusals and non-response were excluded.

Figure 1  
The Cartwheel Network—The Chinese Human Smuggling Process

