The Informal Recycler in Shanghai: Mobility, Migration and Citizenship

Adam Stokes Williams

University of Colorado Boulder, stokeson45@gmail.com

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THE INFORMAL RECYCLER IN SHANGHAI: MOBILITY, MIGRATION, AND CITIZENSHIP

By

ADAM S. WILLIAMS

B.A., Dartmouth College, 2002

A thesis submitted to the

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This thesis entitled:

The Informal Recycler in Shanghai: Mobility, Migration and Citizenship

written by Adam S. Williams

has been approved for the Department of Geography

_______________________________________
Tim Oakes, Committee Chair

_______________________________________
Fernando Riosmena, Committee Member

_______________________________________
Emily Yeh, Committee Member

Date ________________

The final copy of this thesis has been examined by the signatories, and we find that both the content an the form meet acceptable presentation standards of scholarly work in the above mentioned discipline.
Abstract

As social and economic realities shift in China’s post-reform era, increasing instability for the country's hundreds of millions of migrant workers. The recent, dramatic growth of informal markets for recyclable waste represents a valuable opportunity for geographers to reinterpret how migrant labor is transforming urban identities. This thesis argues for a grounded study of informal recycling in Shanghai, now the world's largest receiving port for recyclables as well as hundreds of thousands of domestic migrants. Perhaps more than any other class in the Chinese labor forces, migrant workers participating in informal urban markets face myriad social and economic challenges. Yet despite conflicting discourses on the value and culture of waste, participation in informal recycling offers a constitutive social role, in contrast to conventional ideas of marginalized urban subsistence activity.
Acknowledgements and Dedication

I’d like to thank my advisory committee members, Emily Yeh and Fernando Riosmena, for their time and patience in reading and critiquing my thesis. Thanks again to Tim Oakes, my committee chair and advisor. Tim initially encouraged me to join the CU Boulder department of Geography, and has guided my work over the past two years.

This thesis is dedicated to Shanghai’s migrant recyclers. 谢谢你们.
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CHAPTER I

INTRODUCTION

Shanghai presents itself as a showpiece city of China’s economic power and prestige. The Shanghai World Trade Center, completed in 2008, is now the second-tallest building in the world. It stands among the other glittering towers of Pudong’s financial district, a paragon of market economy with Chinese characteristics.

Designed to propagate a cultivated image of economic capital and state power, the Pudong skyline goes big on imposing structures. Beneath these towers, individuals are specs among the yawning intersections. Wandering Pudong’s canyons of steel and mirrored glass, the only other signs of life one sees are throngs of wedding photographers with their brides and grooms, and the armies of recyclers who skirt the fenced off thoroughfares, pedaling three-wheeled carts laden with scrap and garbage.

Informal recyclers are one face of China’s market economy. The state has prioritized economic development since the early 1980s, after Deng Xiaoping’s proclamation of “development as the first principle.” Development, modernity, entrepreneurship and cultural “quality” (suzhi) can all be connected to the nondescript figures gleaning a living from the city’s waste. Chinese citizens are subject to discourses that eschew the socialist equalities of the past, in favor of a modern social hierarchy that privileges modern entrepreneurial subjects. The idealized subjects have integrated themselves into the market economy as entrepreneurs, while achieving the social distinction of embodying suzhi as modern, cultured and productive citizens. As entrepreneurs, informal recyclers are
particularly successful in economic and social terms. They integrate themselves into urban society in a variety of ways, capitalizing on the proximity of residents to waste matter. Their informal markets embody clear hierarchies of management and employment, which integrate new participants while allowing for increased self-determination and participation. This real and perceived opportunity stands in contrast to the rigid institutionalization and insurmountable hierarchies of formal enterprises. Public and state discourses on recycling often focus on the highly successful public figures that have made fortunes in recycling, such as Nine Dragons Paper Holding's CEO, Ms. Zhang Yin, and self-styled philanthropist Chen Guangbiao.

Shanghai as city has been similarly engaged as the spatial embodiment of China's aspirations towards modernity. The fever pitch of urban development and expansion should be characterized as trending towards a purified, rarified space. The long freeze of Shanghai infrastructure maintenance ended with an explosive, sustained burst of development. I view the 2010 World Expo as a high water mark for an obsession with remaking Shanghai as an emblem of state economic power, in which the China pavilion and the greater World Expo sites have been created and marshaled as themed space; in which international governments pay homage to China's nascent global influence, and China in return presents a unique version of a modern city.

Yet the grand Expo vision extends beyond its pavilions. Begun years in advance, with a budget ultimately larger than the 2008 Beijing Olympics, preparations included a massive overhaul of Shanghai urban infrastructure. Efforts to spruce up the city included more vigorous than usual bulldozing of old
neighborhoods, repaving and redesigning roads, herculean feats of civil engineering, and further expansion of the city’s cutting edge metro, train and bus systems.

With the Expo now running into its final days, Shanghai continues to cultivate and enjoy its international futuristic city du jour status. But I am far less interested in the glossy fanfare of the Expo’s main events. Instead, I find myself most curious to visit the Expo sites shortly after their doors have closed for the last time in October. From there, a fresh set of visitors will be descending on the Expo grounds. These will be the demolition experts, scrap collectors and recycling traders, all part of a vast, predominantly informal network of people turning waste into profit. I expect they’ll make short work of the Expo’s briefly triumphant edifices, before moving on to other recycling projects elsewhere in the city.

A Cultural Geography of Waste Recycling in Shanghai

I begin with the observation that the blending of formal municipal services and the informal markets of migrant labor in Shanghai is typical of the ongoing project of modernization in urban Chinese spaces. Urban waste recycling in China has developed in unique ways. Viewed from the perspectives offered by a cultural geography reading, the development of Shanghai’s informal markets for recyclables and other waste-based industries has roots in the translocal identities of market participants. Further, a cultural materialist reading of urban waste recycling suggests that market forces remain in close conversation with the culture that surrounds waste value, migrant identity and economic mobility. Informal market participants are almost exclusively non-Shanghainese migrants from both
neighboring municipalities and far-reaching provinces from across China’s rural and cultural peripheries. Though isolated by their outsider status in regards to state and social inclusion, migrant waste recyclers do not face these considerable challenges alone. Instead, this thesis argues that the informal market models developed within Shanghai point to appropriations of space and power that are worthy of further study.

“Culture,” in the case of evaluating both waste itself and the socio-economic transactions that surround it, may basically mean the existing practices and attitudes of Shanghai’s urban population. But I argue that culture should be understood more flexibly and expansively as the lived experiences of people, whose attitudes, relations, and imaginaries represent historically sedimented traditions and values. I argue that in order to understand how a Shanghai culture of waste has developed, we must go beyond the historical embedding of meaning in words. For example, analysis of discourse on waste and informal market participants reveals the paradox of how the state posits entrepreneurship as enhancing one’s cultural quality, yet also condemns the floating populations’ disregard for sanitation in recycling markets. However, I find it more useful to consider “culture” in relation to a broad swath of problems based in the material transactions of waste and migrant populations. I view most of these problems as inherent binaries of modernity, including relationships between the individual and society, rural and urban, subjectivity and objectivity, structure and agency, and so on. Instead of defining culture as a value that can be made concrete, I understand it as a process. When considered as a process of ongoing development, culture begins to suggest how we
may interpret change on the dauntingly large scales of city and state. Considered as a way of life, culture may help us understand how group and individual participants in Shanghai informal recycling create practices, understandings and imaginaries for existence in spaces that are uneven and uncertain. Considered as a set of work and creative practices, culture points toward how the organic development of waste recycling methods has led to a vibrant, refined economy that continues to defy market expectations. I seek to deploy “culture” in four conceptual sections of this thesis, including material culture, cultural economy, cultures of citizenship, and cultures of translocal identity.

**Organization of this Thesis**

Throughout this thesis, I rely on these four conceptual lenses to comprehensively frame an ethnography of recycling practices, participants and institutional frameworks. I argue that these lenses offer interpretive angles that are not merely relevant to, but essential for gaining broader, nuanced understandings of informal recycling as a multi-scalar process. Cultural materialism is useful for considering how waste itself functions as an analytical category and socially defined process that is continually made and negotiated. Cultural materialism also informs us how informal recycling, practiced by rural migrants, allows its participants to constitute themselves as a social class. I argue that informal recycling offers means for participants to gain access to the city, which in turn suggests a different variety of relationships between participants, the public, and the state. Recyclers cannot be understood as merely being utilized by the state in forms outlined in political economy, which underscores the spatial mobilization of labor capital as an
inherently exploitative process, devoid of opportunity outside state-prescribed hierarchies. Instead, I apply cultural economy as a means towards understanding the complicated relationships between recyclers and the state, in which the informal economy of recycling is closely aligned with state goals.

Cultural materialism allows us to see how social class for informal recyclers is not constituted strictly by economic relationships or subaltern roles dictated by the state. Instead, cultural materialism gives insight into how recyclers’ agency is co-produced through a way of living in the city.

This relationship problematizes the dichotomy between formal and informal networks. Connected with citizenship, the social role played by informal recyclers as urban environmental stewards further problematizes straightforward economic analysis. In response, I use cultural economy as an analytic for observing broader socio-cultural patterns of urban life in Shanghai. Because I observe how informal recycling market participants have created their own way of life in the city, I use citizenship and translocality as lenses for contemplating how this process is negotiated and interpreted as a multiscalar process of agency.

Interpreting and applying Williams’ lens of cultural materialism to study of waste flows and informal markets, I first consider how waste material may be spatially defined. Understanding that “waste is defined by where something is, not what it is” (Leonard 2010, p. 183) may be a first step for connecting local culture to broader scales. I conceptualize cultural materialism as the lens for seeing how “ordinary” culture is the whole way of life that actively reconstitutes daily, lived experience and imaginaries into a “structure of feeling” that creates meaning and
guidance for migrants amidst the unsettling experiences of modernity in a developing country.

As a developing country, China’s spatial scales are definitively uneven. I attempt consideration of translocal identity as a way to understand how migrants create and interpret identity within the disorienting spaces of urban development, rural backwardness and other scales of capital accumulation in contemporary China. I cannot agree with Mitchell’s assertion (1995) that “there is no such thing as culture,” since inserting “culture” into discussions on identity, political economy and citizenship allows us to further problematize these terms. For me, adding consideration of “culture” to these somewhat flavorless abstractions brings me closer to being able to glean invaluable insight into them. Thus reading “process” as culture may relate various intangibles of everyday life, including the real and the imagined parts of regular peoples’ lives.

Viewing culture as a process connects local, urban systems of waste recycling to broader scales of meaning. I draw on Peter Jackson’s reinterpretation of Williams’ rendering of cultural materialism as means for considering a complete “way of life” that is actively lived and reconstituted. This is especially important because it provides means for understanding Shanghai waste culture as unique and contemporary, standing in contrast to other models present around China and elsewhere in the world. I consider these “maps of meaning” to be legible in processes and interactions within space. As codified and spatialized processes unfold in and around urban Shanghai, I observe the linkages and disjunctions between large groups of people and massive space “on the ground.” I argue that
Shanghai recycling is meaningful and valuable because it is representative of cultural processes that connect one city to many other places.

Similarly, I conceptualize “cultural economy” as a process. This is done in order to connect and distinguish “culture” and “economy” as mutually constituent terms that co-define each other. In order to move beyond Marxian political economy and its cultural limitations, cultural materialists expand on these by interpreting materialism as a practical, productive activity. While political economy is present throughout this thesis, I’m interested in using the lens of cultural economy to convey linkages between people and places that are elided by a strict conformity to “political” as the primary determinant of social processes. Instead, I consider cultural economy as a way of getting at culturally relevant categories of capital production and accumulation in urban space, which allows us to acknowledge culture as a valuable, but by no means holistic or total conception of human activity. I think this approach is not definitive, but is more successful at conveying the richness and complexity of the observed practices and lives on display here. I find purely political narratives on China to be frustratingly vague in terms of social and individual agency, as many of these (see McGregor 2010) portray life in China as functioning under a hyperbolic umbrella of “state” space. While I argue that the “informal” economy of recycling is certainly influenced by the state at every level, I would disagree with any assertion that the “political” should be our primary lens for reading recycling markets’ complex social transactions, which occur in a variety of multi-scalar ways absent from the political purview. Hence, the “cultural” is my focus.
Returning to the idea of culture-as-process, I use space and place as conceptual terms throughout this thesis. These are useful for multiplying scales of human experience (and waste material) to include broader translocalities beyond Shanghai’s municipal neighborhoods. Specifically, these terms have helped me to understand relations of power, environment, and society in fields that may be defined by their spatial processes. By incorporating these cultural geography concepts, I attempt to fulfill the analytical standards of social science, as well as the sub-discipline of human geography. Although further cultural geography terms may certainly be applied to my field of inquiry, this thesis limits its conceptual inquiry to the aforementioned terms, in the interest of completing the M.A. requirements in a reasonably thorough and punctual manner.

This thesis represents my initial attempts to consider urban development and other processes of modernity. I sketch a conceptual map of the cultural geography of waste by drawing from literatures discussing cultural materialism, economy, citizenship and translocality. In tandem, these lenses offer a broader access to the unique perspective afforded by cultural geography. Thus there is overlap between the respective chapters of the thesis. However, the thesis as a complete body of work should indicate that I view cultural geography as an ideal means for understanding and interpreting a variety of pertinent social and material connections. For me, this is because human geography asserts an inherent spatial influence over sub disciplines of economy, sociology, communication and philosophy. Although I draw from literatures of these sub disciplines throughout
this thesis, geographers and their work inform the basis of my observations and arguments.

Using this variety of cultural geography lenses, I develop an argument that informal waste recycling markets and participants are a crucial, problematic aspect of how Shanghai functions as Chinese city space. By studying waste, I approach several of modernity’s “problems” and their manifestations in Shanghai. Foremost among these problems are issues of migrant labor and society. As more than 100 million people have moved from rural to urban places, social upheaval has remained a pressing state concern. While the state is directly responsible for the mobilization of migrant labor, it is also challenged with maintaining rapid development amidst a widening gulf between rich and poor. Environmental problems have been exacerbated as development is prioritized and marked by corrupt and inept governance, resulting in accelerated pollution of air, land and water. Meanwhile, China’s post-reform market economy has commoditized culture, among other things. Creating a social hierarchy that capitalizes on the tensions of spatial unevenness between rural and urban place, *suzhi* is now a means for the state to control and mobilize its citizens. Environmental awareness at multiple scales has contributed to the “greening” of Shanghai discourses and practices, which utilize *suzhi* as a yardstick of social and individual contribution to environmental and resource preservation. Public perceptions of waste indicate a growing concern with conservation. Yet as I will argue throughout this thesis, urban China’s relative successes in comprehensive recycling and waste management are more closely aligned with cultural economy than “quality.” In the midst of these confusing and
contradictory processes of modernity in Shanghai, hundreds of thousands of informal recyclers are capitalizing on the byproducts of development.

Drawing from Lefebvre’s argument (1991) that space is continually colonized via social processes, I explore how informal waste recycling in Shanghai occurs in historically sedimented, culturally nuanced spaces. Interpreting waste and its keepers is possible only if we regard cultural practices, representations and imaginaries as essential components to the management of development and its byproducts. In China, I consider uneven development, the floating population, waste material and informal settlements as just a few of the byproducts of rapid growth.

I believe that a cultural geography of urban organization of waste and its market participants is overdue. Read as "matter out of place," control of waste is central to municipal management and the maintenance of state power. Edward Soja (1996) writes that place functions as a form of space, specified by naming, designating, and other activities that create real and imagined boundaries. These boundaries are useful for understanding how and why security is closely associated with waste. Both socially and personally, Shanghai residents require waste to have its own bounded space. Informal markets and migrant participants must negotiate contradictory social realities and imaginaries that marginalize both the waste they live off of, as well as their own embodied roles as outsiders.

An accepted understanding of the gulf between these terms is one of temporality rather than spatiality; in which modernity is an ongoing evolution of progress. As time goes on, rural spaces become modernized and lose (or cast off) their peripheral meaning. Chinese media and cultural discourses maintain a close
connection between peripheral spaces and the people who inhabit them (or have come from them.) Chinese cultural understandings of native place emphasize peripheral identities, particularly those of migrants. Combined with state concerns in establishing and maintaining civic power relationships, migrant workers living and operating in urban spaces are saddled with a variety of negative stereotypes, most typically characterized as being unclean, dishonest, transient and indigent. Shanghainese residents and urban hukou holders tend to reinforce these cultural assumptions, in part due to the tenuous nature of Shanghainese identity, which holds deep-seated insecurities about its own relative lack of traditional cultural values and quality in comparison with stronger Chinese mainland identities such as Beijing, Hangzhou and Guangzhou.

I read waste as a culturally negated form of matter, marginalized by most cultures for its dirt and disorder. Yet the atypically close relationship between Shanghai residents and the city's trash suggests that inherent values for waste are understood and culturally embedded. It is the work of this thesis to not only demonstrate that this is correct, but also to utilize spatial theory to reinforce this argument, while exploring how Shanghai provides a unique cultural geography for waste.

I accomplish this by focusing on various spatial relations of material and economic culture in the city. As a cultural geographer, I am interested in two lines of inquiry. First, I intend to explore how material relations connect social and political processes of power, citizenship and resistance with material cultures of consumption, waste and value. Second, I want to take a humanistic account of how
migrant identities, markets and mobilities can be better understood by application of cultural economy theory.

I base these explorations on subfields of contemporary cultural geography. I apply cultural materialism theory by considering how social relations play a crucial part in the development of recyclables markets in contemporary urban and rural Chinese spaces.

In each chapter, I integrate contemporary academic work relevant in cultural theory, informality, economy, translocality, and geographies of China. My own observations are an attempt to develop and refine an exploratory framework for future research. Although such an approach raises many questions that are beyond the scope of this project, I hope this thesis can be read as an indication of my genuine dedication to a culture that is at once unique and a potential model for other societies struggling to negotiate the material burdens of urban development.

In Chapter II, I contemplate how material cultures of waste can be read in how state projects, public perceptions and informal markets capitalize on contradictions of modernity. Dualisms of modernity, including subject and object, culture and nature, progress and tradition, rural and urban, and reason-experience play a crucial role in confounding expectations and creating the anxious frictions of daily life throughout urban space. I argue that Chinese attitudes toward waste can be seen as historically sedimented, with both urban and rural residues that complicate the modernity’s unattainable expectations for waste control and removal. This serves to further complicate recycler subjectivities as paradoxically marginalized, highly visible, vilified and sought out.
In Chapter III, I consider how cultural economy is the most relevant lens for approaching and understanding informal economy. I connect the development and sustainability of informal economies in developing urban spaces to the weaknesses of state regimes, coupled with the flexibility of informal market operation. The formal and informal binary is challenged by market functions in waste recycling industries operating in various scales, from neighborhood redemption centers to transnational scrap corporations.

First, I argue that a purely “political” economy of recycling is inadequate for interpreting how waste and recycling are informed by culture. In order to fully appreciate this link, I reference Ray and Sayer’s (1999) views on cultural economy theory after the cultural turn, in which they observe “contemporary societies experience a collapse of the boundaries between economy and culture.” This collapse informs the decline of socialism and growth of free market economy, in which interests diversify toward “cultural questions of recognition.” (Fraser 1995)

The informal recycling market has succeeded in a vacuum left by the state’s inability to independently control waste. State reliance on and cooperation with informal markets indicates cultural valuation of the marginalized forms of both waste material and migrant workers. Part of this stems from how social values and expectations shift in ways that may be explicitly defined via a cultural economic reading. Ray and Sayer argue that, “neoclassical economists tend to assume that ‘culture’ need only be invoked where motivations diverge from self-interest, but as the classical economist realized and historians have documented, the pursuit of self-
interest and associate moral sentiments and social norms are themselves a cultural development associated with the rise of modernity and capitalism.” (p. 7)

Chapter IV is the second of two chapters to evaluate how a cultural economy lens can be usefully applied to informal market logics. Tim Cresswell writes how, “Bourdieu, who analyzes culture as having an economic logic (1977; 1986) ... sees almost every act either in instrumental, indeed explicitly economic terms, or as barely conscious products of the habitus. In the former case the pursuit of honor or status, expressions of goodwill and especially gift-giving are seen as disguised strategies of exchange through which symbolic, social or cultural capital are accumulated” (Cresswell 1998, p. 177). I read the social capital accumulated by informal market participants as predominantly based in economic calculation, especially after a recycler in my neighborhood put it bluntly, “This kind of work makes me stand out as. People know I’m not Shanghainese. I don’t mind, because I only do business with the Shanghainese. I don’t think of them as friends.”

Throughout Chapter IV, I explore how migrant waste recyclers function in a spatial context embodied and given meaning through social relationships of economic, political and cultural hierarchy. Paul du Gay writes that, “the language of economics is often held to provide us with ‘hard’ knowledge of the world because it deals with seemingly clear, objective, material processes. In contrast, the language of culture seems to deal with the ‘soft’, less tangible elements of life—signs, images, meanings and values—which are often assumed to be unable to offer clear, unequivocal and hence ‘hard’ knowledge (2007, p. 286).
I argue that informal markets can be understood by a cultural materialist reading of China’s state-planned economy, which has benefitted tremendously from its deterritorialized labor force, by means of spatialized capitalist logics enabling class separation between the rural poor and urban elite. The impact of the state’s industrial drive of development over the past thirty years can be seen in an examination of the enduring enforcement of spatial control of the individual en masse via the *hukou* and enforced laws that further marginalize migrant workers.

But I complicate this basic argument by asserting that recyclers are entrepreneurs, highly responsive to modifications of their economic environment. This includes negotiating multiple scales of citizenship. Most importantly, they must become what Gordon calls an “entrepreneur of the self” (1987, p. 300).

This chapter views enterprise as a rationality for responding to state control of citizenship via the privileging of *suzhi* and entrepreneurship. Gordon views “enterprising qualities—such as initiative, risk-taking, self-reliance and personal responsibility—represented as the most appropriate forms of conduct on the part of those concerned (whether individuals or collectivities) within any organizational domain, whether public, private or voluntary” (ibid, p. 299).

The entrepreneurship of informal recycling is perhaps one of its greatest strengths for negotiating new forms of citizenship for participants, precisely because of the perceived social, environmental and institutional value that they provide to urban residents. Paul du Gay writes that “the entrepreneurial language of responsible self-advancement and care, for example, is linked to a new perception of those who are ‘outside civility’—those who are excluded or marginalized because
they cannot or will not conduct themselves in an appropriately ‘entrepreneurial’
and hence ‘responsible’ manner” (2007, p. 302). Thus informal recyclers gain
entrance to urban society through transmission of cultural economic value to both
the state and its citizens.

In Chapter V, I integrate translocal identity studies with contemporary
gеographic concepts of mobility and culture, in an effort to bridge conceptual gaps
identified between academic discourses on migrant power and identity. The
conclusions of this thesis consider how waste and value, recycling and the ongoing
project of modernization intersect in unique ways in Shanghai, with a case made for
further research. I write on how translocal flows of information reflect not only
processes of growth and refinement for informal markets, but also the
institutionalizing of market hierarchies, which both mirror and oppose formal
regimes of practice and management. In this way, translocal flows of labor and
information remake various urban markets as various rural nodes link the
outgrowth of Shanghai’s financially successful models with less developed informal
markets elsewhere in China’s second and third tier cities.

The first decade of the 21st century has seen China’s economic growth
pushing it towards global prominence. Ongoing debates and anxieties persist over
how the Chinese state’s power and structure increasingly define international
politics. China’s investments abroad have brought it increasing political and
economic clout.

Yet China’s most pressing issues remain in its own backyard. In domestic
matters, dual contradictions persist. The Communist Party’s unchallenged political
might is matched by its persistent secrecy, paranoia and intolerance of dissent. Single party socialism’s ability to retain political control has been predicated on its ability to promote perpetual growth at home. But disparities in opportunities, livelihood and social services are widening the gap between China’s modernizing eastern seaboard and its diverse developmental backwaters. Amidst the sweeping transitions of the post reform state, social upheaval is radically different than the Communist-era turmoil. China’s contemporary post reform period is defined by the mobility of its people. Over the past decade, China has experienced the largest internal migration in world history, as hundreds of millions have relocated on temporary and permanent bases. The majority of these migrants leave predominantly rural spaces of native place and ancestral homes, heading into urbanizing centers in search of sustainable income. Work has been typically characterized as formal or informal. Generally, formal work has consisted of factory jobs, production lines and other semi-skilled labor in China’s manufacturing sectors. Higher educated college graduates have sought out a new generation of white-collar work in urban office towers. The informal sector has thrived as well, characterized by unskilled work sought out through native place connections, kinship networks or opportunities sought out on arrival.

Carolyn Hsu writes that as “new economic practices are becoming institutionalized, that new class and status hierarchies are emerging. This offers the social scientist an excellent opportunity to study the process of institutional transformation” (2007, p. 190). Hsu asserts that analysis of market and social processes must take into consideration the narratives and practices of non elites,
whom she considers “co creators of emergent institutions.” Here she warns of the analytic outcome of focusing on elites in market socialism’s transitions, which is to find an incompetent state that sacrifices its citizens, culture and environment for capitalistic goals that are exploitative and destructive. Instead, Hsu advocates making sure that people retain their place as participants in China’s transformations.

Figure 1.2 – Three-wheeled transport of recyclables from the Expo site, 2010

Interrogating the spatial processes of waste recycling has helped me to find positive outcomes in Shanghai’s heated development. I see social and economic gains wrought from the flexibility, creativity, and ideologies of market participants. These combine to indicate a model that may represent new forms of capitalism and citizenship not yet understood by either participants or critical observers. This thesis delves into the subject matter with these optimistic concerns in mind.
Field Methods

I conducted field research for this thesis during June and July, 2009 and August, 2010. I connected my theoretical and conceptual background with a mixed methods approach. My ethnographic methods included participant observation and semi-structured interviews with informants, including recycling market participants, municipal officials, local cadres, neighborhood committee members, homeowners, construction workers, small business owners, and migrants. Using coded data to reconstruct narratives, I paid close attention to vocabulary and spatial reference points of narrative (e.g. *luohou* (backward), *xiandai* (modern), *jia* (home) and *zizhu* (self-determination). I coded social dynamics according to space-specific relationships between groups, individuals and the state (e.g. recycling zones, housing, downtown shopping streets). While these interviews furnished me with limited quantitative data, my qualitative data is more prominent in this thesis. I view these initial fieldwork forays as pilot research and experience, which gave me the opportunity to refine my field of inquiry, define the practical parameters of where I will work in the future, and improve my spoken and written Chinese. For purposes of completeness and accuracy, all interviews were digitally recorded.
CHAPTER II

A CULTURAL GEOGRAPHY OF WASTE

Waste: Space, Place and Landscape in Shanghai

Shanghai is built on the alluvial plain of the Yangtze River Delta. Local wags hold that the Qing imperial court’s 1842’s signing of the Treaty of Nanjing ceded the land to Great Britain in the hopes that the encroaching foreign powers would ultimately be repelled by Shanghai’s mosquito-infested swamps and seasonal extremes. Yet the foreign concessions endured and grew, giving rise to one of China’s most dynamic and uniquely fragmented cities. Shanghai’s shifting fortunes and correspondingly altered landscapes would render it unrecognizable to an inhabitant of a century (or just a decade) past.

The Chinese central government makes regular announcements of national progress, reiterating the focus, drive and linear benchmarks of China’s progress. Recently, president Hu Jintao’s epoch-defining “Harmonious Society” slogan has been echoed by the ubiquitous proclamations of the “Better City, Better Life” motto for Shanghai’s World Expo 2010 event. The Expo is the most ambitious declaration of Shanghai’s primacy as an international, metropolitan city, central to China’s heated economic growth. The Expo site and its myriad national “pavilions” convey a whirlwind experience in which both real and imagined achievements of the state’s own brand of “modernity with Chinese characteristics” are on display for an international coterie of business elites, along with the general public.
Although many foreign countries have spent a great deal of money erecting national pavilions around the Expo site, the event has been slow to attract international attention. However, Beijing’s central government and Shanghai’s municipal government in tandem have already invested more money in World Expo 2010 than was spent on 2008’s Beijing Summer Olympics (Economist, April 2010). This Shanghai Expo event represents the municipal government’s most ambitious urban planning endeavor to complement its twin thrusts of renovation and construction.

And despite the opening of the Expo’s international pavilions, with their whimsical and monolithic theme-park approach to futuristic trade, the daily experiences of Expo visitors have been plagued by an unwelcome, mundane presence emblematic of life in Shanghai: an overflow of waste. “Call for action on garbage,” a May 24, 2010 article in the English-language Shanghai Daily newspaper noted, adding that “the build-up occurs because… trash cans or other collection facilities are, in the main, absent.” Local retiree Lu Zengde observes, “It is not only unsanitary and a possible threat to people's health but (leaves) a poor impression on visitors from other parts of the country and the world” (Jia 2010). In terms of damage control for the Shanghai Expo’s image, mosquitoes and muggy weather have likely been the least of organizers’ worries this summer.

How could garbage overwhelm the multimillion RMB spectacle to become the big story of World Expo 2010? Its unwelcome presence is especially ironic when we note that “green” environmental sustainability has been a major buzzword at the Expo, from conception to execution. Inside the spectacular Chinese pavilion, visitors
can read Chinese and English text that proclaims China’s “longstanding commitment to conserving our precious environment” (field notes, August 2010). The maligned U.S. pavilion manages to display solar technology, water recycling, and even a rooftop vegetable garden fertilized by composted household waste (Art Info).

Domestic and international press coverage of the Expo have seized on the garbage overflow. (Shanghai Daily November 6, 2010; China Daily August 2, 2010) And reports about the mounting piles of garbage at the Expo site will certainly ring true with Shanghai residents. Waste is part of life everywhere, but it is through culture that we hold specific understandings of where waste does and does not belong. While Expo visitors may have expectations of seeing (or smelling) waste at some point, some reported disappointment at seeing garbage piled in the midst of the polished granite expanses of the Expo site’s sidewalks. One visitor from Jiangsu told me, “I’m disappointed to see garbage everywhere in the Expo site. Our tickets were expensive and we expected that it would be very clean here.” Nevertheless, the most blogged Expo images on Chinese BBS have been piles of trash on-site, litter and vandalism, and the occasional child using a decorative fountain as a toilet, while their parents look on. This chapter takes these amusing yet arresting images as a starting point for looking at how values and imaginaries waste are spatially linked to cultural economies of development. I ask how waste itself embodies the hopes and anxieties of Shanghai’s growing population.

Who should be the steward of all this garbage? This question further complicates the issue. If it doesn’t “belong” to the Expo site’s futuristic vision of a pure and ordered space, whose responsibility is its removal? In this light, failure to
keep the Expo site free of garbage begins to seem like an inability to maintain order. The landscape thus comes to symbolize some uncomfortable contradictions of modernity as experienced by the urban citizen-visitor. From modernity's rationalizing tendencies, we hold expectations of order. Paradoxically, we see that this order is contradicted by the destabilized spaces brought about by the modernizing process. The garbage trucks won't arrive for another eight hours, and the sidewalk trashcans are already overflowing. Rural peasants in homespun clothes are using hooks fashioned out of coat hangers to fish plastic bottles out of the trash pile. In the variety of collection methods connected to a range of waste markets, we see modernity's dynamic processes of order and displacement, power and alienation.

Figure 2.1 – Unlicensed scrap recycling yard, Pudong South Bund, July 2009.
Despite its politically valorized thrusts of modernity, Shanghai’s urban waste is a part of its citizens’ daily life. Further, Shanghai’s volumes of scrap, recyclables and raw garbage have become a recognized attraction to a large swath of the Chinese population (China Daily March 23, 2010). Migrant waste recycling, present to some extent in most cities across mainland China, is a highly visible, integrated practice that is exhibiting an increasing draw for China’s liudong renkou (floating population), many of whose migrations to the Shanghai municipality revolve around waste volumes, rather than international pavilions. Perhaps it is reasonable to infer that their absence within the pavilion grounds has contributed to the Expo’s garbage woes. When I asked ticket-holding Expo visitors if migrant waste collectors should be allowed on the grounds, some replied, “Yes. They should also be given uniforms.”

Shanghai’s waste is bound to material processes intimately connected to market economics maintained by the state, which increasingly prioritizes consumption and trade as drivers of modernization. When we read about trash overwhelming the Shanghai Expo site, or Beijing’s “Seventh Ring Road” of illegally dumped garbage (The Guardian, March 26, 2010), or ongoing public protests over garbage removal in Guangzhou (Global Times, May 25, 2010), we may suspect that the cultivated images of China’s showpiece cities, meant to embody the ongoing project of modernity, are threatened the byproducts of urban China’s hypertrophic development.

This chapter evaluates how the space, place and landscape of Shanghai waste are bound to material processes of modernity. By arguing that waste itself embodies the desires and contradictions of these processes, I seek entry to a more nuanced
cultural geography of Shanghai’s particular army of informal recyclers, now estimated to number in the hundreds of thousands, among an estimated 10M informal recycling participants throughout China. (Financial Times, March 16, 2010)

China's growing economy of waste recycling, generally defined as “informal,” (Medina 2007) can be read as a subculture formed within specific material conditions and relations of power. Participants’ spatial practices and imaginaries are influenced by the material resources of waste itself (Jackson 1989), part of the commodity consumption chain that is linked to market economic modes of development.

**Waste as “Matter Out of Place”**

I argue that waste disrupts modernity’s imaginative idealization of “pure” urban space. The sheer masses of waste produced by the city-as-organism require a place for garbage. Among the range of secure services that a city-state must provide for its citizens, garbage is traditionally one of the most contentious (Royte 2005). It requires a place of its own. These places may be dumps, landfills, sewage plants, and other designated processing locations that serve to isolate waste from the population that produces it.

Mary Douglas has pointed out that social interpretations of waste, as a material byproduct and resource, connect to cultural values of “purity and danger.” Douglas argues that management and removal of garbage is an essentially productive act that serves to reorder society into a normative vision of conformity. As an anthropologist, Douglas is primarily interested in how ancient societies
concern themselves with ritualized versions of defilement (dirt) and purification (Douglas 1966). I infer that contemporary normative processes of waste removal are closely aligned with modernity’s processes of ordering space. Whether urban space can be truly pure, tidy and devoid of waste, or defiled, filthy and disordered, is a question with many shades of gray. But my point here is that reading waste removal in the context of urban landscape, according to what Alan Pred terms “the sedimentation of cultural forms,” offers insight into how place is a historically contingent process (1984). In order to better understand contemporary Shanghai waste practice, we will need to look at how resident and state attitudes towards waste have changed over time, as well as throughout the city’s urban space. A significant modifier to these attitudes has been the growing presence of rural migrants living in the city and engaging in processes of waste reclamation, sorting and sale. If we are willing to accept arguments made both a century ago (King 1911) and in the past few years (Li Genpan 2008), sustainable development practices have been ingrained in rural Chinese cultural economy for thousands of years. Urban Chinese waste processes have shifted radically in both practice and discourse over the past century, (Goldstein 2004) tied to both economic recession and growth, as well as state and popular discourses on waste as value.

Raymond Williams argued for a “resolutely historical” approach to understanding culture, which is readily accessible in the daily experiences, practices and ordering of waste material in the city (Klaus, p. 96). Because of their lengthy and intimate involvement with sustainable waste practices, as well as their public visibility as an alternative model to state regulatory frameworks surrounding waste
control, a qualitative survey of informal recyclers should be a means towards understanding how an ordinary culture of recycling has been able to thrive in Shanghai, despite significant challenges and marginalization.

Chinese practices for ordering waste repeatedly struck me as highly evolved and unique among the country’s Asian neighbors. This was apparent in Shanghai’s processes of ordering waste, which reveal a variety of practices, mingling historically rural antecedents (such as pig slop buyers, who ride through housing developments buying raw garbage which is then sold to pig farmers) with high technological investment (such as Nanhui District’s Laogang landfill, which reopened in 2005 with a concerted media emphasis on its “green technology capacity” (Tengate Mirafi 2005). I usually woke each morning to the blaring solicitations of loudspeakers rigged to the bicycle of our neighborhood’s broken appliances buyer. I had plenty of time to reflect on how processes and means of ordering Shanghai’s waste reflected an inherent paradox of modernity, in which standardized systems founded in “rationality” compete against the freedom of creativity and ingenuity. Ordering waste is a process that exhibits these tensions, often in radically unpredictable ways that seem to confound all rational intentions of the formalized collection and processing systems.

In “Culture,” Raymond Williams (1981) argued against positing technological determinism as the overarching factor in a cultural materialist understanding of social processes. It is a recurring point of this thesis to observe recent green discourses and investments around Shanghai (self-sorted garbage, wind power, landfill purification, etc) as linked to historical narratives of recycling, rather than
reading these technological developments as directly capable of shifting the
practices of citizens through new material processes. I observe that waste ordering
techniques develop along unpredictable routes. Reordering of Shanghai urban space
proceeds in part according to how processes of waste removal shift, particularly as
informal markets have first gained traction and more recently surpassed formal,
municipal waste control chains. The informal markets contribute to a shift in policy
and focus on waste as a valuable worth reclaiming, rather than a material byproduct
that must be disposed of.

Shanghai’s streets are swept hourly by tens of thousands of blue-shirted
workers, many of whom are former employees of local State-Owned Enterprises
now defunct. Wielding straw brooms, they are tasked with what one sweeper
described as “preventing garbage from creating chaos on the street” (field notes,
July 2009). City visitors and Expo tourists remarked on seeing residents litter with
relative impunity. Municipally-employed sweepers augment the nightly rounds of a
massive fleet of garbage trucks and the semi-monthly patrols of high-powered
water engines, which deploy high-pressure hoses to blast stubborn grime off
sidewalks. From street corner to public park, Shanghai’s waste handling devices and
workers are highly visible, from the six-foot tall automated bottle recycling robot on
Nanjing Lu’s pedestrian shopping mall, to the sloshing buckets of restaurant scraps
ported across the city by “night soil men” on bicycle. Alleyways house cinderblock
“trash houses,” scarred plastic bins jostle for space on industrial driveways, and
some of the few hills in otherwise flat districts like Yangpu are in fact century-old
garbage middens, converted into unofficial landfills during the long stasis of Shanghai development post-World War II.

In her work on Mexico City's garbage woes, Sarah Moore raises two important cultural contradictions. First, dealing with waste itself is a contradictory process, since the more development resources are devoted to controlling waste, the more visible the waste tends to become, thus defeating the purpose of hiding or eliminating waste from the margins of our modern social awareness (Moore 2010, p. 426). Second, when modern citizens are conditioned to expect the urban spaces they live in to be free of the “disorder” of waste, “these expectations can never be fully met, precisely because the same processes of modernization that have produced them have also produced a situation in which garbage proliferates” (ibid, p. 427). Thus we see how conditional modernity creates both a spatial imaginary in which the city space is clean and “rational,” while the market economy that funds city development is based on capitalist production that prioritizes consumerism and “planned obsolescence” of consumables.

When we read waste as the material basis of this contradiction of modernity, we begin to see that waste is political. Shanghai’s garbage is “matter out of place.” Its presence undermines the processes of modernity envisioned and articulated by the state. Yet whether we experience Shanghai’s waste in a visceral way (by spending time in the city during the foul-smelling months of July and August) or read about it as an environmental problem exacerbated by “unsustainable” levels of development in a consumer-driven economy, it becomes clear that the urban geography of waste is crucial to understanding a broader range of spatial issues in the urban setting.
The larger project at stake here is considering how distinctly Chinese processes of modernity play out in the urban geography of waste. I identify the dominant versions of modernity at work here as interpretations of Confucian identity politics (the benevolent and paternal state), as well as the implied moralities of transnational capitalism (increased communication leading to moral responsibility among corporations, etc). Interestingly enough, Daoism has also been critiqued as an early model for environmental conservation, (Kleeman 2001) although I believe that a careful historical reading of older texts would reveal that environmental protection and sustainability have been deeply nuanced Chinese concerns for longer than this.

These trends of modernization in China should be seen as having paramount importance as we observe how the state continues to endorse both socialist protection of its citizens while pursuing transnational capital-driven market economics at increasing social and environmental cost.

**Material Specifics of Waste**

Before proceeding with review of the cultural geography of waste in Shanghai, I want to consider some contemporary literature on waste itself. It has been widely argued that study of waste can effectively reveal historically contingent cultural processes (Rathje and Murphy 1992, Royte 2005, Zimring 2005). Archaeology as a social science and archaeological site excavation as field research tend to focus on ancient waste. Archaeological science recognizes trash piles and buried middens as the most readily available remains of past civilizations. Ancient
garbage pits and mounds are acknowledged as the most useful repositories of cultural clues to how life was lived. And the garbage seems to outlast us all. Rathje and Murphy argue that, “while every archaeologist dreams of discovering spectacular objects, the bread-and-butter work of archaeology involves the most common and routine kinds of discards... to learn from that garbage something about ancient societies and ancient behaviors” (1992, p. 10). Garbage piles offer up artifacts and cultural clues about the societies that created them, richer in variety and scope than any other leftover feature.

While this thesis concurs that study and interpretation of the waste of a society can reveal vast cultural and economic complexities, this is not yet the main focus of my research. This chapter should instead demonstrate entry points for consideration of a cultural geography of waste itself. Waste has been present in human society since our forebears began chipping out stone tools, leaving behind piles of flinty flakes. While ancient societies are hard to read precisely because they created relatively little variety of waste, our own contemporary societies have created landfills that dwarf the surrounding features of the landscape. Rathje and Murphy raise an interesting question: “Would we ourselves recognize our story when it is told, or will our garbage tell tales about us that we as yet do not suspect?” (p. 11). Pixar’s 2008 animated film, “Wall-E,” introduces its protagonist alone on an earth devoid of population—the human race has seemingly been consumed, or at least buried, by its own landfills. Never mind that the film quickly devolves into a slapstick reveal of humans as spaceliner-bound drones of eternal leisure, the
opening scenes are haunting enough. Should we ever succeed in destroying ourselves, at least our garbage will remain to tell the tale as it really happened.

In this light, it is tempting to consider our own garbage as an unintended time capsule to be discovered and read by archaeologists of the future. But will garbage always tell the truth? In light of the fact that waste is not deliberately created as a record, perhaps it is a more honest reflection of society than any history book. If official records, such as those kept by the Shanghai Laogang landfill, are indirectly becoming part of a mythology, or a cultural interpretation, then garbage is the material reality behind this mythology, the stinking truth of the matter. We generally prefer to hide it away as best we can.

During my summer 2009 field research in Shanghai, I developed a section of my semi-guided interview questions to approach this complex feature of urban residents’ relationship with their generated household waste. From the answers I received, I draw the conclusion that Shanghai residents, similar to those interviewed in the 1990s Arizona Garbage Project explored by Rathje and Murphy, commonly harbored guilt and discomfort about the amount and quality of waste produced. I interpret these emotions and their context within a larger cultural system to be concurrent with Douglas’ analysis of waste as “ritually unclean” (1966, p. 32). The next step of this research could be to analyze what percentage of an average Shanghai household’s waste is irredeemably disposed of. In three downtown districts, I observed household scrap, raw garbage and almost all other non-toxic materials reclaimed by formal and informal channels within a few hours of removal from residents’ living space.
Contemporary research agrees that waste is profoundly revealing of social, cultural and economic trends existing in the societies that create it. Taking a globalized view of waste production, the interconnection of countries and cultures is inherent in how we generate waste, together. On an individual level, the contents of household garbage are generally mundane. Considered in larger orders of magnitude—the mountains of waste produced by affluent neighborhoods contrasted with the meager scraps of poorer parts of town, the garbage dumps of Shanghai, the urban waste of China’s industrialized eastern seaboard—waste’s patterns intimate broad cultural norms waiting to be discerned.

But again, what is waste? A few definitions are in order. For the purposes of this thesis, I broadly define waste as material that may be considered unusable, irretrievable or unusable. From a cultural geography standpoint, “waste” is a label that carries the burden of cultural materialist processes. In other words, material becomes waste when its surrounding transactions relocate it to a place in which it lacks use. I accept the idea that material is “waste” when it is in the wrong place. Informal recycling thrives on reappropriating this “matter out of place” and reifying it as recyclable or reusable.

For things thrown away, several English terms are interchangeably used, although each has a specific definition. A variety of terms are typically used in Shanghai, many hinting at the inherent value that objects paradoxically acquires when they become waste. 垃圾 (laji) is the classic term for waste. Other commonly used terms include 脏土 (zangtu “dirty earth”) is more often applied to wet, raw, or organic garbage. 残余物 (canyuwu) is a term for litter or carelessly disposed of
trash. 废品 (jeipin) is more exclusively reserved for scrap and recyclables, fei refers to waste and pin refers to commodities, goods and products.

Most modern means for disposing of garbage are more or less the same as they have been for thousands of years. To date, there are four basic methods: dumping it somewhere, burning piles of it, recycling it, and minimizing production of it. Of course, these straightforward methods belie the incredible complications caused by a teeming population of humans rapidly consuming resources and creating mountains of waste. In order to reduce the complexity of waste, most literature approaches it in cyclical terms of disposal, reclamation and reuse. As for recycling, the attachment of value to its processes has made it the most enduringly popular option for disposing of waste. Moral imperatives for recycling, most recently encapsulated in green discourses of preservation and maximization of planetary resources, come a distant second in mobilizing recycling successes. The most complicated issue tends how recycling can be performed to turn (and maximize) a profit. Royte seems to see this as a question of political economy, particularly in the case of the US, the country well known to consume the bulk of the planet’s resources while remaining notoriously recalcitrant to alter trends in waste recycling, primarily at the federal and state levels (Royte 2005).

While the term “recycling” was coined less than a century ago, by operators in the American petroleum industry (Zimring 2002), its practices and ideas are arguably as old as human civilization. Employed on a market basis, it is invariably linked to economic returns. Moral imperatives have played a far smaller role than market economics that determine how scrap as a production byproduct can be
effectively (profitably) reprocessed and reused. Corresponding with globalized trade and production schemes of neoliberal market economies, international scrap markets have grown huge, accompanied by their globalized corporate interests, conventions and sociologies. For example, the US Institute of Scrap Recycling Industries (ISRI) is a national trade association that nevertheless remains highly invested in export sales of scrap to China and elsewhere.

China’s much-touted hunger for material resources has been a boon to the largest of the American corporate scrap dealers, while China’s market economy of construction and export production propels its economy forward by consuming valuable materials that are becoming more difficult to obtain in a pure, unused state. This is generally due to resource depletion and difficulties in securing direct channels of resource extraction and export, and other transnational political issues.

Development around the world has kept the international scrap market buoyant, with metals like aluminum and iron being in near-perpetual demand. However, the scrap export industry has never been immune to market fluctuations. It was hit particularly hard by the 2009 global recession, during which market prices for scrap commodities plummeted. These market reverberations were felt in Shanghai and Ningbo, as several scrap buying corporations reneged on multimillion dollar buying contracts, stranding imported scrap paper and metal at the city ports (Scrap Trade, November 2009). My point here is that market interactions of scrap trading, whether concerned with removal, processing or recycling, tend to proceed according to spatial organizations of capital. As I will discuss in Chapter 2, international market fluctuations are felt at most lower levels of informal recycling.
In many ways, this serves to position informal recyclers as a point of contact between global scrap trade and the general public. As the state seeks to reduce non-recyclable waste, it would seem potentially beneficial to incorporate informal recyclers as a functional liaisons between national and international scrap policy and waste-producing citizens. However, according to a recent (Shanghai Daily, September 2010) English-language article, no plans exist for strengthening the disseminative potential of this connection.

**Waste and urban space**

Estimates of solid waste streams made at national, local or individual levels tend to vary widely. Rathje in particular demonstrates the collective short-term memory of waste: societies tend to assume that current waste production is an exponential increase from the past, recent and distant. This tendency is attributed in part to a real lack of historical evidence or statistics. For a moment we return to the Freudian problem with garbage, its fecal correlations with filth, impurity, guilt, etc. The University of Arizona Garbage Project’s early 1990s work of sorting and categorizing the waste of hundreds of local households was notably the first of its kind in the US. The other issue at stake here is the noted imprecision of households asked to describe their own garbage—everyone, everywhere, seems to be way off the mark. Perhaps we assume waste will tell us truths about ourselves that we’re happier not knowing.

Components of household waste become part of municipal waste streams. Coal ash, for example, comprised the bulk of household waste up until fifty years
ago. Now it hardly appears outside municipal plants. Many of these plants are highly equipped for creating ‘closed loop’ recycling for this type of waste, which once threatened to overflow the world’s landfills. But Rathje and Murphy point out that “a long view of America’s municipal solid waste would suggest that, on a per capita basis, the nation’s record is hardly one of unrestrained excess. Indeed, the word that best describes the situation with respect to overall volume may be: stability” (1992, p. 51). Essentially (impossibly?) the accelerated population growth of consumer society has not directly corresponded to overall higher levels of waste. At an individual level waste production per capita has not changed all that much in the past ten, twenty, hundred or five hundred years. Increased production of waste is not an inevitability of urban modernization or population growth.

However, spatialized production, distribution and collection of waste certainly is. Sarah Moore (2009) links garbage strikes in Mexico City to sites of garbage accumulation throughout the urban grid, most often due to municipal waste services circumventing lower income neighborhoods, where unusable waste then piles up. Yet this accumulation is mixed, belonging both to the local neighborhood as well as farther flung neighborhoods in a higher income bracket, whose trash has been transported here for careful combing. Place for waste becomes the backyard of urban citizens with low political and economic capital.

Moore’s arguments on garbage can be appropriated in two ways by informal participants. First, waste is seen as a resource with latent economic value. Second, waste can function as tool for drawing attention to marginalized social causes, especially in dramatically overcrowded urban spaces. The most important
connection made in these arguments is between waste and state power. Garbage on the streets can be read as an inability of the state to maintain control over public space. It is the material revelation of disorder within and without the spatial hierarchy of state power.

Showpiece Shanghai maintains an urgency of new construction, “revitalization” of older neighborhoods and the Expo site’s theme park facsimile. These herculean efforts suggest an overarching desire of the state to control urban space by purifying it of culturally unclean residues and artifacts. Yet the ongoing maintenance of these spaces is equally important, although seemingly more difficult to manage. In this context, waste cannot be allowed to accumulate, because its presence suggests the disordering of state space. Shanghai’s floating population and the city’s excess waste have come to cohabitate the same marginalized spaces. It is my intention to argue that although this is a direct result of state management of the spatial inequalities of its market economy, migrant populations in Shanghai have capitalized on waste as an economic opportunity. This spatial phenomenon in turn offers means for exploration of unique aspects of post-socialist society.

Does this purifying project actually work in Shanghai? Throughout this thesis, I will continue to argue that it is an ongoing process that can never be completed. Culturally and economically, the “project” of controlling waste is too large, too overwhelming for the state to control through formal channels of waste management. This is where the thriving “informal” recycling and scrap markets find their point of entry into urban space. Informal recycling can be seen as both subversive of state projects of urban spatial ordering, while simultaneously serving
to reinforce the goals of these projects in terms of progressing toward and maintaining imaginaries of modernity. It is this apparent contradiction that drives this thesis. In particular, I believe that there are constitutive processes of citizenship and identity influenced by shifting definitions of formal and informal market models. It is the goal of this research to consider how the complex interplay of these forces make Shanghai, and urban China, unique.

**Waste as Value: Urban and Rural Cultures**

Passing through Shanghai in the midst of a trip across east Asia in 1911, agricultural scientist F.H. King noted: “In 1908 the International Concessions of the city of Shanghai sold to one Chinese contractor for $31,000, gold, the privilege of collecting 78,000 tons of human waste, under stipulated regulations, and of removing it to the country for sale to farmers” (King 1911, p. 194). America’s own scrap industry was already highly developed by the close of the 19th century. Many of the United States’ urban recycling systems had been created by informal scrap collectors turned entrepreneurs. These were pioneered and perfected by eastern European Jews, a marginalized population of immigrants (Zimring 2005) Although these US models were highly profitable at the time King visited Asia, he took especial interest in China’s waste transactions, which he saw as an outcome of forty centuries of organic farming.
Dr. Arthur Stanley, Health officer of the city of Shanghai, in his annual report for 1899, considering waste as a municipal problem, wrote:

“Regarding the bearing on the sanitation of Shanghai of the relationship between Eastern and Western hygiene, it may be said, that if prolonged national life is indicative of sound sanitation, the Chinese are a race worthy of study by all who concern themselves with Public Health... While the ultra-civilized Western elaborates destructors for burning garbage at a financial loss and turns sewage into the sea, the Chinaman uses both for manure. He wastes nothing while the sacred duty of agriculture is uppermost in his mind. The question of destroying garbage can, I think, under present conditions in Shanghai, be answered in a decided negative. While to adopt the water-carriage system for sewage and turn it into the river, whence the water supply is derived, would be an act of sanitary suicide. It is best, therefore, to make use of what is good in Chinese hygiene, which demands respect, being, as it is, the product of an evolution extending form more than a thousand years before the Christian era” (King, p. 198).

I highlight these century-old anecdotes to suggest that Chinese urban waste processing models developed from organic systems of waste recycling with rural origins. This waste reuse spans many centuries, dynasties and sea changes. Early missionary envoys to the middle kingdom took careful note of its farmers’ waste, or lack thereof. In another section, King visits rural Chinese farms far removed from the Qing capital. “The compost pit in front of where we sat was two-thirds filled. In it
had been placed all of the manure and waste of the household and street, all stubble and waste roughage from the field, all ashes not to be applied directly and some of the soil stacked in the street. Sufficient water was added at intervals to keep the contents completely saturated and nearly submerged, the object being to control the character of fermentation taking place” (ibid, p. 251).

Today in Shanghai, in the shadows of hypermodern office buildings, “night soil” collectors of human and livestock waste still pedal through the streets, doing a brisk business with frugal-minded peripheral settlements and downtown households.

Spending time near piles of trash is a generally unpleasant business. When I asked, most recyclers patiently explained that like any other sensory overload, garbage takes some time to get used to. My field visits to recycling facilities in Shanghai were conducted during the humid days of July, when the city is swaddled by a hot, blanketing haze. The recycling facilities barely dealt with raw or wet garbage, mostly specializing in paper, plastics or scrap metal. Yet they were all redolent and noticeably dirtier than the city streets (which are not pristine during the hot summer months, when garbage is cast out of cramped houses to fester on the curbside for a few hours). Even these innocuous categories of waste revealed plenty of foul sights and smells when approached: punctured plastic bottles of rancid cooking oil, greasy newspapers used to swat incalculable numbers of airborne cockroaches, rusty toilet pipes, exploded toilets, rotten doorframes, empty baijiu bottles, motor oil bottles, shampoo bottles, bottles for every conceivable product created for dealing with the human condition, now used up, with just enough of their original gooey contents to slick the blackened cement floor of the
redemption facility, a sorting shop where workers occasionally conceded to wearing rubber gloves, but usually squished across the floor in a pair of flip flops. The sight and smell of the rotting detritus of our modern consumer experience are reason enough to want to avoid waste at all costs. It’s enough to get anyone depressed about nascent self-constituency of China’s shoppers.

I see a tendency in western discourses on recycling to mobilize “ethical” considerations for consumer recycling (Eco-Cycle 2008). Zimring duly notes that recycling is not a practice invented during the heyday of 1970s “Earth Day” activism, but is instead the result of marginalized people identifying profit in the midst of dirty, foul-smelling spaces of the urban landscape. Notably, Jewish European immigrants came to define and dominate the trade during the 19th century, with smaller family businesses gradually displaced by corporate consolidation by diversifying corporations in the mid 20th century (2002). Neither organized nor independent recycling are recent phenomena in China, where deeply imbedded cultural norms of recycling and conservation have developed over a period of thousands of years. Both rural and urban sociospatial hierarchies have relied on recycling.

Through the 20th century, cities like Shanghai and Beijing had an evolving relationship with waste. Chinese cities developed municipal waste management strategies, while the state shifted official discourses on both necessities of thrift for urban dwellers (the dual importance of conserving and recycling household waste). Over the past thirty years, however, growth of both urban waste and numbers of rural-urban migrants have been reflected by an altered state discourse on informal
recycling, a practice that dramatically increased in the 1980s, as migrants took up the practice of collecting and buying household waste to sell at a slim margin of profit to municipal recycling centers.

Waste processing in China is a distinct cultural system, rooted in thousands of years of recorded resource exhaustion, subsistence privations, and closed-loop fertilizer cycles for farming. During the Mao era, Beijing waste recyclers in both formal and informal channels were characterized as paragons of communist virtue for providing an essential service (Goldstein 2004). This came after the 1949 monumental cleanup of Beijing’s dumps and streets, undertaken by the communists as one of the first orders of business in their capital. The “ordering” metaphor here is easy to read, as the communist architects’ grand plan for new forms of socialist modernity began with sweeping up the detritus (filth and hutongs alike) of imperial and republican Beijing (Hu 2006). As a cultural discourse, this rationalized the state’s aspirations of modernity and underlying class difference. Waste and recycling were dirty, but there were people willing and able to control it. Society as a whole would benefit.

Shanghai households tend to pre-sort and selectively save their own waste, with paper, plastic and glass being the most readily accumulated recyclables (renovation materials, such as scrap metal and wood hold higher weight to value ratios, but are less commonly available to the average Shanghai resident.

Later in this thesis, I argue that studying channels of state power suggest that municipal governments in China have remained remarkably adaptable to waste issues that are rarely static. Of course, the real interest here is not expanding fleets
of garbage trucks, but of close involvement between the state and the informal recycling processes that have developed under the pressures of market economics. This highlights state maintenance of a cheap, semi-permanent work force for handling the “work that city dwellers don’t want to do” (Goldstein 2004), which syncs disconcertingly well with larger thematic discourses on China’s massive “floating population” of cheap labor.

Chapter III problematizes how models of informal waste markets are distinguished from the formal markets they operate in tandem with. I evaluate these distinctions in order to focus on how a cultural economy lens lets us evaluate processes of reinterpreting waste material as value. The means by which this waste is sought and collected points to the variety of cultural connections that are embodied and imagined by market participants. These understandings result in a variety of waste-as-value practices, from cramped households storing hundreds of kilos of newspaper in speculation of rising scrap prices, to demolition site managers auctioning off rights to neighborhood block-sized piles of rubble to bidding scrap collection teams. As we will see, culture as a constitutive process is evident in the organized process, appearance, language and relationships of recyclers and their supplying customers.

How is Cleanliness Connected to Modernity?

For urban Chinese, dirt and disorder remain a fact of life, despite exported images that carefully render Shanghai as a futuristic cityscape as devoid of dirt as the decks of Star Trek’s Enterprise. As Chinese cities have grown, waste, byproducts
and household garbage have required municipal attention. Mao “城市太大了不好”

Zedong’s era saw urban infrastructural development frozen in Shanghai, as it was elsewhere along the eastern seaboard’s major cities. Despite the fact that urban populations were regularly depleted by state efforts to populate its ‘third line’ city and factory developments in western China, eastern seaboard urban populations continued to grow. Municipal infrastructure has never kept pace with this growth in population (and in corresponding waste). From 2000 to 2005, the city invested heavily in waste handling and treatment facilities (Tong Xin 2006).

Awareness of the growing volume of municipal solid waste produced by Shanghai residents was certainly part of why this investment was approved, but there was a curiously public dimension to it as well. Along with infrastructural work surrounding the ongoing Shanghai metro tunnel construction, which demanded expansion of sewage facilities, recently built Shanghai landfills have been prominently featured in state media. Prior to the Laogang landfill’s opening in 2005, a cadre from the municipal department of solid waste treatment explained with evident pride that it was the largest, most technologically advanced urban facility of its kind in the world. When I asked for clarification of what made Shanghai’s facility (which was rumored to have cost more than RMB 500,000,000) so advanced, he explained, “It combines new technology and natural processes. It’s not just using chemicals and plastic to contain the waste, like a typical landfill. It’s actually going to recycle that waste to render the toxic components into stable, reusable things. For example, this means we’ll create fertilizer there. It uses green technology” (field notes, May 2005).
In the past five years, ideas about the “greening” of municipal technology first multiplied and then became prominently exportable features. Along with the greening ostensibly on display at the World Expo site, Shanghai’s myriad advertorial surfaces sell improbable images of blue skies, green grass and industrial parks. The Expo’s “Better City, Better Life” campaign aligns progressive forms of recycling with achievements of modernity in spatially purified terms: we see children frolicking on putting green-esque meadows in the shadow of apartment skyscrapers. The air is cleaner, Haibao-shaped flowering topiary are in full bloom, and the streets look clean enough to eat xiaolongbao off the curb.

Contemporary China’s cultural readings of cleanliness (purity) and dirtiness (impurity) are a central visual conceit in domestic advertising. During the past decade, Shanghai saw a proliferation of public and private televisions. This increase occurred everywhere in China, as state-owned factories and private manufacturers ramped up production of video screens. But Shanghai’s plasma screen TVs are particularly worth mentioning, both for their ubiquity and content. Shanghai televisions have been installed on the platforms of almost every metro line station, in the city’s armata of Da Zhong taxi cabs (as LCD screens embedded in the front seat headrests) on new fleets of buses, on pedestrian malls like Nanjing East Lu, and along busy streets like Huaihai Lu.

Running a near-constant loop of advertisements, occasionally interspersed with brief news stories, public televisions shared much of their content with the broadcasts seen in homes, as people tuned in to CCTV’s multiple national networks and their local affiliates. A specific class of products dominated the ad content on
public TV screens: cleaning products, particularly detergents. A visit to any Shanghai grocery store reveals that Chinese consumers are spoiled for choice when it comes to laundry detergent—last year, I counted more than two dozen brands jostling for space among their neon-boxed counterparts. Further, the aesthetics of laundry detergent commercials are unmistakably uniform.

Most of these commercials introduce a family living in a large, western-style home or apartment, clearly indicated to be in a modern Chinese city (or its suburbs). The home is spotless, brightly lit from sunlight streaming in through large windows, which offer a view of a grassy backyard, where a child has just gotten a grass stain from playing in the moist earth. The child is given just enough screen time to realize that he or she is bringing dirt into the spotless home, before the offending garment, with its grass and soil stains, are whisked into a modern washing machine. Next we’re treated to CGI demonstrations of soil and removal properties of the specific detergent. The overall pure whiteness of everything—from the fresh paint of the picket fence to the outfits and skin complexion of the family, to the tile of the kitchen floor—makes for jarring repeat viewing, like staring at a halogen bulb.

**Transnational Connections in Shanghai Recycling?**

Shanghai’s urban history of development and dormancy is well documented elsewhere (Lu 1999). However it is worth noting that after decades of rapid growth, spurred by development of internationally-administrated concession settlements and a rapid influx of migrants from around the surrounding countryside of the Shanghai municipality and elsewhere, the Chinese Revolution of 1949 marked the
beginning of a long winter of near stasis for what had become China's most vibrant city. For the next three decades, Shanghai endured a period of urban hibernation, during which time the national government invested the majority of its capital into development of areas far inland, in a series of political and tactical expansions into China's provincial backwaters. Shanghai saw a bare minimum of urban infrastructure investment or maintenance, with many of its formidable factories reduced to skeleton crews as workers were shipped out to the inland facilities built as part of Mao-era initiatives to develop China’s interior, reduce reliance on the coastal cities, and stem growth of urban eras. Shanghai's urban population was further reduced as millions of urban residents were relocated to rural hinterlands across western China, including Xinjiang and Tibet. Even after former Shanghai mayor Jiang Zemin became China's next president, the national project of Shanghai's revitalization had not yet begun.

It was not until the mid 1990s that Shanghai began to see the beginnings of urban reform and reconstruction. After Deng Xiaopeng's 1992 “Southern Trip,” the initial experiments of designating coastal cities for foreign-style trade and investment were undertaken not in Shanghai, but in Guangdong Province's cities of Guangzhou and Shenzhen. Though Shanghai arrived late to the coastal city economic revival, it has since pulled away to lead the country's drive for global ascendance. In the process, Shanghai has reacquired a reputation as the cultural center of China’s economy, a place associated with an unswerving alliance to accumulation of capital.

Global and local forces influence Shanghai’s production of the unique urban environment now undergoing this socioeconomic transformation, manifested across
the intersecting locales of the city’s cultural, economic and political spaces. These regional transformations occur beneath the aegis of the state’s ongoing involvement. The state remains the preeminent actor in mediating Shanghai’s projects of becoming a conceptually “global city” (Chen 2002, p. XXI). Informal recycling as practiced in Shanghai generally divides its participants by the specific categories of waste and scrap that they collect. Both generalists and specialists operate in shared neighborhoods, on shared streets. For practical purposed, Shanghai scrap recycler’s three main categories are plastics, metals, and wood. These types subdivide further in valuated terms that take into consideration purchasing cost, facility of transportation and storage, and relative toxicity. For example, specialists may collect only Styrofoam, which is a particularly lightweight, yet bulky plastic. Metals are the most valuable scrap, but are also the heaviest and most regulated material. Electronic waste (known as e-waste) is both highly sought after and acknowledged as the most difficult recyclable to profit from. Its high toxicity directly increases the investment of transport and labor costs, and its prominent position in domestic and international critiques of informal recycling have increased surrounding legislation and regulation.

In regards to Shanghai as a “globalizing” Chinese city, George Lin comments on how, “the existing urban infrastructure simply cannot meet the explosive demands created by the influx of foreign and domestic investment, increase in wealth and urban consumption, and rural to urban migration” (Lin 2004, p. 146). Now considered to be leading the modern developing world, Shanghai has experienced the most rapid economic growth of all the ‘Asian megacities,’ averaging
about 12% annually, attracting US$120 billion in total foreign direct investment since 1992. Shanghai receives more foreign direct investment annually than any other developing country, approximately twice as much as India (Chen, p. XV). Foreign and local consumption are key prioritized forces mobilized by the state to maintain this “globalizing” process.

Informal recycling markets have thrived in Shanghai precisely because of the city’s excessive dedication to creating a visual landscape of modernity. Shanghai continues to see more rapid and expansive building demolition and construction that any other mainland city, creating excesses in waste material. “Shanghainese” cultures of consumerism and slavish allegiance to “fashion” have been appropriated as indicators of Shanghai’s unique cultural identity as a city racing forward, sloughing off former identities as it strives toward “the next big thing.” Shanghai’s relatively cosmopolitan flavor is enhanced by its sizable expat population. Recyclers operating in my neighborhood often pointed out how wasteful foreigners were. “You’ve got money, so you don’t understand how to make use of things. It’s easy for you to go buy something new, rather than use old things” (field notes, July 2009). My retired neighbor busied himself constructing ladders out of scrap wood. When I complimented him on his work, he took the opportunity to explain, “This is how we think in Anhui. We’re resourceful, which is better than having money to spend. Shanghainese people don’t create, they just buy whatever is new at the time.”

Shanghai’s global character is bound up in ideas of how a cityscape should be a visual landscape of modernity. In this sense, new and shiny or tidy and organized are spatially determined requisites for maintaining this cultivated image. As a
westerner, these “purified” notions always confused me. After all, European and American urban spaces often maintain places with “heritage” character evident in preserved edifices, historic or memorial sites, and so on. The Shanghai Bund authorities eagerly welcomed luxury retailers into the neo-classical buildings lining the west side of the Huangpu River. For the most part, these were gutted and rebuilt with brutalist modern interiors. This ongoing project to modernize the Bund has mainly done away with the Shanghai former financial district’s east-meets-west architectural heritage.

**E-Waste: Danger to Citizen and Researcher**

Although only a small body of research currently exists on informal recycling in China, the vast majority of this consists of quantitative studies on e-waste. I do not intend to focus this thesis or future doctoral research on e-waste, for several reasons. The main issue is one of relative inaccessibility. E-waste recycling traders and buyers are initially hesitant, if not completely unwilling, to discuss their business. Participants who perform the work of dismantling electronics to retrieve valuable metals (such as gold and copper) are highly marginalized and in an extremely precarious social position. Dismantling operations tend to be removed from urban areas, intended to be invisible and inaccessible to all but those involved in the business.

Increasingly politicized discourses on e-waste processing have grown domestically in China, as well as abroad. Over the past five years, international scrutiny and condemnation of the Chinese government’s dealings with e-waste
processing have intensified. The state continues to make tacit allowances for places like Guangzhou's blighted city of Guiyu, where the import, processing and sale of recovered materials from e-waste have contributed to a local ecological disaster.

Guiyu's documentation, carried out both by Chinese and foreign journalists, has made it an infamous byword for widespread criticism of the environmental catastrophes wrought by improper, unsafe, or unrefined methods of e-waste processing. E-waste, also known as waste electrical and electronic equipment or WEEE, is highly contentious, almost by nature. Its mountains of derelict 'white goods' (home appliances like toasters, hairdryers, humidifiers, etc) are painfully recognizable when documented, particularly by photographers like Edward Burtynsky, who easily grasp the surreal beauty and horror of polychromatic heaps of discards from our none too distant past. Certainly, any viewer of photos of Guiyu's depressing shantytowns of children roasting circuit boards over acid baths feels an immediate, sinking feeling of recognition. They've likely owned a very similar piece of hardware, last seen languishing in their household trash, waiting for pickups.

Guiyu's catalogue of horrors has been methodically documented since Greenpeace's China branch arrived in 2001. To further complicate matters,"there is no standard or generally accepted international definition for e-waste" (Widmer et al. 2005, p. 93).

So what can be suggested by Guiyu's (and by extension, the central government's) seeming ability to endure international criticism over the processes of extraction there—"unprotected removal of printer cartridge toner, open incineration of wires to recover copper, the de-soldering of printed wiring boards,
use of acid baths to retrieve gold from chips... children employed in sorting plastic chips for recycling... materials and residues dumped in fields, rivers and irrigation ditches” (Hicks et al. 2005). Guiyu’s thriving e-waste industry has not isolated it from the rest of Guangdong. On the contrary, another commonly reported fact is that Guiyu imports all of its drinking water from a nearby city. In fact, Guiyu can only continue to function as it does with the tacit support of the central government. While this may prove to be an excellent example to support my earlier arguments on the inherent closeness and professional relationships between formal and informal recycling economies in China, Guiyu (and by extension, e-waste in general) are extremely hot potatoes for foreign investigators to handle.

Household e-waste surveys have been conducted in Zhejiang’s Taizhou prefecture, with a 2010 article from Environmental Engineering Science considering the results (essentially, that it is standard practice to hold onto any and all broken electronics until an informal buyer arrives or can be located to make a sale). Their relevant observation, that informal waste systems have evolved organically and are thus more adapted to local conditions, points to the challenge of “identifying those elements of informal recycling systems that are worth upgrading, formalizing or in some other way integrating into a formal, comprehensive... management system (Streicher-Porte and Geering, p. 30).

E-waste trade in Shanghai highlights how the city’s waste is distinctly transnational. Politically, a threshold is being approached: e-waste’s toxicity has made it an international issue, which may catalyze central and municipal government regulation of informal waste markets dealing in e-waste. However,
examples like Guiyu suggest that the state’s carefully maintained, tacit involvement in semi-covert e-waste processing sites will continue in the face of growing international pressure.

Meanwhile, a massive increase in domestic e-waste has occurred since China began to rapidly industrialize 1980s, as domestic production and sale of household and office appliances have continued to grow. Successive national-scale incentives are mobilized to encourage Chinese consumer spending (most recently with China’s 2009 national stimulus package touted as the “world’s largest ever” (New York Times, November 10, 2008), the average number of appliances in Chinese homes has steadily risen. Washing machines, televisions, computers, mobile phones and other appliances are all marketed as attainable improvements for one’s overall quality of life. Yet their lifespan and disposability promise a final destination in places like Guiyu and Taizhou, and this *domestic* issue is more likely at the heart of the central government’s attitude towards e-waste, which is currently more conveniently disposed of through informal means. While Taizhou’s city government has announced regulations and control of illegally imported foreign e-waste, at last count (in 2005), its government-established industrial parks housed 42 fixed-point waste processing enterprises capable of handling e-waste (Hicks et al. 2005).

Taking a step back for a moment to consider more globalized implications, China’s annual exports of manufactured electronics amount to hundreds of billions of dollars, accounting for more than half the country’s total export value (Hicks et al. 2005). One quarter of these exports arrive in the EU, with more arriving in the US, where they are purchased, used, and (ostensibly) discarded. Like many other
developing countries, China’s valuing of waste can be categorized as extensively more thorough than its wealthier trading partners in the west. China is not rich in resources, with a 58% per capita distribution of natural resources, compared to the world average (SEPA, 2005). China also has a cultural memory of resource depletion that reaches back thousands of years. Chinese history possesses well-catalogued exhaustion of timber, minerals and other resources, to the detriment of several of its dynasties. I would argue that in order to understand China’s relationships with waste recycling (and in this case, hazardous e-waste recycling), this history needs to be read in tandem with China’s longer history of farming many of the arid or otherwise inhospitable reaches of its borders, with the necessity for feeding large populations. These histories have contributed to a willingness to deal in waste that other countries reject for a variety of reasons related to overall quality of life. This can partly be acknowledged in the average Chinese household’s unwillingness to donate e-waste to official redemption centers, or pay for its removal. Instead, the informal market for purchasing waste thrives because informal recyclers pay for the household waste they collect, in turn selling it through a supply chain that eventually leads to places like Guiyu. While this attitude of waste having value is not unique to China (indeed, it has existed in similar ways throughout the last few centuries of US recycling), informal waste recycling markets have proven to be exceptionally difficult to manipulate, whether for environmental benefit or any developmental impetus.

As the introduction of this thesis argued, without understanding of the connections between China’s formal and informal markets, these readings of Guiyu
miss a broader range of connections in China’s developing waste economy.

Beginning in 2000, trade agreements between the US and China made the direct import of e-waste illegal, with a national ban on ‘seventh category’ waste (appliances, electronics, etc) enacted by Beijing in February of that year (Hicks et al. 2005). Despite this legislation, or perhaps because of it, Guiyu and other cities came to prominence as functioning commercial centers for e-waste import and disassembly. In 2002, the United States recycling industry reported that 80% of American e-waste was exported to Asia, with 90% of this being routed directly to China (Basel Action Network 2002), including ports in Guangdong, Hunan, Zhejiang, Shanghai, Tianjin, Fujian and Shandong (Hicks et al. 2005).

Why are Shanghai’s trading and processing markets for recyclables predominantly informal? In order to answer this question, it is useful to inspect China’s waste recycling industries, markets and participants via a cultural economy lens. While trading (collection, buying and selling, transport and sorting) and processing of waste materials (extraction of valuable metals, processing of plastics, technical reprocessing, etc) are distinct enterprises, their close connections through informal and formal channels suggest that they can and should be considered together.

Viewed as a phenomenon common to developing economies, China’s urban waste recycling stands out as a model unique amongst the world’s cities. A cultural geography reading of Shanghai’s recycling economy is crucial. The city is a confluence of waste and consumption relationships occurring at multiple scales, from the neighborhood level of buyer / household relationships, to Shanghai’s
deepwater shipping port, now the busiest in the world and ground zero for arriving scrap from around the world.

CONCLUSION

Problematizing Distinctions Between Formal and Informal

Mary Douglas’ “Purity and Danger” analyzes cultural concepts of purity and pollution as being intimately connected with the sacred and profane. I have argued that this view serves as an entry point into reconsidering waste as the “matter out of place” that represents cultural materialist connections of urban waste in spatial terms. Two crucial considerations here must be that: first, removal of waste functions to purify lived and public space by removing material that is dirty or “disordered” in the sense that it pollutes and conflicts with the ordered prescripts of urban modernity. Second, market economies that develop around processes of handling waste glean new capital from a process (recycle, reuse, etc) that has otherwise moved beyond the point of profit for the consumer. The introduction of household waste surveys in Shanghai might offer a variety of new data, with interesting implications.

As a city, Shanghai is constituted as having various national roles and identities: hub of foreign investment and international trade, super modern, super urban cityscape, zone of opportunity for migrant workers, a place focused on material gains, with other quality of life aspects—comfort, space, culture—relegated to secondary positions of importance. Would careful scrutiny and quantitative evaluation of Shanghai citizens’ garbage reveal some contradictory truths about the
ideal versus actual average Shanghai resident? It seems likely. My interviews with informal recyclers were consistently surprising and entertaining, people making a living from the waste of others possess rare insight into material culture’s vagaries and contradictions. The Garbage Project revealed many contradictory insights about American households. For example, larger ‘economy size’ products are almost exclusively consumed by wealthy, high-income neighborhoods, with smaller, more expensive-per-volume servings purchased primarily by the lowest income families (Rathje and Murphy, p. 65).

Why study waste? Waste is easier to ignore, to forget, to disavow. As the daily refuse of the household begins to accumulate, it breeds anxiety. The kitchen trashcan starts to stink. The wastepaper basket under the office desk needs its contents to be tamped down if we’re going to stuff more papers into it. The bathroom’s basket is full of uniformed crumpled wads of tissues and toilet paper, a testament to profligate excesses in an age of convenience and disposability. Whether the weekly garbage truck is due any minute or not, sooner or later, taking the trash out becomes an imperative. We feel a sense of relief and well being as we empty the last of our baskets’ contents into big plastic sacks, lugging them out to our curbside critter-proof trashcans. Long before the garbage truck has rounded the corner, we feel relieved, we’re happy to have forgotten about our waste. It’s gone.

Tong Xin, Martin Medina, Ahmed and Ali, and many of the other waste researchers whose work I will reference, all point to this as-yet unrealized promise of integration between formal and informal waste recycling networks. One of my main interests in this subject is to further consider how and why the merging of
formal and informal waste interests so rarely comes to fruition. Far more often, as in the case of Cairo’s Coptic-Christian Zabbaleen (Assaad and Garas 1994) and their armies of trash-devouring pigs, or Mexico City’s pepenadores, or China’s increasingly populous, occasionally rich lajiren, the alliance between informal and formal channels of waste management is at best an officially tacit one.

The Zhejiang study concludes that, “to improve the entire system, regulators have the option to define clear responsibilities for collection, reuse, refurbishment, and recycling. At the same time, they are disentangling the informal activities— which provide income for many self-employed persons—from controlled, formal activities. Once the responsibilities are defined, collectors can be certified and reimbursed for handing in entire obsolete appliances to recycling facilities. Certified recyclers can be reimbursed depending on the recycling service they provide. Not tackling the individual informal activities separately would result in a system that buys obsolete EEE at higher prices than the informal sector pays—a heavily subsidized and expensive system (Zhuang, Wu et al. 2008, p. 29)

Just as we are inclined to view waste itself as “matter out of place,” migrant participants in urban economies of waste are frequently characterized as “people out of place.” Thus we can begin to consider how successes of these informal markets, as touted by media discourses and participants themselves, may represent part of a liberating potential for the marginalized subjects of China’s processes of modernity. By defining themselves in positive terms of economic success and self-determination, recyclers may free themselves from the spatial inequalities of capital
in a post-socialist state. But this must be done in the midst of translocal experiences and imaginaries emanating from the developmentally uneven landscape of China, a country on the rise, with a rising waste problem.
CHAPTER III
CULTURAL ECONOMY AND INFORMAL MARKETS

Challenges to the Informal / Formal Market Binary

Shanghai’s thriving informal waste markets can be seen as both a boon and curse for the municipal government and the state. The state faces a conflict of interest in identifying informal recycling as an essential component for management of urban waste. On one side, it is tactfully acknowledged that the trades of informal recycling participants substantially benefit the city, stemming growing volumes of waste that “threaten” the city and its inhabitants’ way of life. At the opposite end of this discourse, informal market participants are identified and associated with negative social and cultural values, such as dishonesty, dirtiness and transience. These contradictory valuations of informal migrants rest in spatial difference on multiple scales, in the uneven development of rural and urban places across China, and the marginalized spaces that migrants occupy within the city.

This chapter focuses on how the terms “formal” and “informal” are applied to recycling and waste markets in China. I argue that while these terms retain analytic usefulness, their implied binary is increasingly ineffective for observation and interpretation of waste via a cultural economy lens. The Chinese state has a historical legacy of relying on “informal” social institutions to assist its governance. By studying the contemporary development of urban recycling markets, I reflect on how a contemporary culture of socio-economic informality has been beneficial for both the state and its citizens. However, it is the future work of this research project
to consider the way forward. The marginality of informal markets and their participants has meant that participants’ rights of citizenship are limited. This chapter is a starting point for asking how these rights may be extended through social and cultural processes.

Adam Minter notes that despite “various efforts to enfranchise formal redemption centers,” informal buyers and redemption centers dominate the household recycling trade (Shanghai Scrap). The state and its media organs have endorsed the vilification of informal recycler business practices. This is not a new tactic. Josh Goldstein’s historical survey of state attitudes to informal recyclers in Beijing points to continuously shifting discourses throughout the past century, with a growing emphasis on recyclers as an unwelcome presence in the city (2004). But this media-based trend belies the more complex relationship between the state and itinerant urban migrant populations. I focus on recyclers because their service sector is nestled among several hot topics: environmental conservation, developmental modernity, and cultural economy. Goldstein’s survey emphasizes the cultural valuation of recyclers as pivotal social figures, sometimes glorified as paragons of communist zeal, other times castigated for predatory market practice.

A 2009 survey (Zhuang, Wu et al. 2008, p. 31) reported that the vast majority of households prefer to sell recyclables to itinerant buyers who visit their neighborhoods. A typical response was, “The migrant buyers are more convenient for me because they visit our house. They also pay higher prices for white goods (e-waste) than the official redemption centers.” The household services that waste buyers provide (for example, many carry ropes, straps and other equipment for
removing unwieldy items from apartments accessible only by a narrow stairway) contribute to the vast array of informal market activities that urban residents recognize as significant contributors to overall quality of life in the city. Other informal services remain visible and accessible to varying extents, from knife sharpeners and mattress repairmen slowly pedaling their bikes down the streets, to the five-storey mall for gray market electronics at the downtown intersection of Fuxing and Xiangyang Lu, where dozens of repair experts jostle for space, all specializing in quick and cheap repairs of damaged electronics, from mobile phones to microwave ovens.

While the municipal government has aggressively invested in costly modern waste-processing technologies, it continues to effectively rely on an informal army of migrant recyclers to collect, process and remove volumes of waste produced by a city in the throes of fierce development. A critical reading of competing state discourses illuminates the paradox of labeling recycling as “informal.” Its participants are predominantly characterized as migrant outsiders (Li 2003, Jenson and Peppard 2003), at best ignorant of “green” recycling initiatives, or deliberately unaffiliated with these new terms of civic environmental responsibility. Green initiatives are increasingly utilized by the state for deployment of new terms of suzhi (a slippery term of “cultural quality”) that expand the definition of urban citizenship to include behaviors of environmental conservation.

I believe that the state must reconsider the roles of informal waste buyers, particularly in tandem with deployed “green” discourses that emphasize consumer responsibility. Li Shichao points out that, “junk buyers play a role of linkage
between waste sources and redemption depots... [they] make the general public aware of cash value inside recyclable waste. The motivation of getting cash back pushes junk buyers (to) become immediate suppliers to redemption depots” (2003, p. 319). Seen in this light by the state, the informal market participants might be reconsidered as beneficial to maintenance and conservation of waste resources.

At the close of the first decade of the 21st century, urban waste recycling in Shanghai remains a dynamic yet precarious economic strategy for hundreds of thousands of migrants within the municipality. No census count for participant numbers seems to exist. As other first, second and third-tier cities around China experience rising numbers of rural-urban migrants participating in what is commonly understood as “informal” recycling, Shanghai has become the most established and popular destination for those engaging in the variety of activities this encompasses. All my informants in 2009 and 2010 reiterated this trait, typically stating that, “There’s better money, more garbage and fewer problems in Shanghai than in Beijing or Shenzhen” (field notes 2009-2010).

Informants identified Shanghai as the preeminent city for informal waste recycling for a variety of reasons: manageable topography (Shanghai has no hills or elevated terrain within thirty miles of the city center), densely populated central districts, thousands of ongoing construction projects, tolerant local police, a relatively low presence of organized extortion, and a cultural stereotype of Shanghainese people indulging in accelerated consumption (and discard) of material trends.
Yet these observations do not seem to tell the whole story about Shanghai’s growing markets for scrap and waste recycling. In Chapter II, I identified ways in which development processes of the state must align with symbolic dimensions of clean, purified space as an ideal of modernity. I have argued that municipal waste management represents a crucial means for state power to reinforce its control of urban space. Yet this would suggest that formal channels of waste control would dominate the city. This chapter considers how and why this is not the case in Shanghai, where “informal” networks maintain a pervasive network of waste collection, sorting and reuse. Throughout this chapter, I problematize formal and informal distinctions for urban waste markets. Although these terms remain somewhat useful, the ways in which these markets intersect suggests that state and informal market functions are integrated at multiple scales in Shanghai.

Here I will consider the success of Shanghai’s informal waste markets via a cultural economic reading of the spatial attributes of processes and participants in collection, sorting and distribution of waste resources. Drawing on evidence presented by functional processes of urban waste networks, I argue that binaries between formal and informal markets, while tempting to apply to the complex analytical frame of developing coastal cities in China, are in fact inadequate for making sense of China’s success as a market economy. The labeling of certain waste markets as “informal” (in opposition to “formal” markets) is an issue that I consider via some of the cultural contradictions inherent in the marginalization of participants. Sections of this chapter consider literatures of urban informal
development, informal markets and the Chinese state, and broader connections to cultural economy in China.

**Cultural Economy Applications**

As I have argued, the “culture” of urban waste is based around material transactions, corresponding with the resources of its trades. In considering how a culture economy develops around waste material, we can integrate urban spatial relations into the relationship between culture and economy. While Phil Crang suggests five options for thinking about the cultural turn and re-constitution of economic geography, I will initially adopt two here: first, that “the economic is understood as contextualized or embedded in the cultural,” and two, “the cultural is seen as materialized in the economic (economies are seen as involving the production, circulation and consumption of “materials” that are cultural)” (Crang 1997, p. 3). These approaches begin to suggest some contradictions in the stated division between formal and informal waste recycling, a discourse initiated by the Chinese state. This discourse has also been propagated by scholars, mainly in third world development studies. It relies on a formal-informal binary to characterize “black” market transactions that are outside of formalized regulation. This binary is problematic because it elides processes through which the formal and informal markets interact. I view the economy of waste recycling in China to be essentially cultural, connected to the past by daily practices and spatial imaginaries that characterize waste not just as byproduct, but as value. This means that waste itself is culturally integrated into social space in ways that are unfamiliar to outside
observers like me. I was baffled by my neighbors’ willingness to stockpile old newspapers in our stairwell. “Modernity” as a state initiative is evidently a turbo-charged project meant to propel Shanghai past other global cities in terms of real and imagined capital. Yet despite the excesses of investment in purified city space (polished marble sidewalks, utter absence of humans and other living creatures, etc), scrap is being sorted everywhere.

Figure 3.2 – Informal scrap sorting yard in Puxi, July 2009.
This strikes me as a clash of pre-modern (read: rural), and modern cultures, displayed in spatial terms. Sites for collection, trade, and sorting of waste are maintained by informal migrant participants. Yet these spaces coexist in surprisingly casual ways with the high modernist spaces of Shanghai’s new skyscrapers. This is due to the contradictory relationship between modernity and its material byproducts, as well as migrants and private entrepreneurship.

Much of the current literature defines informality as an economic strategy employed by lower classes and primarily associated with urban migration (Rouse 2006, Ahmed and Ali 2006, Bolaane 2006, Medina 2007). Another definition of informality has been advocated by Joseph Borocz, who focuses on post-Socialist states in Eastern Europe. Borocz’s informality centers on unofficial connections, nepotism, and other forms of corruption that favor privileged connections and relationships (Borocz 2000). While I acknowledge that these forms are present in China, I address them in via a national cultural geography oriented toward China’s historically embedded socio-cultural meaning, instead of Borocz’s European model.

Instead, I am interested in addressing the literature connections between informality and rural-urban migration. Earlier work considered the informal sector’s development in tandem with rural and urban spatial inequalities, leading to impoverished rural migrants moving to cities and accepting informal work because the formal sector was unapproachable. Keith Hart wrote on how “popular entrepreneurship” in developing informal market systems served to reproduce the formal sector’s relationships of capital and labor (Hart 1973), by facilitating channels of access to migrants, as well as creating service economies (such as
tailoring, bike taxis and electronics repair) that served to enhance and reinforce the 
socio-cultural hegemony of the city-state. More recent work on informality suggests 
that informal economies operate in both developing and developed countries.
Informal recycling thrives in the US, although primarily through trading rather than 
sale of material goods, dominated by networks organized by Mexican migrant 
participants (Rathje and Murphy 1992). Informal recycling in Chinese cities 
developed as low-quality consumer goods proliferated and required either servicing 
or scrapping. Facilities for these services were not provided by the state-owned 
enterprises responsible for shoddy 1980s consumer goods like home appliances.
The consumer privations of the Mao era had been encouraged both by state 
communist exhortations towards frugality, coupled with a real lack of obtainability. 
Despite accelerated domestic consumption, Shanghai residents still maintain these 
cultural connections to treating (what might otherwise be considered) waste as 
material with some remaining value.

Informal markets are most often understood as illegal or quasi-legal, 
operating in gray or black areas outside of state control. Of course, when 
considering the legality of informal sector economies, it is necessary to distinguish 
between illegal *processes or arrangements* and illegal *goods and services*. With the 
exception of e-waste in latter stages of recycling, urban garbage and scrap markets 
do not traffic in illegal goods. As Appadurai (1986) pointed out, “products are goods 
with a career.” This “career” has been created by social realities and imaginaries, 
influenced by state and media discourses, but more practically augmented by social 
relationships between waste producers (consumers, building sites, etc) and waste
collectors (migrants, informal markets) Waste markets divide as a state contends with waste as a byproduct of consumption. Markets able to extend the “career” of waste to a secondary post-consumer state of “quality” through adding a new process that gives waste new value. In Blackwell’s Cultural Economy Reader, Callon, Meadel and Rabeharisoa approximate this value, which they argue is “obtained at the end of a process of qualification, and all qualification aims to establish a constellation of characteristics, stabilized at least for a while, which are attached to the product and transform it temporarily into a tradable good in the market” (2004, p. 69). The authors further point out that “the positioning of products and the shaping of preferences are endogenous variables that agents manipulate and calculate” (ibid, p. 74). As we will see, these agents are both formal representatives of the state, as well as unlicensed, informal operators. Competition between these two poles of market influence have served to increase efficiency within waste markets, as well as complicate distinctions of the formal and informal binary.

Chinese informal markets of waste correspond with social identification of value in an otherwise worthless byproduct. It is the goal of my research to identify how and why China’s informal markets have so thoroughly appropriated waste as value, via means that have been markedly less successful in developing economies around Africa, South America, the Middle East, and elsewhere.

**Literature on Various Models of Informality**

Hernando De Soto introduced terminology for the “informal sector” in 1980. Now referred to as the “informal economy,” De Soto’s principles have been
expanded to define relations of employment and exchange that operate in marginalized conditions. These may potentially include “small-scale, unregulated, poorly regulated or over-regulated, illegal, untaxed, precarious, family-oriented, strongly entrepreneurial, poorly remunerated, and/or based on low-level technologies” (Corbridge 1992, p. 381). In my estimation, all of these terms apply to low-level recycling in China, which is typically practiced by the poorest, least integrated urban migrants. However, as I have stated in my introduction, informal recycling integrates multiple tiers of influence and graduation, with most participants identifying the “potential” for upward mobility within the market as a major determinant for their ongoing involvement. To be clear, I view the private (私营企业) “informal” recycling market as more inclusive, with more mobility, than any parallel “formal” state-owned (国营) enterprise. One of the operational assumptions about the formal-informal binary has been to assume that modern, formal economic sectors would eventually replace informal markets via processes of modernization.

The reliance of the developing world on informal recycling remains little researched, yet this informal strategy is greatly important to ongoing processes that enable modern social spaces to function. Most academic literature identifies informal recycling participants as intermediaries of some sort: collectors and traders who respond to the demands of residents and businesses requiring services that are inadequately provided by the state. The World Bank estimates that 1% of the developing world’s urban population relies on various forms of waste scavenging for survival (Medina 2009). Common economic strategies of informal
recyclers include recovery, collection and sorting of materials, to be sold for reuse or recycling, or used by waste collectors themselves.

Although the term “scavenge” figures prominently in literatures on developing economies, I choose to avoid it when discussing recycling in urban China, simply because the majority of informants with whom I spoke stated that waste resources in Shanghai were abundant, which minimized the possibility of conflict between low-level collectors. While some respondents indicated that a segment of Shanghai’s migrant population “subsists” off collecting recyclable refuse in high-traffic areas such as the North train station, these gatherers rely on recycling as one of several subsistence activities, rather than a full or part-time informal occupation. Most are homeless and without support networks of any kind. As I will discuss later in this thesis, networks are a crucial determinant for success. Returning for a moment to identification of the informal in processes or arrangements, it is through spatial networks that trade hierarchies have developed.

Other literatures identify an informal economy as “people’s spontaneous and creative response to the state’s incapacity to satisfy the basic needs of the impoverished masses,” (Desoto 2002, p. 14) or as a reaction to “segmented inequality of the developing economy,” with its “inferior working conditions, low-productivity firms, [and] disrespect for the rule of law” (Bosch and Maloney 2007). Self-employment is seen as the core of this informal sector, which may in turn be relied upon in various relationships between formalized state apparatus and markets that provide both employment and services for populations within developing cities and countries. Desoto is interested in the potential of market
economics to democratize and empower participants in restive regions. While relatively stable, the Chinese state prioritizes social stability in various disciplinary forms. Outside observers tend to fixate on the limited press and speech freedoms of Chinese citizens. How can observations on the democratizing potential China’s informal economies be made?

Medina has identified a lack of scholarly research on informal recycling, arguing that anthropologists have conducted most of the few studies undertaken thus far. Although this falls in line with Chapter II’s observations on waste and archaeology relations, Medina suggests that anthropology has lent a “good understanding of the socioeconomic and demographic characteristics of the individuals involved in it, their activities, and the social dynamics in waste picker communities. But we know relatively little of the economic, environmental, and historical dimensions of waste picking, the linkages between waste picking and the international economy, as well as the impact of globalization on waste pickers and their activities” (1997, p. 1). Identifying these deficiencies indicates the necessity for reconsideration of what “informal” really is. My research suggests that informality is a term with some analytic value, but does not help to connect recycling market processes to greater urban governance and economy.

Unlike the trash pickers and recyclers of many other developing countries (Miraftab 2004, Mitchell 2008, Van Horen 2004), informal recyclers in China are paradoxically gaining economic mobility in a space explicitly defined by state power. This success may be defined by economic self-sufficiency, but can also be found in how recyclers negotiate and leverage their “outsider” identity as non-Shanghainese.
This is the process by which recyclers utilize cultural understandings of waste value and urban / rural class difference. While historically embedded in relations of social class, consumption and waste, these cultural values are nonetheless reproduced and renegotiated by state involvement with market economics as well as the identity politics that surround and define participants.

**Challenges Met by Participants**

Much of the academic and professional literature on informal waste-recovery activities deals exclusively with the bottom tier of the waste-recovery hierarchy: collectors (Adeyemi et al, 2001, Fahmi 2005, Huysman 1994, Kaseva and Gupta 1996, Masocha 2006). In Shanghai, this bottom tier of street collectors and general scavengers shares common traits with low-level informal enterprises in foreign cities such as Cairo, Mexico City, Delhi and so on. Perhaps they are closest to a general perception of who waste collectors are, that is, the most marginalized members of urban society, subsisting on scavenged refuse near dumps and other fringe-peripheral spaces that serve as purgatory for garbage the state is unwilling or unable to further process. Rahthje and Murphy, studying garbage ethics in the United States, are quick to note that, “the image of pestiferous garbage mountains in the developing world is at once repellent and almost a cliché, but the people who work these dumps, herding their pigs even as they sort paper from plastic from metal, are performing one of the most thorough jobs of garbage recycling and resource recovery in the world. The garbage mountains are a noisome reminder that a truly efficient system for the disposal of garbage is not always compatible
with other desirable social ends—economic development, modernization, and human dignity, for example” (1992, p. 40).

In her recent work in Hanoi, Mitchell identifies a need to study the people she calls “waste intermediaries.” These are the buyers of collected recyclables, to whom informal collectors can sell what they've accumulated on the street. They typically set up shop as sidewalk depots or other semi-fixed locations. Mitchell’s study notes that 49% of these intermediaries are former collectors, indicating that the informal market has its own hierarchies of economic and spatial mobility (2008). DiGregorio (1997) identifies a three-tiered network beginning with waste collectors (pickers, dumpsite scavengers, household junk buyers), then waste intermediaries (receivers, unlicensed depots, dumpsite depots) and toward the top, waste traders (licensed redemption centers, corporate reclamation centers, and in the case of Shanghai, state-owned enterprises engaged in reprocessing recyclable material and scrap into raw material ready to reenter the resource stream).

Most informal recyclers operating on the street or at construction sites must regularly negotiate a variety of job hazards. Waste collection is typically done by hand. Protective equipment must be purchased by collectors. I have only rarely observed collectors wearing helmets or protective clothing (steel-toed boots, canvas aprons, etc). While most collectors wear gloves, they tend to dress the lightweight clothing of urban migrants—dusty suits and blazers, soft-soled feiyue sneakers, and the like. Most carry mobile phones, and rely on these to maintain close contact with partner collectors, family, and managers of the scrap yards where they will transport their accumulated recyclables, usually on a daily basis.
Equipment is minimal as well. Throughout the past decade, while municipal Shanghai has sprawled outward in all directions. Central Shanghai still sees the bulk of demolition and construction projects, while also housing some of the wealthiest apartment complexes, gated communities and neighborhoods, where collectors have more success in finding and purchasing recyclables. While other Chinese cities such as Beijing have granted recyclers specific licenses for operating motorized carts and small trucks in central district areas, Shanghai’s almost terminally congested central streets and elevated expressways have remained mostly off-limits to the typically noisy, derelict vehicles operated by recyclers. Thus the majority of collectors and buyers operate with three-wheeled carts (三轮车) powered by foot rather than engine. These are relatively easy to maneuver, but exhausting to pedal (especially as redemption centers are pushed further into peripheral places as the ongoing “renovation” of central Shanghai clears out informal and unlicensed shops and vendors, thus lengthening the distance of recyclers’ commute while forcing them to extend their operational scope of collection). Only basic equipment is employed for transport of recyclables: lengths of rope for tying down and securing goods, plastic and canvas bags for carrying larger amounts of small goods such as plastic bottles, rope yokes for individuals who will pull heavier loads on wheeled carts, instead of attempting to move the carts by pedaling. Thus the basic costs required for outfitting and equipping an informal collector or buyer operating at street level are far lower than those for a municipal garbage truck when designed or retrofitted expressly for collecting recyclables. In addition to truck fuel and maintenance costs, operators must be trained, licensed and formally employed with
danwei social benefits, housing allowance, etc. Further costs are incurred along the supply chain.

**Problems with the Market Binary**

An operational division between formal and informal recycling markets is further complicated when assessed in relative legality and regulation. DeSoto’s neoliberal stance towards informal markets is to view them as isolated by a sort of legal apartheid that serves to keep informal market participants marginalized and ultimately unable to join the global flows of capital enjoyed by legitimate, state-licensed business. This conceptualizes how isolation from globalized markets locks informal participants out of development cycles. However, I believe that hypotheses derived from this assumption are flawed. Shanghai informal recyclers, particularly mid-tier (unlicensed) waste and scrap buyers, deal directly with formal reprocessing centers. In Summer 2009, I visited six larger-scale redemption centers, each with operating managers overseeing more than itinerant collectors. Of these six centers, five sold metal scrap, plastics and glass directly to state-owned enterprises. They operated in industrial parks sited on state-owned factory land. I read these market locations for waste as operating within Roy’s view of informality as, “not a separate sector, but rather a series of transactions that connect different economies and spaces to one another” (Alsayaad and Roy 2004, p. 13). The spatialized transactions of recycling around Shanghai are interesting in that they vary widely in character according to location. I argue that further study of this variety could provide insight into how waste’s cultural economy develops as shifting
spatial hierarchies are altered by the changing social landscape. The acronym “NIMBY” (not in my backyard) comes to mind, both in the shifting attitudes of resident households towards waste processing in their neighborhoods, as well as the state agendas regarding how waste should be made to disappear. As waste is further marginalized by state will to modernity, this raises questions of how informal (as well as formal) market participants will interact with this spatial process.

Martha Alter Chen has suggested that understanding China’s informal economy should extend, “to include not only enterprises that are not legally regulated but also employment relationships that are not legally regulated or protected. [Chen’s emphasis] The new definition of the “informal economy” focuses on the nature of employment in addition to the characteristics of enterprises” (Chen 2007, p. 3). Using this expanded definition, we infer that waste markets are comprised of various forms of “informal employment”— that is, employment without state labor or social protections, but closely aligned with the former and current urban-peripheral spaces of recycling as a state-industrial complex. Chen’s observations bear quoting at length. Market relations of production, distribution and employment:

“tend to fall at some point on a continuum between pure “formal” relations (i.e. regulated and protected) at one pole and pure “informal” relations (i.e. unregulated and unprotected) at the other, with many categories in between. Depending on their circumstances, workers and units are known to move with varying ease and speed along the continuum and/or to operate
simultaneously at different points on the continuum. Moreover, the formal and the informal ends of the economic continuum are often dynamically linked. For instance, many informal enterprises have production or distribution relations with formal enterprises, supplying inputs, finished goods or services either through direct relations with formal enterprises, supplying inputs, finished goods or services either through direct transactions or sub-contracting arrangements” (Chen 2007, p. 4).

Guanxixue should be mentioned here, which Mayfair Yang describes as “an urban art... [that is] a particular instrumentalized and politicized form of a more traditional body of renqing principles and rural gift economy” (1994, p. 320). Yang’s observations indicate that guanxi is an explicitly spatial practice, developed as previously rural manners and behavior (such as gift-giving, hospitality, etc) were recoded in urban space as increasingly competitive and exclusionary processes for deal-making and political clout. Ray and Sayer write, “while the logic of the formal economy does not require culturally-ascribed differences... a significant proportion of economic activity takes place outside it... economic problems are cultural in origin, deriving from the way in which individuals’ economic activities and obligations are ascribed to them” (1999, p. 15). This idea was often on my mind during my pilot research, when guanxixue was repeatedly referenced by informants operating at every level of the informal recycling markets. Guanxixue has been noted as a necessary, essential ability, given primacy over any other skills or economic resources that recyclers required for success, although I remain skeptical about its malleability in academic discourses on cultural economy in China. When I asked one
informant about the initial steps required for a migrant to begin working as a scrap recycler in Shanghai, his response summed up the answers given by most others. “The first facts I learned about for scrap collecting involved the individuals and groups I’d need to establish *guanxi* with, along with what I specifically needed to do to properly create that connection. The way it had been explained to me in my village in Zhejiang, this was the really important thing to do correctly. If I made mistakes, I would not succeed in this business” (field notes, July 2009). When I interviewed a married couple that ascended through the informal ranks to become licensed redemption center owners, they immediately referenced their own cultivations of social relationships as the primary determinant of success for their shop. “Of course the license was expensive,” they responded to my interest in the actual cost of opening a redemption center in a relatively new neighborhood in Shanghai’s outer Songjiang district. “But as a foreigner, your assumptions are wrong. We paid the real investment costs over several years, as we gained introductions to high-level officials in the area. That took more than money” (field notes, July 2009).

A multi-scalar, geographic study of waste recycling offers the potential to better understand these various aspects of what I view as a cultural economic phenomenon that would expand existing definitions for informal economy. A cultural economic approach offers several ways of looking further into the evolution of waste recycling as a practice, business and industry. However this raises the question of how to glean a fundamental understanding of waste recycling when it is typically seen as an informal market populated by vulnerable, marginalized
segments of the population. Waste picking is characterized by hazardous working conditions, social persecution and inescapable cycles of poverty and deprivation.

We should first view informal recycling as an existing hierarchy that is partially based on formal economic models. These include hierarchies of management and distribution of capital. The operational hierarchy of informal recycling also draws from market economy private enterprise and entrepreneurship, neither of which is prevalent in state-owned and operated formal waste industry. I am inclined to draw on Mitchell's analysis of her recent fieldwork in Hanoi, in which she identifies unlicensed buyers (or middlemen) as understudied in informal waste recovery literature. Mitchell points out that “their fixed presence in the city (compared with the relative mobility of waste collectors) means that they experience the effects of spatial change much more than do other actors in the informal waste-recovery trade...the effect of economic and spatial change on waste intermediaries is complex and multifaceted, and cannot be described as a wholly positive or negative experience, simultaneously gaining and losing as a result of the economic restructuring taking place in Vietnam generally, and the spatial transformations underway in Hanoi specifically” (Mitchell 2009, p. 2634).

Unlicensed buyers in Shanghai, operating curbside shops, neighborhood depots and sorting operations in transitional land spaces (such as demolished city blocks still awaiting commencement of new construction projects), were the informants from whom I learned the most during summer 2009 fieldwork. They were experienced, entrepreneurial, acutely aware of local and global market fluctuations, and also very gregarious. Thus I would seek to hone in on direct study
of their operations in the future, in order to gain the clearest possible understanding of cultural material variables. Last, Mitchell (2010) points out “while many researchers working on issues related to informal waste management discuss the role waste collectors play in sustaining the urban environment, few acknowledge the degree to which the informal waste-recovery sector as a whole directly benefits from increasing consumption in the city and the circulatory process of consumption and disposal.” This relationship directs us toward consideration of state development, production and consumer initiatives in the spatial relations of formal and informal waste market processes.

Informality in State Space

State control and influence on waste recycling markets in China complicates attempts to describe a clear distinction between formal and informal markets. This section opens with consideration of the broader contradictions common in interpretations of market development in China. Perhaps this is because designations of “formal” or “informal” suggest a separation between the socialist state and “democratizing” market logics of neoliberalizing production and trade.

Portraying informal markets as separate entities is an attractive means for conceptually repositioning capital’s power away from state regimes and toward liberalizing discourses in which market and consumer exert increasingly influence on social and state reforms. For example, human rights, environmental responsibility, and other positive social forces have been included in the list of positive outcomes from a liberalized market economy. However, informal recycling
markets cannot be read as isolated from state governance. Although informal recycling is tolerated (and in many ways encouraged) by the state, it is monitored and regulated by government. Although existing research reveals a relative lack of data on informal markets and participants, a spatialized view of market processes suggests that the state does not intend to give free reign to participants, particularly when they are highly visible within the city. Yet regulation remains a challenge that I would suggest will be given increasing attention from the state as known limits on environmental durability and resource availability are approached. Jing Wang (2001) argues that despite its appeal, any view of state and market division is an inaccurate read perpetrated by cultural and economics outsiders. In other words, eliminating the state from market considerations (on the assumption that the state confines its involvement to state-owned enterprises and other municipal remnants of market economy reforms) is to miss the projects that continually reinforce state involvement in the market.

A cultural geography of intersections between the state and market may offer a clear view of how these ongoing processes unfold, by considering how the state controls informal markets and participants by maintaining “difference” of informal waste processes. This serves to marginalize operational spaces, leading to the urban periphery as only place for significant market processes to take place.

Understood in Foucault’s terms of power and the state, we see that Shanghai’s municipal government does not confine its administrative organs of waste to semi-peripheral areas, but casts a long shadow across the city via institutional regulation, policing and punishment. But because waste recyclers can
only operate by canvassing the *entire* city grid, their success depends on how successfully they can negotiate the many shades of gray between practices officially labeled informal (read: black market) and formal (read: licensed, taxed, regulated). As a participant observer, it is difficult to read clearly how these agreements are met by informal market participants. Wang suggests a cultural acknowledgement of the paternal state through Chinese history. She continues, “the Chinese state... with its 50 year old tradition of state monopoly socialism on one hand and its deeply ingrained Confucian prototype of “state-family” (what the Chinese term “guojia” literally means) on the other, unfolds a picture of political reasoning that is not only not invisible but which certainly cannot be derived from a Western paradigm that emphasizes the “elimination of the family as a model” for the development of the art of government from the eighteenth century onward (Foucault 1991, p. 98)” (Wang 2001, p. 44).

Thus we can begin to see how ongoing state involvement in Shanghai’s informal waste markets is characterized more by the prickly tolerances of municipal officials and their enforcers (*chengguan*, etc) than by actual legislation. This returns to Phil Crang’s views on how to spatially represent the economic through the cultural. Crang writes, “to speak of embedding is to speak of situating the economy in a cultural context, in a placed culture, whether its cultural place be the individual (as representative of some wider spatial scale), the firm, the region or the nation-state. These “places” are themselves cultural constructions” (Crang 2000, p. 12). For waste recycling, this connects to cultural constructions of *place* for waste, *place* for those participating in markets that create waste value, and questions waste
ownership, from stewards to profiteers. By first considering some of the conflicting issues that the state negotiates, such as competing discourses of urban development and environmental conservation, then inserting the very large, very active population of migrant recyclers dealing in the material that is both byproduct of and resource for these processes, the need for reconsidering state motives for tolerating and maintaining informal waste markets becomes more clear.

Roy points out, “the planning and legal apparatus of the state has the power to determine when to enact this suspension, to determine what is informal and what is not, and to determine which forms of informality will thrive and which will disappear. State power is reproduced through a capacity to construct and reconstruct categories of legitimacy and illegitimacy” (Roy 2005, p. 149). This raises the question of why waste recycling markets are allowed to thrive in Shanghai. They are not only huge, highly visible to the public eye. The largest redemption centers I visited were not “official” (licensed), but nonetheless occupied prominent real estate locations. The Xuhui District center I visited was less than three blocks from Xujiahui, the first and largest of Shanghai’s post-reform shopping areas, a sprawling headache of skyscraper malls, elevated walkways, neon lights and massive volumes of shopping pedestrians. The amount of municipal investment embodied in Xujiahui’s commercial promenades suggests that state actors might be opposed to having a nearby redemption center, where more than two hundred sanluche recyclers processed their daily collections every evening. However, yard managers assured me this was not the case. One manager told me, “The district rents this land to us and lets us deal in whatever scrap we’d like, although they warned us not to
process e-waste here. With all the high-rise apartment buildings in this area, residents need to be able to get rid of their waste, but they also want to make some money from it. We don’t have an operating license, just a lease that we have to renew annually" (field notes, August 2009). This observation suggests that problems with formalization arise on both sides—market participants and the government alike are struggling to afford the costs associated with formalized operations of waste control. Most redemption center operators shrugged when I asked about licenses, taxes and paperwork necessary to their business. These were identified as hassles that district and neighborhood officials were generally more anxious to avoid than the recyclers themselves.

This reconnects waste to political spaces of legislation and regulation. A major issue with the informal economy’s operation remains the punitive and cumbersome regulatory environment of formal operation. As “green” issues proliferate in China as evolving state and public discourses, the regulatory environment surrounding scrap recycling becomes political. This is particularly the case in e-waste industries. In the case of urban China, formalization will need to be instituted by the state. And it does not appear to be in the state’s interest to do so.

I suggest that spatial linkages of how state power connects to informal economy must be further explored. We need to ask how transactions are carried out at multiple scales, from individual operators collecting on the street, to mid-level redemption center operators, to the larger networks of market participants who trade waste with each other. and major state-owned reclamation centers responsible for returning waste to states of raw material that may reenter the
manufacturing stream. I would like to study specific waste material commodity chains (for example, plastics...) to consider varieties of informal market participant relationships and varieties of formal regulatory environments (over-regulated, deregulated or lacking regulation)” (Chen, p. 10).

**Informality’s Spatial Importance to the State**

Cultural economic processes of Shanghai’s robust waste markets offer evidence that the state continues to exert influence on market participants and flows of capital. But the success and expansion of these markets also suggest that their development is linked to an “economy of qualities” underwritten by the state itself. The state exerts two forces on informal markets—support and marginalization. The state utilizes contradictory policies and discourses to mobilize informal markets. This returns us to the material presence of waste in the city, commonly understood by urban citizens to be a byproduct of development that is increasing fast. I read the social anxieties of both residents and municipal officials to be an outcome of state discourses on what Callon et. al term “the economy of qualities,” which functions as it, “involves the establishment of forms of organization that facilitate the intensification of collaboration between supply and demand” (2008, p. 74). Waste market organizational regimes retain an outward appearance of informality, while ultimately answering to state organs at higher levels of the reclamation process. This brings us to Crang’s observations on structured spaces of cultural production. He writes that, “the cultural field... is situated within a broader field of power, that is, within “the set of dominant power relations in society,” the
dynamics of which it refracts rather than reflects” (p. 8). This altered “refraction” is a result of several cultural legacies. First, state inability (and unwillingness) to fully regulate the informal market means that informal market hierarchies shift with market forces. Second, the cultural geography of state power in China suggests that there is a tradition of state reliance on informal markets to contribute to management of space. While this has played out in a variety of ways in the past century, recent expansion of the global waste trade has been reflected in China by the growing participation and share of the informal market.

I connect Crang’s statement to the operation of mid and lower tiers of waste collection and sorting, in which regulation and licensing are rarely observed or enforced. These tiers reconnect to formal commodity chains in later stages of the reclamation process. These material connections take place within urban Shanghai, the “structured space” of cultural production. I believe that Shanghai residents’ behaviors and attitudes towards waste “refract” state discourses on urban citizenship, while “reflecting” a social history in which waste retained value through recycling practices spanning modern and dynastic economic development.

Formal collection processes, such as municipal garbage trucks and landfills, have fallen behind the influence and profitability of informal collection. (Tong 2005) Despite investment in waste processing technologies, municipal waste collection, and formal ties between official redemption or reprocessing centers and a multitude of state-owned enterprises that rely on reprocessed raw materials for factory production, informal channels of waste recycling are more prominent. Informal collectors and buyers receive a far larger amount of household, business industrial,
commercial, construction and demolition waste, from which they earn far higher margins of profit.

How are informal recycling markets able to maintain these higher profit margins? In her study of junk buyers in Wuhan, Shichao Li concludes that “this is a typical example of the cheapest and lowest skilled labor forces being in relatively unlimited supply in a developing country.” (2002, p. 19) Yet surplus labor capital and rural-urban migration are common factors shared by all other models of informal waste economies in developing cities. Informality’s success in urban China demonstrates the state’s continued need for these market processes, because they partially reinforce the state’s own brand of urban modernity. While state subsidization of formal recycling is ongoing, informal industries provide the bulk of services for keeping waste in its proper place and space. State initiatives designed to boost consumption translate to increased waste, which its subjects view as a material resource that begets capital. Households and businesses rely on informal recycling to both purify urban space while enabling the transactions that allow them to realize profit from their own trash. These assumptions are different from the United States, where American households and businesses prefer that their trash “disappear.” (Rathje 1992) My Shanghai neighbors would stack newspapers in our stairwell for years, waiting for recyclers to offer an optimum market value for paper. In turn, buyers tend to expediently sell their accumulated recyclables to state-owned redemption depots. This means that the informal economy directly facilitates municipal waste control, while supplying state enterprises with material resources for continuing production. Thus, these cultural and economic practices offer routes
for empirical investigation. Thus, power relations along this waste commodity chain are more complicated than simply interpreting state power as the ultimate factor in market function and development.

Figure 3.7 – Yuyuan neighborhood plastics trader, August 2010.

The next issue to consider is the state’s ultimate inability to fulfill the promises of modernity used to legitimize development initiatives. I use the word “promises” to mean expectations of higher income, quality of life, etc. These
expectations are in evidence in how state media and development organs marketize modernity as an aspirational, achievable state to be pursued on both a social and personal level. These initiatives exhibit relationships with multiple scales of urban space. Construction and real estate development, flows of capital and labor, and material recycling and production have been mobilized by the Chinese state to great success, leading to evaluation of China’s “miracle” economy.

Socio-environmental stewardship is a relatively new aspect of this aspirational modernity. China’s interpretation of recycling as a social responsibility and charity, to be foisted onto the consumer or producer, has been reconfigured over the past eight years, and remains of little relevance to the average Shanghai resident. China’s peasant classes have a longer relationship with recycling that is based on necessities of privation (and more recently, profit). Today, while Shanghai’s municipal government continues to invest in waste and recycling technologies, employing tens of thousands of workers in these closely linked industries, hundreds of thousands of informal waste recyclers ply the streets in search of valuable waste. Many aspects of the developing informal market are tacitly tolerated by the state, particularly in municipalities like Shanghai that have both huge numbers of unlicensed migrants and significant challenges for waste control. Like most developing megacities, Shanghai has more trash than it could handle without assistance from informal markets. Habitat International reports that “cities are struggling to meet waste-related targets for waste collection, safe disposal, reduction or recycling. Increasing quantities of waste, higher expectations from the public, changing waste characteristics and increasing costs of waste management
are some of the challenges... local governments are ill-prepared to meet.” (Ali 2006, p. 729)

This is immediately recognizable in the creation, maintenance, and navigation of intricate socio-cultural relationships between recyclers and clients (urban residents, businesses, construction yard bosses, etc). There is a definitive lack of clear regulations and rules on recycling, as there is also a lack of enforcement by state power (police, landlords, etc). Instead, the business seems to develop and thrive through interpersonal relations. Informants cited the need to cultivate and maintain business relationships, which was most effectively done at a personal level. While some advertised their services on the internet, they insisted that we meet in person before we could do business together. A group of sixty recyclers operating in a vacant lot in downtown Shanghai explained that this was their temporary base of operations, where they performed a variety of work activities (sorting, breaking down, exporting of recyclables) and met with a variety of clients (building site managers from the nearby World Expo 2010 site were happy to stop by the lot to cement informal deals on scrap access). Visiting this site, it seemed that I was witnessing a large, shifting group of people actively constituting their business dealings on a very personal level. No papers were being signed, but I was assured that all participating parties would honor deals made here. Municipal authorities were very clearly aware that a large, informal recycling concern was operating one block away from the Bund, but they too preferred to be involved via informal channels. This all seems to directly relate to ongoing negotiations of a material culture based around waste both as capital and obstacle to modernity.
Jing Wang considers ways to reevaluate state involvement with culture and informal enterprise in street spaces. “In the wake of the state-sector reform, it became obvious that the street is also called upon to bear the burden of containing the socially displaced—those who no longer work for state-owned industries... street based communal services are now considered as a vital gateway—next to the private sector—to opportunities of reemployment, especially for those laborers whose occupational skills are limited.” (p. 47) I think Wang’s discourse framework offers a means for reevaluating these economic and cultural relationships between consumers, recyclers and the state. If we’re going to accept that “street economy, in fact, is nothing less than a remnant of the Great Leap Forward, reminiscent of an economic collectivism,” (p. 48) then we can start to look at recycling not merely as an informal market borne of the desperate divide between haves and have-nots in urban China, but as an institutionalized practice that has evolved around continually shifting state discourses on the many social issues that it comes in contact with. These include how migrants in the city are labeled as “floating population” and “blind flow,” associated with both social corruption and dirtiness, as well as how private entrepreneurship, social accountability and enterprise are all associated with how citizens may contribute to China’s market economy.

Certainly, recycling might fit into the realm of commercial cultural entrepreneurship outlined in Wang’s “Culture as Leisure” article from 2001. But perhaps its more fractious nature can be read in how the state seeks to maintain law and order in recycling’s cultural production, a project that has been notoriously unsuccessful thus far, even in Shanghai, World Expo 2010’s site of China’s
triumphant modernist urban project. This will be discussed further in the next chapter.

Affordability of informal services that contribute to “quality of urban life” can be readily traced to disparity between social classes in the city, a factor in turn predicated by growing disparity between rural and urban development. To draw an example of how this can be read in spatial issues in the city, residential real estate development in Shanghai directly influences the spatial distribution and mobility of informal recyclers. As “western-style gated residential communities” are built in undeveloped outer districts, then advertised and sold to upper class residents, these areas become new focal points of migrant residents, whose business practices lead them to capitalize on both the variety of scrap material byproducts of construction, as well as the large waste volumes of the wealthy new inhabitants. Formally (and, in a variety of “under the table” methods, informally), the state benefits both from construction and real estate kickbacks, while relying on modes of tolerance towards recyclers, who maintain “modern” levels of cleanliness and waste disposal for the fashionable new neighborhood. These practices also connect to informal land use and property because the majority of informal service providers live and operate out of various squats, temporary settlements and unlicensed multi-family dwellings. If they were unable to reside in such affordable housing, Shanghai’s urban markets would be inaccessible to them. Thus I would argue that state complicity in informal markets and land use is an inherent determining factor for the continued service industry of Shanghai’s migrant populations.
Of the Shanghai residents whom I interviewed during July 2009, everyone identified itinerant scrap buyers as a ubiquitous part of the city landscape. Informants’ length of residency ranged from two months to forty-five years. Recyclers are highly visible in their numbers, work strategies (such as their pedaled three-wheeled carts laden high with accumulated scrap) as well as their methods for self-advertising, which usually include some kind of audible cue, such as a sound recording. However, the ubiquity of recyclers in Shanghai has become a focus of concern for municipal officials, as they are increasingly identified as being contradictory to the particularly modern image city and state officials wish to convey. Recyclers appear unwashed, noisy, and worst of all, uncultured. Their image conflicts with that of a tidy, modern city—a place devoid of waste and those who are dependent on informal markets surrounding this ‘excess’ of waste.

CONCLUSION

Informality and Cultural Economy

In this chapter I have argued that state involvement with informal waste markets challenges assumptions of a binary between “formal” and “informal” markets in contemporary urban China. I have done this by making preliminary examination of informal market processes, state connections to these processes, and state motives for a variety of support responses to informal market development, which connect to state challenges of creating and maintaining an “urban modernity.” By challenging the binary of formal and informal urban markets, we can interpret recycling processes more effectively, while elevating discourse on how informality
represents significant socioeconomic development that currently lacks understanding. This is particularly the case in Shanghai, a city that represents many of the contradictions inherent in rapid urban development and resulting increases in socioeconomic disparity between the rich and poor. Roy argues that one means to journey towards a new epistemology of urban planning, in which we move away from the dichotomy between First World “models” and Third World “problems” (2005) is to study urban informality, particularly “rights to the city” as a crucial means for enabling citizenship and ownership within the city for its residents. As I will argue in Chapter IV, the enduring presence of China’s hukou policies can similarly be read both as means for the state to control and mobilize migrant workers. However, I also read developments in informal recycling to represent cultural shifts occurring in Shanghai that have begun in the lower levels of recycling, then trickling upward. These cultural geographies of waste in turn challenge the two preeminent models of socioeconomic development (neoliberal market democracy and socialism) in the PRC.

Encounters like these have led me to reconsider academic discourses on divisions between formal and informal markets. In my limited experience, urban Chinese economies challenge assumptions that markets can be divided neatly between the legitimate, illegitimate and a respective “gray area” where the two come into brief, generally illicit contact. Instead, I have argued that urban Chinese models of cultural and political economy blur these lines. While the terms maintain an analytical usefulness, the haziness of actual market practice demands further elucidation. The state in China only maintains these distinctions of formal and
informal when it is deemed officially appropriate to do so. Both China’s economic vibrancy and enduring, seemingly intractable social divisions are continually reinforced by the smoothed connections of formal and informal economic networks.
CHAPTER IV

Urban Citizenship and the Cultural Economy of Recycling

This chapter considers connections between urban citizenship and cultural economy via experiences of migrant recyclers in Shanghai. The Chinese national labor market has been assessed as a unique environment, with a massive surplus labor force, the hukou system restricting geographical and professional mobility of workers and maintaining a rural-urban division, and numerous nonmarket and quasi-market labor practices existing in a complex economic environment (Wang 1998, p. 464).

The hukou system’s management of social rights and welfare contributes to ongoing spatial unevenness in the division of state subjects into rural and urban categories. However, this institutionalized social exclusionary measure is not an overriding determinant of citizenship in China. Instead, citizenship has become a variety of fluid social categories that both urban and rural hukou holders negotiate. I argue that scrap collectors illustrate this shift because their successful negotiation of urban citizenship does not equate with “earning” an urban hukou. Is the hukou system’s management of welfare and social inclusion and exclusion still the overriding determinant of urban citizenship in China? Or does the emergence of migrant-dominated markets, such as recycling, represent a weakening of the dual-class citizen binary upheld in part by the hukou system?

In order to answer this question, I first integrate existing literature on urban citizenship and the role of the hukou in China. I then consider how cultural economy literature relates to recycling markets in Shanghai. I argue that urban citizenship is
now a process negotiated by urban residents. The market economy of recycling represents a fluid territory where rural migrants are deemphasizing the importance of an urban *hukou*. When asked, most participants responded that they did not anticipate obtaining one at any point. I found that recyclers’ successful negotiations of urban citizenship did not equate with “earning” an urban *hukou*, but were instead focused on other values of citizenship, including economic mobility and community recognition. Thus this chapter explores how shifting cultural and economic values can be read as influential in determining the citizenship of migrant recyclers.

**Hukou Origins and Developments**

Begun in 1952 and based on an existing Soviet model, by 1958 the *hukou* system institutionally separated rural and urban Chinese residents, effectively limiting the mobility of the population and fostering the “dual economy” that continues today, in official and practical terms (Wang 1998, p. 466). The dual economy has privileged urban *hukou* holders, by entitlement them to higher paying jobs and superior social services. It leaves rural hukou holders, the majority of the national population, at a severe disadvantage, previously confining them to less developed places with limited economic opportunity, and more lately spurring their deployment of labor capital to industrial and urban spaces, providing power for China’s factories. In Chapter III, I discussed how challenging the formal and informal binary creates the potential for understanding the processes that blur this economic division of rural and urban markets.
While the *hukou* originally expressly prohibited migration, this regulation has been relaxed since the reform period began in the 1980s. However, because development regimes have been far slower to reach rural areas throughout the country, rural hukou holders have had to self-mobilize in search of opportunities. This migration reform has been carefully managed by the state, which has also overseen deployment of the suzhi paradigm, in which entrepreneurship and cultural “quality” have been insinuated into civilizing discourses on reformation of the self into an ideal state subject.

Chinese citizens must be registered at birth at their local *hukou* authority office, with a person’s mother’s status (rural or urban) determining their resultant status, regardless of place of birth. Limited allowances for rural to urban conversion of *hukou* make it very difficult for rural *hukou* holders to acquire urban *hukou* that would entitle them to legally acquire permanent residence (or formal employment), social services (health care, schooling) or what Wang calls the “community-membership-based benefits and privileges” in places outside one’s *hukou* location (1998, p. 466). In 2008, Shanghai offered urban *hukou* for residents who had completed seven years’ work in the municipality, along with required tax and social security payments. Thus only an estimated 3,000 migrants would qualify (Economist, May 8, 2010) The *hukou* should be considered a geographical, place-based system. “*Hukou* institutionalized one’s particular slot in the state’s organization of space, meaning that one’s relation with and access to the state was defined, at least in part, spatially” (Oakes and Schein 2006, p. 5).
Urban Citizenship

Citizenship has been defined as the rights and duties relating to an individual’s membership in a political community, with emphasis on considerations of both nation-state and heritage membership (Mitchell 2009, p. 85). I focus on urban citizenship to consider how the Chinese state and city governments’ assemblages of power have sought to control the status and practice of citizenship in Shanghai. As a prominent form of state power in the daily lives of urban migrants, the hukou system is consistently identified as the most dominant control over citizenship rights and expectations (Chan 2010; Wang 1998; Zhao 1999; Solinger 1999; Mackenzie 2002). Observers criticize the hukou for “segregating the rural and urban populations, initially in geographical terms, but more fundamentally in social, economic, and political terms... the foundation of China’s divisive dualistic socioeconomic structure and the country’s two classes of citizenship” (Chan 2010, p. 357).

Oakes and Schein’s equation of geographical and social mobility under the hukou suggests its impact on the social, economic and political values of citizenship. Chan estimates that the hukou today maintains 700-800 million second-class Chinese citizens as the cheap, surplus labor force that is powering China’s rapid modernization (2010, p. 357). This is carried out by the ongoing internal migration of rural migrants onto the factory floors of the country’s export economy. However, observation of complicated daily realities on the ground demand further analysis. I argue that Shanghai and other developing cities’ “informal” recycling markets are spaces where citizenship is based around the spatial mobility and petty
capitalism that scholars have attributed to Chinese traditional cultural values and practice (Zhang 2001; Gates 1996). The city-state’s maintenance of hukou controls on rural migrant citizenship has both limited and stimulated economic mobility of rural-urban migrants. But study of recycling markets will also demonstrate how negotiation and transgression of this state-imposed boundary occur.

Developed in ancient Greece, as articulated by Aristotle, citizenship was first conceptualized as a social category of membership and participation, with attendant rights and duties (O’Byrne 2005, p. 136). I conceptualize contemporary citizenship in China as a process closely bound up with modernity, in which the neoliberal subject is construed as an assimilationist model for state subjects to aspire to (Yan 2003; Anagnost 2004). This subjectivity orders Chinese citizens according to their accumulated, achieved and maintained standards of suzhi.

Observing Chinese nation state models for citizenship, the inherently exclusionary character of this term is identifiable. Dorothy Solinger writes of how exclusionary policies of state development have led to the “contestation” of citizenship by marginalized rural outsiders, who have little choice but to pursue social rights of welfare, education and enterprise outside formal, state channels (1999). In terms of global forms of citizenship, it is beyond the scope of this thesis to consider how informal market participants at low and middle tiers may negotiate these.

For informal recycling participants, I consider relevant forms of citizenship to be fluid, non-linear processes. In some ways, these subvert the aforementioned strictures on “cultural quality,” which masquerade as a social category.
In other ways, recyclers utilize *suzhi* discourses to exploit the reading of recycling practice as a socially valuable activity. I connect these negotiations with recycling market logics germane to current cultural economy literatures. These markets exist both as spaces within the city, as well as relationships between migrant participants and urban residents.

Waste markets and participants relate to processes of urban modernity that construct citizenship and produce citizens. The concept of citizenship as a social process of defining membership in a place-based society (Marston and Mitchell 2003) is essential here. Deprived of equal citizenship rights despite existing within the nation space, the “floating population” must weigh the value of social inclusion and exclusion as they seek opportunities in the city. The economic success of waste market participants continues to influence newcomers and seasoned “professionals” alike, altering the aspirations of citizenship.

A function of the *hukou* system is to control the flow of temporary and permanent migrants to urban centers. Informal markets arise as the “floating population” responds to the strictures of this control by seeking ways to support. As Peter Mackenzie points out, “even as migrants’ *hukou* status excludes them from many of the entitlements of the state, they also enjoy greater autonomy from state control than any other group within Chinese society” (2002, p. 305). The demise of the *hukou* system would not necessarily eliminate or reduce the wide variety of informal markets that have been developed by those marginalized by it. The current separation of rural and migrant classes should not be considered airtight. Instead, this is a porous boundary that invites transgression, offering promises of economic
mobility that many migrants have found to be truer than those of the state. Citizenship for migrants is less determined by state sanctioning of residential status, and more influenced by economic and cultural mobility.

If we consider the *hukou* as China’s “secret recipe...in a system that discriminates against some 800 million rural residents in many basic aspects of life,” (Chan 2009, p. 198) we must also ask how the limitations of state-sanctioned citizenship have motivated migrant workers to embody other types of citizenship forged by cultural networks (native place, *guanxixue*) that state socialism had formerly tried to suppress with introduced institutions like the *danwei*, intended in part to fragment or remove these traditional systems of support.

George Lin and Dennis Wei suggest that, “as China moves along the path of market reforms and globalization, some of the theoretical and conceptual concerns... on cities under capitalism may be relevant to the transformation of urban China in view of the profound processes underway in an open and globalizing nation” (Lin and Wei 2002, p. 1537). As I argued in Chapter III, the task of ideologically separating the state’s market economy from that of informal markets is difficult if not impossible, but I would like to continue from here with a suggestion that the *hukou* system’s intended stabilization effects have spurred the development of informal waste markets, which have arisen in response to the relative inefficiency of formal channels of collection and trade in valuable scrap and recyclables.

Can urban migrants negotiate varieties of citizenship outside of relative *hukou* status? The rare offers of urban *hukou* to migrant workers have been met with less enthusiasm (around 30% of the floating population in Hebei’s city of Shijiazhuang
chose to receive Hukou transferrals in a 2001 trial) than anticipated by the local and state governments (Zhu 2007, p. 66). In Spring 2010, Shanghai’s government announced that seven years’ work in the city along with tax and social security payments would entitle residents to an urban hukou, yet these requirements limited the potential recipients to approximately 3,000 people. (Economist) Responding to Zhu’s call that, “full explanation of the temporary nature of the floating population must go beyond the hukou-centered approach,” (2007, p. 67). I seek to connect patterns of physical mobility with social and economic mobility.

Dorothy Solinger points towards an image of the floating population as “a conglomeration, a mélange of collectivities” (1999, p. 287) in which membership in urban society is built on social rank in both their place of origin as well as among other urban residents. Solinger emphasizes her conviction that citizenship in official terms is being undermined, by the gathering strength of market forces in tandem with the diminishing role of the state in allocation of public work and resources. She concludes that migrants make themselves into “proto-citizens” as citizenship itself swings away from the political and toward the socioeconomic (ibid, p. 289).

**Cultural Economy and Citizenship**

I now turn to this chapter’s consideration of cultural economy as an appropriate lens for evaluating how forms of citizenship connect migrant recyclers with urban society. Hill Gates argues for recognizing the role of culture in China’s history of private entrepreneurship, with its “petty-capitalist mode of production and its patterned interaction with tributary relations of production” (1996, p. 3).
The means by which informal recycling participants integrate themselves into urban society can be better understood when cultural and economic terms are co-evaluated, because the vast majority of participants are migrant outsiders.

Migrant participants in waste markets are engaged in a relationship with settled urban residents and state production that appears to be mutually transformative. The economy of waste in Shanghai embodies cultural values that affect multiple scales of spatial engagement: between waste market participants, urban residents and state reclamation centers for recyclables. Waste, a marginalized byproduct dealt with by marginalized people, represents the opportunity to move into and control spaces left empty by the receding responsibilities of the state and the willingness of urban citizens to do business with migrant workers seen to provide an essential social service. Informal recycling in Shanghai is a major provider of employment, goods and services for lower-income group as well as higher income groups. Everyone sells their waste to recyclers, who operate within both the city’s slums and its gated communities.

The previous chapters have explored how recycling has inherent connections with the emotional values of consumption, the complex economic relationships of place and social hierarchy, and the cultural attitudes and habits reflected in how urban China views and deals with its own waste. The development of massive, informal markets for recycling has occurred in tandem with migrant populations seeking cultural economic opportunities outside the prescribed boundaries of the state-planned system. Ray and Sayer argue that, “the expansion and diversification of commodity production also contributes to the expansion of civil society and the
diversification of social worlds in which ordinary people live, thereby expanding the positionalities and identities available to them” (1999, p. 10). Their view seems to be that market capitalism serves to foster the development of self-interest and social norms that in turn encourage the expansion of existing networks to serve new economic niches. The rapid organic growth of recycling markets throughout Shanghai seems to agree with this analysis. Multiple functional systems within the city operated in dramatically different ways, with managers typically stating that their particular system had developed according the trial and error, with prior models and regulations playing a less significant role.

Of course, waste and scrap are dealt with in Shanghai today with many of the same tools used hundreds of years in the past—witness the straw brooms of street sweepers or the buckets of night soil balanced across the shoulders of a greenhouse worker. China’s history with waste is distinctly economic, as are its traditional stewards of waste: rural farmers.

Carolyn Cartier has advocated paying attention to the massive underclass of migrant workers populating urban centers and peripheries. She argues that, as a post-socialist state, market capitalist processes in China serve to undermine citizenship in democratic terms. In Cartier’s view, resistance and discrimination from settled citizens, along with the “lingering weight of those prior [state] institutions and the expectations they created” are antagonistic and detrimental to migrant rights (1999, p. 278). In most informal markets, Cartier is correct. However, I connect the growth of informal recycling in Shanghai to refined social and technological values that capitalize on modern values of increased consumption and
a discomfort towards dirt. Using cultural economy allows us to approach a more nuanced and individualized variety of experiences and understandings among recycling participants and the general public.

Development of informal recycling markets into models of efficiency and profitability has been driven by an economy of knowledge and experience shared amongst marginalized migrant populations, drawing from cultures that value waste as a resource. While I connect contemporary urban waste recycling with older rural cultures of reuse of waste in agriculture, wealth in waste is an urban phenomenon that Shanghai has come to embody, where markets have grown in tandem with the city’s rising wealth and consumption.

This leads us to the contradiction that urban hukou holders who typically consider themselves “Shanghai’ese” both recognize the value of waste and scrap, but maintain that waste work is only fit for rural migrants. Reading recycling as a cultural economy indicates a way towards analyzing how migrants participants use recycling as a medium for gaining power and resisting the dual-class structural hegemony of the hukou. While both their social status and vocation should collude to exclude migrant participants from urban citizenship, the facts that their work is profitable and has become essential to maintaining the city contradict these assumptions. Although this should be sufficient to raise the specter of environmental justice, it is beyond the scope of this thesis to include the translocal spaces for e-waste processing and other labor-intensive, polluting forms of waste reclamation. Here I am primarily concerned with applying cultural economy to the social role of mid-level waste and scrap traders.
Study of waste markets can help situate the mutual transformations of urban citizenship and state/market processes. This chapter identifies how the citizenship of migrants in Shanghai is conditioned by state and market processes, including China’s *hukou* system, licensing of waste redemption centers, and a general overview of shifting cultural values of waste markets and their participants. These examples in turn direct the thesis to a fourth chapter, in which culture of waste market participants is explored through consideration of translocal processes and identity.

During summer 2009, my informants privileged informal recycling participants’ negotiation of spatial transactions and relationships over other values for both economic success and self-determination. Scrap and waste traders must learn to negotiate changing cultural economies that play off state pronouncements on green initiatives, place management, and urban citizenship. As opposed to formal channels of gaining certified citizenship, recyclers are more successful when they maintain and create local relationships of mutual benefit. This most often comes in the form of handling scrap, waste and other byproducts of consumption, and paying prices that conform to market value. This typically means undercutting prices paid by municipal redemption centers.

Ray and Sayer write, “while the logic of the formal economy does not require culturally-ascribed differences... a significant proportion of economic activity takes place outside it... economic problems are cultural in origin, deriving from the way in which individuals’ economic activities and obligations are ascribed to them” (1999, p. 15). This idea was often on my mind during my pilot research, when *guanxixue*
was repeatedly referenced by informants operating at every level of the informal recycling markets. *Guanxixue* has been noted as a necessary, essential ability, given primacy over any other skills or economic resources that recyclers required for success, although I remain skeptical about its malleability in academic discourses on cultural economy in China. When I asked one informant about the initial steps required for a migrant to begin working as a scrap recycler in Shanghai, his response summed up the answers given by most others. “The first facts I learned about for scrap collecting involved the individuals and groups I’d need to establish *guanxi* with, along with what I specifically needed to do to properly create that connection. The way it had been explained to me in my village in Zhejiang, this was the really important thing to do correctly. If I made mistakes, I would not succeed in this business” (field notes, July 2010). When I interviewed a married couple that’d ascended through the informal ranks to become licensed redemption center owners, they immediately referenced their own cultivations of social relationships as the primary determinant of success for their shop. “Of course the license was expensive,” they responded to my interest in the actual cost of opening a redemption center in a relatively new neighborhood in Shanghai’s outer Songjiang district. “But as a foreigner, your assumptions are wrong. We paid the real investment costs over several years, as we gained introductions to high-level officials in the area. That took more than money” (field notes, July 16, 2010). This returns to the previous chapter’s question of how state involvement in the informal market goes beyond bureaucratic issues of licensing and documentation to actively influence informal control.
Migrant individuals and groups must compete among themselves for resources that are obtainable mainly through negotiating social relationships. I have discussed how these include establishing relationships with residents for buying and bartering recyclables. Also worth considering are how informal recyclers gain and maintain access to particularly valuable neighborhoods, and how they must devise means for navigating urban spaces in informal ways. Because recyclables like plastics and metals have fluctuating market value, informal recyclers must also create space for storing their accumulated capital in these objects. This reconnects with Oakes and Schein’s cultural approach to place as produced “in association with the construction of identity, subject formation, and processes of social differentiation” (2006, p. 19). It was particularly interesting to me that the spaces which Shanghai recyclers lived and stored vast amounts of scrap often occupied entire city blocks in downtown districts. Settled residents living nearby unanimously agreed that they would never visit these temporary places for migrants. One apartment owner explained, “I know that the people who buy plastics and paper from me are living in that dump, but I wait for them to visit me. I wouldn’t visit them there, that place is dirty and dangerous” (field notes, July 2009).

This is interesting in context with the licensed redemption center managers, who purchase official licenses at great expense. Their argument was that this license protects them while legitimizing their business in the mind of the public. Also, the license itself will retain a market value that can serve as a retirement fund. But are owner operators willing to pay registration fees and taxes in return for benefits of formality? The answer to this question is complicated. At lower levels of basic
collection with limited buying from households, participant informants were
unanimous in choosing to forego formal channels for licensing. Mid-tier informants
managing neighborhood redemption centers answered both affirmatively and
negatively. At higher levels, the operation license is extremely expensive, yet sought
after. Limited quantities of neighborhood redemption center licenses are made
available by the city, according to population and waste densities. Those informants
who had purchased these operation licenses viewed them as the most significant
business investment in their career (60% of informants stated that they had been
working in informal waste market participants for more than five years). They
considered licenses to be a worthwhile investment primarily because licenses can
be transferred between people (although not between neighborhoods), and thus can
be sold.

**Who are the Informal Recyclers?**

Shanghai’s waste markets reflect a broad range of business practice. In
comparison with the variety of “informal” waste markets around the world, China’s
in general (and Shanghai’s in particular) are exceptionally successful. Informal
recycling in Shanghai operates as a scaled hierarchy in which graduation to
positions with higher pay and responsibility was considered to be more dynamic
and merit-based than in relative formal industries.

In 2009, several informal recycling facilities in Xuhui employed more than
two hundred individual collectors, each tasked with collecting and buying
household scrap and transporting it to downtown sorting facilities. Overseers of
these facilities typically managed as many as fifty collectors and earned salaries between 4000 and 9000 RMB per month, roughly four times higher than their collectors. While roughly 70% of individual or family operators remained at the bottom of the earnings pyramid after one to four years of work, 30% of those engaged in this work for more than four years had risen to mid and high level earnings, often employing and retaining collectors to work for them, while individually managing a collection center. While the women working at the lower levels of collection and buying of scrap are most often spouses working alongside their husbands, women also represented 40% of the managers I encountered at collection centers across four Shanghai districts, with most of these self-identifying as entrepreneurs with a history of five or more years work in Shanghai’s scrap trades.

Both male and female actors informed me that women are particularly effective scrap traders, equally capable in trading and managing. Many female managers pointedly mentioned Zhang Yin, the female CEO of China’s Nine Dragons Paper Holdings Limited, as both business role model and proof that women could be hugely successful recyclers. I observed that the street collection level’s intensely demanding physical work was performed in equal shares by both men and women. During my pilot research, I observed that the significant gender gap in earnings and performance, which tends to be acknowledged as inherent in the economic structure of informal economies (see Medina; Ali; Bolaane) was far less pronounced in urban recycling than in any of Shanghai’s other informal markets, such as clothes manufacture and construction.
As for why this is the case, current literature on informal economies emphasizes socio-cultural inequalities between men and women. Broadly, these include men having access to better tools, better work sites/spaces and greater access to productive assets and financial capital, as well as producing or selling higher volumes or different ranges of goods and services (Chen 2004, p. 4).

However, while these inequalities in capital and connections across a variety of spaces remain present and visible in most of Shanghai’s informal trades, I observed them to be markedly reduced in informal waste markets.

I took note of informants’ stated interest in pursuing and obtaining a Shanghai urban *hukou*. All low level collectors and buyers operating at profits less than 1200 RMB per month stated that they had no intention of trying to obtain a Shanghai *hukou*. At the mid-level of motorized buyers and operators of neighborhood redemption centers, a few respondents said they were either pursuing or had already obtained a Shanghai *hukou*, an impressive feat in terms of relative cost and the necessary cultivation of relationships with local officials. This suggests to me that my field research must begin to focus on mid-level waste market participants, whose work and lives interact more dynamically with state policy and market development. This connects my study with Mitchell’s methods from Hanoi, where her reported findings suggested that study of waste “intermediaries” will be the most illuminating entry point into understanding how globalizing and local waste flows interact with cultural and political geographies of urban change (2010).

Competition is intense among mid-level recyclers, whose territorialized control over various districts and neighborhoods of the city reflect the broader
struggles of the migrant population under state and market influence. The socio-environmental value of waste recycling grants recyclers an amount of agency higher than that of other informal markets in Shanghai.

Informal workers and markets have a greater socio-economic influence because of a distinct sense of self-determination. Formal waste workers described their jobs as menial, requiring little skill or effort, sufficient only for limited social benefits and a low but steady income. Informal workers emphasized their work’s ziyou or “freedom”—freedom to think and work creatively, apply new ideas, attempt to create new market revenue flows, and especially, to work when and how they desired. This cultivated aspect of informal waste culture is shared both with other informal members of the floating population, as well as urban residents, with whom recyclers cultivate the bulk of their working relationships.

On the ground, informal market participants prioritize mobility of goods and individuals. On a daily basis, recyclers must negotiate time-space constraints of the urban grid to visit construction or demolition sites to claim waste, or visit neighborhoods to negotiate sales and pickup of household and office recyclables, and then return to either their semi-peripheral storage locations, municipal redemption centers or other informal centers where middlemen will inspect, price and buy their accumulated stock. While it is in the interest of recyclers to cultivate relationships with more permanent local residents, they rarely seem to maintain local urban residence for themselves or their recyclable goods for longer than a few months. This may be attributed to the rapid demolition and construction of urban development in Shanghai, along with local authority’s reactions to regular state
announcements demanding increased monitoring (and inevitable harassment) of migrants working informal sectors. These urban dwellers work the land—in the vicinity of my Jing’An district neighborhood, the informal waste recyclers were regulars, recognizable faces. As a neighborhood resident, I tended to see them as cultivators of a social soil. They enjoyed first refusal of household waste, which they either bought in person, or collected from the dumpsters, in front of which garbage was often left, neatly separated by my neighbors, who were well aware of which recyclers traded in which specific recyclables. Everyone knew the recyclers by name, as well as general details of their background, gleaned from the easy small talk that my older, retired neighbors indulged in. Like other itinerant tradesman (mattress darners, knife sharpeners, etc), recyclers were subject to character references, and the dozen or so who visited my neighborhood all explained that they were led to their best purchases via word of mouth among residents with whom they had traded fairly in the past. Residents haggled with recyclers over prices paid for accumulated recyclables, but also deferred to recyclers’ knowledge of scrap prices, the fluctuations of which are influenced by the vagaries of domestic and international markets. In 2008, the global financial crisis was apparent to recyclers in early September, when metal scrap values plunged by 80% (Branigan 2009).

CONCLUSION

Citizenship and the Creation of Socio-Cultural Value

Applying cultural economy theory to citizenship issues surrounding recycling markets is initially useful for examining market and their participants beyond
purely economic terms. Lash and Urry write that if we view the economy as culturally inflected and culture as economically inflected, then, “the boundaries between the two become more and more blurred and the economy and culture no longer function in regard to one another as system and environment” (1994, p. 64). While I am aware of the argument among theorists over the relative primacy of its terms, I approach cultural economy here as a potential means for a more holistic and measured lens for researching a population whose social position cannot be understood exclusively in cultural or economic terms.

This brings me to consideration of how a cultural geographer might approach this problem. In order to locate and study informal recycling, a spatial approach is necessary. We need to identify how space and place for collection and trade connect to cultural economies of waste as resource and responsibility, including neighborhood redemption centers, participant housing and informal yards. I noted that differentiation in the positioning and transience of these urban forms aligned with district level tolerance and development. Outer districts in Shanghai tended to have far more lenience towards semi-permanent accumulation of waste materials and informal residence of unlicensed migrant participants. Spatial hierarchies in Shanghai tended towards privileging massive development schemes over accumulated informal businesses and housing. While this is a common thread in much of urban development studies, I frequently stumbled on razed city blocks in central Shanghai overtaken by dozens of informal recyclers sorting through thousands of tons of scrap.
Since I read society's attitudes and behaviors towards waste as influenced by ongoing mobilization of citizenship as a cultural quality, I connect this view to some of Phil Crang's writing on cultural economy, in which he identifies culture, “as a differential quality, marking out and helping to constitute distinctive social groups each with their own meaning and value systems.” Crang’s agreement with these definitions is contingent on whether culture is cast “less as a thing which all human beings possess than as a process that we are all involved in. The cultural, then, concerns the meaningful mapping of the world and one’s position within it. It concerns practices of identity, meaning and signification” (2002, p. 5). In the case of informal recycling, I identify practices of identity in the ways recyclers and household sellers constitute themselves in regards to the waste that they trade. Chinese cultural valuation of waste-as-resource has been dramatically reconfigured in tandem with experiences of waste as a byproduct of economic processes of modernity. Informal systems of trade and sale connect to processes of controlling space and redesignating place for both waste itself and the marginalized people who may occupy a culturally determined role of stewardship for this waste.

Rapid construction, demolition and consumption regimes are all contributing to this expanding pile of garbage. Urban citizenship in China continues to undergo social and cultural shifts that are reflected in a variety of scales. While the spatial patterns of these urban phenomena are of interest, I would like to direct the fourth chapter of this thesis towards consideration of how market processes and experiences contribute to the translocal identity of migrant participants.
CHAPTER V

Translocality in Waste Recycling Culture

In the first three chapters of this thesis, I have first considered geographies of urban waste economies by applying cultural materialism, cultural economy and contemporary citizenship theory to participant experience. One theoretical outcome of considering how waste is culturally constructed as a spatialized imaginary has been to further problematize the formal and informal dichotomy of marketized valuation of waste as both urban scourge and resource. Next I explored how urban citizenship and cultural evaluations of modernity are bound up in material exchanges of informal waste markets, particularly as informal recyclers situate themselves as the dominant, crucial link between urban residents and market channels for recycling and reuse.

Chapter V considers how ideas about translocality may be related to studies of the cultural economy and identity issues surrounding informal recycling participants. I apply critical theories of translocality as a means for interpreting experiences and identities of the informal recycling community. Translocal studies should begin by acknowledging that markets, individuals and cultures emerge and exist within networks and linkages of multiple localities. This suggests that these materially and symbolically constituted relationships are representative of what Oakes and Schein identify as the “economic and social unevenness” of contemporary China (2006, p. 30). In other words, translocality as a conceptual tool may be utilized understand how differences of spatial unevenness between rural and urban
places are productive of shifting identities for migrant recyclers. Translocality may be read in the mobility of capital, ideas, services, technologies and personalities, all of which are represented in unique ways in Shanghai’s recycling markets. This can be a first step towards acknowledging how the fundamental inequalities between city and countryside influence people who routinely migrate back and forth between them.

**State of the Nascent Art**

Having gained ground in the past decade (see Massey 2007; Cartier 2001; Katz 2001; Castree 2004), translocal studies are incorporated here to highlight how a simultaneous analytical focus on mobility and locality may offer new insight for understanding how migrant populations in urban China create unique subjectivities. This may allow us to acknowledge the multiple localities essential to migrant identity and imagination, while retaining a grasp on the importance of how mobility within and between these multiple scales of experience are shifting citizenship into translocal values.

This section first considers some of the literature on China’s floating populations, then moves on to analyze how translocal studies can contribute to broader literatures on migration and citizenship in China and beyond.

In 1989, Peter Jackson’s “Maps of Meaning” noted how a cultural geography reading of Raymond Williams’ work on cultural materialism could offer fresh conceptual tools for analyzing place and space in terms of the contradictions of prevailing cultures in different geographic locations. Jackson’s argument is that this
could be accomplished by paying explicit attention to how these contradictions are rooted in material connections between places and people. Jackson references both Denis Cosgrove’s interests in landscape as being subjectively demonstrative of human experience, as well as Nigel Thrift’s Gramscian-based ideas of hegemony-as-structure of feeling.

David Harvey has written that, "It is more useful to contemplate action and agency as multiscaled, nimble enough to jump scales and work in multiple theaters of action (2000). I read “multiscaled” and “translocal” as similar concepts that can emphasize mobility as an upward / downward phenomenon, as well as lateral mobility, an underexplored concept (Cartier 2005; Oakes and Schein 2006) that is germane to Chinese area migration studies. Informal recyclers emphasize lateral mobility in their work, moving between city neighborhoods and districts, as well as between cities. Since they typically operate individually or as small groups, recyclers’ lateral agency is more independent than that of migrant workers employed by factories or other larger corporations. They must rely on flows of knowledge and experience to determine optimal locations for all aspects of their business, from purchase and collection to sorting and sales. While most recyclers reported that their current collection route has been established over a period longer than a year, others cited experience from multiple districts and cities, during which time they followed urban development regimes of several scales, from newly erected skyscrapers and gated communities to municipal establishment and implementation of redemption centers. This has been noted in Wuhan (Li 2002) and elsewhere, but remains critically under-researched in Shanghai. These linear and
circular movements of China’s migrant population may remain internal, but I believe that a cultural economic interpretation of state influence on this lateral mobility is overdue, particularly as it relates to the uneven development of both economy and culture that reflect China’s “spatial inequalities” (Oakes and Schein 2006, p. 7).

Translocal Space and Place

Solinger argues that rural to urban migration has become a necessary risk, both for the peasant underclass, as well as the state, which had previously viewed mass rural urban migration as a force with dangerous potential to destabilize society (1999). By reintroducing the translocal mobilities of waste recycling participants, we begin to understand how migrant markets form around the calculated movement of people, information, technologies, etc. Shanghai’s informal recycling participants ostensibly operate under the influence and control of state regulation of scrap and waste markets. Yet the relative success and mobility of waste recycling participants in Shanghai (in comparison to participants within other “informal” markets such as tailoring, gadget repair, and so on) suggests that the recycling markets benefit from favorable cultural economic factors.

Jackson references Antonio Gramsci’s writings on how a dominant class uses power to persuade subordinate classes to accept moral, political and cultural values as the “natural order” (1989, p. 53). In regards to waste and scrap markets in Shanghai, the strong appeal of this work expressed by participants suggests that the discourses and politics of the state on “informal” recycling are essential components
of the shifting “natural order” of consumption and waste practices in China. I consider these discourses as linked with state priorities of encouraging entrepreneurialism and consumption as means for individuals to elevate their social and cultural quality, and discouraging informal use of urban space, particularly by migrant populations who do not fit prescribed modern subjectivities. The shifting perceptions of recycling and its corresponding modes of citizenship are far from static.

Eric Mueggler (2001) has critiqued the “state imaginaries” of the Mao era, during which time the communist party endeavored to foster a translocal sense of belonging and duty for its subjects. National and regionalized identities were articulated by the state and woven into narratives of nationalism, rural collectivism and urban work units like the danwei. Thus we see that the modern Chinese state has underwritten spatial unevenness into the present, including such later developments as 西部大開發 (“open up the west”) and other state sanctions that privileged or forsook specific regions.

Oakes and Schein argue that as the state has relaxed Mao-era restrictions on population mobility, translocal practices have dramatically increased, particularly as rural people marginalized by uneven development have sought opportunities in the factories and cities of the coast. They point out that many of these translocal practices were neither anticipated nor initially encouraged, but have been conditioned by state economic liberalization (2006, p. 8). Chan in turn remarks that one of the hukou’s benefits to the state (providing a massive underclass labor force) was not the original reasoning behind its social institution (2010). However, as
hundreds of millions of internal migrants maintain temporary or informal employment in China’s cities, their maintenance of a translocal identity of both rural and urban, reflects their places of work and home. As migrants have become an indispensable resource for providing labor that requires minimal compensation, policies and enforcement reflect conflicting needs of the state to create market revenue and contain the presence of huge numbers of migrants in cities like Shanghai. Oakes argues that the household registration system has become “too valuable to the state and its goals of rapid modernization and development” (2000, p. 320).

Does the state continue to hold the reigns of migrant workers in cities? In the case of migrant recyclers, approaching this question with a translocal slant suggests some promising lines of inquiry. Translocal practices facilitate jumping scale by allowing migrants to reposition themselves in beneficial ways. These linkages can exploit the stratified unevenness of development between the rural and urban, local and global, and so on. Spaces of inclusion and exclusion can thus be better understood if we are able to contextualize diffusion of people, information and capital by interpreting unevenness as both spatially dependent and exploitable both by state power and mobile individuals. Although China geographers typically argue that scale jumping up economic hierarchies is nearly impossible for migrant workers, I encountered two prominent discourses in recycling that countered this assertion. First, municipal yard managers and owners all explained how they had graduated through the ranks to hold their relatively high positions. A manager at a metal scrap yard shared a typical response, “I have a hukou from Anhui’s Qiaocheng
district. It took me a much shorter amount of time to be promoted to this position than it would have in any other work that I could do in Shanghai.” Second, media discourses that mention the self-made qualities of market entrepreneurs commonly reference national recycling figures like Nine Dragons’ Zhang Yin and Chen Guangbiao, one of China’s richest men (fortune publicly made from his Jiangsu recycling business). These elite figures and their mythologies of success function in tandem with local mid-level entrepreneurs, serving to attract migrants to informal recycling as a strategy for more rapid scale jumping. While I am attracted to Cartier’s analytical concept of the “information have-less,” (2005, p. 12) I generally find that “quality information” in China consists of opaque official statistics and figures. I always noted a low confidence expressed by officials and the public alike in data of economic development. I will be interested in considering how digital information mobility now influences historical and institutional networks among migrant workers. Among informants, I noted that the age group making use of digital technologies of connectivity (mobile phones, SMS, online advertising, Google Earth, etc) was much broader than here in the US. I interviewed a sixty-year-old man managing his business of buying and carting metal scrap from an iPhone.

Considering translocal networks as a means for jumping across scale is the other issue at stake in understanding China’s uneven development, as migrant mobility between spaces of vast relative difference (rural, urban, east and west) has been greatly facilitated by improving networks of transportation for people, goods, ideas, and so on.
Figure 5.3 – Anhui men with Shanghai’s “summer harvest” of recyclables, July 2009.

A few hours’ drive from Shanghai, once-populous small towns and villages are increasingly emptied of everyone but the senior citizens and infants, a key aspect of rural-urban migration duly noted in the 2000 census (Zhu 2007, p. 68) that has fundamentally altered the social geography of rural and inland China. But these villages are not permanently emptied, despite appearances. In most of the small towns and villages I’ve visited, the economic impact of remittances from people who have migrated to city work are hard to miss. Tall, cement and ceramic tile farmhouses have sprung up in ancient towns and formerly decrepit outskirts of smaller county seats that are seeing an influx of hard-won city cash. While rural residents continue to migrate to urban areas in huge numbers, they retain ties to
their places of origin. This points to how native place identity in China has always been actively configured as translocal identity. State-managed labor reconfigurations (such as the *danwei*) originally intended to destabilize family and social networks functioning around native place have been weakened or dissolved. In this vacuum, native place connections have regained influence, but have also been modified as migrants have streamed away from home villages and towns to occupy cities, establishing their own spaces and networks (Zhang 2001).

Translocal goes both ways, from rural to urban to rural again: It’s also worth noting that this rural-urban mobility is not a one-way ticket to the city. Kam Wing Chan’s recent paper on Hukou developments opens with mention of the annual Spring Festival exodus of migrant workers leaving the cities to return home (Chan, 2009). During this time, the dynamic role of returnees plays out as they bring back hard experience and knowledge to isolated locales (Chen and Coulson 2002, p. 2190). Of course these workers have also sent city wisdom back to the countryside over the phone—Shanghai’s telephone companies in 2007 estimated a 100% mobile phone penetration rate (Law and Chu 2008, 43). National telecommunications continue to expand on cheap, pay-as-you-go plans for migrant workers needing to phone home (Cartier 2005). Temporary migration to and from urban centers stimulates flows of information and experience between modern markets like Shanghai and less developed markets in rural spaces as well as “lower tier” cities. By maintaining family ties or land at home, migrant workers maximize family resources and income. Sending one breadwinner to the city for an indeterminate amount of time can increase savings without permanently severing these economic
and social ties. Perhaps this is one reason why early 2009’s layoff of an estimated 20 million migrant workers from the Pearl River Delta’s manufacturing centers did not lead to the massive unrest of uprising that was anticipated (Wong 2008). Instead, these strategies of temporary migration, developed in response to the imposed pressures of rural *hukou* limitations, favored migrants’ return to their rural homes to wait for economic conditions to become favorable again for their next move to urban work.

**Entrepreneurship and Translocal Subjectivity for Migrant Recyclers**

In this section I discuss how informal recyclers actively constitute themselves as cultural entrepreneurs. A translocal subjectivity contributes significantly to this process. Specifically, the independent enterprise of informal recycling builds on subjectivities of migrant outsiders and urban residents. Both of these groups reference the translocal aspects of migrants’ subjectivities.

Self-identifying “Shanghaiene” residents typically view informal recycling trades as activities reserved for and practiced by non-Shanghaiene outsiders (field notes, August 2009). Although Shanghaiene cultural identity is a contentious subject best reserved for another discussion outside this thesis, this prevailing view of recyclers as outsiders is common across every other city I’ve visited in China. From Kunming to Chongqing to Beijing and Guangzhou, urban residents state that recycling trades are the providence of rural migrants. Residents refer to the ubiquitous low-level recyclers with pejoratives that emphasize their uncultured rural status (from *nongmin* to *xiangbalao*).
These attitudes may reflect state and media discourses on both migrants and informal recycling, in which migrants are characterized as urban interlopers, operating outside the grid of official employment, or as unclean, uneducated and untrustworthy. For example, a July 2010 article from the Shanghai Evening News, titled “Large waste dump near the roadside,” notes the “heaps of broken glass, discarded building materials, and muddy road exuding a stench” at a busy informal redemption center on the North bank of Suzhou Creek. Another Evening News article, “Police seize genuine liquor bottles,” focuses on the detention of a couple who had formerly earned a living picking up trash, but had created a more profitable business by refilling empty baijiu bottles with ersatz plonk. Police easily identified these “rural” people by their “dirty clothing” and “timid, dishonest look.” Even more social outcry was gleaned from the April 9, 2010 story of a recovered bronze statue, dumped in a river by fleeing recyclers pursued by police. The article duly notes that theft of metal statues is a growing problem in cities like Shanghai, where the price for scrap metal is especially high. Finally, another recurrent article theme is the “emergency police measure” of clearing out families from illegal squats that have become informal recyclables sorting stations, such as this Morning News story on Xuhui district’s raid of “a shocking waste station” where several families were living “in a chaotic environment of recycling” (2010).

As official municipal redemption centers for recyclables began to spring up around Shanghai’s central districts in the mid-2000s, several advertising campaigns emphasized the prevalent dishonesty among migrant recyclers, touting official
centers’ prices as reliably pegged to international value indexes for scrap metal, electronics and other recyclable materials.

But these discourses on responsible recycling, for both urban residents and informal market participants, are not representative of the daily practice I encountered on the ground. Informal recyclers in Shanghai dominate the trade, edging out municipal redemption centers and city-operated collection trucks. This is because informal recyclers culturally constitute themselves to embody a convenient, efficient and profitable segment of consumptive culture. Markets for scrap and waste trade have developed in tandem with a social imaginary for both migrant recyclers and urban residents. This social imaginary represents the translocal mobilities of recyclers, many of who migrate “seasonally” between the city and countryside. It also encompasses the vicarious experience and knowledge accumulated informally among participants, the most successful of whom translate this wisdom into practice as they colonize developing areas of the city.

Along with their accumulation of material capital, I connect the subjectivity of informal recyclers’ translocal identities to their accumulation of social capital as a nonmaterial asset. This includes means and methods for bonding, bridging and linking activities, applied vertical and horizontal scales of experience, informal network relationships, and capitalization on perceptions of rural-urban division in the form of role-play.

Cornelius Castoriadis has indicated that social imaginaries function because, “society must define its ‘identity,’ its articulation, the world, its relations to the world and to the objects it contains, its needs and its desires.” (1987, p. 147)
interpret this to mean that recyclers create and exploit twin identities as rural outsiders and marginalized citizens providing an essential urban service. They actively contribute to the constitution of their social class by performing ritualized services. Transactions with residents are characterized by recyclers reciting current market values, then haggling over fair prices. In these transactions, I observed each side referencing multiple spatial imaginaries. First, urban residents tend to view migrants as embodying rural characteristics of frugality and conservation, particularly in their willingness to deal in residents’ scrap and waste that is considered too dirty to be handled by urbanites themselves. In response, migrants characterize and portray themselves as studied practitioners of uniquely rural values—conscientious recycling, willingness to work hard in unfavorable (dirty, low income) conditions, uncomplaining and fair. These values connect the uneven spaces of rural (isolated and developmentally sluggish, yet tidy) and urban (cosmopolitan, spendthrift, with a “growing” threat of garbage). Migrant recyclers tend to harbor a spatial imaginary of city dwellers as shrewd and willing to exploit rural outsiders, yet profligate in their consumption and waste. As informal business transactions bring these groups into regular contact, shared socio-spatial practical and imaginary subjectivities become part of each group. As they dwell in cities for longer periods of time, migrants in particular subjectively adopt some urban values and practices as it benefits them, avoiding and ignoring what does not. This seems to me to be an ongoing process of translocalizing themselves while they are in the city, and when they return to spaces outside the city. Transporting technologies facilitate both the narrowing of distances between these spaces, as well as the
shortening of time required for accumulating the experiences and insights that allow migrants to form their own systems of belief, entrepreneurship, etc.

Migrant translocal identity can be seen in how they practice both semi-permanent and "seasonal" migration from rural and peri-urban spaces to the city. Low-level recyclers explained that they typically spent two the three months in Shanghai between June and August. This was because they continue to maintain farmland, but grow crops which require little tending between planting in late spring and harvest in early autumn. They also characterized summer as an ideal time to collect and trade in recyclables, because Shanghai's famously hot and sticky summers are a time when households are anxious to get rid of garbage instead of accumulating and storing it in the hopes of later receiving higher market value. Thus migrant recyclers maintain a translocal identity as harvesters of both vegetables and urban consumer waste. Similarly, they maintain village identity in family, schooling, and TVE participation, returning home to harvest crops, do manufacturing piecework, and assist grandparents in childrearing. They must also operate within an urban identity as a migrant outsider willing to perform work that is unpleasant for "wealthy" urbanites. Many informants self-identified scrap recycling as a type of farming, with a variety of agricultural metaphors. Most of those interviewed responded that they held hukou in Anhui, Zhejiang and Jiangsu, provinces that border Shanghai and allow for an affordable, relatively short commute, suggesting that despite ongoing narrowing's of the time-space continuum, fundamental unevenness continues to characterize Chinese internal migration. Translocality of this type in informal recycling is difficult to negotiate for those migrants coming
from out in China’s center, southwest, and farther removed from the industrialized coast.

So waste recycling was viewed and practiced as a sort of urban crop. Requiring relatively little investment for tools or workspace, low level participants (reporting a monthly income of RMB 1000 or less) often chose to rent the three-wheeled carts that were the only real tool requirement of the trade. This “service” economy is produced by migrants, who position their services conveniently, affordably, and locally. Callon, Meadel and Rabeharisoa point out that an economy of qualities (which can also be called a service economy) is inherently political: it requires cooperation and collective effort (Callon et Al, p. 60). As I discussed in Chapter IV, this service product offered by migrants is an efficient, profitable collection and purchase of waste. Urban recycling in China is commonly seen as dirty yet lucrative work. In Shanghai, most household informants used primarily negative terms to describe the various work of recyclers that they were familiar with—street collection, household buying, construction site clearing. Informants typically used words like “dirty,” “unpleasant” and “unattractive.” Their perception of workers, and the work itself, typically expounded on distinct social and cultural distance between “real Shanghainese” residents, whose families had ostensibly lived in the area for an indeterminate, ‘long’ length of time, and migrants from the countryside, described with a battery of slang and official derogatory terms, including liudong renkou and mangliu (“blind flow,” suggesting that migrants had wandered out of rural areas and into urban spaces with few ideas about how they were going to contribute as members of society).
Recyclers are predominantly rural migrants, identifiable by their accented Mandarin, dusty and unfashionable clothes, and most often by their skin tone. In some ways, their identifiably lower social status makes them welcome in Shanghai, because they are readily associated with a willingness to perform a variety of work that would be distasteful to sophisticated urban residents, but is appreciated as urban services that add to the general quality of urban life. This informal service industry includes work such as basic electronics repairs, tailoring, home renovation, and of course, waste buying. I was surprised to hear many informants identify gender equality as a defining trait of informal recycling markets. Female informants indicated the low entry costs into this informal sector as their initial factor for choosing recycling over work available in other informal markets. I hope to expand my research to consider the agricultural basis of waste value culture in regards to gender divisions of work.

Informal recycling capitalizes on translocal spatial practice within the city. The lower tier collectors and buyers whom I observed doing business with households and construction projects in central districts of the city typically lived in temporary or informal housing more than five miles from central areas. Informal settlements along the urban periphery where also where groups of recyclers would sort and store recyclables prior to transporting them to sale locations (typically either neighborhood, state-owned recycling centers or informal middlemen with sufficient connections with larger recycling processing centers outside the city).

Central settlements exist as well, often in vacant lots or cleared city blocks awaiting eventual construction projects. Here, living space is often a secondary
addition to accumulated mountains of finely sorted detritus, the waste of China’s evolving consumer capitalist system snatched up and stashed in the shadow of Shanghai’s skyscrapers. Functioning as the material basis for a cyclical process of consumption and waste, trash becomes the means for migrant poor to appropriate the waste (artifacts) of a dominant culture for their own profitable means (Cosgrove and Jackson, p. 37). A corrupt, state-tolerated culture of graft and bribery does persist, in which local developers collude with police and security officials to allow migrant recyclers to store their goods on property that is not licensed for such use, while other collusions allow informal recyclers to gain access to guarded sites of civil engineering, building and infrastructure construction and so on.

Migrant housing may capitalize on the relatively undeveloped aspects of the urban periphery, in which settlements, sorting centers and the like can operate with more ease in negotiating unofficial district tolerance. It is interesting to note that these areas may also become host to new upscale housing and business developments, lured by tolerant local authorities willing to overlook violations of land use restrictions.

Returning to jumping “across” scales, informal recyclers working in Shanghai may have worked a similar trade in another Chinese city, but those who had claimed that the business was different in every city, and recycling in all these cities continued to evolve independently of the others. The relative failure of the state to formalize and standardize recycling in all Chinese cities has meant that each city’s recycling cultures have grown organically, and often haphazardly. Models that worked particularly well in one place (Shanghai) had not been successfully
implemented through informal channels elsewhere (for example, Ningbo). Yet this wide variety of “ordinary” cultures evolves and exists because of material production of value. What fascinates me about Chinese urban recycling—the success of its participants in informally creating value out of waste, seen as part of the hostile urban landscape, is that it is a system that might be readily applied elsewhere, and represents a flexible market that encourages appropriation and modification.

Older participants tended to be short-term seasonal migrants into Shanghai, most often during the long summer months when there was minimal tending of crops to be done. During their time in the city, they were living together as larger groups. More often than younger participants in their twenties or thirties, these groups would point out how their own attitudes towards consumption and waste were very different than urban Shanghai residents. They cited hard years in the countryside, with economic privations and inadequate stores of food. For this age group, recycling was viewed as an economic activity facilitated by the relative ‘wastefulness’ of city residents, whose privileges of economic security prevented them from seeing value in trash. For me, this indicated a straightforward contradiction between the cultural values of waste held by urban and rural residents.

Younger men tended to be the more active, competitive participants in recycling, often stating intentions of accumulating and reinvesting capital at the fastest possible rate. If they were still involved in recycling in their mid to late 30s, they would either be rich, or at least possess an official license for operating a
redemption center, in which case they’d depend less on their own mobility for collecting, and more on established hierarchies of trade with other recyclers. As applications for these licenses have increased, so has their social and economic value. People were very proud of their licenses, though they hastened to point out that this was because the license ensured regular business through informal channels, and were not any guarantee of security against state intervention or assimilation (no one particularly wants the state to ‘formalize’ or ‘integrate’ informal recycling under the aegis of municipal management).

Quantitative studies on Chinese rural-urban migration have formed a set of determinants for who migrates where. Some of these include age, sex, marital status, nationality or minzu status, education level and household size. Men are far more mobile within a variety of work opportunities, particularly when they have completed secondary school (Li and Zahniser, 2002). Yet women account for a slight majority of total numbers. Literacy and a number of dependants tend to be the biggest motivations for individuals to leave homes in rural areas to seek work in Chinese cities.

Law and Chu further discuss how information communication technologies have fostered migrant workers’ relationships with other informal city dwellers, expanding and altering traditional social interaction through mobile phone subscriptions, SMS text messaging and 24-hour internet cafes spread across the city. It would be worth considering how communication technologies have enabled migrant city workers to remain in closer contact with their old homes, retaining a stronger sense of local self that might be otherwise dissipated by urban isolation.
In the next section, I explore how both the state-planned labor division of Hukou registration and the development of informal market economies contribute to new urban mobility for migrant workers. These aspects of China’s economic transformation over the past twenty-five years—a period dubbed the “age of migration” (Chan 2008, p. 204)—have become normative in a culture that increasingly must move in order to survive (or at least, be economically competitive).

Two of Amin and Thrift’s approaches to understanding cultural economy that I’d like to apply here are the values of knowledge and discipline. The intense competition for informal work among migrants in Shanghai has amplified the necessity of these values for waste recyclers. To be successful, waste recyclers mentally map the city in ways that few other groups would, learning what areas are amenable to their business, what neighborhoods have particularly zealous police or building site managers, and how to optimize movement across distances with whatever mobile transport they may have (bicycles, carts, trucks). Recyclers may work alone, but more often seem to align themselves through pre-existing community connections. These points of common origin included provinces, prefectures and villages.

The semi-annual train ride back home played a key part in this self-organization: some of the recyclers I met in 2007 explained that they came to Shanghai only because friends from home had previously established routes and territory that they were invited to work as subordinates. Discipline is also imperative, as waste recyclers set their own hours and devise their own ways for
optimizing efficiency in collection, trade and sales, in order to increase profits and thus security (Li 2002, 329). I believe that while much of this wisdom must be won first-hand, the increasing mobility between the rural and urban settings has led to this informal sector becoming highly efficient while remaining outside the state-planned economy.

Is cultural geography at several urban scales—streets, neighborhoods, districts—the best way to get a clearer sense of how selective and translocal cultures develop amongst respective social classes? I think that studying informal workers’ living quarters and neighborhoods would offer one of the most distinctive differences between urban cultures of rich and poor. At this point, I am unclear whether a study of urban informal recycling must include multiple cities. I would prefer to focus specifically on Shanghai by performing research in multiple districts, neighborhoods and peripheries. More specifically, I view the plurality of Chinese cities as almost insurmountably complicated. The variety and multiplicity of local city sites across China might add too many complex dimensions to an informal recycling study. I would argue that by honing in on a variety of local scales (city, municipality, districts, neighborhoods) for a single city would adequately demonstrate the variety of governance, society and markets in coexistence.

**CONCLUSION**

**Translocal Linkages and Agency**

In order to negotiate urban citizenship, migrants rely on translocal linkages that include identity, communication and technology. In order to contest
exclusionary regimes of citizenship, as disenfranchised state subjects migrants actively and passively engage in both subverting state discourses and reconfiguring existing hierarchies of scale. This occurs extensively throughout informal recycling markets. This is why I argue that further study of market processes may reveal how translocality and citizenship are essential components of market economy subjects.

While I have argued here that both structure and agency play significant operational roles in informal recycling, I lean toward agency as the driver most deserving of further study. I privilege agency here for several reasons. First, while scholars continue to identify subtle manipulations of state regulations of migrant worker mobility, the hukou remains firmly in place. The willingness of China’s political leadership and its bureaucracy to incorporate migrants into urban space cannot be assessed as any sort of triumph for the sort of market logic predicted by neoliberal observers (Wang 2002). Instead, the state has maintained a painfully exclusionary set of regulations that deny migrants basic social tools and support, functionally segregating China’s population and serving to maintain the massive underclass labor resource behind the country’s booming export economy.

Second, study of migrant recyclers in Shanghai will reveal how state regulation of many informal markets is characterized by bureaucratic inefficiency and tacit tolerance. I consider this emblematic of how informal waste markets situate a convergence of values and anxieties shared by state regulatory apparatus and participants. Processes of modernity in urban China destabilize spaces of urban experience. Initially, we can identify the very real increases of waste in tandem with production and consumption, along with its perceived growth in the minds of urban
government and citizens, as a source of modern anxiety. Next, we can identify how processes of waste control serve to alleviate these anxieties, both by mobilizing waste into its proper place (out of sight, out of mind...) and allowing consumers to participate in these processes, through sale and trade of waste resources. In this sense, agency emerges as the more dynamic means for future consideration of urban migrant citizenship issues.
VI. CONCLUSION

Culture, Waste, and Value in Shanghai

While the state retains prominent involvement in the urban waste management industry, Shanghai’s informal recycling markets have become exceptionally dynamic. Participation of growing numbers of migrant workers is actively reconfiguring waste and capital flows through China’s uneven spaces of development and modernity. The linkages and processes of recycling markets are worthy of further study, in order to better understand how waste material and the contestations of economic and social opportunity for migrant workers transect in new ways.

Contemporary discourses concerning migrant recyclers reflect friction between historically embedded cultural economic values and the contradictions of modernity as a developmentally attainable goal. Josh Goldstein (2004) notes how recycling as an economic practice and social responsibility was appropriated by the Communist party, which launched several campaigns that recognized itinerant trash buyers as paragons of socialist virtues, such as their ability to discern and realize value in waste, while also contributing to the management and cleanliness of the urban environment, and representing conscientious entrepreneurship. At the same time, recycling has been identified by the state as a problematic informal economy characterized by unregistered migrant workers who eschew state standards of environmental stewardship, sanitation, and ethical business practices. This
vilification of recyclers became a prominent issue in the days leading up to the 2008 Olympics in Beijing. State announcements were made, warning itinerant recyclers not to practice their trades anywhere within the ring roads. These were accompanied by aggressive fining and persecution of recyclers, carried out by divisions of Beijing’s chengguan and other municipal law enforcement. The result of this campaign were dramatic and immediate, if not enduring. Reports stated that recyclers numbering in the tens of thousands cleared out of the city, vacating temporary residences near Beijing’s arid semi-periphery of industrial sprawl, and vanishing from the city streets where their ubiquitous presence was likely missed, as garbage and scrap quickly piled up in the wake of everyday consumption and neighborhood demolition, combined with the Herculean construction efforts of Olympic site construction and prep.

The concerted media effort towards putting Beijing’s recycler armies out to pasture was assisted by the contradictory comments of Professor Wang Weiping, a prominent public figure in migrant studies. At a May 2008 recycling conference, Wang stated, “According to our studies, more than seventy percent [of informal recyclers] have contracted infectious diseases, such as dysentery, hepatitis and typhoid, and can easily infect others in the city… I hope these people can temporarily sacrifice their interests and go home and then come back after the Olympics … Their losses won’t be that great” (Minter 2008).

This was a dramatic, if not entirely shocking, turnaround by Dr. Wang, whose public persona had been defined by his numerous calls toward social justice for
migrant workers. Earlier in 2008 he had stated, “scrap collectors are hard working, law-abiding people... we should give them our business” (ibid).

Like other sweeping urban initiatives, this one began with a prominent show of physical and intellectual effort before fading. Long before the Olympics had ended, informal recycling was back up and running, both downtown and outside the city, suggesting that its estimated 250,000 participants in Beijing possessed more determination than those intending to make an example of them. I would suggest that it is time to expand these historical understandings, of how recycling has been appropriated by the state, and recontextualize them in contemporary developments and initiatives of “modernization” as a surrogate for modernity.

Shanghai’s urban recycling participants continue to grow. Typically non-Shanghainese outsiders, they contribute to a growing waste and recycling economy that can be characterized by complex cultural economic linkages between formal and informal markets. Increasingly rapid construction, demolition and consumption are all contributing to the expanding pile of waste material exploited by these markets. Urban citizenship in China continues to undergo social and cultural shifts that are reflected in a variety of scales. While the spatial patterns of these urban phenomena are of interest, this thesis is most concerned with the translocal identities of recycling participants in what has been labeled the informal sector.

State involvement in scrap and waste recycling remains committed to progressing towards a vision of modernity as space purified of waste. This ongoing project prioritizes purification in material and cultural terms. Migrant outsiders can gain access to the city via embodiment of cultural ideals of entrepreneurship, civic
contribution and socialized behavior. The purification processes for achieving these ideals are complicated by conflicting initiatives of urban development that alter and increase flows of consumed and wasted material within the city.

The state struggles to maintain industrial development, resource conservation, the ongoing “green” environmental initiatives, and manipulation of hukou legislation that divides Chinese urban and rural classes. Analysis of state propaganda and media organs demonstrates two contradictory discourses: that informal migrant workers create negative urban social trends (dirt, dishonesty, environmental ignorance), and that economic entrepreneurship is an essential responsibility of urban citizens, with successful waste and recycling businesspeople glorified as new paragons of these social traits. State influence on urban residents’ attitudes and behaviors towards consumption and waste have had an impact by mobilizing “culture” as an incrementally attainable subjectivity.

A critical reading of competing state discourses informs the defining paradox of informal recycling. Its participants are characterized as migrant outsiders, at best unaffiliated with and ignorant of ‘green’ recycling initiatives, which are now utilized by ongoing state deployment of culture as a means for redefining urban citizenship. At worst, they are characterized or lumped together as a social problem. This is most often apparent in associations of migrants with sanitary issues and illegal market transactions. Modernity’s concerns with dirt, filth, theft and personal safety are all prevalent in this negative portrayal of migrant recyclers as a ubiquitous indicator of uneven development.
While the Shanghai municipal government has aggressively invested in costly modern waste-processing technologies, it continues to rely on this informal army of predominantly migrant recyclers to collect, process and remove the growing volumes of waste now being produced by the city. Although China has become the world’s greatest net importer of scrap, prevailing cultural attitudes towards waste and consumption offer the greatest insight as to how and why Shanghai’s recycling industry presents an economic model that is more dynamic and profitable to participants than any other city in China, or the world. China’s material culture of recycling, reuse and value in waste is far older than its deepwater ports or industrialized cities. I have argued that a close exploration of China’s cultural and economic relationships with waste will offer new means for understanding contemporary commercial culture. Peter Jackson has pointed out that traditional readings of culture and commerce insist on a dualistic interpretation of these two spheres, with “culture” associated with creativity, personal and social meaning, and aestheticism, while “commerce” is more readily understood as a materialistic logic of capital and subordinated human agency (Jackson 2002, p. 3). In response, this thesis has argued that “culture,” despite its problematic elasticity as an analytical term, must be employed when seeking theoretical and practical connections between creative and economic aspects of life in urban China. My interpretation of cultural economy has been to give this terminology primacy over political economy, as a means to bring “culture” into conversation with all practical and imagined aspects of daily experience.
Agency will also be the focus of my future research. To briefly explain this direction, I would argue that the inaccessibility and inaccuracy of statistical evidence available in China makes quantitative survey a risky proposition at best, inevitably beset by a variety of state-maintained obstacles to the individual researcher. Instead, I am far more interested in developing qualitative studies of migrant experience and identity. I believe that the paucity of qualitative data and studies on informal recyclers cannot remain unaddressed. To put it another way, their relative success suggests that many marginalized groups, within China and abroad, might benefit from a comparative analysis with what I consider to be the most vibrant recycling community in the world.

At the close of the first decade of the 21st century, urban waste recycling in Shanghai remains a dynamic, precarious economic strategy for hundreds of thousands of migrants within the municipality. Numerous other first, second and third-tier cities around China are experiencing rising numbers of rural-urban migrants participating in what is commonly understood as ‘informal’ recycling. Viewed as a phenomenon common to developing economies, China’s urban waste recycling stands out as a model unique amongst the world’s cities. To begin to understand why, this thesis has applied a cultural geography reading of Shanghai’s recycling materials, participants and surrounding cultural economic processes. The city is a confluence of waste and consumption relationships occurring at multiple scales, from the neighborhood level of buyer / household relationships, to Shanghai’s deepwater shipping port, now the busiest in the world and ground zero for arriving scrap from around the world.
The China National Resources Association estimates that 70% of the recycled waste in China is imported. Arguing that China's own domestic recyclables market is relatively small, spokesman Wang Yonggang commented, “Chinese lifestyle basically adheres to thriftiness and austerity, and they will resort to repair things many times over before throwing them away” (Levin 2009). Yet a trip to any urban redemption center in China belies this statement. As domestic development and industrial production continue to ramp up, obsolete products, packaging and the other familiar specters of a modernized market economy are everywhere.

Despite anxieties over growing amounts of domestic waste, Chinese entrepreneurs are making a fortune importing the rest of the world’s trash. The US Trade Commission noted a 916% increase in Chinese imports of US recyclables from 2000 to 2008.

I typically began interviews with redemption center managers by asking them about their competition. Most responded by telling me I needed to spend more time working and less studying. One informant, a fifty year-old Jiangsu lady, was happy to school me. “This business is initially repulsive to everyone. The used cooking oil in these plastic bottles stinks. Because of that, you want to avoid them, like most people. The reason we’ve been successful has to do with our indifference to bad smells. Other people work in factories that smell bad. We didn’t want to work in a factory were we might or might not get paid, in addition to the bad smells and disgusting food. To understand this business, you need to do it for three years at least, until you stop smelling garbage, and start seeing its profitability.”
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