

University of Kentucky

UKnowledge

---

University of Kentucky Doctoral Dissertations

Graduate School

---

2008

## NEW SILKS ROADS: PROMISES AND PERILS OF THE INTERNET IN THE THAI SILK INDUSTRY

Mark Graham

*University of Kentucky*, [immedium@gmail.com](mailto:immedium@gmail.com)

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

### Recommended Citation

Graham, Mark, "NEW SILKS ROADS: PROMISES AND PERILS OF THE INTERNET IN THE THAI SILK INDUSTRY" (2008). *University of Kentucky Doctoral Dissertations*. 651.  
[https://uknowledge.uky.edu/gradschool\\_diss/651](https://uknowledge.uky.edu/gradschool_diss/651)

This Dissertation is brought to you for free and open access by the Graduate School at UKnowledge. It has been accepted for inclusion in University of Kentucky Doctoral Dissertations by an authorized administrator of UKnowledge. For more information, please contact [UKnowledge@lsv.uky.edu](mailto:UKnowledge@lsv.uky.edu).

ABSTRACT OF DISSERTATION

Mark Graham

The Graduate School  
University of Kentucky

2008

NEW SILKS ROADS:  
PROMISES AND PERILS OF THE INTERNET IN THE THAI SILK INDUSTRY

---

ABSTRACT OF DISSERTATION

---

A dissertation submitted in partial fulfillment of the  
requirements for the degree of Doctor of Philosophy in the  
College of Arts and Sciences  
at the University of Kentucky

By

Mark Graham

Co-Directors: Dr. Matthew A. Zook, Professor of Geography  
and Dr. Thomas R. Leinbach, Professor of Geography

2008

Copyright © Mark Graham 2008

## ABSTRACT OF DISSERTATION

### NEW SILKS ROADS: PROMISES AND PERILS OF THE INTERNET IN THE THAI SILK INDUSTRY

The Internet is often touted as a panacea for perceived deficiencies in economic development. Its space-transcending abilities, which can instantly connect producers with consumers, have the potential to cut out intermediaries and to redistribute economic surplus in a more equitable manner. This dissertation asks whether the promises of the Internet are being realized in the Thai silk industry.

The project explores the following questions: (a) At which nodes in the commodity chain is the Internet being used?; (b) How has the introduction of the Internet altered production chains and the flows of capital in the Thai silk industry?; (c) How are these changes altering the socio-economic conditions of actors who are involved in reconfigured production chains?; (d) What are the relationships between contemporary discourses about the economic benefits of disintermediated commodity chains and the actual effects of disintermediated commodity chains?; and (e) Are older local silk making traditions being replaced as producers interact with distant consumers through the Internet?

This project uses a textual analysis of websites selling Thai silk to examine discourses being put forth about the effects of the Internet. Surveys and interviews with producers and merchants provide data on changes that the Internet is having on the production chains of Thai silk. Results suggest that in very few cases is the Internet allowing a disintermediation of commodity chains to occur. Internet users are actually more likely to position themselves as cybermediaries: buying from, and selling to other intermediaries. Although disintermediation is rarely occurring in the commodity chains of silk, the Internet is allowing firms to sell to a geographically diverse range of customers. These findings indicate that instead of placing buyers and sellers into co-presence in a virtual marketplace, the Internet is rather being used as a tool to open up virtual conduits between those already occupying privileged economic positions in the commodity chains of Thai silk.

KEY WORDS: Internet, Cyberspace, Disintermediation, Thailand, Silk  
Multimedia Elements Used: JPEG (.jpg)

---

Mark Graham

---

July 24, 2008

NEW SILKS ROADS:  
PROMISES AND PERILS OF THE INTERNET IN THE THAI SILK INDUSTRY

By

Mark Graham

Dr. Matthew A. Zook

---

Co-Director of Dissertation

Dr. Thomas R. Leinbach

---

Co-Director of Dissertation

Dr. Richard H. Schein

---

Director of Graduate Studies

---



DISSERTATION

Mark Graham

The Graduate School  
University of Kentucky

2008



NEW SILKS ROADS:  
PROMISES AND PERILS OF THE INTERNET IN THE THAI SILK INDUSTRY

---

DISSERTATION

---

A dissertation submitted in partial fulfillment of the  
requirements for the degree of Doctor of Philosophy in the  
College of Arts and Sciences  
at the University of Kentucky

By

Mark Graham

Lexington, Kentucky

Co-Directors: Dr. Matthew A. Zook, Professor of Geography  
and Dr. Thomas R. Leinbach, Professor of Geography

Lexington, Kentucky

2008

Copyright © Mark Graham 2008

## ACKNOWLEDGMENTS

I would like to thank all of those who have made this dissertation possible. This study is the product of the contributions of many people. First and foremost, I wish to thank the many weavers, dyers, spinners, designers, merchants, managers, clerks, shopkeepers, and salespeople who graciously contributed their time, and patiently answered countless questions.

I want to express my sincere gratitude to the members of my dissertation committee at the University of Kentucky: Tom Leinbach, Sarah Lyon, Sue Roberts, and Matthew Zook for their criticism, encouragement, and time. I owe a particularly deep thanks to Matt and Tom for encouraging me to join the Geography department at Kentucky and including me in their research plans.

Tom's guidance, foresight, and support were invaluable as I designed this project, and this dissertation is fundamentally shaped by crucial suggestions that he made. I especially appreciate his and Marge's willingness to visit me in 2007 in the Northeast of Thailand in order to experience firsthand some of my research sites.

Matt has been a constant source of inspiration throughout my graduate career, and his research, in many ways, impelled me to begin my PhD. His advising over the course of four years has both kept me on track and encouraged me to dream up a variety of plans and projects. His continuous guidance not only helped me to overcome the myriad challenges and difficulties that I faced whilst designing, researching, and writing this dissertation but has also had a profoundly positive effect on my professional life. I deeply appreciate all of the support that he has shown to me.

I was fortunate to have been awarded a range of fellowships and scholarships to support my work. These include the National Science Foundation Doctoral Dissertation Award, the Association of American Geographers Dissertation Grant, and a number of awards from the University of Kentucky and its Department of Geography (the Dissertation Year Fellowship, the Dissertation Enhancement Award, the Commonwealth Research Award, and the Withington Award).

My appreciation also extends to my support network in Thailand. Two individuals in particular went out of their way to offer help, advice, and friendship: Wipawee

Grisanaputi and Ken Sura. I would likely still be conducting fieldwork if it were not for their invaluable assistance. I was kindly offered interpreting and logistics support from (in alphabetical order) Tip Bresler, Jun Fujihira, Jintana Iamlaor, Rawinnipha Konmanee, Pear, Chitsophon Pichetladarom, Matrini Ruktanonchai, Pritnun Shanasabang, Vallaya Suttikhum, Jeeranuch Suwannachote, Isaan Tom, Pongpipat Vanijvongse, and last but by no means least, Jakraphan Oonboonruang and Arthit Pisapan. Finally, Ellen Boccuzzi's inputs, suggestions, and detailed readings of drafts of this dissertation have undoubtedly shaped it for the better, and for that I owe her an enormous amount of gratitude.

On the other side of the Pacific, I was supported by friends and colleagues who invested their time and energy into helping me through this four-year process. I owe thanks to: Aitor Balfagon, Chris Blackden, Evan Boles, Stan Brunn, Jose Cañibano, DeWitt King, Abby Foulds, Taro Futamura, Davide Girardelli, Guilherme Maia, Sarah McCormack, Anna Secor, Rich Schein, Mitch Snider, Monica Stephens, Lori Tyndall, Candice Wallace, Rick Webb, and Raegan Wilson (listed alphabetically). There are many others amongst my cohort, colleagues and friends who I have not mentioned here, but their friendship, love, and support is not forgotten.

Most importantly, I offer three final thanks. First, I thank Jessi for countless reasons. As my best friend and companion in Thailand, Kentucky, and many places in-between, this dissertation is in many ways as much a part of her life as it is of mine. Second, I thank my family for everything I am, have, and will be. My family in the UK, my lost family in Iran, my new families in America, and especially Lydia, Nadia, and Axel have all made this research possible in their own ways. Finally, I thank my mother Jeannie: a traveler, adventurer, and free spirit whose sacrifices and strength have taught me much about life. It is to her that I dedicate this dissertation.

## TABLE OF CONTENTS

Acknowledgements.....	iii
List of Tables .....	viii
List of Figures.....	ix
List of Files .....	xi
Chapter One: Thailand and the Global Trade in Silk .....	1
Statement of the Problem.....	1
Significance.....	1
The Thai Context: Political and Economic Framework .....	4
One Tambon One Product (OTOP) .....	11
Thai Silk.....	14
The Global Silk Industry.....	20
Raw Silk .....	22
Textile Production .....	23
The Thai Silk Industry .....	25
The Production of Thai Silk.....	27
Chapter Two: Silk Roads in the Electronic Age: Disintermediation, Development, and Distorted Distance .....	32
Commodity Chains .....	32
Disintermediation and Expanded Markets.....	35
Wormholes and Power-Geometries .....	41
Wormholes .....	42
Power-Geometry .....	44
Globalization and Development .....	47
Globalization, Development and Commodity Chains .....	52
Research Questions.....	57
Chapter Three: Methodology .....	59
Preliminary Research.....	59
Sampling Strategy and Sample Description .....	60
The ‘Internet Adopters’ .....	60
‘Thai Silk Sellers’ .....	61
Data Collection Procedures.....	63
Content Analysis .....	63

Internet Surveys.....	66
Face-to-Face Surveys .....	68
Interviews .....	70
Trustworthiness of the Data .....	72
Response Rate and Regression Analysis .....	74
Coding Procedures .....	76
Ethical Considerations .....	76
Chapter Four: The Sites of Internet Usage .....	78
Location of All Websites Selling Thai Silk .....	78
Locations of Internet Use by Country .....	79
Locations of Internet Use within Thailand.....	81
Locations of Internet Use by Sub-Category .....	84
Discussion.....	85
Overcoming Geographic Obstacles.....	88
Bangkok as an Internet Hub .....	89
Firm Size .....	90
Summary .....	91
Chapter Five: Altered Chains.....	93
The Internet and Distant Customers .....	94
Geographic Focus.....	95
Locations of Most Important Customers.....	96
The Internet and Reconfigured Chains .....	100
Topological Changes.....	100
Geographic and Topological Characteristics of Sales.....	104
Differences in Supply Chains.....	106
Conclusions.....	110
Chapter Six: More than Just a Digital Divide: Economic Transparency and Thailand's Uneven Geography .....	112
Thailand's Uneven Geography .....	112
The Spatial Divide.....	113
The Linguistic Divide.....	114
The Educational Divide.....	114
The Economic Divide.....	117
The Cultural Divide.....	117
The Digital Divide.....	118
Transparency.....	121
Pakthongchai .....	121

Ban Reng Khai .....	130
Case Studies .....	134
Case Study: Room for Life.....	134
Case Study: World of Thai Silk .....	136
Case Study: Thaitambon.com.....	141
Conclusions.....	147
Chapter Seven: Justifying Cyberpresence: Altered Chains, Claims about Benefits, and the Links between Data and Discourse .....	151
Benefits of Buying Silk.....	153
Benefits to Customers: Directness .....	153
Benefits to Producers: Proximity to Markets .....	155
Benefits: Unique Opportunities.....	156
Traditional and Modern Imagery .....	158
Authentic, Traditional, and Non-Modern Themes .....	159
Preventing Rural to Urban Migration.....	160
Preserving Traditions .....	162
Emphasizing Difference and Promoting Authenticity .....	166
Contemporary and Modern Themes.....	170
Links between Data and Discourse.....	176
Prices .....	176
Wages .....	180
Conclusions.....	183
Chapter Eight: Fears of Network Integration: The Reproduction and Replacement of Weaving Traditions .....	187
Sustainability Issues in the Silk Industry .....	187
Responses to the Market .....	192
The Internet and Silk Styles.....	199
Case Studies .....	202
Case Study: Jagtar .....	202
Case Study: World of Thai Silk .....	205
Conclusions.....	208
Chapter Nine: Overview and Conclusions.....	211
Summary .....	211
Discussion.....	218
Ontic, Infinite, and Fixed, Virtual Market-Spaces.....	219
Conclusions.....	225

Appendix A: Definitions.....	227
Appendix B: List of Websites Selling Thai Silk.....	229
Appendix C: English Survey .....	231
Appendix D: Thai Survey .....	239
References.....	249
Vita .....	268

## LIST OF TABLES

Table 2.1: Gereffi, Humphrey, and Sturgeon’s Determinants of Global Value Chain Governance.....	34
Table 3.1: Locations of Northeastern Silk Producers .....	70
Table 4.1: Location of Survey Respondents in the United States and United Kingdom that Use the Internet.....	81
Table 5.1: Descriptive Characteristics, Organized by Sales to End-Customers, Manufacturers, and Intermediaries.....	102
Table 6.1: ICT Usage by Establishment Size, 2006 .....	120
Table 7.1: Mean Prices of Silk.....	178
Table 7.2: Mean Wages .....	183



## LIST OF FIGURES

Figure 1.1: Map of Thailand .....	5
Figure 1.2: Detail of Plain Silk .....	16
Figure 1.3a: Detail of Tie-Dying Threads before they are Woven into Mudmee Fabric ..	16
Figure 1.3b: A Silk Weaving Factory in Chonnabot .....	16
Figure 1.4: Map of the Northeast of Thailand Showing the Locations of Chonnabot and Pakthongchai.....	17
Figure 1.5: Detail of Mudmee Silk (1).....	18
Figure 1.6: Detail of Mudmee Silk (2).....	19
Figure 1.7: Detail of Praewah Silk (1).....	19
Figure 1.8: Detail of Praewah Silk (2).....	19
Figure 1.9: Participants in the Silk Trade .....	21
Figure 1.10: Major Flows of Raw Silk and Yarn.....	22
Figure 1.11: Major Flows of Silk Fabric .....	23
Figure 1.12: Major Flows of Finished Silk.....	24
Figure 1.13: Simplified and Generalized Commodity Chains of Thai Silk.....	30
Figure 2.1: Correlation between hosts per capita and UNDP Human Development Index .....	49
Figure 2.2: Simplified Representation of a Commodity Chain .....	54
Figure 2.3: Partially Disintermediated Chain .....	55
Figure 2.4: Disintermediated Commodity Chain.....	56
Figure 3.1: ‘Internet Adopters’ .....	67
Figure 3.2: ‘Thai Silk Sellers’ .....	69
Figure 4.1: Location of All Websites Selling Thai Silk by Country .....	79
Figure 4.2: Location of all Websites Selling Silk in Thailand.....	80
Figure 4.3: Location of all Survey Respondents in Thailand .....	83
Figure 4.4: Location of ‘Thai Silk Sellers’ .....	84
Figure 4.5: Internet Use of all Survey Respondents .....	86
Figure 4.6: Internet Use of ‘Thai Silk Sellers’ .....	87
Figure 4.7: Mean Number of Administrative/Clerical/Sales Staff .....	90
Figure 4.8: Mean Number of Production Workers .....	91
Figure 5.1: Location of Sales Focus .....	95
Figure 5.2: Location of “Top-Three” Customers among EAs in Thailand who Indicate that they Focus on International Customers.....	98
Figure 5.3: Location of “Top-Three” Customers among all EAs in Thailand.....	99
Figure 5.4: Proportion of Sales to End-Customers, Manufacturers, and Intermediaries .	101
Figure 5.5: Proportion of Sales by Bangkok Merchants.....	103
Figure 5.6: Proportion of Sales by Northeastern Producers .....	103
Figure 5.7: Proportion of Sales Sub-divided by Distance .....	105
Figure 5.8: Proportion of Sales Sub-divided by Location .....	106
Figure 5.9: Proportion of Sales Sub-divided by Category and Geography .....	107
Figure 5.10: Proportion of Supplies.....	108
Figure 5.11: Proportion of Supplies Sub-divided by Location.....	108
Figure 5.12: Proportion of Supplies of Finished Fabric Only (Sub-divided by Location).....	109

Figure 6.1: Education Index.....	116
Figure 6.2: Internet Users in Thailand .....	120
Figure 6.3: Packthongchai, Nakhon Ratchasima, Thailand.....	124
Figure 6.4: Watchara MaiThai Silk Shop .....	125
Figure 6.5: Looms Underneath a House .....	125
Figure 6.6: Spinning Platform.....	126
Figure 6.7: Screenshot of <a href="http://www.lea-silk.com/pages/foundation.html">http://www.lea-silk.com/pages/foundation.html</a> .....	131
Figure 7.1: Websites Containing Themes Relating to Traditions and Modernity .....	159
Figure 7.2: Screenshot from Originalthaisilk.com.....	164
Figure 7.3: Screenshots from Thaisilkvillage.com .....	165
Figure 7.4: Screenshots from Thaisilkvillage.com .....	165
Figure 7.5: Screenshots from Chattongthaisilk.com.....	165
Figure 7.6: Screenshots from Chattongthaisilk.com.....	165
Figure 7.7: Screenshot from Siamese-style.com.....	165
Figure 7.8: Screenshot from Sopmoeiarts.com.....	167
Figure 7.9: Screenshots from Silkofsiam.com .....	168
Figure 7.10: Igres' Grande Odalisque.....	169
Figure 7.11: Screenshot from Thailandfashion.net.....	172
Figure 7.12: Screenshot from Charoonthaisilk.bizland.com .....	173
Figure 7.13: Screenshot from Vc-fabric.com .....	175
Figure 7.14: Website Ownership and the Use of “Modern” versus “Traditional” .....	176
Figure 8.1: Chabatik Silk .....	195
Figure 8.2: Sales of Machine-Made Silk .....	200
Figure 8.3: Sales of Plain Hand-Woven Silk .....	201
Figure 8.4: Sales Mudmee Silk.....	202
Figure 8.5: A Standardized Color Chart Used by Silk Producers.....	205
Figure 9.1: Potential Commodity Chains of Thai Silk after the Introduction of Wormholes.....	213

## LIST OF FILES

File 1: Dissertation.PDF

## CHAPTER 1

### THAILAND AND THE GLOBAL TRADE IN SILK

#### Statement of the Problem

Why is it that while silk is considered a luxury good and is able to command high market prices, producers and manufacturers of silk are often resigned to poverty? Is it because, for centuries, vast distances have separated producers from consumers, and manufacturers from markets, necessitating a chain of intermediaries, each driving down the price from their suppliers and raising the price to their customers? However, distance is no longer what it used to be. Even as spatially grounded infrastructures and organizations need to exist to support the inherently globalizing drive of capital (Brenner 1998), capital and the capitalist system always seek to annihilate space through time (Harvey 1989). So, in the age of instant access and space-transcending technologies, what is happening to the old silk roads, traditional supply chains, and the nodes along the way?

#### Significance

Thailand has a millennia-old tradition of silk production that has survived up to the present day. While the country's silk industry is significantly more developed than those of other Southeast Asian nations, Thailand lags behind China and India in terms of total raw and finished silk production (UNCTAD/WTO 1997, 2002; Datta 1996). While statistics vary considerably on the matter, it is estimated that there are between 150,000 and 500,000 households, mostly in northeastern<sup>1,2</sup> Thailand, which are dependent on the

---

<sup>1</sup> The National Statistical Office of Thailand define the Northeast as Nakhon Ratchasima, Buri Ram, Surin, Si Sa Ket, Ubon Ratchathani, Yasothon, Chaiyaphum, Amnat Charoen, Nong Bua Lam Phu, Khon Kaen, Udon Thani, Loei, Nong Khai, Maha Sarakham, Roi Et, Kalasin, Sakon Nakhon, Nakhon Phanom and Mukdahan provinces. These nineteen Northeast provinces are all situated in-between northern Cambodia and the southern border of eastern Laos.

<sup>2</sup> The Northeast of Thailand is commonly referred to as 'Isan' or 'Isaan.'

production of silk for supplemental income (UNCTAD/WTO 2002; Rani 1998; Pye 1988). While no specific study on the production chains of the Thai silk industry exists to date, Cohen's study of crafts in Thailand (2000) indicates that an increasing amount of profit is made at each step away from the producer in the production chain. i.e. the making of the craft itself is the least profitable step, while foreign importers set the highest mark-ups.

The Thai silk industry is distinct in Southeast Asia in its predominant use of handlooms (Rani 1998). Reeling and weaving are most often performed by hand by rural women and elderly household members (Charsombut and Islam 1992; Ohno and Jirapatpimol 1998; Otsuka 1982). This is in part because native and hybrid varieties of Thai yarn cannot be machine reeled, but the persistence of handloomed silk can also be attributed to the commercial viability of traditional<sup>3</sup> fabrics which are not mass produced (United Nations 1994; Montlake 2007).

Thai silk producers are currently in a worrying economic position. The old global Multi Fibre Agreement (MFA), which expired in 2005, set export limits to wealthy countries on textiles (Suphachalasai 1994; APEC 1998; Yearman and Gluckman 2005). However, with its expiration, Thailand's National Economic and Social Development Board and the World Bank (2005) warn that Thai silk is highly uncompetitive in comparison to Chinese and other imported fabrics. They estimate that large reductions in labor costs or increases in productivity are needed. Lower labor costs are clearly not a desirable option, and although increases in productivity at first sound appealing, the necessary adoption of hybrid or foreign higher-yield silk would eliminate domestic varieties that are the basis for traditional Thai hand woven silk products.

---

<sup>3</sup> Constructing a binary of 'traditional' and 'contemporary' (or 'modern') silk is problematic given that the two phrases cannot capture the myriad local and non-local influences that become woven into any piece of fabric. However, the two phrases are widely used by producers and merchants to describe the silk that they sell. The phrases are also used by many of the commentators who lecture and write about Thai silk in trade and academic forums (c.f. Achavasmit 2008). 'Traditional silk' is often used to refer to silk that is handmade and woven with techniques, colors, and patterns considered indigenous to Thailand. The concept of 'indigenous' is similarly problematic due to the fact that a number of characteristics of silk that are considered traditional are actually non-native. Nonetheless, when used by producers and merchants, the idea is instead most often used to describe techniques that are commonly repeated and practiced in Thailand. As a result, I will employ the phrases 'traditional' and 'contemporary' in the manners in which they are used by producers and merchants, instead of using these terms to imply national origins.

In response to these dilemmas, a number of commentators have proposed using the Internet as an effective strategy to bring economic wealth into impoverished regions of Thailand (Sambandaraksa 2006; Chandrasekaran 2001; United Nations 2003b; Thuvasethakul and Koanantakool 2002). The Internet can be employed as a marketing tool to promote the high-quality and uniqueness of Thai silk products, allowing Thai producers to highlight the differences between domestic products and cheaper imports (rather than competing directly with them) (Richards 1999). The internet also offers the potential to cut out a number of steps in the silk production chain, reducing the amount of surplus extracted by intermediaries (Benjamin and Wigland 1995; Office of Technology Assessment 1994; Javalgi and Ramsey 2001).

These assertions, however, are not without problems. While there has been a massive expansion of the Thai Internet infrastructure, only between five and ten percent of the population have access (Palasri, Huter, and Wenzel 1999; NECTEC 2004). It remains to be seen, then, whether the Internet can truly produce tangible benefits not only to large firms, but also to silk producers who have fewer economic resources. Furthermore, there are fears, reflected in not only academic and policy writing, but also in music and literature (e.g. Sudham 2002), that instant access to distant markets will have negative effects on Thai culture and Thai cultural products such as silk (Hongladarom 2000).

The effects of the Internet as an instrument of development within craft industries remains largely unstudied. As such, this dissertation examines the ways in which the Internet has been integrated into the production chains of the Thai silk industry. This allows me to ask whether the promises of the Internet, that have been so widely touted, are being realized in the context of the Thai silk industry.

## **The Thai Context: Political and Economic Frameworks**

Throughout its history, Thailand (see figure 1.1) has been torn between globalization<sup>4</sup> and isolation. From the time of King Phraya Phet Raja (1688-1703), Thai leaders maintained a relatively isolationist policy of keeping relations with colonial powers to a minimum (Tate 1971). The country successfully resisted European colonization from all sides of its borders and today retains a unique non-colonial mode of integration into the world economy (Dixon 1999). Thailand was generally reluctant to sign treaties and open its markets to Western capitalists, until forced to do so by the British in the early and mid-nineteenth century<sup>5</sup> (Dhiravegin 1975; Dixon and Parnwell 1991; Buch-Hansen 2003).

Until the nineteenth century, the country had never before been constrained by objective and mapped boundary lines. However, in order to defend against potential European incursions, national boundaries had to be clearly demarcated (Winichakul 1994). Outer regions of the country were gradually and often forcibly integrated economically, culturally, and politically into the Thai state. This integration notably happened on generally exploitative and unequal terms, paving the way for an uneven state of development that persists today<sup>6</sup> (Dixon 1999).

---

<sup>4</sup> When using the term globalization henceforth in this dissertation, I adopt Dicken's (2003: 12) definition of globalizing processes as "functional integration of... internationally dispersed activities."

<sup>5</sup> A significant event during this period was the 1855 signing of the Bowring Treaty between the Thailand and the United Kingdom. The agreement liberalized foreign trade, and stipulated that British merchants were allowed to trade directly with anyone in Thailand without having to go through any intermediaries (Hindley 1968; Ingram 1971; Elliott 1978).

<sup>6</sup> When measured by province, most of the lowest average incomes and lowest average levels of education are found in the Northeastern region of Thailand (UNDP 2007).

Figure 1.1: Map of Thailand<sup>7</sup>



<sup>7</sup> Source: United Nations open-source base-map # 3853 rev. 1



Following World War II, Thailand experienced a mild upturn in economic growth. By the late 1970s, the country's exports (particularly textiles) and GDP had begun to grow at phenomenal rates. During this period there were evident and intensifying imbalances in the economy (Glassman 2004b, 2007), but the dominant view was that the Thai economy could grow itself out of this problem (Bank of Thailand 1978). The 1980s and 90s saw a number of structural adjustment programs implemented in the Kingdom. The goal of these plans was to further internationalize the economy and reorient it towards exports (Sahansakul 1992; Robison, Higgott, and Hewison 1987), and by the 1990s Thailand's new economic order with a focus on integration in the global economy was in full swing (McVey 2000). However, despite much economic upheaval, most of these changes occurred in the Bangkok Metropolitan Area and the rest of country remains a largely rural and agricultural society (Dixon 1999).

In 1997 an economic crisis affected much of Asia. The crisis, driven by excess investment, large amounts of debt, deteriorating balance of payments positions, and declining profitability in the face of increased global competition began in Thailand, with a massive devaluation of the Thai baht<sup>8</sup> (Glassman 2001; Yeung and Lin 2003; Kelley 2001; Beaverstock and Doel 2001). Speculation quickly spread throughout Asia and currencies such as the Malaysian ringit, Indonesian rupiah, and Singapore dollar declined rapidly in value (Jomo 1998). The Thai stock market crashed and the country plunged into a recession. Large amounts of capital swiftly left Thailand and huge layoffs took place in many sectors of the economy (including finance, real estate, and construction) (Kaufman, Krueger, and Hunter 1999; Dixon 2001).

It was around this time<sup>9</sup> that Thaksin Shinawatra became Prime Minister on a platform of modernization and massive economic investment in the rural provinces (Glassman 2004a; Phongpaichit and Baker 2004). The Far Eastern Economic Review noted that "Thaksin won by embracing populism on a grand scale." The journal referred

---

<sup>8</sup> The Thai baht (THB) is the official currency of Thailand. On June 14, 2008, 1 USD could be exchanged for 33.18 THB.

<sup>9</sup> In January 2001.

to “‘his populist policies,’ ‘populist sheen,’ ‘populist election campaign,’ and ‘populist brand of government’” (Phongpaichit and Baker 2002: 3; 2005).

Thaksin’s economic policies were a medley of economic ideas that became known as ‘Thaksinomics.’ The core policies behind ‘Thaksinomics’ were aimed at increasing the purchasing power of Thailand’s lower classes. They included: subsidized fuel and electricity, easily available micro-loans for small and medium enterprises, and the One Tambon One Product<sup>10</sup> (OTOP) program (Lian 2003; Smith 2002; Intarakumnerd 2005). Most importantly for this discussion, Thaksin launched a range of ICT-based programs throughout the country in order to eliminate the Thai digital divide (see for example: Waltham 2002).

Daniel Lian (2003), one of the strongest advocates of ‘Thaksinomics,’ points out a concern underpinning Thaksin’s policies by stating that “mass-produced IT and consumer goods are a dead-end for Thailand given the rise of China as the global factory.” In place of the laissez-faire policies of previous governments, ‘Thaksinomics’ focused more on promoting unique and indigenous industries<sup>11</sup>. Thaksin himself stated that:

*We are looking inward to our original strengths, our unique local know-how, and matching them with new marketing and communications technology. The aim is to create a new class of entrepreneurs who could marry local skills with international technology and hence move up the value chain (Phongpaichit and Baker 2002: 3).*

Thaksin’s focus on harnessing globalization and making it work for rural economic growth brought him into direct conflict with the King of Thailand, Bhumibol Adulyadej. The King has implemented a number of his own policies to bring prosperity to rural Thailand, but the King’s Buddhist inspired economics stresses general happiness

---

<sup>10</sup> A Tambon is an administrative district smaller than a province and larger than a village.

<sup>11</sup> It is worthy of note that one of the largest silk companies in Thailand, Shinawatra Thai Silk, was started by Thaksin’s great grandfather Seng Sae Khu. The company continues to be run by members of the Shinawatra family.

instead of GNP, promoting moderation and a ‘sufficiency economy’ based on Buddhist values (Murphy 2006; UNDP 2007). According to Shawn Crispin (2006):

*Thaksin had co-opted and subsequently subverted the monarch's message through his heavily touted "dual-track" development strategy, which aimed to pump up domestic, grassroots consumption alongside export-led growth. Rather than encouraging Buddhist moderation over market-driven acquisitiveness, Thaksin's rural strategy aimed to convert the country's poor peasantry into a new class of export-oriented, profit-maximizing capitalists.*

Before Thaksin’s ouster, many commentators believed that Thaksin would be able to continue his program of reform (despite his conflict with the King’s philosophies) as long as strong economic growth continued. (Phongpaichit and Baker 2005; Likitkijomboon 2006). But ultimately, Thaksin was deposed in a bloodless coup that installed a military government in September 2006 (McGuirk 2006).

There is evidence that at least some of the seventeen coups that have occurred in Thailand since the Second World War took place in partnership with (or at the behest of) the King (Handley 2006)<sup>12</sup>. Given the ideological differences between Thaksin and the King, then, it would not be surprising if the King tacitly approved this most recent change in government.

Immediately following the coup, the interim Prime Minister, Surayud Chulanont, stated that gross national happiness would be pursued as an alternative to GDP, and that the nation’s economic philosophy would center around King Bhumibol’s sufficiency economy in an effort to combat the uneven distribution of wealth (Crispin 2006; Charoenpo and Nanuam 2007). Indeed, the new military government, with the blessing of the King, enacted an interim constitution that included the following terms:

*The interim mechanism is...aimed to restore love and unity, the economy, the law and order, to create strong*

---

<sup>12</sup> Because of the nature of these allegations, Paul Handley’s (2006) book, and all mention of it, is censored in Thailand. This fact has made it difficult for an academic debate concerning Handley’s assertions to take place.

*system to check and investigate corruption, to establish good ethical system, to promote and protect the rights and liberty of the people, to have the country respect the UN treaties and treaties and agreements with other countries, to promote the country's ties with international communities and to promote Thais to adopt the self-sufficiency economy (Boonyaratglin 2006: emphasis mine).*

Pridiyathorn Devakula, the interim government's Minister of Finance, described sufficiency economy as a philosophy rather than a theory. He stated:

*A sufficiency economy is not self-sufficiency. It is a philosophy rather than a theory. But the philosophy can be applied to every level of the economy. Households should avoid overspending, businesses should avoid over-expansion and the government should concentrate on protecting national resources (in Crispin 2006).*

Proponents of the philosophy stress that it is not an attempt to introduce absolute self-reliance (Baker 2007). Medhi Krongkaew notes that The Ninth National Economic and Social Development Plan states:

*It [the sufficiency economy] calls for a 'middle way' to be observed, especially in pursuing economic development in keeping with the world of globalization. Sufficiency means moderation and reasonableness, including the need to build a reasonable immune system against shocks from the outside or from the inside (Krongkaew 2003).*

The King expands on the theme of autarchy versus globalization by noting:

*This self-sufficiency does not mean that every family must grow food for themselves, to make clothes for themselves; that is too much. But in a village or sub-district there should be a reasonable amount of sufficiency. If they grow or produce something more than they need they can sell them. But they do not need to sell them very far; they can sell them in nearby places without having to pay high transport costs (Krongkaew 2003).*

Understandings of the sufficiency economy are generally based on speeches given by the King, as his philosophy has not been clearly laid out in any texts. However, due to strict lèse-majesté laws, Thais are extremely loath to enter into discussions that could be regarded as even remotely critical of King's philosophies. In the past, lèse-majesté has been used to give out prison sentences of three to fifteen years for criticism of not only the King, but also the royal family, the royal development projects, and the King's ideas<sup>13</sup> (Streckfuss 1995).

The fact that the sufficiency economy is enshrined into the constitution yet cannot be openly criticized, has led to a widespread attempt by Thais to adopt the philosophy despite misunderstandings and downright confusion about exactly what it entails and how it should best be practiced. The phrase "sufficiency economy" has become a buzzword, and during my stay in Thailand, I was eagerly told by all manner of people about the ways in which they were implementing the sufficiency economy in their daily lives and business practices<sup>14</sup>. Chanyapate and Bamford (2007) have similarly observed:

*The ability to do almost anything and still call it the sufficiency economy was reflected in studies by organisations from the Thai Farmers Bank to the Stockbrokers Association of Thailand. They patriotically scanned their operations through the prism of the sufficiency economy and, surprise, surprise, found that there was no incompatibility at all. Clearly the square peg of the sufficiency economy could be hammered into holes of all shapes. Any coherent meaning to the sufficiency economy was disappearing into an all-purpose mush.*

Two rather strange examples of how far people have been willing to go to apply the sufficiency economy philosophy to their actions can be seen in the official declarations of the National News Bureau's Public Relations Department. One message announced a

---

<sup>13</sup> Lèse-majesté laws are not only applied to Thai citizens. A number of foreigners have been convicted under the laws. For example, a French businessman was arrested for refusing to switch off a reading light on a Thai Airways flight after two princesses requested that he do so (Parry 2007).

<sup>14</sup> Some of the specifics of these conversations will be presented later in the dissertation.

new anti-narcotics campaign that would both educate youths about the dangers of narcotics and “encourage [them] to follow His Majesty the King’s teachings [...about] Sufficiency Economy” (National News Bureau 2007b). Another stated that the annual Hua Hin Jazz festival will be shortened “with only two days instead of the three on previous festivals, to follow principle of the Sufficiency Economy” (National News Bureau 2007a).

The philosophical disagreements on economic matters between the King of Thailand and the former Prime Minister mirror many of the academic debates surrounding issues of development and technology (to be discussed in detail in chapter two). However, unlike academic debates, these political debates have tangible economic, cultural, and political effects (such as the 2006 coup d’état). Thaksinomics and the sufficiency economy thus frame much of the actualization of economic policy in Thailand. Thais of all socioeconomic groups and in a variety of occupations are directly impacted by this debate. Silk producers, for instance, have been affected in their ability to leverage government support for programs such as One Tambon One Product (OTOP) to market their products.

### **One Tambon One Product (OTOP)**

On March 19, 2002 the Thai cabinet approved a ten year ICT policy framework, which they dubbed “IT 2010.” The framework was designed to create a “knowledge-based and sustainable economy” (NECTEC 2002 in UNCTAD 2003: 84). The plan includes eight objectives, including “promot[ing] and facilitat[ing] SME’s e-commerce development” and “promot[ing] interoperable payment systems and security.” Perhaps the most interesting of the eight points is the government’s declaration of “e-commerce as *the* national trade strategy and proactively engage in international trade” [emphasis mine]. This point is again stressed in the first policy of the IT 2010<sup>15</sup>: “The Government should recognize e-commerce as the national trade strategy that should be included in

---

<sup>15</sup> The six ICT policies are distinguished from the eight strategies.

the Ninth and Tenth National Plans for Social and Economic Development”<sup>16</sup>  
(UNCTAD 2003: 84).

A pillar of IT 2010 was the creation of “Internet Tambon to provide [Internet] infrastructure to communities in all regions” and “One Tambon One Product,” where “IT and electronic commerce will enhance efficiency in the management of global information and markets, particularly with regard to the growth of Thailand’s E-Commerce Cooperatives” (National Information Technology Committee Secretariat 2003: 14).

The pre-coup government of Thaksin Shinawatra placed the concept of economic clustering at the heart of its ten-year Science and Technology Action Plan. This is true at the national, regional, and local level. The automotive, textile, software, and tourism industries were designated as national clusters, while the governors of each province (who were dubbed CEOs by Thaksin) were instructed to focus regional cluster strategies on only a few products and services (Intarakumnerd 2005). At the local level, OTOP, modeled on the successful One Village One Product (OVOP) project in Japan, was intended to have each tambon<sup>17</sup> develop a cluster-based economy around a single product.

Thaksin and the Ministry of Interior, in tandem with OTOP, set up a web-based project that is now called Thaitambon.com. The goal was to combine the vast, country-wide scope of OTOP with electronic commerce, thus allowing products from every tambon in the country to be marketed globally. By May 2003, 4,000 tambons were connected, and the number has increased since then. The United Nations Conference on Trade and Development cites ThaiTambon as being “a good example of

---

<sup>16</sup> Despite the two changes of government (the 2006 coup and the recent [Dec 24, 2007] election that brought the people’s Power Party [a group closely aligned with Thaksin’s disbanded Thai Rak Thai party] into office, there have been no explicit moves to scrap the IT 2010 framework. This, however, does not mean that the IT 2010 policies have been smoothly put into practice. Some of the tensions between the Internet Tambon (thaitambon.com) project and the coup government are discussed in detail in later chapters.

<sup>17</sup> A tambon is an administrative district smaller than a province and larger than a village.

rural development using the Internet,” claiming that “it has increased the average monthly community income by \$240, to \$730” (UNCTAD 2003: 87)<sup>18</sup>.

However, with the ouster of Thaksin, the core mission and activities of both OTOP and Thaitambon.com had become ideologically incompatible with the priorities of the military junta, leaving them in a state of flux. Neither organization could be seen to be openly acting in contradiction to sufficiency economy, yet at the same time, OTOP and Thaitambon.com lacked clear direction from the central government. Following elections in early 2008, the military junta surrendered power to Prime Minister Samak Sundaravej. Samak was seen by most voters as being a proxy for Thaksin. However, there have yet to be any indications that Samak will re-implement any of Thaksin’s development programs. Samak actually canceled the annual OTOP fair scheduled for March 29 citing a disagreement with the event organizers (Thailand Board of Investment 2008).

I had hoped to receive clarification about how OTOP planned to adapt to a post-Thaksin Thailand. Unfortunately, despite numerous attempts<sup>19</sup> to contact anyone authorized to speak on behalf of OTOP, I was (somewhat understandably) denied access. I experienced more success in my attempts to learn about how Thaitambon.com was dealing with the new political scene. Prior to the coup, I became acquainted with the director of Thaitambon.com, and he was happy to participate in extensive interviews. These interviews, their relevance, and the roles that OTOP and Thaitambon.com are playing in the contemporary silk industry will be discussed in more detail later in this dissertation. It is meanwhile necessary to provide further contextual groundwork about issues relevant to this project by reviewing the existing research on the economic geographies and cultural meanings of silk.

---

<sup>18</sup> The claim that ThaiTambon has been able to increase average incomes by forty-nine percent is surprising, and at least, within the contexts of the silk industry seems highly unlikely (a point that will be discussed in more detail throughout this dissertation). The UNCTAD report does not cite any methodology for arriving at the forty-nine percent increase. The document does, however, cite a presentation given at a conference called *the APT Seminar on Digital Opportunity for All* as the source of this statistic (Tameyapradit 2002).

<sup>19</sup> My attempts included phone calls, emails, and personal visits to government offices in Bangkok



## Thai Silk

The cultivation of silkworms and the weaving of silk<sup>20</sup> in what is now Thailand can be traced back thousands of years (Brown 1980). Pottery excavated from the Ban Chiang site<sup>21</sup> in Northeastern Thailand depicts silkworms and cocoons (Conway 1992). There is more concrete evidence that in the fourteenth century the Khmers that inhabited Northeastern Thailand were taught how to weave silk by members of the Tai<sup>22</sup> culture, and it has been noted that there are similarities between traditional silk weaving patterns and carvings at the Angkor Wat temple complex (Sheares 1984). During the Ayuthaya period (1350-1767) trade with India flourished, and Indian double-ikat silks imported by Dutch merchants fetched high prices in the Thai market. The fabrics, called *patolas*, significantly influenced Thai court textiles and ultimately Thai weaving practices (Conway 1992; Irwin and Schwartz 1966). By the seventeenth century, considerable trade had developed between Ayuthaya<sup>23</sup> and China, and Chinese silks were regularly imported (Chumbala 1985). These outside influences undoubtedly influenced fashioned tastes and designs in the region further. In the late 1800s Northeastern silk was considered cheap and low-quality. Despite this, it was profitably exported to Singapore, India, and beyond (Jones 1890). Robert Pendelton's (1943) study on Isan observed that silk was the most commonly used fabric in the region, as Northeastern soils were unsuitable for cotton production<sup>24</sup>.

The Northeast of Thailand has never been a completely independent nation-state. Instead, the region has been continuously influenced and ruled by all of its neighbors. Most inhabitants of the region are of Lao origin, and the language is considered a dialect

---

<sup>20</sup> Silk is defined as continuous protein fiber produced by a silkworm (American Fabrics and Fashions Magazine 1979).

<sup>21</sup> Excavations from this site date from over 2000 years ago,

<sup>22</sup> The Tai ethnicity refers a group of people across mainland Southeast Asia who speak languages in the Tai-Kadai family. The Tais migrated from southern China into present-day Thailand and Laos, and they constitute the largest ethnic group in both countries today (Wyatt 1984). People of Tai origin are also found in southern China, Burma, and Vietnam.

<sup>23</sup> Ayutthaya is the name of a Thai Kingdom that existed from 1351 to 1767.

<sup>24</sup> Much of the land in the Northeast is considered inferior to agricultural lands in other parts of the country. Only eight percent of Northeastern land can be irrigated, and one third of land is saline contaminated (Intarachai 2003).

of Laotian. In the southern Isan provinces of Surin, Si Saket, and Buriram, however, over half a million inhabitants claim Khmer origin. Regional identity is therefore far from homogenous and is defined by myriad external influences (Keyes 1967; Reynolds 2002). These influences are reflected in the weaving patterns practiced throughout the Northeast. Weaving patterns do not coalesce any one essential style, but are richly varied and diverse (Conway 1992).

Weaving in Thailand is a strictly gendered activity. Men usually construct looms, shuttles, and spinning wheels, while weaving is almost exclusively practiced by women<sup>25</sup> (Conway 1992). The dying and spinning of silk can be performed by men, but is also usually a female activity. Weaving techniques and patterns are rarely written down and are instead usually taught to young girls by their mothers or older female relatives.

Traditionally, silk has been used by Thais for a variety of cultural purposes. Certain patterns and styles are associated with courtship, engagement, marriage, birth, and death. There are also specific silks for monks and novices, Buddhist festivals such as Org Phansa (the end of Buddhist Lent) and Bun Phraawes (a harvest festival), and spiritual and superstitious purposes (e.g. for protection and exorcism) (Tambiah 1970; Conway 1992).

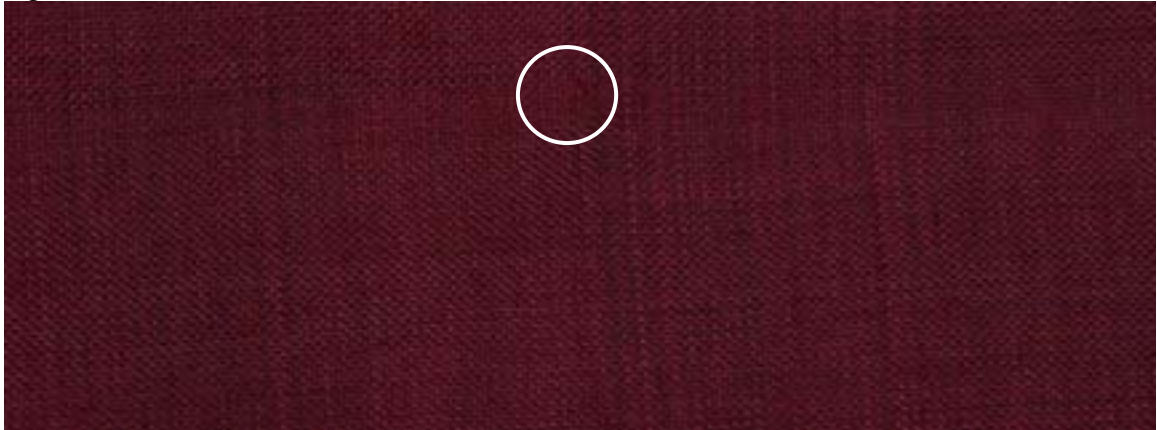
Thailand is home to a number of weaving types, patterns, and unique dyes. In order to provide context for the following discussion, it is necessary to briefly review some important types of silk. Three types of silk in particular came up repeatedly in discussions with silk weavers and vendors: plain hand-made silk, mudmee silk, and praewah silk<sup>26</sup>.

---

<sup>25</sup> During the course of fieldwork I encountered a large community of male transvestite ('ladyboy') weavers in the area around Chonnabot. Most of the Chonnabot shopkeepers prized the 'ladyboy silk' and charged significantly higher prices for the fabric. Not only do the male transvestite weavers employ more complex designs on their silks than their neighbors, but they also are famous for creating denser (and consequently more costly) silk by using a lot of force to push weft threads extremely close together on any piece of fabric. In general, female weavers are less likely to force the weft threads as close together as their male transvestite counterparts. The silk produced by the transvestite weavers would fetch at least twice the asking price of silk produced by females, but sometimes would sell for twenty times as much.

<sup>26</sup> There are a number of other types of silk produced in Thailand. Plain silk, mudmee, and praewah are simply the types mentioned most frequently in interviews and discussions.

Figure 1.2: Detail of Plain Silk



Note: The imperfections in this hand-made fabric (such as the knot in the middle of the picture) can be clearly seen in this photograph.

Figure 1.3: (a) detail of tie-dyeing threads before they are woven into mudmee fabric; (b) a silk weaving factory in Chonnabot.



The plain weave is the most common type of silk found in Thailand. In this type of weave, weft<sup>27</sup> threads are passed over and under every warp thread (see figure 1.2). Usually the warp and weft threads are the same color, but it is not uncommon to find two-tone fabrics that, due to the use of different dyes in the warp and weft, appear to change color depending on the angle from which they are viewed (Conway 1992). Plain hand-woven silk is produced all over the Northeast, although the town of Pakthongchai<sup>28</sup> is particularly renowned for its focus on plain silk. Weaving of plain silk (as well as mudmee and praewah) is performed either underneath the houses of

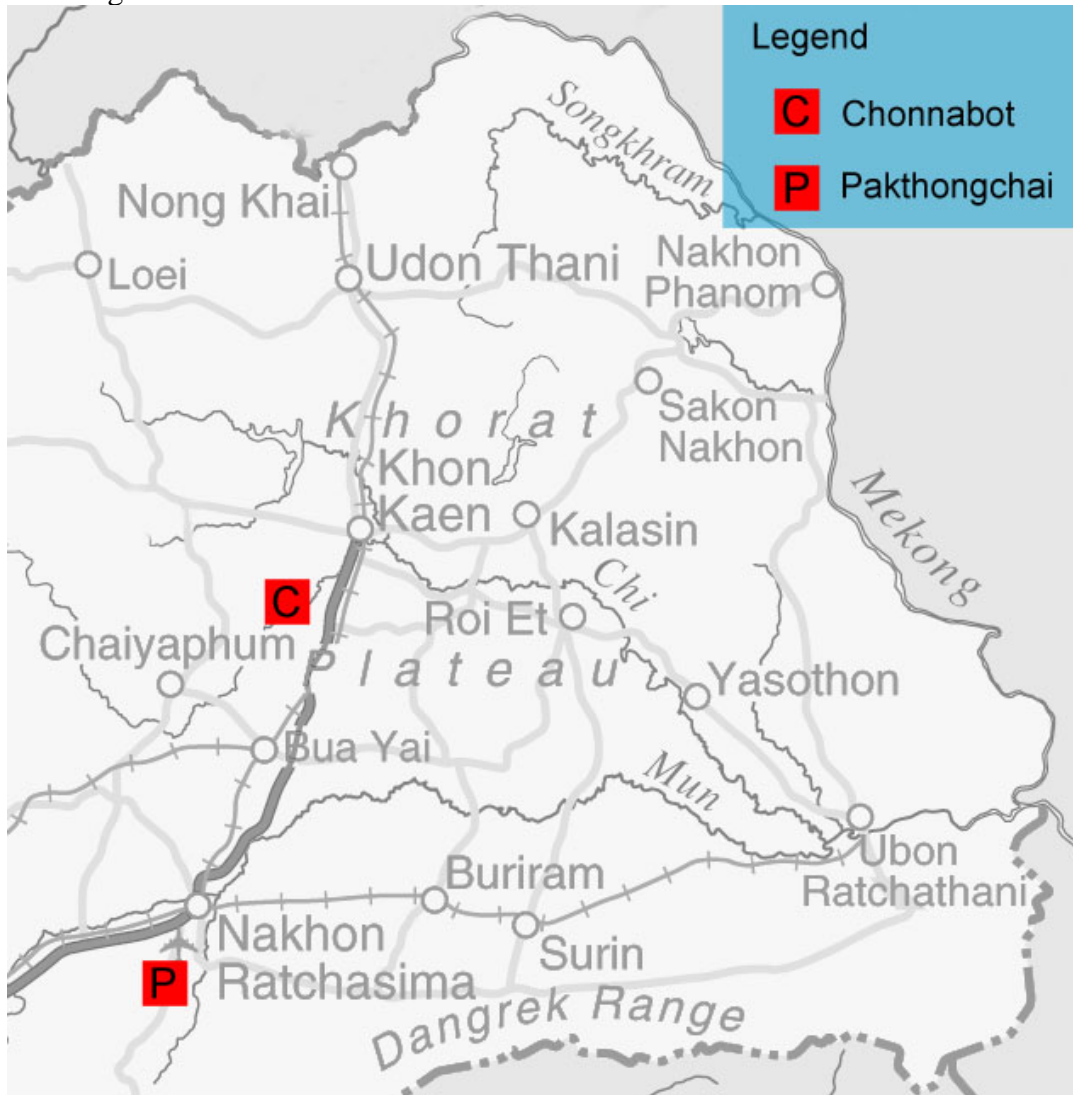
---

<sup>27</sup> 'Weft' and 'warp' threads are defined in the appendix.

<sup>28</sup> The location of Pakthongchai is highlighted in figure 1.4.

individual weavers or in dedicated factories such as the one shown in figure 1.3b. The price of plain silk varies based on a number of factors (ply, type of silk used, dyes, brand name, etc.), but starts at approximately 150 baht per meter and can rise to ten times that price.

Figure 1.4: Map of the Northeast of Thailand Showing the Locations of Chonnabot and Pakthongchai<sup>29</sup>



Other than plain weaves, mudmee is possibly the best known type of Thai silk (see figures 1.5 and 1.6). Mudmee is created by tie-dyeing the weft yarn into distinct patterns prior to the weaving process (see figure 1.3a). Some of these patterns can be

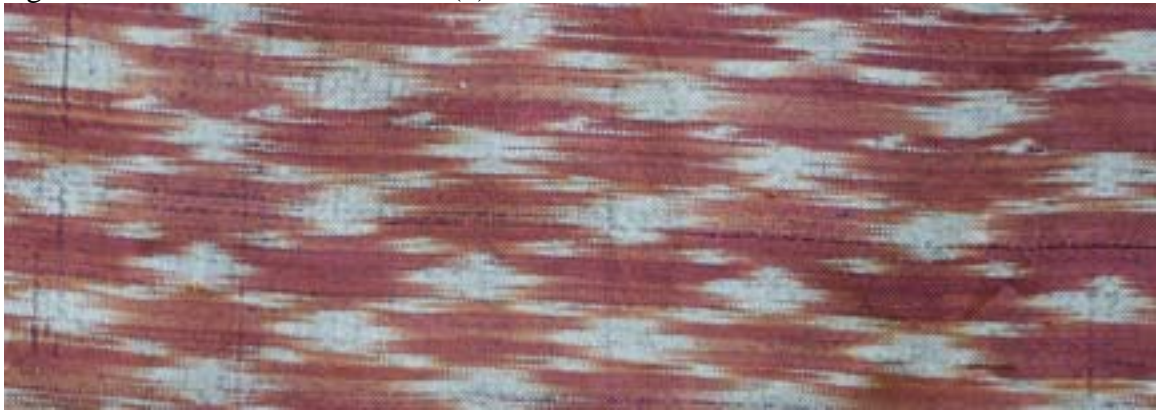
<sup>29</sup> Adapted from United Nations open-source base-map # 3853 rev. 1

highly complex and require mathematical precision of the part of the weaver<sup>30</sup>. Some weavers keep a notebook containing instructions and diagrams, but many simply memorize distinct patterns taught to them by their mothers. Susan Conway (1992), in her book on Thai textiles, identifies twenty five distinct mudmee patterns that have been named by Northerners (such as cobra, diamonds, and water hyacinth).

Mudmee is woven throughout the Northeast, and each sub-region has its own distinct styles and patterns. The town of Chonnabot is particularly famous as a center of mudmee production. Although mudmee patterns often originate in specific regions of the Northeast, their production is not always limited to that area. The matter is confused further by a lack of standardized naming practice. This was fact highlighted by Mr. Jamroen, the manager of a two person factory in Chonnabot. He commented that:

*We have some of the same patterns here as other places, but different names. We need some way to standardize. "Plagrasil" here is called "soidogma" in Mahasarakham. This is even originally from Chonnabot, but now Mahasarakham people have patented it.*

Figure 1.5: Detail of Mudmee Silk (1)



---

<sup>30</sup> In the production of mudmee, the weaver usually ties and dyes her own silk. However, there are cases where the process is divided and these tasks are performed by separate people.

Figure 1.6: Detail of Mudmee Silk (2)



Figure 1.7: Detail of Praewah Silk (1)



Figure 1.8: Detail of Praewah Silk (2)



Mudmee is rarely made in long reams, partly because of the difficulties inherent to tie-dyeing large amounts of yarn. It is instead sold in units of four meters. Some weavers make two meters of mudmee and two meters of a matching plain color. Others weave all four meters in the mudmee style. Prices of mudmee also vary drastically, but

can start at approximately 350 baht per meter and rise to many thousands according to the quality of the silk and the design.

Praewah is far less common than either mudmee or plain silk, owing largely to its high cost. However, the fabric (which is often dubbed ‘the queen of silks’) has been made increasingly popular by the royal family and is stocked in most Thai silk shops. Praewah (see figures 1.7 and 1.8) is only produced in Kalasin province and is made from a combination of continuous supplementary weave and discontinuous supplementary weave (giving the impression of an embroidered pattern even though the raised patterns are woven into the silk). Each row of thread needs to be carefully woven in order to avoid mistakes and, as a result, individual pieces of four meter Praewah fabric can take months to weave. The cost of praewah can range from 1,500 baht to hundreds of thousands of baht for a single piece.

### **The Global Silk Industry**

Ever since long-distance trade in silk began in the first century AD, the many participants in the global silk trade have been forced to develop strategies to reckon with the enormous distances that separate producer from consumer (Giovanni 1997; Wood 2002). Producers could not directly interact with consumers; and consumers, likewise, had no direct means of communicating with producers. Thus, in order for silk to be moved from regions of supply to regions of demand, a host of intermediaries were needed to buy, sell, and transport the fabric through all points in its production chain.

Silk constitutes a minute amount of the total global production of textiles (0.2% by weight)<sup>31, 32</sup>. This is largely because other textiles such as cotton and synthetics can be produced and sold for a much lower price. The complicated and time-consuming processes involved in the production of silk also mean that it cannot ever be cheaply produced in mass quantities. This is not to say that silk does not play an important role in

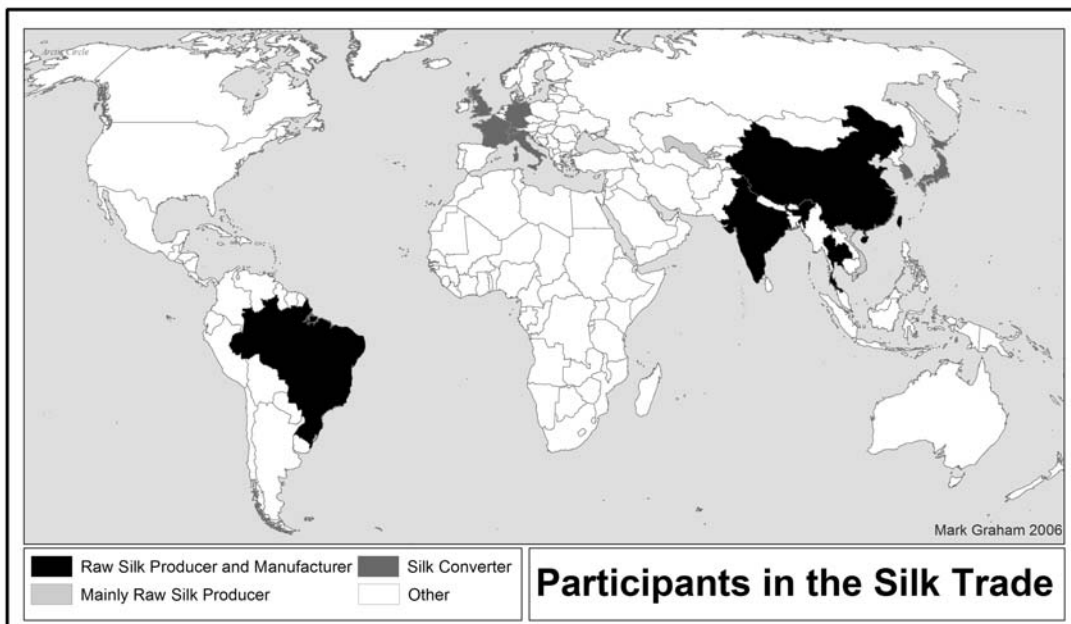
---

<sup>31</sup> The statistic becomes less insignificant when measured in terms of monetary value instead of weight, due to the fact that silk is able to fetch a much higher asking price than most other textiles.

<sup>32</sup> See figure 1.9, for an illustration of the participants in the silk trade.

the global textile trade. By the late 1920s, the global value of production and trade in silk had reached thirty percent of the value of the cotton trade and sixty-five percent of the value of the wool trade (Ma 1996: 331). Indeed, silk became crucial to the economies and economic development of a number of nations, including Italy, Japan, and China until the mid-twentieth century<sup>33</sup>.

Figure 1.9: Participants in the Silk Trade<sup>34</sup>

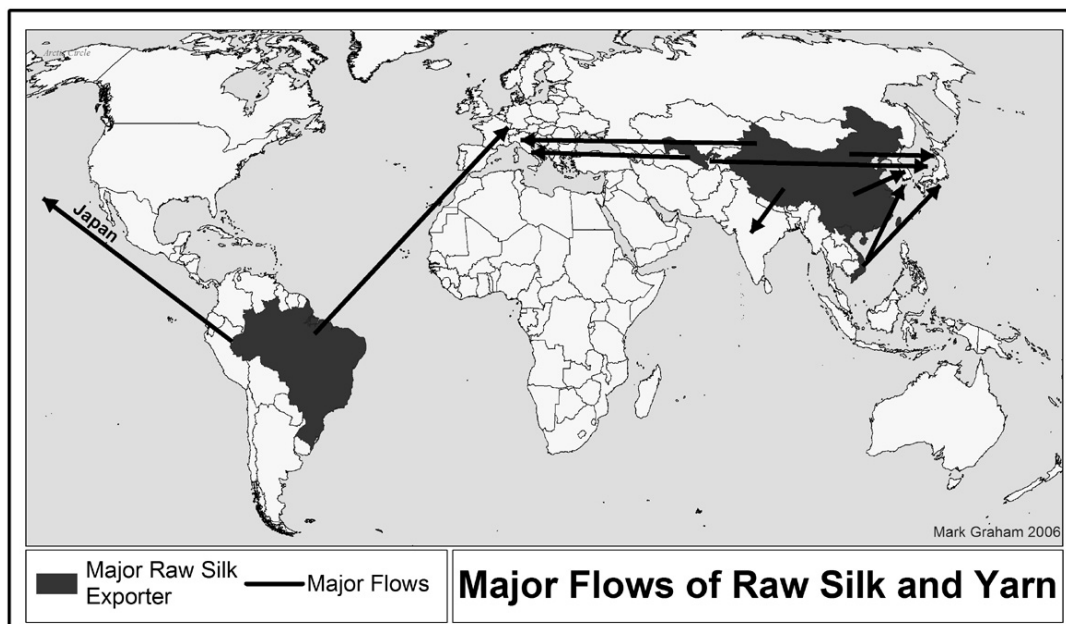


<sup>33</sup> According to Ma (1996), the percentage of total national exports that were raw silk before World War I were approximately as follows: Japan, 40%, China, 30%, and Italy 20-25%

<sup>34</sup> The following four maps were produced by this author and are based on data gathered mostly from UNCTAD/WTO (2002) and Datta and Nanavaty (2005) and email correspondence with Ron Currie, the former Secretary General of the now defunct International Silk Association (Currie 2006) It should be noted that these maps are not intended to present an absolute or comprehensive picture of the global silk industry. There are undoubtedly a number of significant omissions in the maps due the unavailability of countrywide data for a number of nations. Furthermore, the symbology and shading of countries is not an attempt to convey any sort of binary knowledge; it is instead simply a strategy to highlight dominant players at a national scale. Arrows indicating flows of silk also do not convey any qualitative or quantitative aspects of those flows. For example, the arrows emanating from Brazil in figure 1.10 are all of the same width and shading despite the fact that Brazil exports around 75% of its raw silk to Japan. Finally, any arrows starting or ending in Europe are intended to refer to Europe as a whole. However, it should be noted that Italy, France, Switzerland, and the U.K. are the dominant European participants in the silk industry.



Figure 1.10: Major Flows of Raw Silk and Yarn



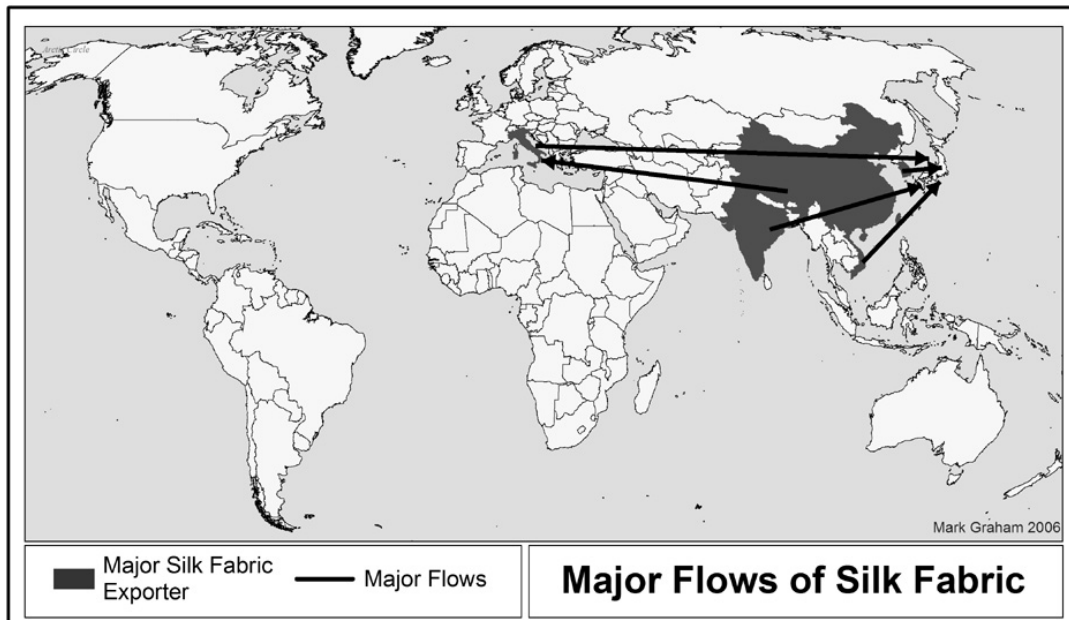
### *Raw Silk*

There are three main varieties of silk worm: monovoltine, bivoltine and polyvoltine. Tropical polyvoltine silk, most often used for production in India and Southeast Asia, produces low yields and its silk cannot generally be machine reeled. In contrast, bivoltine silk worms, generally used in China, Brazil, Japan, and the former Soviet states, is a more temperate variety of worm and produces much higher yields (Balasubramanian 1985).

China is the dominant producer of raw silk (see figure 1.10), producing over seventy percent of the world's supply (with much of its output being bivoltine). India is a distant second, producing around twenty percent of the world total. Brazil, Thailand, Japan, South Korea, North Korea, Iran, and a host of other countries also produce raw silk, which in most cases is converted into fabric domestically. Uzbekistan and Vietnam are exceptions in that they are predominantly exporters of raw silk and convert very little of it into finished products (UNCTAD/WTO 2002, 1997). Japan, once a major source of

raw silk, now only produces a negligible amount (Hough 1968; Datta and Nanavaty 2005).

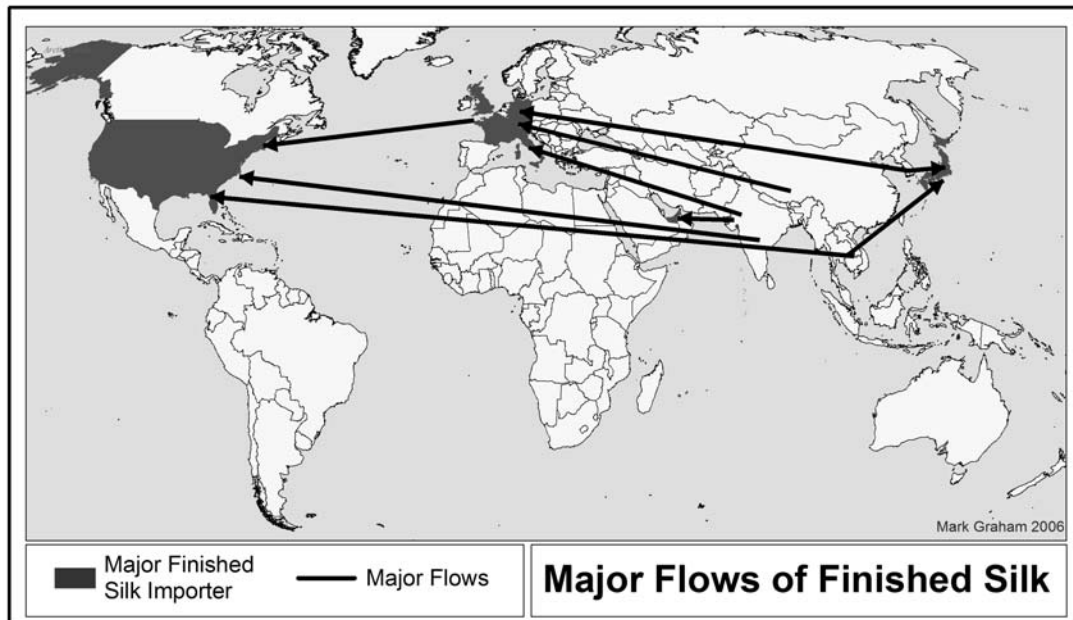
Figure 1.11: Major Flows of Silk Fabric



### *Textile Production*

Detailed statistics on the global trade in silk garments are exceedingly difficult to obtain for a number of reasons. First, national statistics can often not be standardized to one another. Second, many silk producing countries do not collect or keep detailed statistics pertaining to the silk industry. In most countries, data on silk fabrics have been aggregated into statistics that also measure garments made from other fibers (UNCTAD/WTO 2002, 1997). Finally, the International Silk Association (ITC), which was the primary supplier of silk statistics to the International Trade Center, has relatively recently ceased its activities. As a result, there has been a “total breakdown in international communication about silk” (Currie 2006). However, despite the dearth of information, a combination of existing quantitative data and detailed information from knowledgeable actors within the industry is enough to piece together a meta-level picture of flows of silk textiles and garments (see figures 1.11 and 1.12).

Figure 1.12: Major Flows of Finished Silk<sup>35</sup>



Although India is the second largest producer of raw silk, it is also the world's largest importer as a result of its large internal market for finished silk products. Many other countries also supplement their own domestic supplies of raw silk with imports, primarily from China and to a lesser extent from Brazil and Vietnam (UNCTAD/WTO 2002, 1997; FAO 2006). Some countries (such as Italy, Switzerland, and Japan) import virtually all of their raw silk and silk fabrics to manufacture high-end textiles and garments (Datta and Nanavaty 2005). Raw silk is converted into fabric on either hand- or power-looms. Chinese bivoltine silk is mostly woven using electrical machinery, while Indian and Southeast Asian silk continues to be woven on hand looms.

The largest consumers of imported finished silk products are Western Europe (France, Germany, Italy, Switzerland, and the U.K.), Japan, the United States, and the United Arab Emirates (much of the finished silk shipped to the UAE is re-exported to other regional markets) (UNCTAD/WTO 2002); large quantities of finished silk

<sup>35</sup> "Finished silk" refers almost entirely to garments. However, there are a small amount of other items (such as bags or purses) made of silk included in this map.

products are also consumed within India and China. However, much of this demand is filled by domestic production.

### **The Thai Silk Industry**

The previous section has shown that, perhaps more than ever, distance and geography remain fundamental to interactions between the initial producers and the end consumers. The last section also illustrated that Thailand is not a dominant player in any aspect of the industry. However, the production and distribution of silk is an important part of Thailand's economy and of the lives of its people.

Thailand has a millennia-old tradition of silk production that has survived up to the present day, in part because of the country's relatively stable economic environment (Conway 1992). Although silk weaving in Thailand is an ancient practice, many people mark the arrival of a foreigner, Jim Thompson, as a turning point in the Thai silk industry. Fifty years ago, Thompson started a company that focused almost exclusively on exports, and his company is now the largest silk company in Thailand. Thompson redesigned looms, imported higher quality raw silk, and encouraged producers to weave new patterns that would be appealing to foreigners (Warren 1970). The company controlled, and still controls, all of the nodes of production on its supply chains. However, over the past few decades hundreds of former employees have started their own silk businesses focused on international trade (Haggblade 2006). The global demand for Thai silk grew rapidly throughout the 1980s and 1990s and has only recently declined somewhat (Haggblade and Ritchie 1992). Today, Thailand's silk industry lags significantly behind China's and India's in terms of total raw and finished silk production<sup>36</sup> (UNCTAD/WTO 1997, 2002).

Many observers predict that Thai silk producers will face a number of critical challenges in the years to come as a result of the recent rescindment of the global quota

---

<sup>36</sup> Statistics on the global silk industry are notoriously imprecise. For example, Thailand's export statistics are significantly deflated by 'invisible exports' - that is a large quantity of finished silk products exported without proper documentation or bought by tourists in Thailand to be taken out of the country (Currie 2006).

system on textiles. The newly liberalized marketplace for textiles is expected to result in a slowdown in economic growth for some Southeast Asian countries (South East Asia Monitor 2004). The former quota system guaranteed a fairly stable market for textiles. With the elimination of the system, silk producers are now brought into direct competition with all other producers in an open market. China is seen by many to pose the largest threat to Thai producers, as China is able to produce silk with a lower price per unit<sup>37</sup>.

Although textile quotas are being phased out, a complicated web of international trade agreements remains in place. This has made it difficult to formulate any predictive statements about the competitiveness of the Thai silk industry. The World Bank and Thailand's National Economic and Social Development Board even state that these regulatory complexities make it difficult "for clothing-exporting small-and-medium sized enterprises from developing countries to determine their competitiveness vis-à-vis that of major competitors" (Thailand's National Economic and Social Development Board and the World Bank 2005: 172).

The idea that the fabric is a 'part of Thai identity' is frequently reproduced in a variety of settings ranging from royal exhibitions, export shows, and advertisements for Thai hotels and airlines (Jory 1999). Although a healthy sericulture sector exists in Thailand, the country is forced to supplement its own production of raw silk with imports from China and Vietnam<sup>38</sup>. While statistics vary considerably on the matter, it is estimated that there are between 150,000 and 350,000 households, mostly in north-eastern Thailand, which are dependent on sericulture for supplemental income (UNCTAD/WTO 2002; Thailand's National Economic and Social Development Board and the World Bank 2005; Chan et al. 2008).

---

<sup>37</sup> There are suspicions that Chinese producers are deliberately attempting to harm their Thai counterparts through dumping policies in the Thai marketplace (Iamlaor 2006).

<sup>38</sup> Government quotas stipulate that one third of all yarn has to be purchased in Thailand. This regulation has provided support to silk farmers and producers of raw silk, but raised the price for raw materials for weavers (Chan et al. 2008).

## *The Production of Thai Silk*

The final section of this chapter provides a brief outline of the production chains of Thai silk in order to provide context for the rest of this study. Beginning with the rearing of cocoons, Thailand's National Economic and Social Development Board and the World Bank argue that there is no dominant country-wide production chain<sup>39</sup>:

*Some farmers raise silkworms and sell cocoons for processing in factories; other raise silkworms, reel the cocoons and sell silk yarn, either to other villagers or to weaving factories; another group buys yarn and concentrates on dyeing and weaving; and some farmers complete the whole process from planting and maintaining their mulberry plots in order to produce and sell woven and dyed fabric (Thailand's National Economic and Social Development Board and the World Bank 2005: 173).*

As native and hybrid varieties of Thai yarn cannot be machine reeled<sup>40</sup>, most reeling is performed by hand by rural women and elderly household members. Reelers produce on average of 5 kg of yarn per year with polyvoltine native varieties of silk and 18kg of yarn per year with poly-bivoltine hybrid varieties. Estimates suggest that typical

---

<sup>39</sup> Despite the fact that commodity chains in the Thai silk industry are notoriously difficult to fix and map (due to their diversity), figure 1.13 is an attempt to do just that. Beginning with mulberry bushes, the schematic diagram traces the flows of silk through to hypothetical end-consumers. It is necessary to attach a number of caveats to the figure. First, the length or width of arrows is in no way indicative of any characteristic of silk flows (e.g. importance or distance traveled). The diagram displays the most significant potential routes that silk can take as it moves from producers to consumers. Second, the diagram is not intended to represent a comprehensive overview of all inputs and outputs in the silk industry. While a number of elements have been deliberately omitted (e.g. packaging materials for finished silk, fertilizer for mulberry bushes etc.), I would argue that the elements represented in the schematic are the most significant processes, inputs, and outputs in the Thai silk industry. Third, although various tasks are represented in distinct locations in the diagram, there is often overlap in the real-world. Disparate tasks are frequently performed in the same place by the same person (e.g. weavers can also be tiers, dyers, and reelers). Finally, intermediaries are divided into "village-level intermediaries," "regional intermediaries," "Bangkok intermediaries," and "foreign intermediaries." The intent behind this categorization of intermediaries is not to posit any distinct and congealed scales at which certain intermediaries operate. The purpose is rather to highlight the potential for silk to pass through multiple intermediaries that have differing geographic foci. "Village-level intermediaries" refers to merchants in the same village that the silk was woven in, and "provincial-level intermediaries" refers to merchants in the same province that the silk was woven in.

<sup>40</sup> Monovoltine and bivoltine silkworms usually produce cocoons large enough to be processed by automatic reeling machines. However, neither type of worm is suited to a tropical climate and are often killed off by bacterial and viral diseases. Native polyvoltine worms have fewer problems with disease, but usually produce cocoons too small for automatic reeling machines (Morton 1989).

reelers earn 3,000 – 4,000 Baht (\$750 – 1,000 USD) per household per year. A small amount of silk is reeled in factories (there are currently seventeen such factories in Thailand). After reeling, yarn is then usually bought by yarn traders. In many places there is a hierarchical structure of traders at the village, district, and provincial level. These traders are able to extract a profit margin ranging from 2-11 percent. (UNCTAD/WTO 2002; Thailand's National Economic and Social Development Board and the World Bank 2005).

Thailand's National Economic and Social Development Board and the World Bank (2005:178) distinguish between three types of weavers: traditional village-level weavers, small to medium scale weaving plants, and large weaving factories. Detailed and accurate statistics on weaving do not exist, and there is debate as to what share of the market is taken up by the small number of major producers that exist within the country (e.g. Jim Thompson Silk Co. and Shinawatra Thai Silk). Most weaving does continue to be performed on hand-loom. Many traditional weavers sell their silk to local markets, while others have exclusive relationships with wholesalers and retailers. The costs and revenues of weavers vary greatly with context. Some woven silk remains in Northeastern Thailand and is manufactured into garments and other products at the village level or by larger factories. The rest is typically transported to Central Thailand (Bangkok vicinity) and is either sold to foreign buyers or converted into other products (UNCTAD/WTO 2002; Thailand's National Economic and Social Development Board and the World Bank 2005; Datta and Nanavaty 2005).

The precise amount of silk exported from Thailand is another notoriously difficult statistic to measure. Silk that is converted into scarves, bags, ties, and other products is not measured under the 'silk' category in statistics kept by the Customs Department and the Thai Department of Export Promotion. Even numbers relating to the amount of simple woven fabric exported vary by a large degree<sup>41</sup>. Furthermore, both the Thai Textile Association and the Department of Export Promotion agree that a massive amount of silk likely leaves the country without being formally declared (either due to

---

<sup>41</sup> The precise number is likely somewhere between fifteen million and forty million US dollars a year (Chan et al. 2008; Department of Export Promotion 2007).

smuggling or tourist purchases). As such, it is challenging to estimate the proportion of silk that is produced for domestic versus international consumption. The director of the Thai Textile Association and a representative from the Department of Export Promotion were both hesitant to even guess what an approximate ratio might be. A 1992 report funded by CARE and USAID estimates that ten percent of the market for silk is taken up by 'traditional demand' and 'rural households', seventy-five percent is sold to tourists and 'affluent urban Thai consumers' and fifteen percent is exported (Haggblade and Ritchie 1992). However, it is unclear how these figures were compiled.

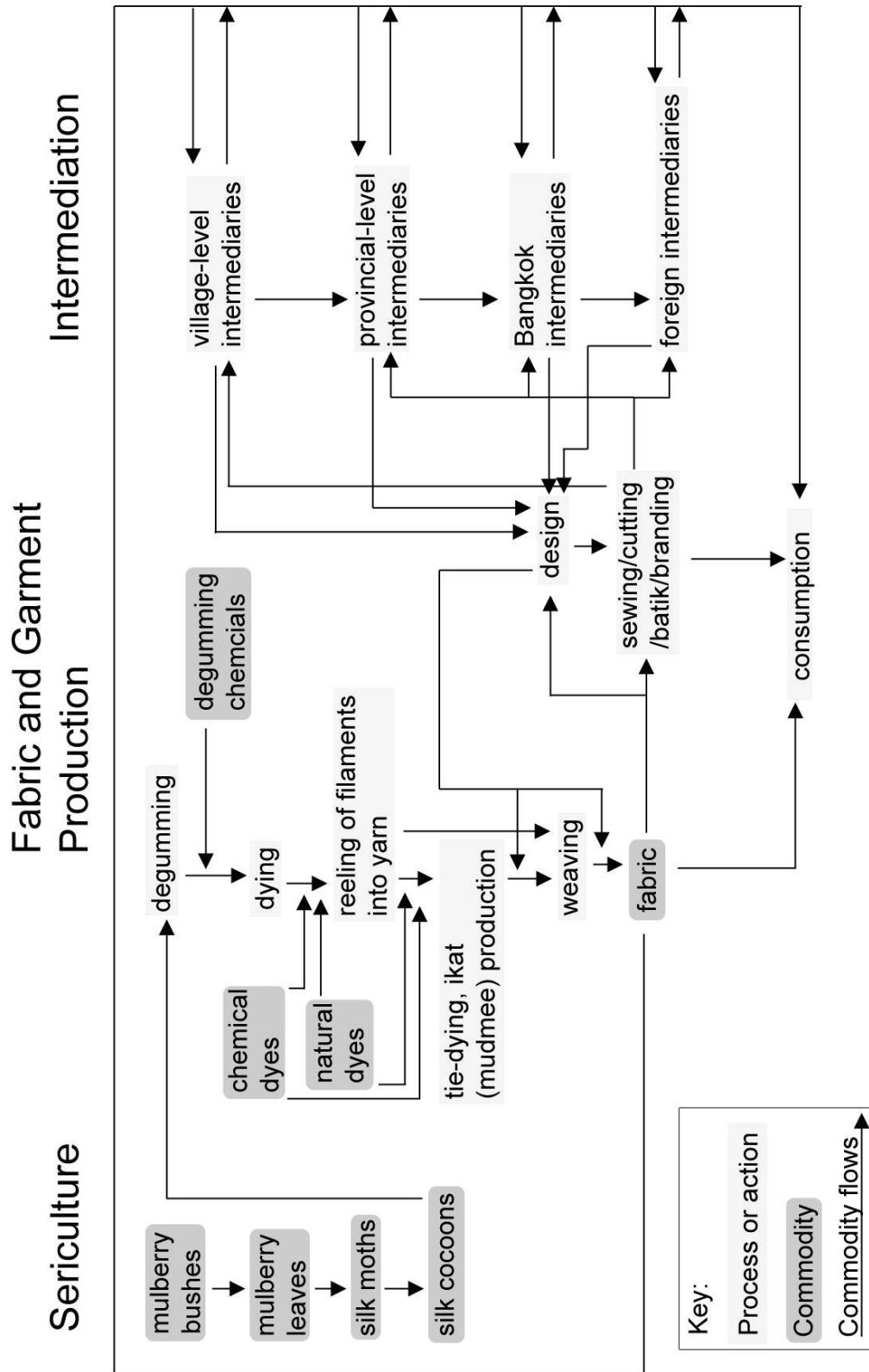
The proportion of exported silk is certainly large enough to cause concern to the national government that the Thai silk industry might be threatened by international competitive pressures. Ominously for the country's producers, Thailand's National Economic and Social Development Board and the World Bank (2005) warn that Thai silk is highly uncompetitive in comparison with Chinese silk. Thailand's National Economic and Social Development Board estimates that large reductions in labor costs or increases in productivity would be needed to improve competitiveness.

A transition from domestic varieties of silk (polyvoltine) to hybrid domestic-foreign (poly-bivoltine) silk would indeed result in an increase in productivity, but it is the domestic polyvoltine varieties that are the basis for traditional Thai hand woven silk products. A move away from small-scale production (on handlooms throughout the country) and towards industrial-scale production of machine-made silk, would similarly provide both reductions in labor costs and increases in productivity. Yet, an industry-wide switch to machine-made fabric would vitiate all that is unique about Thai silk.

While the specific type of raw silk (monovoltine, bivoltine, or polyvoltine) used in the weaving of any piece of fabric does alter the appearance and texture of the fabric, those differences are minor compared to the types of weave, patterns, and colors produced by weavers. Changes being experienced by the producers of raw silk in Thailand are certainly worthy of study. However, instead of attempting to look at the entire chain of silk production (starting at mulberry bushes and silk worms), this dissertation will focus on silk once it has been woven into fabric.



Figure 1.13: Simplified and Generalized Commodity Chains of Thai Silk



Emphasis is placed on woven fabric rather than raw silk because, even though the type of silkworm used is not an insignificant factor, it is the styles of weaving, the patterns, and the colors which contain the most cultural meaning. Very few consumers of silk care whether the fabric is derived from monovoltine or polyvoltine worms. People instead place most importance on the visual factors that characterize silk (pattern, weave, color, etc.).

Another reason for focusing on woven rather than raw silk stems from that fact that in some villages, the skills of silk weaving and dyeing are not being passed on to the younger generation<sup>42,43</sup>. This issue has not gone unnoticed, and there is widespread concern that the many styles and patterns of silk unique to Thailand and reproduced over centuries will disappear. As a result, a number of solutions have been proposed, many of them involving the use of technologies to reduce relative distances between buyers and sellers<sup>44</sup>. The specifics of these programs, and the theories upon which they are based, will be discussed at length in following chapters.

Copyright © Mark Graham 2008

---

<sup>42</sup> Mills' (1999) book *Thai Women in the Global Labor Force* mentions this fact. The observation that young women are not taking up the practice of weaving is also a common refrain throughout villages in the Northeast.

<sup>43</sup> This is not to suggest that traditional practices of raw silk production are not also changing with the introduction of new, and hybrid, breeds of silkworm.

<sup>44</sup> This point is the final reason why this dissertation focuses on woven silk rather than raw silk. As will be discussed in more detail in later chapters, many of the solutions proposed as development strategies for the Thai silk industry involve selling woven silk on the Internet to end-customers: something that few people have proposed to do with raw silk.

## CHAPTER 2

### SILK ROADS IN THE ELECTRONIC AGE: DISINTERMEDIATION, DEVELOPMENT AND DISTORTED DISTANCE

*Woke up this mornin', saw my business model was gone  
Oh, woke up this mornin', saw my business model was gone  
Got so mad, I threw my drink across the lawn*  
“Disintermediation Blues” by Howlin’ Fatcat (Murrell 2007).

#### Commodity Chains

When we think about a commodity, we usually reflect on its utility or cost, or perhaps its meaning or aesthetic. Seldom is much thought given to the myriad processes in other places that have moved the commodity to the here and now. Veils of space and time obscure the commodity’s past existence and cause it to become a ‘container of hidden relationships’ (Marx 1867). For these reasons, a number of scholars have proposed the ‘commodity chain’ as a heuristic device intended to conceptualize movements of goods and capital.

A commodity chain can be defined as a “network of labor and production processes whose end result is a finished commodity” (Hopkins and Wallerstein 1994: 18). Similarly, value chains have been described as the process by which technology is combined with material and labor inputs, and then processed inputs are assembled, marketed, and distributed” (Kogut 1985: 15, in Gereffi et. al 2005: 79; see also: Gereffi et al. 2001; Pil and Holweg 2006; Schmitz 2004; Porter 1990; Sturgeon, Biesebroek, and Gereffi 2008). Elsewhere, global production networks (GPNs) are defined as networks of production and distribution that are global in their reach (Dicken et al. 2001; Dicken 2005; Henderson et al. 2002; Yeung, Weidong, and Dicken 2006). These terms are often deployed in interchangeable ways (Sturgeon 2001) and will be used throughout

this project as way of exploring questions related to flows of commodities and capital between producers in Thailand and end-consumers<sup>45</sup>.

Gereffi et. al. (1994) distinguish between producer- and buyer-driven commodity chains. They observe that producer-driven chains are often dominated by large corporations that coordinate the entire network. Such chains are readily observed in technology-intensive commodities. In contrast, buyer-driven chains are frequently characterized by labor-intensive consumer goods, such as garments. Retailers and merchants function as core enterprises in such chains and organize a range of decentralized production networks that are often located on the global economic periphery<sup>46</sup>. Gereffi notes that many producer-driven commodity chains appear to be shifting to buyer-driven chains, especially with the advent of e-commerce (Gereffi 1994, 2001a). While the sharp distinction between producer- and buyer-driven chains has encountered criticism, particularly due to its overreliance on essentialist categories (Raikes, Jensen, and Ponte 2000; Sturgeon 2008), the aim of identifying the forces that control flows of value remains important. At the same time, it is imperative to recognize other important forces such as the role of labor, and local, national, and extra-national states that may influence relationships within commodity chains (Smith et al. 2002). This should be done while paying attention to the specific degrees, sorts, and gradations of power, and the grounding and location of profits within any chain (Raikes, Jensen, and Ponte 2000).

In a recent article, Gereffi et. al. (2005) focus on the governance of global value chains. They identify three variables that influence how value chains are governed and change: the complexity of transactions, the ability to codify transactions, and capabilities in the supply base. Gereffi et. al. conclude that as capabilities in the supply base and the ability to codify transactions increases there is often a governance shift to a market-based value chain. Use of the Internet to access (or establish) non-local markets similarly

---

<sup>45</sup> This is not to imply that there are not significant differences in the ways that commodity chains, value chains, and GPNs have been formulated and employed as heuristic devices by various authors. For the purpose of this project, the idea of a chain is used to describe the actors and spaces connecting producers and consumers of Thai silk.

<sup>46</sup> Wal-Mart is a classic example of a core enterprise in buyer-driven chains (Brunn 2006).

often relies upon codified information about commodities. It is thus necessary for codification schemes to exist for any codified knowledge that passes through commodity chains (either virtually or physically) (Balconi 2002; Baldwin and Clark 2000; Sturgeon 2003).

However, as long as transactions remain complex, value chains often tend to be organized hierarchically by large market buyers. Gereffi et. al. describe how “global buyers used explicit coordination to help create a highly competent supply-base upon which global-scale production and distribution systems could be built without direct ownership” (2005: 82). However, they note that other important forms of coordination do exist and outline five types of value chain governance (see table 2.1) on a scale with markets at one end and vertically integrated firms on the other (2005: 83): (1) markets (low switching costs); (2) modular value chains (retailers as lead firms make use of turn-key suppliers); (3) relational value chains (mutual dependence between buyers and sellers); (4) captive value chains (small suppliers dependent on larger buyers); and (5) hierarchy (vertically integrated governance).

Table 2.1: Gereffi, Humphrey, and Sturgeon’s (2005) determinants of global value chain governance.

Governance type	Complexity of transactions	Ability to codify transactions	Capabilities in the supply base	Degree of explicit coordination and power asymmetry
Market	Low	High	High	Low
Modular	High	High	High	↑
Relational	High	Low	High	↓
Captive	High	High	Low	↓
Hierarchy	High	Low	Low	High

The end-goal of such analyses is often to assist firms located in developing nations to improve their positions in global markets (Kawakami 2008). This is accomplished by focusing on the integration of systems of production and distribution as well as the structure and governance of the commodity chain (Raikes, Jensen, and Ponte

2000; Gereffi, Humphrey, and Sturgeon 2005; Whittaker et al. 2007). Gereffi et. al. (2005: 99) point out that:

*the governance of global value chains is essential for understanding how firms in developing countries can gain access to global markets, what the benefits of access and the risks of exclusion might be, and how the net gains from participation in global value chains might be increased.*

Within the context of the Thai silk industry, specific forms of governance vary. The Jim Thompson Corporation, for example, can be seen as a core enterprise in hierarchical or captive chains (as they control and coordinate almost all aspects of the chains they are involved in). Other chains, involving a greater amount of smaller merchants and suppliers, are characterized by a low degree of coordination and likely can be described as market or modular chains.

The introduction of the Internet into any commodity chains of Thai silk has the potential to significantly alter the governance of those chains. Specifically, the Internet is thought to both spark a move towards more buyer-driven chains, and allow more market and modular chains to emerge (Porter 2001). However, the most revolutionary impact the Internet is argued to have on commodity chains is through “disintermediation.”

### **Disintermediation and Expanded Markets**

Disintermediation was used as early as 1981 to describe the bypassing of economic intermediaries (Hawken 1981). But the term’s contemporary significance generally lies in its ability to describe the potential of the Internet to threaten the existence of ‘middlemen,’ brokers, and intermediaries in any commodity chain, and to reorganize economic spaces and relations, for example by bringing economic benefits to both producers and consumers (Office of Technology Assessment 1994; Javalgi and Ramsey 2001; Drucker 1999; Couclelis 2004; Janelle and Hodge 2000; Tanburn and Singh 2001; Goldstein and O’Connor 2000; Gellman 1996).

The United Nations, in its “E-commerce and Development Report,” clearly outlines the idea that:

*The Internet can reduce the use of intermediaries in the traditional supply chain by enabling producers to interact and transact directly with buyers. This is largely because producers and buyers can obtain trade information from each other and can carry out transactions at a much lower cost than in an offline supply chain with multiple intermediaries (UNCTAD 2003: 163).*

Such ideas are echoed by Molla (2005:4):

*With respect to developing countries, most businesses (including those involved in agriculture; a key developing country economic sector) depend on long supply chains and intermediaries to market their products and to purchase required inputs...More often than not, the intermediaries take the lion's share of the profit, and they decide which products are to be delivered to the market and from which supplier to purchase equipment and other necessary inputs.... They also add to the cost of input materials and finished products. As indicated above, e-commerce can enable producers and/or consumers to bypass some of these intermediaries and/or the cost associated with them. This can allow producers in developing countries to market their products directly to clients (such as markets in the North), overcome "biases of dealers"... and increase their visibility. This also benefits their clients, as some of the savings are likely to be transferred to consumers in the form of reduced prices.*

He adds:

*it is argued that by using e-commerce, businesses in developing countries, irrespective of size and location, can overcome the geographical barriers to trading globally and can access markets and supply networks that would have otherwise been inaccessible for them.*

Anecdotes about disintermediation abound. Romero (2000 in Leinbach 2001) has reported on a group of rural Guyanese weavers who, with newfound connections to the

Internet, began successfully selling hammocks online<sup>47</sup>. Similarly, the manager of an Ethiopian leather production company, in his presentation to a conference called *Ethiopia in the Knowledge Age*, exclaimed:

*finding a marketing strategy that can short-circuit this barrier was an indispensable dream for us. Electronic commerce is now giving us an option by enabling the producer and the consumer to meet in the information super highway and transact at our will without any intermediary whatsoever (Kebede 2001:2).*

Kebede further claimed that using the Internet to disintermediate the commodity chains in which he was involved allowed him to raise prices (while still undercutting competitors), reduce his promotion costs, and expand his market to encompass the world.

Disintermediation is often written about as an inevitable force that will ultimately reshape most contemporary economic activity (Keegan 2006), and perhaps as a result, the disintermediation discourse has been able to attract many powerful backers. Peoplelink.com, for instance, is partially owned by the Inter-American Foundation and the World Bank. The administrators of the project see it as a:

*"Non-profit Global Artisan Marketplace" doubling the income of grass roots artisans by enabling them to sell directly to buyers, thereby bypassing several links in the commercial chain that normally pay them only 10% of the final retail price.*

In the late 1990s, the EZiba.com project was able to raise a staggering \$70 million in order to create an online shopping portal for crafts from around the world. Ethicvillage.com, was started with a similar mission, and was featured in a range of newspapers. The project's goal was to "establish a one to one relationship between producer and consumer in order to promote exchanges and mutual respect." Both

---

<sup>47</sup> However, despite being extremely economically successful, the project ultimately upset existing village relations and as a result is no longer in existence (Leinbach 2001).



EZiba.com and Ethicvillage.com have now ended operations. EZiba.com went into bankruptcy in 2005. Ethicvillage.com is no longer a functioning website.

One in-depth research project in Thailand has found that firms with web sites are generally able to increase sales (UNCTAD 2007). Perhaps because of such studies, Vanichvisuttikui and Jungthirapanich (2004) are similarly optimistic about the potentials of the Internet to promote Thai craft industries<sup>48</sup>. The authors lament the lack of Internet access in rural Thailand, arguing that it is precisely this lack that is keeping craft producers from exporting their wares. Vanichvisuttikui and Jungthirapanich state:

*Without the infrastructure, how could these rural people learn the technology to have the knowledge concerning the development of e-commerce? Also, how could they distribute their products to compete in the worldwide market? (Vanichvisuttikui and Jungthirapanich 2004: 74)*

Recently, the Thaitambon.com project has been touted as a way to way to connect rural Thai producers of crafts with distant markets without the need to go through intermediaries. A 2003 UNCTAD report notes that:

*Tambon Net [Thaitambon.com] is regarded as a good example of rural development using the Internet. It has increased the average monthly community income by \$240, to \$730.38 It has expanded the sellers' market to Bangkok and other big cities (both retailers and wholesalers), as well as foreign markets (UNCTAD 2003: 87).*

Poon and Jevons (1997: 34) state that “because the Internet creates a ‘borderless’ virtual business platform on which suppliers, customers, competitors and network partners can freely interact without going through the pre-defined channels on the value chain, members of the same business network or of different networks can by-pass the traditional interaction patterns and form virtual value chains” (for a similar argument see

---

<sup>48</sup> Optimism about the potentials of the Internet in the context of crafts industries is not unique to Thailand. A USAID sponsored report on issues of gender, IT, and development, for example, highlights the ability of the Internet to economically empower women by allowing them to sell crafts to distant markets (Hafkin and Taggart 2001).

Benjamin and Wigland 1995). As such, “the Internet has diminished many of the information asymmetries (and hence power asymmetries) between sellers and buyers” (Gereffi 2001b: 1628). Firms in ‘developing nations’ can use transparency brought about by the Internet to find new customers in order to ‘escape local de facto monopolies’<sup>49</sup> (UNCTAD 2002, 2005; Goldstein and O’Connor 2000). In a borderless world, it is argued that historical competitive advantages such as firm size become irrelevant because the Internet can “level the competitive playing field by allowing small companies to extend their geographical reach and secure new customers in ways formerly restricted to much larger firms” (OECD 1999: 153; see also UNCTAD 2006b).

The arguments above, interestingly move beyond viewing the Internet as a tool for disintermediating commodity chains, and also see it as a technology with the power to accomplish an unfettered geographic expansion of markets. Purcell and Toland (2004: 241) claim: “ICT[s] offer the opportunity to reduce the barriers of distance, and give...countries better access to the global economy.” According to the International Telecommunication Union, the Internet “provides developing countries with a unique opportunity to compete in market places that were beyond their reach”<sup>50</sup> (Ntoko 2007: 1).

The ideas that the Internet will allow for geographic expansion and disintermediation are deeply intertwined, and rest on a very particular spatial ontology. For both geographic expansion and disintermediation to occur, the Internet needs to bring consumers and producers into the same cyber-marketplace. To do this, cyberspace needs to take on an ontic role. The assumption here is that cyberspace is both an ethereal alternate dimension that is infinitely accessible (from any connected portal on the planet), and fixed in a distinct (cyber-) location (the virtual marketplace in which all producers and consumers transact with one another). Using the Internet to transport producers and consumers into co-presence in a virtual marketplace thus means that both

---

<sup>49</sup> A classic example of the Internet bringing about market transparency is relayed by Anderson (2005), who describes the planned use of the Internet to allow Laotian villagers better understand the market price for their crops in nearby towns.

<sup>50</sup> Overå’s (2006) case study of the ways in which cell phones are used by informal traders to facilitate long-distance trade lends support to this argument.

physical barriers and the intermediaries who throughout history have served as bridge over physical distance are rendered largely irrelevant (to the transactions that are supposed to happen between producers and consumers).

This is not to say that degrees of nuance have not been added by commentators focusing on the uses of e-commerce by firms to find new and distant customers who wish to move beyond the idea of a 'borderless world' enabled by information and communication technologies (ICTs) (Hamill and Gregory 1997; O'Keefe, O'Connor, and Kung 1998; Daniel and Grimshaw 2002; Poon and Swatman 1999; Kim and Mauborgne 1999). The authors retain the assertion that ICTs have the power to fundamentally restructure commodity chains; they disagree, however, on the effects that the Internet can, and will, have. Sarkar et. al. (1998) argue that new types of intermediaries (cybermediaries) will emerge in commodity chains, while Quelch and Klein (1996) posit that many producers of goods may be unprepared for disintermediated production chains.

Although the work mentioned above is important in developing a preliminary understanding of the effects of ICTs on commodity chains, its Western bias renders that body of literature less pertinent to this project. Despite the existence of a few case studies and myriad reports in the popular press about previously disconnected people using the Internet to disintermediate and connect directly with consumers (Rhodes 2003; Chandrasekaran 2001; Kuchinskas 2005; Sambandaraksa 2006; Bijoy 2003; Amighetti and Reader 2003), there has not yet been a comprehensive body of empirical work produced which examines the effects of ICTs in commodity chains.

Drawing on Kessing and Lall (1992), Gereffi et. al. observe that as suppliers in developing nations are integrated into global value chains, they are often required to meet production requirements not applicable in their local markets (see also: Lyon 2006; Mutersbaugh 2004; Mutersbaugh et al. 2005). This, in turn, increases the amount of control required and exerted by buyers and also sets up a gap between capabilities needed for domestic markets and capabilities for export markets. Raikes et. al. (2000: 393) note: "Participation in a GCC is a necessary, but not sufficient, condition for

subordinate agents to upgrade [from hierarchical and captive network value chains to relational, modular, and market types of chain], and one which involves acceptance of terms defined by key agents as a condition for participating in the chain.” Kaplinsky (2000) similarly observes that it is not if, but how, producers are integrated into GCCs that determines the benefits that they can potentially receive. Power, and the ways that flows of commodities are coordinated and controlled by key agents thus become crucial issues for understanding up- and down-stream flows of activities and agents.

### **Wormholes and Power-Geometries**

*“The great power struggles of cyberspace will be over network topology, connectivity, and access-not the geographic borders and chunks of territory that have been fought over in the past” (Mitchell 1995: 151).*

The basic idea of a commodity chain is that it is shaped by the ability of each node in the chain to extract surplus as commodities move from producers to consumers (Anderson and Coughlan 1987). Distance necessitates lengthy and complex commodity chains, and consequently the extraction of increasing amounts of surplus (Frank 1966; Rangan, Menezes, and Maier 1992). This idea can be put to the test by imagining a situation where producers and end-consumers occupy the same space; in many cases there would be no need for a commodity chain, and there would be no surplus extracted by third parties. Producers and consumers would have little reason not to buy from each other<sup>51</sup>. Yet, as technologies lead us to reconsider distance and relative positionalities, we must also rethink commodity chains and ask whether absolute distance is as important of a determinant of the structures of commodity chains as it once was. Or, in other words, can the Internet, by altering relative geographies and creating shared virtual spaces, dramatically shorten GCCs?

---

<sup>51</sup> This is not to say that (in this hypothetical world in which producers and end-consumers occupy the same space) producers and consumers would not have any reasons to use intermediaries. Language and cultural barriers are two conceivable reasons why intermediaries might still occupy a niche.

Two concepts – wormholes and power-geometries, developed respectively by Eric Sheppard (2002) and Doreen Massey (1993) – are useful ways of: first conceptualizing non-proximate positionalities within commodity chains; and second, taking into account the power relationships embedded in non-proximate relationships.

### *Wormholes*

Eric Sheppard (2002) introduces the concept of a wormhole to describe non-Euclidean<sup>52</sup> geographies of positionality (a specific position within the global economy). The wormhole concept, while not entirely novel, is an interesting way to conceptualize the ways in which networks can be both specific and contingent and jump over or largely ignore in-between spaces (Latour 1991; Graham 1998). Positionality is used to capture “the shifting, asymmetric, and path-dependent ways in which the futures of places depend on their interdependencies with other places” (Sheppard 2002: 308).

Wormholes thus provide a way to conceptualize how disintermediation in commodity chains can alter relational positionality. Understanding spatial proximity is therefore not a purely Euclidean exercise, as any node on a commodity chain (e.g. an American silk retailer) could be seen to be ‘close’ to another node such as a Thai silk manufacturer<sup>53</sup>. Any move to disintermediate a commodity chain, by using the Internet to directly connect producers with consumers theoretically creates a wormhole in which two or more nodes/people/places jump over nodes/people/places that were previously intermediaries.

Much has been written on the links between physical nearness (or distance) and social and economic interaction, and numerous commentators have described disintermediation through wormholes as a form of ‘despatialization.’ Eldridge and Jones

---

<sup>52</sup> Euclidean distance refers to the absolute, straight-line, distance between two points (as can be measured using a ruler or GPS. Euclidean geography is an understanding of space based upon Euclidean distance. For example, if using a Euclidean metric to describe distances between world cities, it could be stated that Cape Town is almost exactly four times as far away from London (6,011 miles) than Athens (1,500 miles) irrespective of the cost- and time- distances between the two places.

<sup>53</sup> The retailer would be far away if measured in absolute miles according to latitude and longitude, but near if measured through the wormhole that provides countless communication, images, sounds, and other economic and social interactions

(1991: 500) note that “few concepts are more central to the discipline of geography than distance decay. Distance plays a role in the distribution of ideas, technology, population, [and] interactions of various types.” Drawing inspiration from Newton’s Law of Universal Gravitation, Waldo Tobler has invoked the first law of geography: “Everything is related to everything else, but near things are more related than distant things” (Tobler 1970: 236).

As it becomes possible to alter relational distance using ICTs, authors such as Richard O’Brien (1992) and Frances Cairncross (1997) have asserted that space and distance are of less significance for economic and cultural activities. Gillespie and Williams (1988) similarly argue that the convergence of time and space brought about by communications technologies will eliminate the geographic frictions that help to shape spatial differences, while Pascal (1987) notes that ICTs can de-centralize space and transform any form of agglomeration into a mere holdover and relic of the past. Following this line of thinking, wormholes can wholly unsettle Tobler’s first law of geography, and distance no longer becomes a determinant of economic interaction.

However, far from being uniformly distributed, communications technologies and opportunities for production and consumption have distinct geographic biases (Castells 2002; Dodge and Kitchin 2001a; Zook 2000; Townsend 2001). Instead of enabling the death of distance, sociotechnical networks have always represented geographies of “enablement and constraint” (Law and Bijker 1992: 301). Graham (1998: 179) sums up this point by stating that “rather than simply being space and time transcending technologies, telecommunications systems actually act as technological networks within which new spaces and times, and new forms of human interaction, control and organization are continually constructed.”

The death of distance idea has long been discredited by geographers. However, the notion that technology can render geography obsolete has remained a compelling and powerful discourse. Many writings on “the virtual marketplace,”<sup>54</sup> explain away

---

<sup>54</sup> E.g. Kebede’s (2001:2) quote that “Electronic commerce is now giving us an option by enabling the producer and the consumer to meet in the information super high way and transact at our will without any intermediary whatsoever”.

geographic friction and spatial barriers to interaction by simply citing the presence of the Internet. None of the writings cited earlier that employ the idea of a virtual marketplace underpin their visions with spatially-focused theory. Virtual marketplaces are nonetheless (as mentioned earlier in this chapter) usually presented as being infinite and fixed. Moreover, I would argue that while wormholes<sup>55</sup> are not specifically employed in any of the quotes relating to cyber-marketplaces and disintermediation, a similar idea is employed to bring into being the idea of virtual marketplaces (albeit in ways likely not intended by Sheppard). In such conceptions, the positionalities of producers and consumers are presented as being in need of interventions that can facilitate more direct forms of commerce. Wormholes are seen as a way to transport producers and consumers into a shared cyber-marketplace, bypassing the two main impediments to direct trade (geography and intermediaries).

Yet, it remains that there is no convincing evidence that the Internet and wormholes will ever be able to fundamentally nullify the economic, political, and cultural effects of distance. I would thus contend that, far from making geography less relevant, wormholes stimulate ‘respatialization.’ The fact that spatial relations are less visible and linear does not mean that they are less relevant. Instead of universally shrinking space, ICTs are reorganizing space, and reforming networks. Commodity chains stretched out over space will not disappear onto the head of a pin, but will continue to link people, places, and nodes—albeit often in complex and non-Euclidean ways.

### *Power-Geometry*

*“Commodity chain analyses can (and should) be employed to consider the complex and shifting power dynamics between sites: to open up tensions and anxieties in the multiple sets of relationships between producers and consumers” (Leslie and Reimer 1999: 416).*

---

<sup>55</sup> In the sense that wormholes are friction-free conduits between people or places.

Doreen Massey's (1993) concept of power-geometry draws on non-Euclidean geographies in order to socially differentiate time-space compression. She contends that by utilizing the concept of power-geometry, power can be seen to be both reflected and reinforced by mobility and by control over mobility. Massey states:

*I want to make one simple point [about] the power-geometry of time-space compression. Different social groups and different individuals are placed in very distinct ways in relation to flows and interconnections. This point concerns not merely the issue of who moves and who doesn't, although that is an important element of it; it is also about power in relation to the flows and the movement. Different social groups have distinct relationships to this anyway-differentiated mobility: some are more in charge of it than others; some initiate flows and movement, others don't; some are more on the receiving end of it than others; some are effectively imprisoned by it (61).*

Massey notes that "it is not simply a question of unequal distribution, that some people move more than others, some have more control over others. It is that the mobility and control of some groups can actively weaken other people. The time-space compression of some groups can actively weaken other people" (62). The hypermobility of capital has been observed by many commentators to weaken the bargaining power of relatively immobile workers. However, using the concept of power-geometry, Massey takes this argument a step further. She points out that every time a person drives to a suburban shopping center, they undermine both the viability of the public transport system and more local retail establishments. In other words, the relative mobility and high levels of access to ICTs by one person potentially furthers the spatial imprisonment of others who have less power over mobility. She concludes that "conceptualizing space, mobility and access in a more socially imaginative way, and abandoning easy and excited notions of generalized and undifferentiated time-space compression, might enable us to confront some of these issues rather more inventively" (63).



In order to effectively think about places in a globalized world, Massey suggests that we reconsider places as processes. Places have multiple identities and cannot be contained by boundaries. Because of time-space compression, places are a coming-together in a specific space and time of a constellation of relations that are stretched out in time and space. A place, thus, can never be explained solely by itself, and imagining a place in this way provokes a truly global sense of place.

By employing the idea of power-geometries, the effects that wormholes and the Internet have on the nodes of commodity chains that they connect can be brought to the fore in this study. The idea allows a movement away from Tobler-ian understandings of how economic actors can have non-proximate influences on one another<sup>56</sup>, without resorting to the “death of distance” hypothesis. Thus, instead of imagining that the opening-up of wormholes between all places connected to the Internet can result in large-scale time-space compression, and ultimately bring all connected physical places into the same virtual space, the notion of power-geometry can be used to envision the complex ways in which wormholes and time-space compressions effect economic actors. Although Massey does not mention commodity chains in her discussions of power-geometry, it is useful to apply the idea to the effects of time-space compression in commodity chains. By employing power-geometry as a heuristic, potential topological changes to commodity chains can be viewed as pre-requisites rather than determinants of altered relationships of power within chains<sup>57</sup>.

For example, disintermediated commodity chains might in theory connect Thai silk producers in the Northeastern Thai town of Chonnabot with British silk merchants. However, if only one actor in Chonnabot (the owner of a silk weaving firm) serves as gatekeeper to the rest of the commodity chain, that actor has the potential to create a power-geometry that is highly beneficial to her/himself. The benefits of wormholes and disintermediation (i.e. an increase in the amount of surplus captured) might therefore

---

<sup>56</sup> i.e. distant EAs will be unlikely to have strong effects on one another.

<sup>57</sup> The idea that power within commodity chains is not correlated to topology can of course be discussed about without relying on the power-geometry heuristic. Power-geometry is nonetheless a useful device to highlight the connected and contingent power relationships within any chain, or more generally to focus on how “the ways in which people are inserted into and placed within ‘time-space compression’ are highly complicated and extremely varied” (Massey 1993: 62).

effectively terminate at the Chonnabot gatekeeper. The power-geometry here is that by using Internet technologies within a silk commodity chain, an intermediary (potentially) actively harms other EAs in similar commodity chains by redirecting flows of silk and capital.

More generally, many observers and commentators in the Thai silk industry recognize that altered positionalities will result in altered power-geometries. As such, the Thai silk industry's precarious economic position<sup>58</sup> invites a variety of interventions from Thai government agencies, NGOs, and private actors in the guise of "economic development". Economic development projects take a variety of forms, but almost always revolve around expanding the market for silk and becoming more globalized. However, as the following section will show, the use of the Internet to open up wormholes, and reconfigure positionalities and power-geometries in order to reach or create new markets can also have undesirable effects.

## **Globalization and Development**

*People lack many things: jobs, shelter, food, health care, and drinkable water. Today, being cut off from telecommunications services is a hardship almost as acute as these other deprivations, and may indeed reduce the chances of finding remedies to them. - Former UN Secretary General, Kofi Annan, speaking in Geneva (Mujahid 2001).*

*Like sharks drawn to blood in the ocean, a whole host of consultants, academics, vendors, and development organization staff have been drawn in to the e-development arena by the scent of money. Others-like the serial divorcees convinced that the next marriage will be the one that works –are drawn in by the hope that, this time, a real answer to the problems of development has been found (Heeks 2002:1).*

---

<sup>58</sup> Many of the problems faced by the Thai silk industry were discussed in the previous chapter.

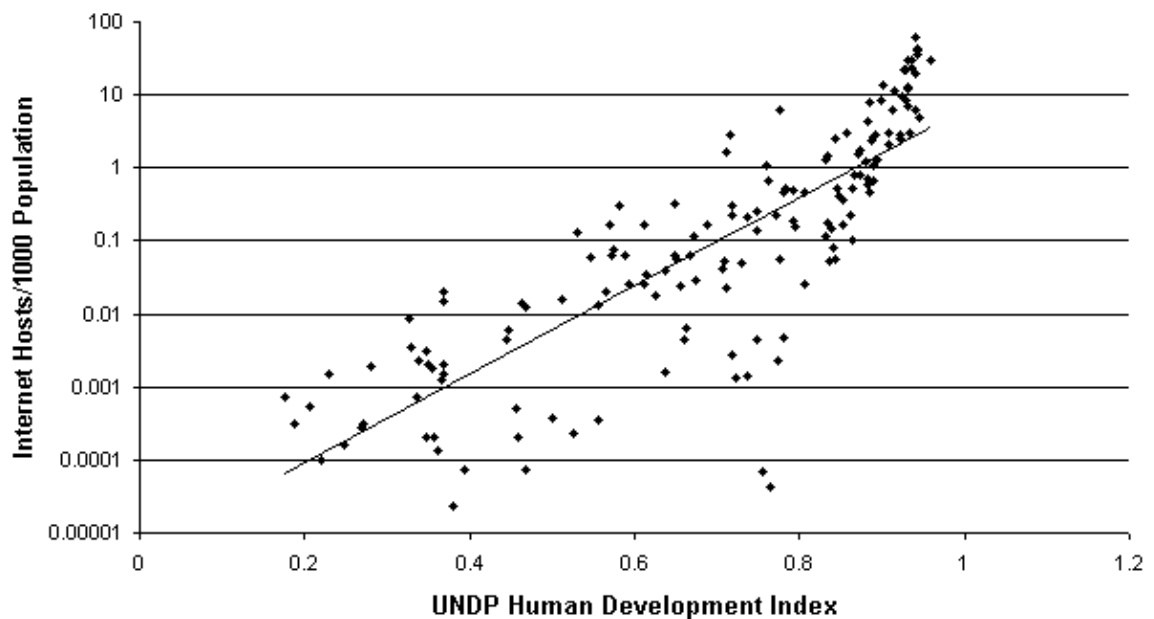
In this section I will briefly review some of the debates surrounding the concepts of “globalization” and “development.” I then examine how these debates are relevant to commodity chains in the Thai silk industry.

Debates about globalization and development have become highly pertinent to the Thai silk industry; especially as ICTs are increasingly being employed as tools to foster economic connections with the outside world. Some economists proclaim that it is “the absence of globalization – or an insufficient dose of it – that is truly to blame for...inequities. The solution to geography’s poverty trap is for developing countries to become more globalized” (Hausmann 2001: 53; see also Friedman 2001; Nissanke and Thorbecke 2006). In such formulations, globalization becomes a necessity in order to create a level playing field on which the poor can compete (see Friedman (2005) and Gates (1996)); while “Autarchy is not a viable option in an interdependent world where for most countries delinking means marginalization” (Gereffi 1995: 142). Countless reports designed for an international audience of policy makers and academics point to strong correlations between measures of development and connectivity (for example figure 2.1).

Such ideas are widely held, as can be seen through an examination of The Monterrey Consensus (United Nations 2002) which was reached by a recent meeting of world leaders and which acknowledges the necessity of international trade as an engine for development. The idea that globalization can be harnessed as a tool to improve the economic condition of pre-globalized groups of people is grounded in neoliberal economic theories which rely on the logic of the marketplace. By allowing the market to regulate society instead of being regulated by society, it is argued that market forces will solve the world’s development problems by effectively governing and creating wealth for all participants (Hirschman 1981; Lal 1983, 1985; Berthoud 1992). It is often argued that production for non-local markets (or exporting) is required for any producer to become familiar with global standards and norms and thus remain competitive (Roessner and Porter 1990; Baily and Gersbach 1995). Furthermore, the argument has been presented that export-oriented production will help producers survive global competition

by encouraging them to blend new and old ideas (Ichimura 1990). Such ideas are not new, and early commentators on economic development were stressing the need for producers to be integrated into distant markets. Myint (1954: 157), prior to the invention of the Internet (and the idea that the Internet can disintermediate commodity chains), notes: “we shall see then that the real damage done by the middlemen lies not in their 'exploitation', considerable as it may be in many cases, but in the fact that they have put themselves between the backward peoples and the outside world and have robbed the latter of the educating and stimulating effect of a direct contact”. In sum, this line of argument asserts that if producers are not closely linked into global or distant markets they will be uncompetitive and will consequently be unlikely to find an economic niche to fill (Malecki 1997). and disintermediation using the Internet becomes an obvious way to alleviate some of Myint’s concerns.

Figure 2.1: Correlation between hosts per capita and UNDP Human Development Index<sup>59</sup>



Neoliberal arguments such as the ones presented above have become imbued in a variety of development discourses (c.f. Toye 1993). Authors such as Byrom and

<sup>59</sup> Copyright © International Labour Organization 2001. Source: (Tanburn and Singh 2001: 8). The International Labour Organization grants permission to reproduce this figure.

Medway (2004) laud the fact that electronic connections to world markets have the potential to offer physically remote areas access and proximity to increase income streams. A number of reports published by the UN highlight the idea that ICTs can effectively help to alleviate poverty (United Nations Development Programme 2005; United Nations 2003b; Harris 2004), and the World Bank frequently promotes investment in ICTs in developing countries, pointing out that “infrastructure is a major bottleneck to growth and poverty alleviation in developing countries” (World Bank 2005). An OECD report states that “ICT[s] can have a levelling effect, giving poor countries and poor people access to markets, information, and other resources that would otherwise have been inaccessible” (Goldstein and O'Connor 2000: 1). Empirically-grounded reports published by the UNU World Institute for Development Economic Research similarly claim that ICT adoption is correlated with income (Baliamoune 2002) and the ability to export (Clarke 2002). In sum, adoption of the Internet is widely described as necessary for the stimulation of economic development in poor regions (Hammond 2001; Ishaq 2001; Steinmueller 2001; Coer De Roy 1997; Campbell 2001; Geldof 2005; Grimes 2003), and the UN Conference on Trade and Development’s seventh Information Economy Report went so far as to call it as necessary as electricity and water (Bangkok Post 2006). Perhaps the clearest argument in favor of using ICTs to bring wealth to impoverished regions was articulated by Love and Love (1999: 27):

*The third world has huge and well-recognised e-commerce and marketing potential... The third world is also a great reservoir of untapped talent, which if helped, would flourish rapidly, joining and contributing to the developed world’s economy.*

A number of commentators have recognized that these development epistemologies can be applied to craft producers in poor areas of the world. Goldstein and O'Connor (2000: 6) note that “to date, much discussion has focused on B2C applications for OECD entrepreneurs, but there is growing evidence of a significant potential for developing countries, notably artisans in traditionally low technology

sector.” These ideas have been applied to the Thai silk industry in a number of instances. Development projects such as the ‘Room for Life<sup>60</sup>’ and Thaitambon.com seek to restructure traditional commodity chains in the silk industry from the village upwards. Integral to these projects are strategies of disintermediation that enable producers to sell directly to consumers. As a result, the incomes of producers are significantly raised (at least in theory), but not without fundamental transformations to existing commodity chains.

Many development projects that aim to reduce the ‘digital divide’ conflate spatial and temporal differences (Selwyn 2004). Poorer places<sup>61</sup> are positioned behind on a pre-determined path of development, while globalization and increased connectivity are viewed as pathways to advanced states of development (Cox 1998; Massey 1999, 2005). Aspatial discourses such as those asserting that Thai silk producers need to better integrate into the world economy in order to ‘catch-up’ (Sat-Ed 2006) can be truly powerful because they possess the discursive power to shape material processes (Escobar 1992; Gibson-Graham 1996; Kelly 1999; Massey 2005).

Counter-arguments are offered by those who see globalization and improvements in communication and transportation technologies as tools that enable and give shape to processes of neo-colonialism, and exploitation (Hardt and Negri 2000; Richmond 1994; Balakrishnan 2003). The early dependency theorists observed that the integration of “Third World” economies into first world markets created a state of dependence (Frank 1966, 1979; Baran 1957; Prebisch 1981). Dos Santos (1970: 231) describes such dependence as “a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected.” Loosely drawing on the work of dependency theorists and post-colonial theorists, commentators such as Sardar (1996) see the Internet “as a new phase in a long history of the West’s attempt to colonize not only the territory and the body but also the mind of

---

<sup>60</sup> <http://www.sat-ed.com/Buyfromthevillage1.htm>

<sup>61</sup> It has always been the case that people living in poor districts, cities, and countries are far less likely to have access to ICTs than people living in wealthier places (Jipp 1963; Kenny 2001; Chakraborty and Bosman 2005). The UNCTAD has found that people in high-income countries are twenty-two times more likely than people in low-income countries to use the Internet (UNCTAD 2006a).

the Third World ‘other’ ” (Schech 2002: 18; see also Visvanathan 1988). Domination can be extended to distant spaces through the knocking down of virtual and physical barriers (Adams 1995). By taking places out of their isolation and placing them in a global village, such places are thrust into the hegemony of Western knowledge and capitalism (Alvares 1992; Escobar 1995a, 1995b; Pieterse 2001). Producers then grow dependent on unstable market conditions and distant consumer preferences (Dahles and Zwart 2003; Ohno and Jirapatpimol 1998). Profitable elements of local cultures (such as silk making) are packaged and integrated into the network, while others are potentially ignored, both by distant consumers and local people. This dynamic can also have harmful effects on the crafts being produced: “the decline of craftsmanship, their simplification, the denigration of aesthetic and material culture and the loss of their symbolic and functional value, [...and] the subjection of indigenous groups to the external exigencies of the commercialization process” (Dahles and Zwart 2003: 146; see also; Ariel de Vidas 1995; Parnwell 1993; Escobar 1995a).

### **Globalization, Development and Commodity Chains**

*“The new digital era of globalization is characterized by a dramatic increase in connectivity that is melting the informational glue that holds corporations and global value chains together” (Gereffi 2001b: 1618)*

Commodity chains are integral to globalization because economic relations are seldom within local, national, or even regional scales of analysis. While modernization theorists often share the epistemology that the nation is the primary locus of capital accumulation, “global commodity chains allow us to focus on the creation and distribution of global wealth as embodied in a multidimensional, multistage sequence of activities, rather than as an outcome of industrialization alone” (Gereffi, Korzeniewicz, and Korzeniewicz 1994:13). Commodity chains allow a reformulation of conceptual categorizations that can be used to understand changing structures of economic organization. As a result, the commodity chain paradigm can address development issues

by focusing on networks, processes, and the trajectory of individual enterprises and commodities.

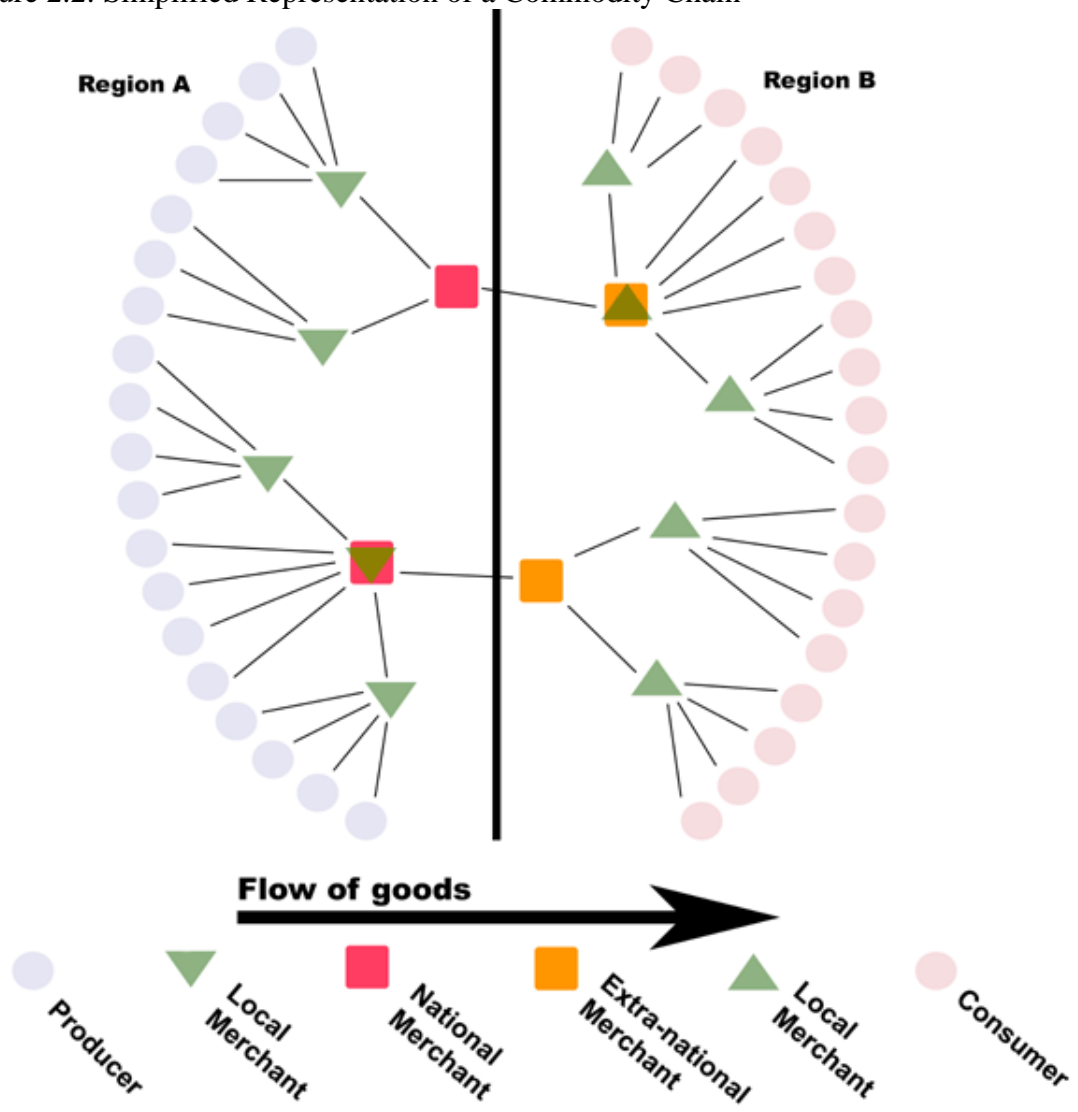
In order to ‘harness globalization’ and ‘reap the benefits of development’ (or conversely, to bring the harmful effects of an external market to bear on a place) an economic actor might consider two alterations to traditional commodity chains: the commodity chain could be disintermediated, thus allowing more surplus to be captured by the producers; or the chain could be reconfigured so that it has a stronger focus on international markets. Figure 2.2 displays a highly simplified representation of a commodity chain involving Thai silk that is partially sold abroad. There are a number of intermediaries between the producers and consumers. The silk made by producers might be for both domestic and international consumption. This model might be best represented by the ‘market’ or ‘modular’ types in Gereffi et. al.’s (2005) discussion of value chain governance.

In the context of development debates and programs, disintermediations of commodity chains rely on respatialization, altered positionalities, and wormholes. The Internet, by opening up wormholes, is presented as a way to bring buyers and sellers into a shared virtual marketplace. In doing so, both intermediaries and distance are rendered less relevant: producers can not only sell to consumers without having surplus extracted by intermediaries, but they also can sell to consumers located anywhere on the globe.

This can be done in a variety of ways. In a partially disintermediated chain, such as figure 2.3, we see a foreign merchant as the link between producers and international consumers. Upstream wormholes are opened between the foreign merchant and her/his suppliers, and downstream wormholes between the merchant and her/his customers. In a commodity chain in a full state of disintermediation (e.g. figure 2.4), positionalitiy has been fundamentally altered by wormholes and end-consumers can buy directly from producers.

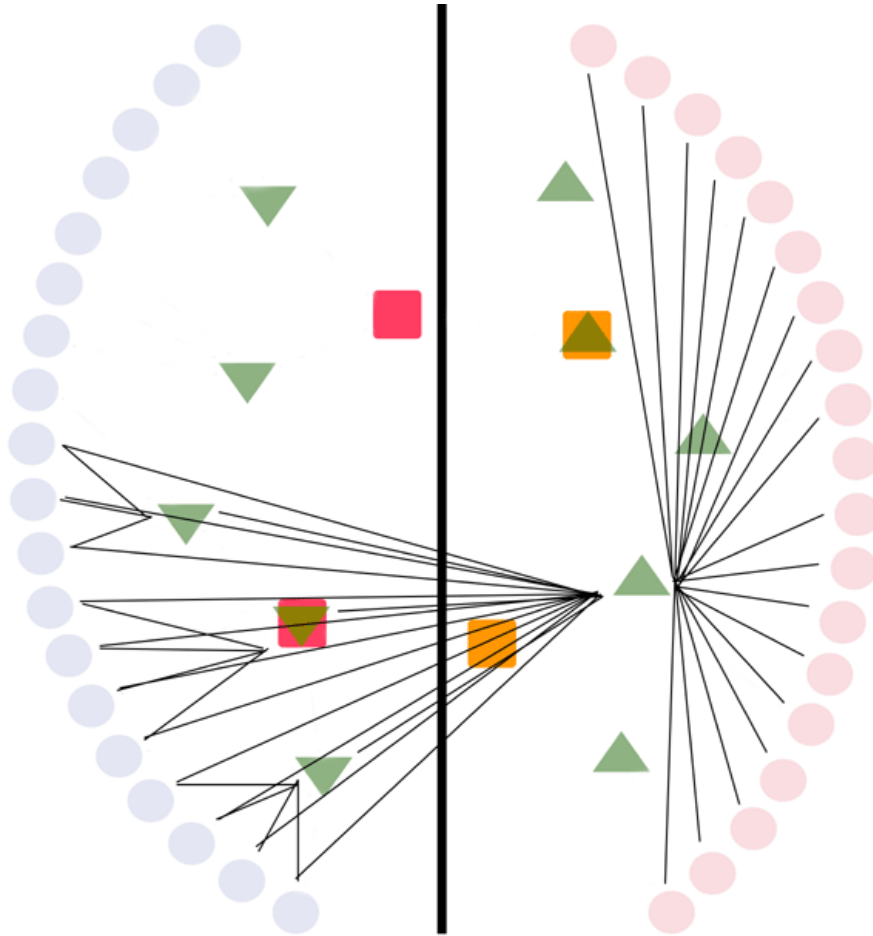


Figure 2.2: Simplified Representation of a Commodity Chain<sup>62</sup>



<sup>62</sup> The following three representations of commodity chains are reproduced from Graham (2008).

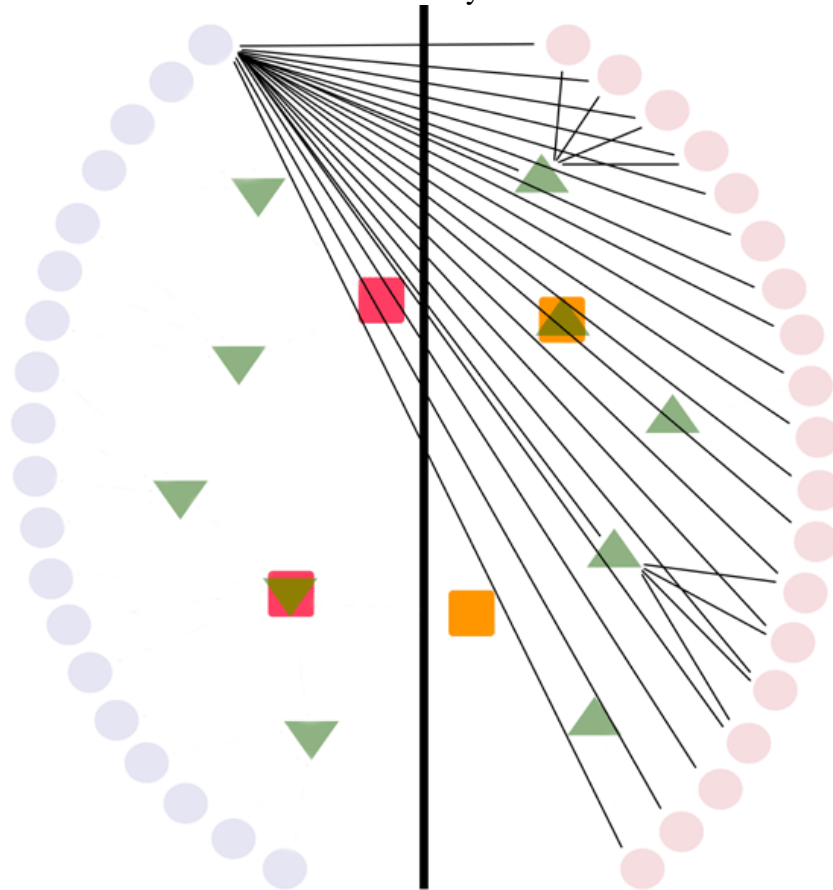
Figure 2.3: Partially Disintermediated Chain



Network structure is thus a highly-significant component of power-geometries in the Thai silk industry. Each node on the commodity chain relies on the many other nodes it buys from and sells to. Geography has always played a major (but not absolute) role in influencing which nodes occupy beneficial positions of power. Weavers in the Northeast of Thailand are geographically distant from most markets, and consequently rely on intermediaries who serve as a link between themselves and customers. In this situation, end-consumers rarely venture into the spaces inhabited by producers, and producers likewise rarely enter into many of the spaces of (end-) consumption. This lack of spatial proximity between producers and consumers allows intermediaries to pay low wages and charge high prices. Traditional power-geometries have thus not been kind to producers. Yet, a hope in the development literatures is that by altering commodity chain structures,

the Internet will also transform power-geometries within the silk industry. However, as mentioned earlier, these hopes often rest on the idea that the Internet can bring producers and consumers into co-presence in a virtual marketplace rather than the notion that the Internet will facilitate communication through highly individualized wormholes.

Figure 2.4: Disintermediated Commodity Chain



These hopes and the various spatial ontologies that they rest upon remain largely unexplored and untested. Research on economic development and ICTs has most frequently focused on macro-level characteristics of regions and industries. There is surprisingly little research on the intersections between ICTs, disintermediated and globalized commodity chains, and economic development - especially as these topics pertain to small-scale craft producers. Through an in-depth study on the attempted uses

of the Internet to disintermediate chains in the Thai silk industry, this dissertation aims to fill that gap.

## **Research Questions**

The study is focused on five interrelated questions: (a) At which nodes in the production chain is the Internet being used?; (b) How has the introduction of the Internet altered production chains and the flows of capital in the Thai silk industry?; (c) How are these changes altering the socio-economic conditions of actors who are involved in reconfigured production chains?; (d) What are the relationships between contemporary discourses about the economic benefits of disintermediated commodity chains and the actual effects of disintermediated commodity chains?; and (e) Are older local silk making traditions being replaced as producers interact with distant consumers through the Internet? Through these questions I will examine the ways in which the Internet has been integrated into the Thai silk industry, probe the effects it is having, and relate these findings to theories of economic development and globalization.

These questions will be answered with data from: (a) a content analysis of websites and policy documents put forth by silk merchants and NGOs that use the Internet; (b) surveys completed by silk merchants and managers of cooperatives that use the Internet; (c) face-to-face surveys with a sample of merchants and producers that do not necessarily use the Internet; and (d) in-depth interviews with silk merchants and producers. The following chapter (chapter three) offers detailed commentary on the methodologies used to collect data.

Subsequent chapters then address each research question in turn. Chapter four asks at which nodes in the production chain the Internet is being used. The chapter demonstrates that the Internet is being used primarily by merchants in Bangkok as opposed to at the sites of production in the Northeast of the country. Chapter five looks at whether the introduction of the Internet has altered production chains and the flows of capital in the Thai silk industry. The chapter reveals that the Internet, in most cases, in

resulting in very little change to commodity chain reach and topology. While some EAs are able to use the Internet to sell to distant customers, disintermediation is rarely happening in the commodity chains of Thai silk. The original intent behind chapter six was to look at how changes to commodity chains are altering the socio-economic conditions of actors who are involved in those chains. However, because so few changes are occurring, the chapter instead explores and discusses some of the reasons why the Internet is failing to live up to its much touted promises. Chapter seven first looks at some of the discourses being put forward on the websites of EAs that sell silk, and then compares some of the economic claims made on those websites to salary and pricing data of silk collected from surveys. The chapter reveals that there is little empirical evidence to support claims that the Internet is either allowing wages to be raised or prices of silk to be lowered. Finally, chapter eight asks whether older local silk making traditions are being replaced as producers interact with distant consumers through the Internet. The chapter shows that many of the fears about traditional practices being replaced as producers become integrated into global networks are being realized.

## **CHAPTER 3**

### **METHODOLOGY**

I have used a four-step methodological approach to answer the research questions above. First, I performed a content analysis of websites and policy documents put forth by EAs that use the Internet to sell silk. Second, I carried out institutional surveys with silk merchants, producers, and managers of cooperatives that use the Internet. Third, I conducted face-to-face surveys with a sample of merchants and producers that do not necessarily use the Internet. Finally, I interviewed a select set of silk producers at sampled firms and cooperatives.

The major field research was conducted in Thailand from February 2007 through July 2007. I kept an apartment in Bangkok, but made frequent trips to the Northeast and based myself at a hotel in the city of Khon Kaen. Because of the significant language barrier (i.e. the wide range of dialects spoken in the Northeast of the country), I worked with local researchers and interpreters to translate conversations, questionnaire materials, and responses for most of this project. I rarely travelled long distances with interpreters, but instead chose to use contacts at regional universities to locate assistants at each location. Additionally, from January 2008 until July 2008, I returned to live in Bangkok. During this period, the manuscript was drafted, and some follow-up interviews were conducted.

#### **Preliminary Research**

Preliminary research was conducted in the summer of 2006 in order to field test and further develop some of the research questions and ideas in this project. I met with professors and graduate students at Khon Kaen and Mahasarakam Universities in the Northeast of Thailand. I also had a number of meetings with the leaders of NGOs such as silknet, which markets village-produced silk from Northeast Thailand and

Thaitambon.com, which sells Thai crafts on the Internet. My meetings focused on the uses of ICTs as a disintermediating tool of economic development. A major component of the preliminary research was to establish whether firms and cooperatives would be receptive to allowing me to study them over a longer time span. I talked to a number of silk producers and sellers throughout the Northeast and in the markets of Bangkok. These interviews further allowed me to preliminarily identify groupings of EAs involved in the sale of silk. In addition, I pilot tested the surveys used in this dissertation and took notes on how to improve and redesign them.

## **Sampling Strategy and Sample Description**

### *The 'Internet Adopters'*

Two groups of EAs are included in this study. The first group, the 'Internet Adopters' consists of producers and merchants that sell Thai silk with the assistance of at least one webpage. To be included, members of this group can be located anywhere, but must devote a substantial amount of their website to the selling of Thai silk. The 'Internet Adopters' were discovered by using a variety of keyword searches. The search engine Google was initially used to discover the majority of websites selling Thai silk. Google was employed for two reasons. First, the company has indexed the majority of websites in cyberspace. Second, even though Google by no means offers an unbiased or scientifically neutral ranking of pages, highly ranked pages are generally those that are active and receive a relatively large amount of web traffic (Introna and Nissenbaum 2000; Lewandowski 2005; Cotlier 2001; Cotriss 2002). During the months of November and December 2006, using the keywords: [Thai + Silk], and [Thailand + Silk] one hundred and thirty nine websites were discovered. I am confident that these sites indexed by Google represent a majority of active websites that sell Thai silk.

The Google searches led me to a few web pages that are hosted on third party sites, most notably eBay and etsy.com. I then performed secondary searches on eBay, etsy, and other third party sites. These secondary searches were carried out because there

is time lag of a few weeks between the posting of a new page and its inclusion in Google's search engine. Moreover, the search engine appears to discard older eBay auctions. Over a period of six weeks during November and December 2006, I performed six different searches on eBay and Yahoo! Auctions for [Thai + Silk], and [Thailand + Silk]. By doing so, I discovered thirty additional sellers that regularly sell Thai silk.

### *'Thai Silk Sellers'*

The second group, Thai Silk Sellers, consists of merchants and silk producers in Thailand that were found without the assistance of the Internet. All members of group two were contacted between February and June 2007. The initial goal was to enlist eighty 'Thai Silk Sellers' from four sub-groups:

- (a) silk merchants in Bangkok;
- (b) silk merchants in Khon Kaen and Nakhorn Ratchasima (the two commercial silk centers of the Northeast);
- (c) silk producing firms in Northeast Thailand;
- (d) self-employed silk weavers in Northeast Thailand.

I had originally planned to select silk merchants in Bangkok, silk merchants in the Northeast, and silk producers in the Northeast from lists provided to me by the Thai Silk Association (sub-group a), professors at Khon Kaen University, and the Korat Silk Association (sub-groups b and c). However, the lists that I secured contained fewer producers and merchants than expected, and my preliminary research demonstrated that less than half of potential respondents would be willing to take the time to fully complete a survey.

For sub-group 'a,' I employed a method of convenience sampling to contact as many merchants as possible in Bangkok and only filtered the results if the resulting sample size was too large. Silk merchants were located using assistance from the Thai Silk Association, my interpreters, merchants, and local shoppers. While I certainly did



not manage to request participation from every silk shop in the city, I did visit all of the major clusterings of silk shops in Bangkok (Silom, Sukhumvit, Banglamphu, Chatuchak, and most of the major malls). At each location, I visited every shop that primarily sold silk, silk products, or fabric and requested that a manager complete a survey.

Approximately twenty-five percent of shops were willing to complete a survey.

The lack of a comprehensive database of any of the other sub-categories led me to adopt a similar sampling strategy for sub-groups 'b,' 'c,' and 'd.' With regard to sub-group 'b,' I am confident that I approached almost every merchant in Khon Kaen and Nakhorn Ratchasima. The vice-president of the Korat Silk Association (Ken Sura), a professor at Khon Kaen University (Dr. Wipawee Grisanaputi), and all of my local interpreters verified that I had not omitted any merchants in these two cities. Perhaps due to the relatively less hectic nature of silk shops in Khon Kaen and Nakhorn Ratchasima, the ratio of silk merchants willing to complete a survey rose to about fifty percent.

For sub-groups 'c,' and 'd' I focused my efforts on two Northeastern districts that specialize in and are centers for two distinct types of silk. Chonnabot in Khon Kaen specializes in mudmee silk, and Packthongchai in Nakhorn Ratchasima focuses on the production of plain colored silk. I had initially planned to perform ten surveys with silk producing firms and ten surveys with self-employed weavers at each location. In Chonnabot, I was aided by the district government, which provided me with a list of all silk producing groups. Ten producers were randomly selected from the list, and the district government official in charge of craft products contacted each producer and asked them to meet with me in the Chonnabot town government building. A similar strategy was adopted in Packthongchai. The Korat Silk Association has a database of all producers in Packthongchai. Ten producers were randomly selected from that list and I contacted them the sites of production.

In Packthongchai and Chonnabot, I asked the Korat Silk Association and the Chonnabot district government to put me in touch with self-employed weavers (sub-group d). Both parties agreed, and meetings were set up with self-employed weavers. Once meetings were arranged, however, it became clear that a significant number of

respondents were not in fact self-employed weavers, but the heads of weaving groups or “cooperatives”<sup>63</sup>. The precise number of respondents in each group and the problems encountered during fieldwork are discussed later in this chapter.

## **Data Collection Procedures**

The data used in this dissertation have been collected using four methods: (1) content analysis, (2) Internet-based surveys, (3) face-to-face surveys, and (4) in-depth interviews.

### *Content Analysis*

In April and May 2008, discourse and content analysis was used to examine discourses put forth by all ‘Internet Adopters’ regarding their use of the Internet. The goal behind using two methods of textual analysis for all one hundred and thirty nine websites of the ‘Internet Adopters,’ was to explore how EAs: (a) are topologically

---

<sup>63</sup> It should be pointed out that the use of the word “cooperative” in the Thai silk industry is rarely used in a manner corresponding with the International Co-operative Alliance’s definition of a cooperative (“an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”) (International Co-operative Alliance 2008). Cooperatives in the Thai silk industry are often indistinguishable from many merchants or producing firms. That is, the actual producers receive a salary according to the amount of silk that they produce (a salary that often varies little from what non-cooperatives pay), while all excess profits stay with the manager of the cooperative. On no occasions did I encounter a cooperative that was either jointly-owned or democratically controlled.

I was unable to obtain precise financial data from most cooperatives. However, when visiting any village in which production is organized through a cooperative, the wealth disparities between the cooperative manager and weavers were always visibly apparent. The homes of weavers were in many regards indistinguishable from one another (no cars in front of the home, no satellite dishes outside, similar construction materials), while the homes of the managers of cooperatives were clearly occupied by people with more resources (they were built from more expensive materials, had new and expensive cars parked outside, had large televisions inside, etc.).

As such, surveys managers of cooperatives were either assigned into sub-categories ‘b’ (Northeastern silk merchants) or ‘c’ (Northeastern silk producers). Most were assigned into sub-category ‘c’ due to the fact that they organized production processes for all cooperative members (i.e. they supply raw materials to weavers) and maintained a physical storefront. Some were assigned into sub-category ‘b’ because they bought silk from a variety of sources and provided no supplies to weavers (weavers would arrange purchases of raw materials themselves).

positioned within commodity chains; (b) justify using the Internet to sell silk; and (c) describe actual economic and social effects that their use of the Internet has had.

Established techniques of content analysis were used as part of the first method (Krippendorff 1980; Lutz and Collins 1993; Slater 1998; Rose 2001). Based on a pilot study of twenty websites, categories were devised to measure the frequency of descriptions of various justifications for and explanations of the effects of the Internet. Many of the categories used are purely descriptive. For example, I categorized contact addresses, languages used, and whether credit cards are accepted. The absence versus presence of images also played a part in the content analysis. I looked for whether pictures of the silk on offer were either absent (likely due to fears of copying) or prominently displayed. I also made note of whether photographs of the sites of production were displayed on the sites.

Second, I have drawn on Rose (2001) to use a Foucauldian framework of discourse analysis to move beyond the explicit and latent meanings extracted using content analysis. To identify key themes, Rose asks “How are particular words or images given specific meanings? Are there meaningful clusters of words and images? What associations are established within such clusters? What connections are there between such clusters?” (Rose 2001: 151) This method allows themes to be uncovered that are not based on the frequency counts of content analysis.

Using the Foucauldian framework also entails analyzing persuasive elements in discourses. Therefore, the various ways in which EAs support their claims will be examined. At the same time, contradictions and absences play a prominent role in the framework. Thus, any internal contradictions within discourses presented on a website, or the absence of explanatory elements or common themes present on other websites, are important (Tonkiss 1998; Rose 2001). The analyses described in this step allow me to: (a) identify common or competing discourses about effects of the Internet and ICTs, and (b) compare written statements and ideas about effects of the Internet put forth by EAs to data solicited in surveys and interviews.

One of the most important themes that I looked for during the discourse analysis was the presence of any claims that were made about benefits accrued to customers or producers as a result of purchasing silk. I not only looked for direct statements about benefits (for example statements about profit sharing), but also for less direct ways of hinting at the potential benefits of buying silk (for example, descriptions of “the dying art of silk weaving”, photographs of Thai children or old women in a village setting, etc.). A related search that I conducted involved descriptions of the silk and the production of silk. I looked for the use of words such as “traditional,” “natural,” “modern,” and “contemporary.” In order to verify that nothing was missed in my search, I used the Google search engine to search for keywords such as those listed above within each website<sup>64</sup>.

In a separate column, I also categorized the silk presented on every website as being either predominantly traditional or contemporary (or both). Categorizing silk into the binary categories of contemporary or traditional is inherently problematic. There are no agreed upon standard definitions of either term within the context of the Thai silk industry, and categorizing highly complex fabrics, such as silk, into binary categories undoubtedly overly simplifies the unique history and character embedded into every piece. At the same time, the words “traditional” (or “old fashioned”) and “contemporary” (or “modern”) are frequently used in the Thai silk industry: online, in physical shops, and at the sites of production. Most weavers and shopkeepers will have little difficulty specifying which types of silk are traditional and which are modern. Having spent a year doing fieldwork in Thailand I am confident that in most instances I would categorize silk in the same way that most Thai producers and merchants would. Silks such as mudmee, praewah, pa jok, yok, and others are almost universally labeled as “traditional” in Thailand. Machine made silk, handmade silk containing contemporary designs, and silk converted into handbags, scarves, and other products are almost always labeled as “modern” by people in the silk industry. In my analysis of silk websites, I

---

<sup>64</sup> The Google search engine can be used to search all indexed pages within any website using the following syntax: “site:silk.co.th keyword.” Every page connected with a hyperlink to the index.html page of a website is indexed and included in the search.

created categories to capture the ways in which producers and merchants describe their own silk. However, when categorizing the styles of silk sold by each EA, I would sometimes deviate from the ways that silk was described by the person or company selling it. There were instances when silk was described as “traditional” even though other few producers or merchants would label it as such (for example a machine made tie decorated with a floral pattern).

I should point out that this method is, more than any of the other methods employed in this dissertation, is influenced by my own subjectivity. Each section of chapter seven (the only chapter that employs this methodology) is organized around defined categories. Some of the categories are unambiguous (e.g. the presence of certain words or phrases on a website), while others are open to a broader range of interpretation (e.g. whether claims about benefits to producers or consumers are being made). However, it is within each of the sections (that are based on defined categories) that my own subjectivity has the most bearing. I offer a number of interpretations of the intentionality<sup>65</sup> behind texts and images that are based upon my individual experiences with this topic. In every instance I attempt to offer a clear rationale behind each interpretation; however, it should still be pointed out that other researchers analyzing the same texts and images would undoubtedly draw somewhat different conclusions.

### *Internet Surveys*

All one hundred and sixty nine ‘Internet Adopters’ (one hundred and thirty nine websites plus thirty online marketplace sellers) were contacted by either email, forms on their websites, or telephone. They were asked to complete the survey either online at [www.questionpro.com](http://www.questionpro.com) or during a face-to-face meeting. If no response was received, a follow up email was sent to the ‘Internet Adopter’ requesting that they complete the survey at their earliest convenience. As of October, 2007 forty-seven ‘Internet Adopters’

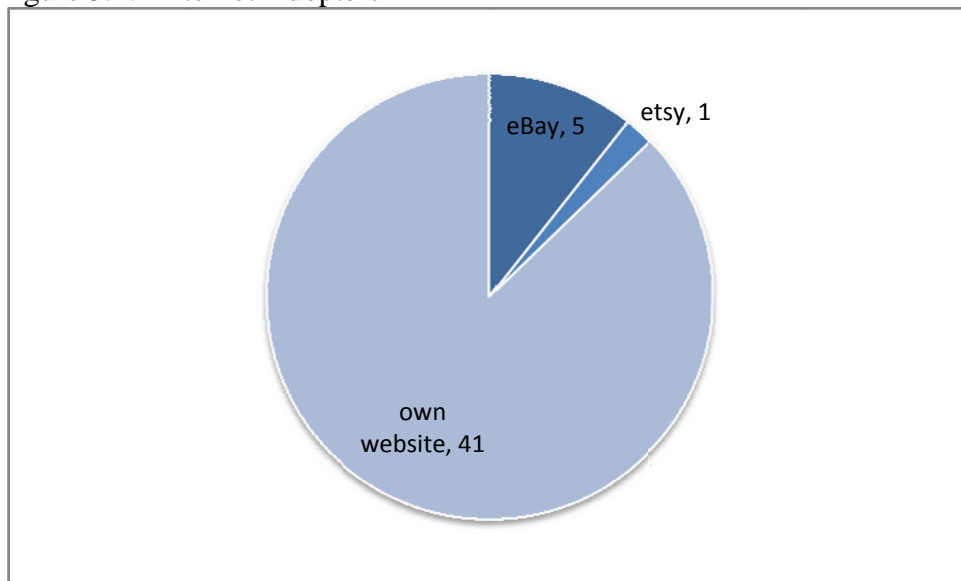
---

<sup>65</sup> Throughout my analysis, I accept that my interpretations of intentionality cannot be verified with any kind of absolute certainty not only because I have been unable to interview the creators of every website selling Thai silk, but also because messages conveyed through texts and images are always also based on un- or sub-conscious emotions and desires (Lacan 1977; Rose 1986; Rose 2001).

completed a majority of questions in the survey. Of the forty-seven respondents, five are eBay sellers, one is an etsy seller, and the rest have their own websites (see figure 3.1).

The forty-seven respondents represent a quite low rate of response: 33.8%. Twenty-one of my emails to potential respondents (15.1%) were automatically returned to me with error messages such as, “your message could not be delivered to one or more recipients.” Follow up emails sent over subsequent months were also returned in the same manner. These returned messages are unmistakable signs of businesses no longer in operation. Given the low rate of response, it is likely that a significant proportion of the other websites contacted are no longer active and are mere shells of a formerly active business with unmonitored mailboxes (results in chapter seven lend support to this conclusion). Unfortunately however, no straightforward method exists to determine which businesses are no longer active and which are simply choosing not to respond to email inquiries.

Figure 3.1: ‘Internet Adopters’



Total # of ‘Internet Adopters’: 47

### *Face-to-Face Surveys*

All ‘Thai Silk Sellers’ were contacted between February and June 2007 and were asked to complete a survey identical to the one provided to the ‘Internet Adopters.’ An interpreter accompanied me on each meeting, and we asked respondents each question verbally. I then wrote the answers in the survey form myself. Respondents would occasionally elaborate on a topic about which I had provided only closed-response answers. When this happened, I recorded everything that they said on the reverse side of the survey and later transcribed the conversation and stored it with other interviews. Surveys took approximately thirty minutes to complete, although I would ask additional questions or skip some questions based on how interested or rushed I judged each respondent to be.

As discussed above, I initially assumed that respondents could be broken down into four distinct sub-groups. However, once the data collection phase of the project began, it became clear that these sub-categories were over-simplifications of the economic activities involved in the Thai silk industry. For example, a number of firms can be defined by both categories (a) and (c)<sup>66</sup>. That is, they employ production workers in the Northeast, but operate at least one shop in Bangkok. The precise breakdown of respondents is displayed in figure 3.2.

Location and position were integral to the research design regarding the selection of ‘Thai Silk Sellers.’ The initial strategy was to collect information from twenty respondents from each sub-group. Apart from sub-group ‘d’ (self-employed weavers), this task has been achieved. But, as noted above, the pre-defined categories into which I attempted to place respondents do not fully reflect the complexity of relations within the Thai silk industry.

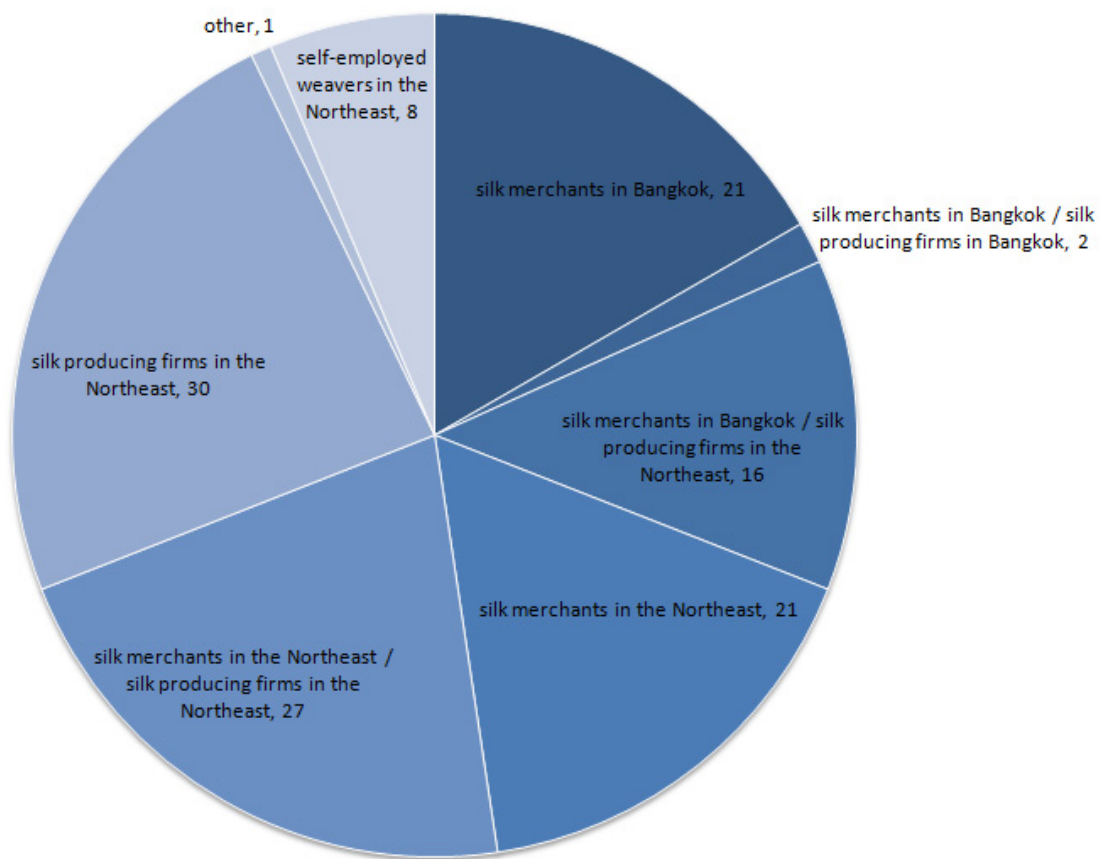
Two additional points should be mentioned regarding the sampling of ‘Thai Silk Sellers.’ First, I had initially planned to perform ten surveys with silk producers in Khon

---

<sup>66</sup> The categories are defined as: (a) silk merchants in Bangkok; (b) silk merchants in Khon Kaen and Nakhorn Ratchasima (the two commercial silk centers of the Northeast); (c) silk producing firms in Northeast Thailand; (d) self-employed silk weavers in Northeast Thailand.

Kaen, and ten in Nakhorn Ratchasima. As the chart demonstrates, a significantly larger sample was achieved. This is mostly due to the overlap in categories: i.e. merchants interviewed in Bangkok and in the Northeast revealed that they are also producers. Table 3.1 lists the locations of all respondents who produce silk in the Northeast (sub-groups ‘c’, ‘a,c’, ‘b,c’, and ‘d,c’). The sixteen respondents listed under the ‘Bangkok’ category were unwilling to reveal the exact site of production in the Northeast.

Figure 3.2: ‘Thai Silk Sellers’



Total # of ‘Thai Silk Sellers’: 126

Second, while there are only eight surveys that have been completed by self-employed weavers, I had conversations with a number of other weavers who were



unwilling or unable to complete a survey<sup>67</sup>. A number of these conversations have been recorded as interviews, and will be discussed in the following section.

Table 3.1: Locations of Northeastern Silk Producers

Khon Kaen Province	14
Nakhorn Ratchasima Province	34
Kalasin Province	4
Other Northeastern Provinces	6
Bangkok	16
Total	74

### *Interviews*

I had originally planned to interview twenty ‘Internet Adopters’ and ask them to expand on some of their responses to the survey. However, over the course of my fieldwork, it became clear that many survey respondents were happy to talk at length about any aspect of their business. I therefore altered my strategy of using separate stand-alone interviews as separate events from the surveys, and instead had extended discussions with any survey respondent who indicated that they had the time to do so. These interviews were either recorded as written notes on the margins and reverse sides of the surveys or were recorded with a digital voice recorder and later transcribed. Where answers closely related to open-ended questions in the survey, I have entered them in the survey file in that manner. Otherwise, the discussion has been stored in a separate location.

The interviews were always grounded in extended discussions of existing survey questions. There were four points that I attempted to address in all interviews (if the conversation did not touch on these points): (a) personal changes in the respondent that may have occurred after the firm or cooperative adopted ecommerce (such as a new job or house, different salary, altered skill set, different working hours, different leisure time activities); (b) external changes in the community, village, or neighborhood (such as

---

<sup>67</sup> It is possible that some of the weavers are illiterate.

abandonment of other economic activities, new economic activities, visible changes, changes in the gender or ages of producers, or altered social relations) that may have occurred since the adoption of ecommerce; (c) quality of life changes since ecommerce adoption; and (d) and how the Internet has directly affected respondents' lives.

Three additional types of interviews were also performed. First, I emailed all 'Internet Adopters' who had completed online surveys and requested that they participate in either a phone or in-person interview in order to expand on some of the themes relevant to the project. Only three out of the forty-seven Internet Adopters who filled out surveys were willing to participate in a follow-up interview. However, eleven of the forty-seven Internet Adopters agreed to meet with in order to fill out the survey and conduct an interview at the same time<sup>68</sup>.

Second, I recorded extended discussions (that could be called 'interviews') with members of the 'Thai Silk Sellers' group while performing those surveys in the same manner in which I approached interviews with 'Internet Adopters.' These interviews have all been integrated into spaces for open-ended answers in the file in which surveys are stored.

Finally, a number of interviews were carried out without a survey. For instance, several short conversations with silk weavers in the Northeast have been recorded. These weavers were unwilling to complete full surveys, but were nonetheless willing to have a short conversation about their craft. Interviews were also undertaken with people who are either knowledgeable about or who make decisions affecting the Thai silk industry. Members of this group include: the Director of Thaitambon.com (the online arm of OTOP), representatives from the Department of Export Promotion, the Governor and Vice-governor of Kalasin province, a number of professors at regional universities, officials in silk associations, and others. The relevance of these interviews will be discussed in the following chapters.

---

<sup>68</sup> So, in summary, I met with fourteen of the forty-seven (or thirty percent of) Internet adopters that filled out surveys.

## Trustworthiness of the Data

Searches for ‘Internet Adopters’ were performed in English using Romanized text. Thus, it is possible that websites in languages other than English have been entirely overlooked. However, a number of Thai-only websites were present in my search results. Furthermore, during the course of fieldwork and surveys with ‘Thai Silk Sellers,’ I discovered a few additional websites that were not present on my list of ‘Internet Adopters’. Nonetheless, this is a shortcoming in the sampling procedure that may have resulted in an overrepresentation of websites that sell silk to international customers<sup>69</sup>.

The trustworthiness of responses might be called into question for a few of the questions in the survey. Specifically, salaries and working hours are sensitive issues, and questions on these topics may have elicited exaggerated responses (particularly because respondents seemed to assume that I was unfamiliar with the local silk industry). While working hours vary by commodity chain position and region, salaries are generally similar for related activities in any given district. Before beginning formal surveys, I always asked my interpreters and other local contacts (such as members of the silk associations and university professors) about local salaries. If, during the course of a survey, a respondent stated that his or her worker’s salaries were significantly higher or lower than the local norm, I would ask for clarification by inquiring as to why this was the case. This follow-up questions in all cases either led to an explanation (such as praewah silk requires highly skilled workers who deserve higher salaries), or a restatement of the original answer (it is possible that communication difficulties may have resulted in the initial misstatement e.g. the respondent would state something like “I was talking only about one of my weavers, the rest of the weavers earn...”).

Communication difficulties undoubtedly had an effect on much of this research as discussion was performed through the filter of an interpreter. Interpreters always

---

<sup>69</sup> It should be noted that the lack of Romanized text on a website would not automatically exclude it from the search results of an English language search. Baker (2008), for example, points out that if “su-ta-n-fo-du” (Katakana for Stanford [University]) is searched for in Google, the homepage for Stanford is the first listing. However, the word “su-ta-n-fo-du” does not exist on any of the web pages under the stanford.edu domain. The reason that Google ranks the site is because there are a large number of Japanese katakana sites containing both “su-ta-n-fo-du” and a link to stanford.edu.

spoke the local dialect fluently, and with one exception had an extremely high level of proficiency in English. However, with all communication that takes place in more than one language through an intermediary, there will inevitably be misunderstandings. While some of these misunderstandings are undoubtedly embedded in my survey and interview data (especially in open-ended questions where respondents were allowed to answer as they saw fit), I attempted to minimize their effect by asking questions in a slightly different way whenever there appeared to be confusion about what was being asked.

During the asking of closed-response questions, misunderstandings were generally easy to resolve by pointing out the fixed number of potential responses and asking the respondent which, if any, most closely described her (or his) situation. I always made clear that ‘none of the above’ was an acceptable response. When ‘none of the above’ was selected, I would indicate what had happened on the survey and also write what the respondent said in the margins<sup>70</sup>. While I have striven to minimize miscommunication to the greatest extent possible, it is likely that the language and cultural barriers inherent to this research have affected the ways in which people responded to my questions. During the discussion of results, I will point out all specific incidences where the language barrier may have had a meaningful effect.

Finally, the main problem encountered with regard to the trustworthiness of the data was that respondents often decided to skip large sections of the survey. Before starting each survey, I pointed out to respondents that if they either did not know the answer to a question or did not feel like responding, then I would prefer that they skip the question instead of providing me with a rushed or false answer. Particularly towards the end of the survey, many respondents decided to do precisely this. The final section of the survey, which asks people about characteristics of their businesses before they used the Internet, has been filled out by so few respondents that it is rendered largely unusable. Furthermore, in cases where it was clear that respondents felt rushed and imposed upon, I deliberately skipped some questions (almost always the last section) in order to speed up the survey.

---

<sup>70</sup> For example, when asked “what proportion of the following types of silk do you sell?” respondents would sometimes indicate specialist types of silk not on the list presented.

These problems could have been mitigated by either making the survey shorter or by insisting that respondents take the time to fill out all sections. While these missing data are a hindrance to this project, they also provide me with more confidence on the trustworthiness of the data that I do have (i.e. they are less likely to be made-up simply to make the survey finish sooner).

### **Response Rate and Regression Analysis**

The fact that only sixty-three economic actors (EAs) that have websites (forty-seven ‘Internet Adopters’ plus sixteen ‘Thai Silk Sellers’ that have websites) responded to the survey is particularly problematic to the methodology I had hoped to employ in this study. I originally intended to examine the degree to which responses can be related to, and explain changes in the response terms using multivariate regression modeling. The initial plan entailed using cyberpresence as a dichotomous dependent variable and then extracting and refining several independent variables from the survey data: (a) level of Internet usage; (b) production chain position; (c) changes to production chain position; and (d) main silk types sold. The results of these regression analyses would have allowed specific influences to be discerned among the various predictor independent variables (to be solicited in the surveys) and uses of ICTs to sell silk.

Independent variables (b), (c), and (d), all are also characterized by unexpected problems. As the following chapter demonstrates in much detail, production chain position (variable (b)) is a complex variable, and contains a large degree of overlap between categories. This fact only becomes a problem when attempting to employ sub-categories (such as silk merchants in Bangkok, silk merchants in the Northeast etc.) to predict a dependent variable (cyberpresence) containing an already low number of observations (63). For example, only one category (silk merchants in Bangkok) contains over twenty observations, and only one other category contains more than ten observations (foreign merchants) (see figure 4.5).

Data about Independent variable (c) (changes to production chain position) are even more problematic owing to the fact that either such changes did not occur, or the final section of the survey was not completed (as discussed in the above section of this chapter). Data in category (d) (main silk types sold) are also characterized by both low response rates and overlapping responses.

In hindsight, a number of steps could have been taken in order to ensure that the data collected were suitable for a regression analysis. First, the most obvious strategy would have been to collect a larger number of responses. Collecting responses was an extremely time-consuming process, but extending the amount of time spent conducting fieldwork (perhaps by another six months) would have ensured that I could have met with a significantly larger group of producers and merchants. However, doing so would still have done little to increase the number of Internet users included in the survey. I did make repeated efforts to contact every Internet Adopter selling Thai silk, and it is unlikely that the response rate of this group would have increased even with additional requests for online or face-to-face surveys.

Second, survey categories defining commodity chain positions (which were constructed prior to the commencement of fieldwork) are not entirely exclusive of one-another. Constructing a larger number of sub-categories would removed some of the fluidity from each sub-category, but at the same time would have left most sub-categories still populated with only a small number of EAs.

Finally, while it may have been extremely challenging to obtain a larger sample size of Internet Adopters, it is conceivable that a redesign of the survey could have resulted in more respondents completing what is now the last section of the survey (the section that asks people about characteristics of their business before they used the Internet). Simply moving this section to the beginning of the survey would have likely resulted in higher response rates. However, some respondents did justify their unwillingness to complete the final section of the survey by noting that the Internet had resulted in few changes to their business. As such, these respondents may have remained unwilling to complete the section regardless of how early in the survey it appeared.

Despite the inability of the survey to support multivariate regression modeling, it remains that the survey data have been crucial to this project. Measures of statistical dispersion have been successfully employed throughout the dissertation to compare various characteristics of EAs. Open-ended responses have proved to be similarly useful and have provided insights on topics that I had not considered prior to designing the survey. The survey data collected thus remain requisite for most conclusions drawn from the dissertation despite the fact that low response rates in some sub-categories have unfortunately made the use of regression analyses impossible.

### **Coding Procedures**

All surveys conducted online were downloaded from [www.questionpro.com](http://www.questionpro.com) into a spreadsheet file. Because the online survey was identical to the paper survey, I then proceeded to code all closed response questions into pre-defined columns in the spreadsheet. Open-ended responses were more challenging to code into the spreadsheet. Many respondents would provide me with long answers which are relevant to multiple questions. Furthermore, many respondents would talk before and after the formal survey question and answer session. When that occurred I would record everything that they said on the back of the survey or in the margins. All of this information was transcribed into a text document, and placed into an extra column in the spreadsheet. A second spreadsheet file was then created so that I could add the open-ended responses to questions into more relevant columns. If a response answered more than one question, I would place it into multiple categories instead of trying to determine which category it was most relevant to.

### **Ethical Considerations**

During the course of surveys and interviews, none of my informants asked to remain anonymous or expressed concerns regarding anonymity. However, due to the sensitive nature of one of the discussions that occurred, and the potential for economic or

political consequences that could result from comments that were made, I refrain from identifying a respondent by name. I highlight the specific interview in which this anonymization needed to occur in chapter six. All other respondents are identified by their location and job title.



## **CHAPTER 4**

### **THE SITES OF INTERNET USAGE**

The initial step to finding out what effects the Internet has had in the Thai silk industry is to examine the geography of Internet usage. This involves exploring not only the sites of Internet usage on a national or sub-national scale, but also where those sites fall (topologically) within commodity chains of silk. The topological positions of Internet users are especially important, because by knowing whether producers or intermediaries are attaining cyberpresence, we can judge whether the disintermediating potentials of the Internet have been realized. Questions of location will be addressed in two ways: first, by examining the locations of all websites that sell Thai silk; and second, the locations of survey respondents that use the Internet.

#### **Location of All Websites Selling Thai Silk**

Determining the location of websites is always a somewhat problematic task because location can have a variety of meanings. Location could mean: the location of the registry of the domain, the location of the servers which host the website, the location of at which the site was created, the location of head offices, or any number of other definitions. For the purposes of this chapter, location will be used to refer to the location of head offices. This definition provides the most solid indicator of the sites of control and capital accumulation, but is also the most challenging to determine. While locations of domain registrations, for example, are easily determinable in WHOIS<sup>71</sup> data, the sites of head offices had to be gathered individually from either information on websites or conversations with the owners of websites.

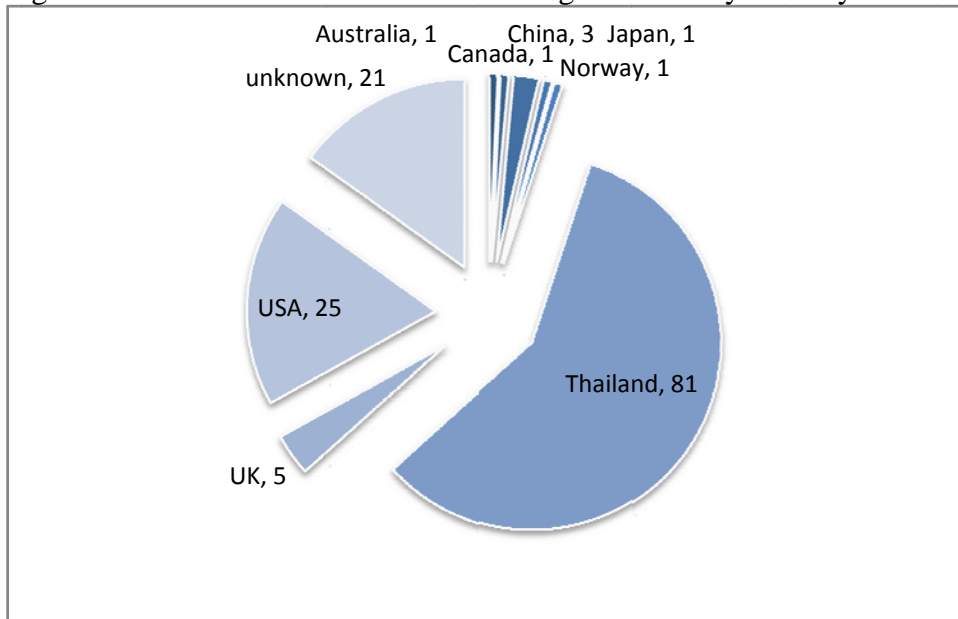
---

<sup>71</sup> WHOIS is an Internet protocol used to query an official database containing information (including location data) about the ownership of most domain names.

### *Locations of Internet Use by Country*

If we start by looking at the location (see figure 4.1), by country, of all websites that sell Thai silk, it can be seen that the bulk of sites are located in Thailand (58%). Eighteen percent are located in the United States and nine percent are located in other countries. Fifteen percent cannot be definitively placed, but from an examination of those websites it seems that a majority of the ‘unknown’ category are also located in Thailand.

Figure 4.1: Location of All Websites Selling Thai Silk by Country

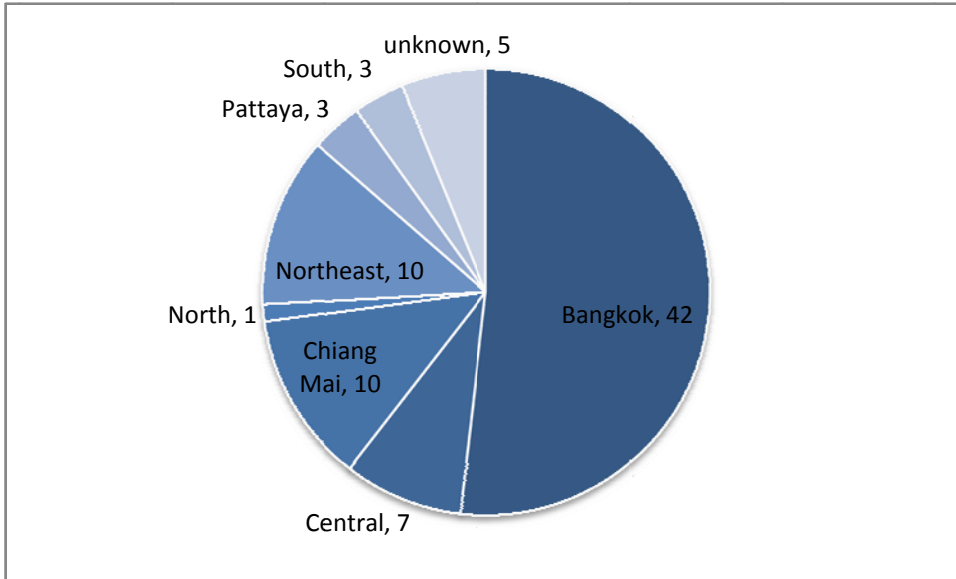


Total number of websites: 139

Roughly half (52%) of silk-selling websites in Thailand are located in Bangkok, with another 9% in Central Thailand (suburbs and satellite towns of Bangkok) (see figure 4.2). Interestingly a significant proportion of websites can be found in provinces that receive significant numbers of foreign tourists but have little or no local silk production. Thirteen percent of websites that list silk for sale are located in Chiang Mai and Northern Thailand, and another eight percent are located in Pattaya (the Southeast)

or Southern beach towns. Only twelve percent of Thailand-based websites are based in the Northeastern provinces in which the vast majority of Thai silk is produced.

Figure 4.2: Location of all Websites Selling Silk in Thailand



Total number of websites: 76

It is also germane to examine websites based in the US and Britain, as these countries are the only ones outside Thailand that host<sup>72</sup> a significant number of sites selling Thai silk (see Table 4.1). Each location in the following list represents the location of one website that sells Thai silk (apart from Atlanta, GA, which is home to two websites). Although the locations have been pinpointed to the greatest degree possible, a number of sites are still somewhat vague.

Only eight out of the twenty-two specified locations in the United States are in large urban areas, while none of the sites in the United Kingdom are based in sizeable cities. The fact that a large population of Thai expatriates live in California is likely a factor behind eight of the websites being sited there. However, it remains unclear why there are not any clusters of websites in urban areas.

<sup>72</sup> The word “host”, in this context, refers to the sites of head offices and not the servers that host websites.

Table 4.1: Location of Survey Respondents in the United States and United Kingdom that Use the Internet

USA:	Atlanta, GA	UK:	Bath
	Avon, OH		Clifton Moor
	Baltimore, MD		Rushden, Northampton
	Berkeley, CA		Sidcup
	Culver City, CA		Upholland
	Delaware		
	Gloversville, NY		
	Holtsville, NY		
	Leicester, NC		
	Los Altos, CA		
	Los Angeles		
	New York State		
	Oregon		
	Panhandle, Florida		
	Poway, CA		
	San Diego, CA		
	San Francisco CA		
	San Rafael, CA		
	Somerville, MA		
	Vashon, WA		
	Washington D.C. USA		
	western Massachusetts		
	Note: Three additional sites cannot be placed with any degree of specificity. All that is known about them is that they are in the United States.		

*Locations of Internet Use within Thailand*

Because the Thai Silk Sellers survey was conducted in Thailand, the total distribution of survey respondents (on a national scale) is strongly skewed toward Thailand. As a result, examining the distribution of survey respondents on a national

scale does not yield useful results. Exploring the locations of Internet use within Thailand, however, proves more insightful.

The first bars in the figure below (figure 4.3) highlight the locations of all survey respondents that are based in Thailand<sup>73</sup>, including respondents who fall under the category ‘Thai Silk Sellers’ as well as those that can be described as ‘Internet Adopters.’ The bars with lighter shading represent a variety of ways of measuring Internet use. The second bar displays the total number of ‘Internet Adopters’ in each region, while the third and fourth respectively measure whether an EA has a website and uses email<sup>74</sup>.

While these data do not provide a reliable indication of the proportion of silk businesses using the Internet<sup>75</sup>, the graphs still paints a striking picture of a concentration of Internet use in Bangkok. It should also be pointed out that the sample is heavily biased towards the inclusion of EAs located in Bangkok and the Northeast, while largely ignoring EAs in other parts of the country. Nonetheless, the chart does still specifically provide a glimpse at how the Northeast is under-represented in its Internet presence.

Because of the bias that the ‘Internet Adopters’ introduce into an analysis of who is using the Internet<sup>76</sup>, figure 4.4 measures only the locations of ‘Thai Silk Sellers.’ The second and third bars again measure the amount of EAs in each location that have their own websites and use email. This chart provides a more accurate representation of the percentage of EAs in both Bangkok and the Northeast that use the Internet. Twenty- four percent of EAs in Bangkok have a website while a full forty-one percent use email. In the Northeast only six percent of respondents have their own website, and fourteen percent use email.

---

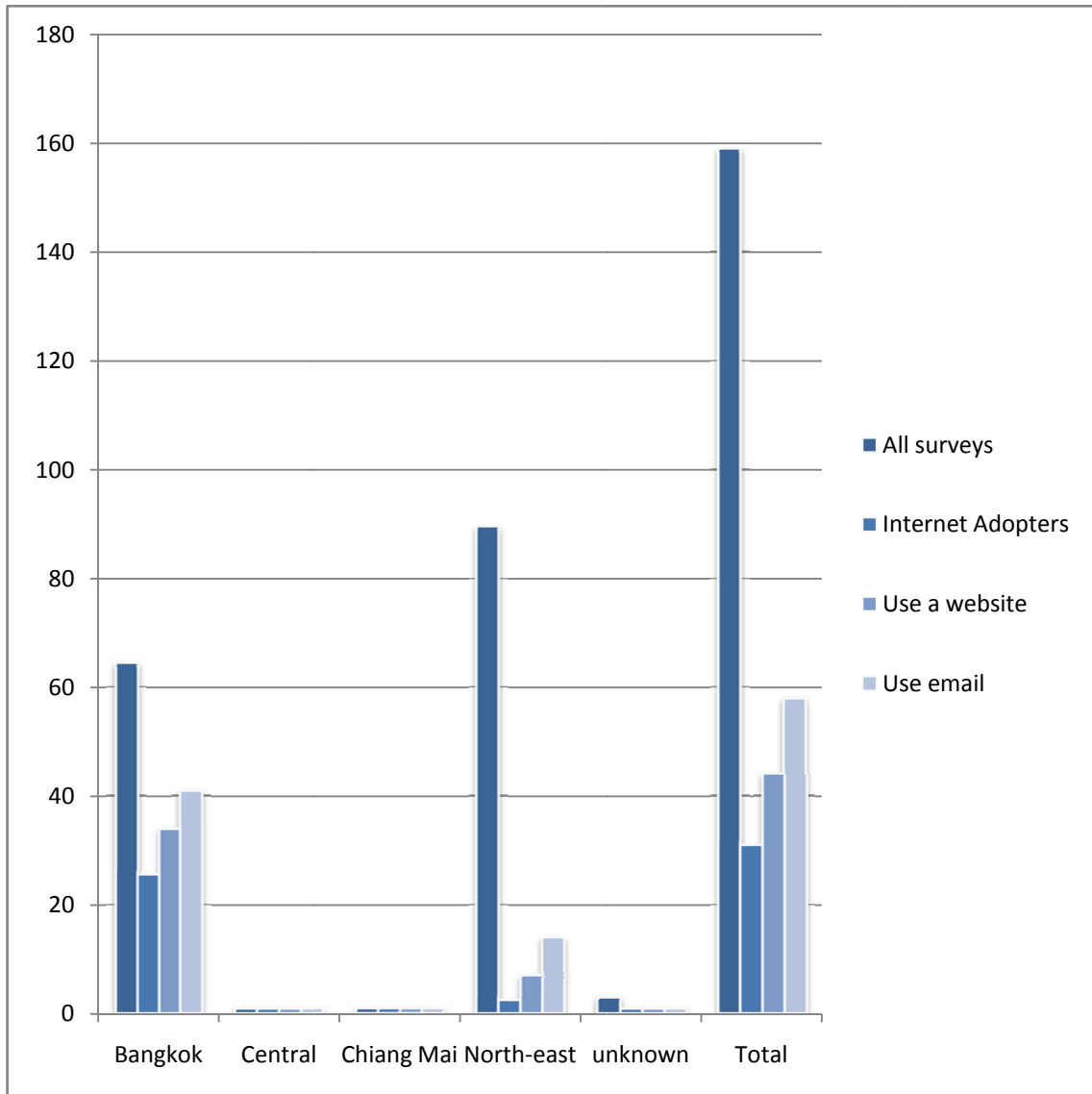
<sup>73</sup> i.e. a combination of the surveys which were filled out in person and online.

<sup>74</sup> Measuring the use of websites or email captures all ‘Internet Adopters’ plus the ‘Thai Silk Sellers’ connected to the Internet.

<sup>75</sup> Due to the fact that this sample contains all ‘Internet Adopters’ who were specifically included in the sample precisely because they do use the Internet.

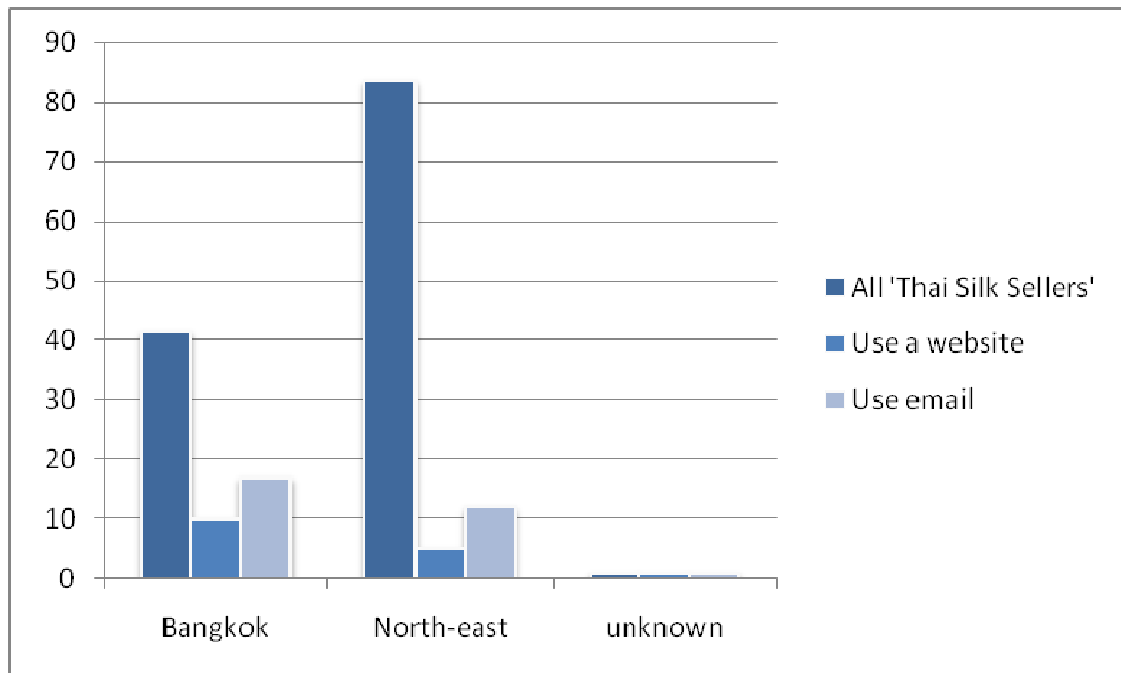
<sup>76</sup> It should be noted that these data in many ways reflect the findings of the 2003 Thai Manufacturing Survey. That survey found that approximately thirty percent of textile businesses had a web-presence (UNCTAD 2007).

Figure 4.3: Location of all Survey Respondents in Thailand



Note: As mentioned in chapter three, there can be some degree of overlap between geographic categories since sites of management, sales, and production are not always in the same place. For the purpose of this chart, a location was assigned based on the home or headquarters of the EA. However, if respondents sold in a Bangkok market but were otherwise located in another region, 0.5 was assigned to each place.

Figure 4.4: Location of 'Thai Silk Sellers'



Note: If respondents sell in a Bangkok market, but are otherwise located in the Northeast, 0.5 was assigned to each place.

#### *Location of Internet Use by Sub-Category*

Finally, a more precise way of examining the nodes at which the Internet is being used can be achieved by grouping responses by sub-category. If all respondents are examined (figure 4.5), we see that EAs who have their own websites or use email are heavily concentrated in all categories involving merchant activities in Bangkok. Sixty-one percent of Bangkok merchants have a website, and sixty-six percent use email; forty-four percent of EAs who are both merchants and producers of silk in the Northeast have a website, and sixty-six percent use email. This stands in sharp contrast to the dearth of websites run by Northeastern merchants (five percent use email) and the low level of Internet use amongst Northeastern producers (seven percent of whom operate a website and seventeen percent of whom use email). It is interesting to note that among the group of EAs who are both merchants and producers in the Northeast, Internet use

rose substantially compared to other merchants and producers outside of Bangkok (twenty-one percent had a website and thirty-two percent used email).

If only the ‘Thai Silk Sellers’ group is examined<sup>77</sup> (figure 4.6), a similar pattern can be observed. Nineteen and twenty-nine percent of Bangkok merchants in this group respectively have websites and use email. The proportion of Internet users rises substantially if Bangkok merchants who also produce silk in the Northeast are examined (thirty-eight percent have websites and sixty-three percent use email). Merchants, producers, and self-employed weavers in the Northeast all have extremely low levels of Internet use, but again, EAs who are both merchants and producers in the Northeast display a significant amount of Internet usage (fifteen percent have a website and twenty-seven percent use email). Internet usage within this group is thus at a level quite similar to usage among Bangkok merchants.

## **Discussion**

From the sample in the Northeast, only two producers and six merchants who are also producers have websites, while a total of fifteen producers, merchants, or some combination of the two use email (out of the total sample of 173 respondents). Given the widespread poverty and lack of literacy in Thai, English, and computer technologies in the Northeast, it is perhaps unsurprising that Internet usage often only enters the commodity chains of Thai silk after silk leaves the region. However, it is interesting to note that twenty-nine of the ‘Thai Silk Sellers’ I interviewed in the Northeast were involved with the Thaitambon.com project<sup>78</sup>. This represents exactly one third of all Northeastern ‘Thai Silk Sellers’ included in this project and means that all of these producers and merchants have at least one item (and often many more) listed on the Internet. The effects that Thaitambon.com has had will be discussed in later chapters.

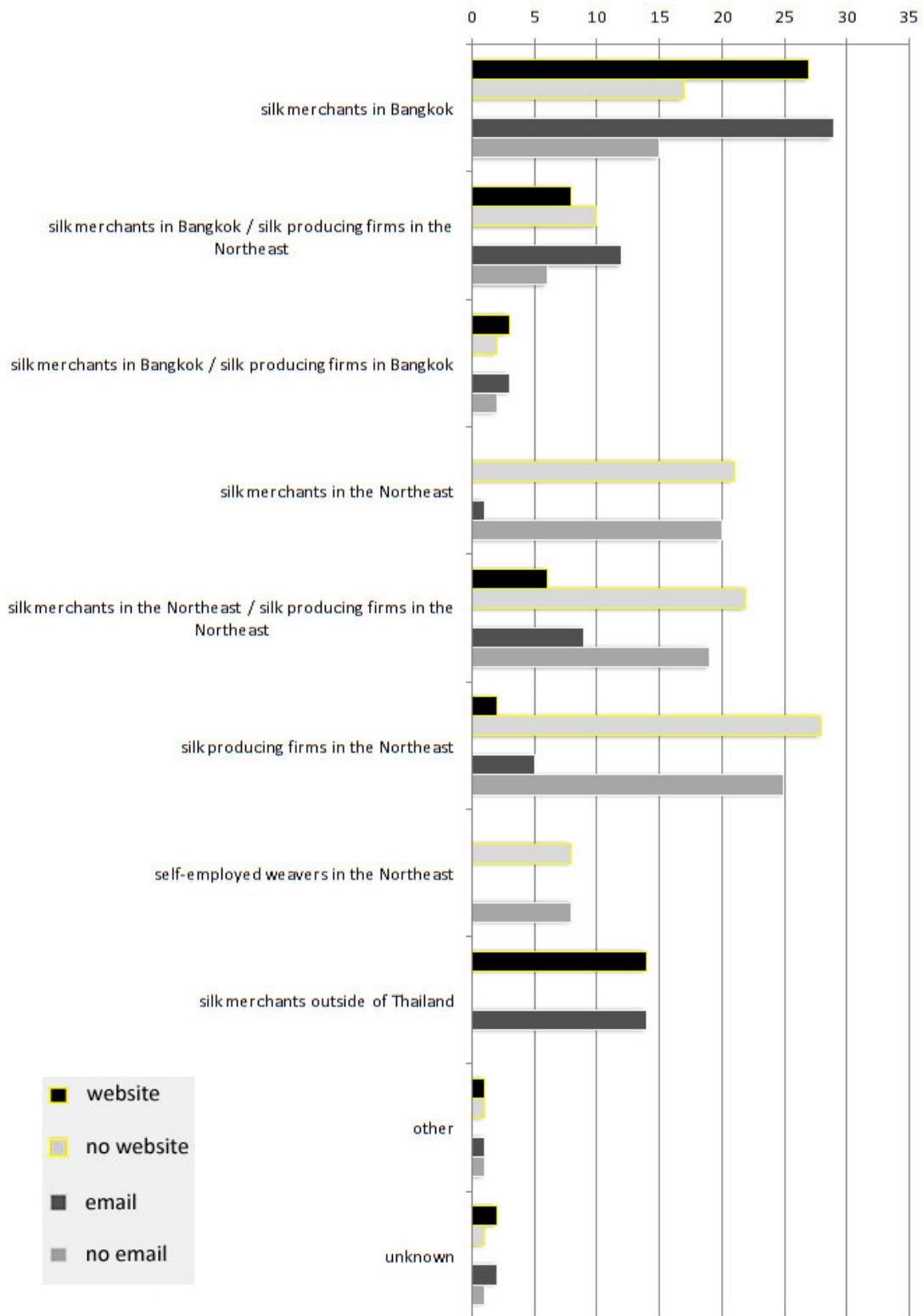
---

<sup>77</sup> Again, in order to examine the data without ‘Internet Adopters’ who were included in the sample for the sole reason that they use the Internet.

<sup>78</sup> These twenty-nine silk sellers were not coded as having a website.

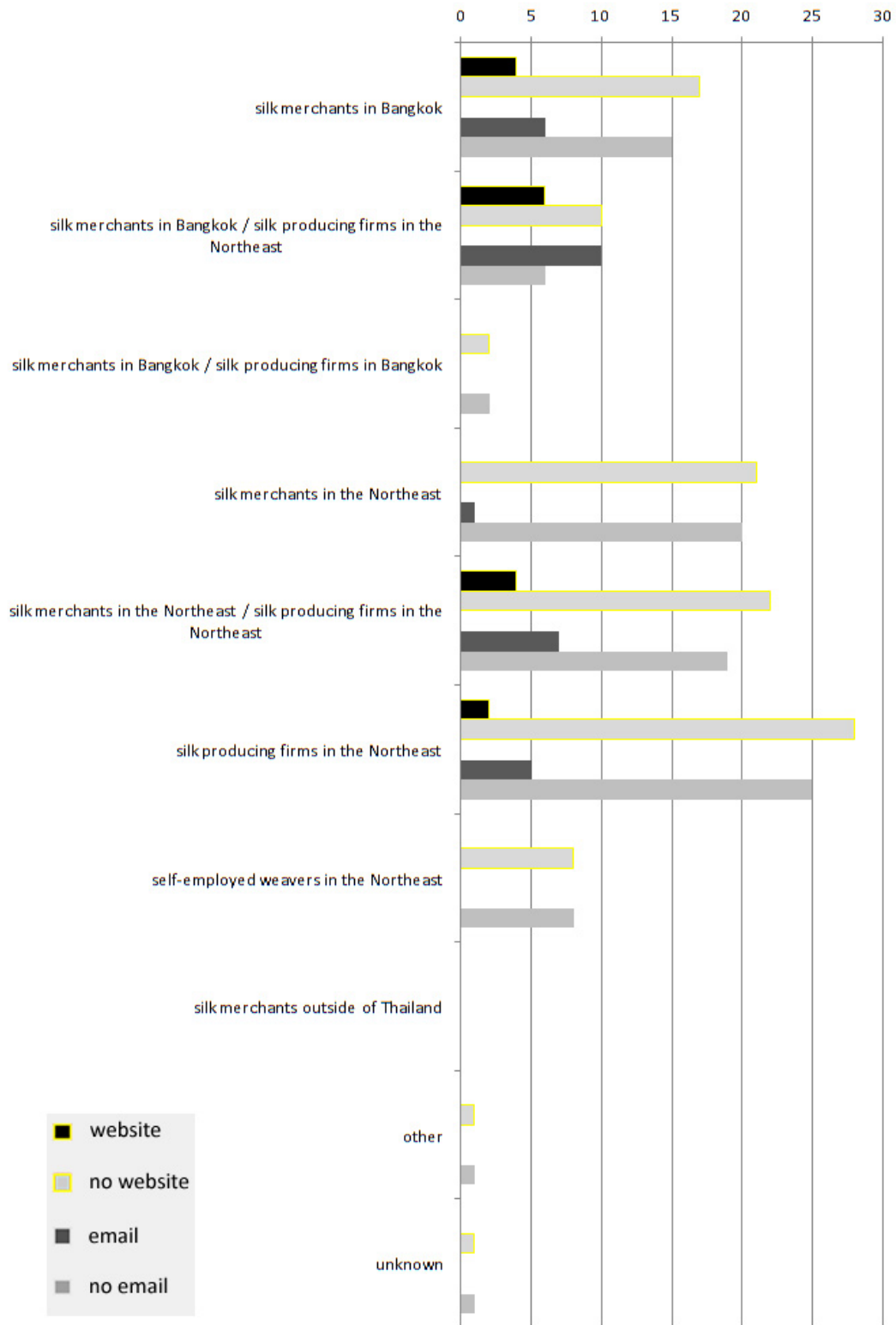


Figure 4.5: Internet Use of all Survey Respondents



Total # of respondents: 173

Figure 4.6: Internet Use of 'Thai Silk Sellers'



Total # of respondents: 126

## *Overcoming Geographic Obstacles*

While the bulk of websites that sell Thai silk are located in Thailand, a significant proportion is also based outside of the country. Interestingly, most websites based outside Thailand are not situated in large urban centers. This fact in many ways supports the common claim that the Internet drastically diminishes the importance of geography. These silk sellers are keenly aware that the Internet allows them to sell anything from anywhere. The manager of *silkofsiam.com*, for example, explained to me that:

*I don't have to be located here. The military took me here, and I left the military to earn my doctorate. And as my location does not matter, I just stayed here [California].*

The idea that the Internet allows sellers to overcome geographic obstacles was similarly expressed by other online sellers. Connie, the director of a website based in Florida, stated:

*My business is totally based on the Internet. If it were not for the Internet I would not have a business, we sell through the Internet worldwide. My business is based in Florida because we live here, but we have built this business this way so we can move and have it anywhere in the world.*

It is conceivable that the ability to use the internet to sell anything to anyone from anywhere has led a number of EAs who sell silk from outside of Thailand to do so as a second career. The manager of *Worldesigns* describes his situation:

*I am a full-time academic and AIDS researcher so this can only be done from home via the Internet.*

However, it remains the case that most websites selling Thai silk are run from within the borders of Thailand. In fact, because the searches for websites that sell Thai

silk were not performed using Thai script, it is conceivable that the number of non-Thai sites is somewhat overrepresented in the sample used in this study.

### *Bangkok as an Internet Hub*

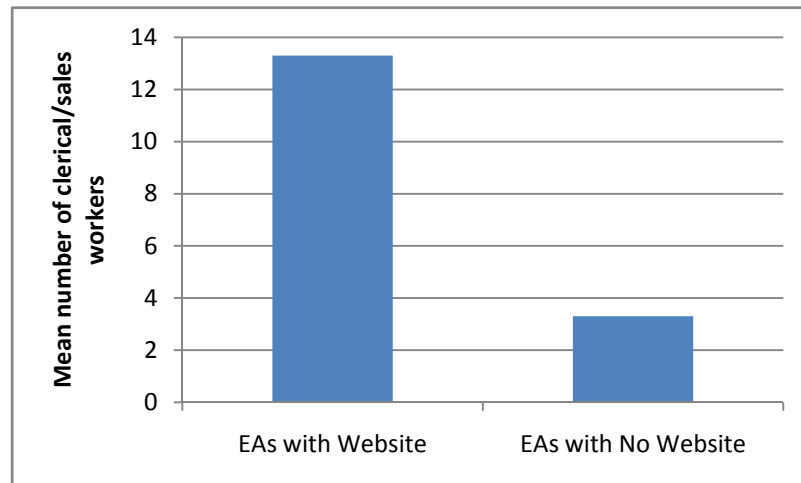
The data reviewed earlier in this chapter clearly show that within Thailand, Bangkok is the primary location for Internet usage in the silk industry. As almost all Thai silk is produced in the Northeastern provinces, it is merchants that are based in Thailand's primary city that perhaps feel the greatest need to gain a foothold in cyberspace. Categorizing the data by sub-groups confirms this fact. Like respondents who solely regard themselves as merchants, the category of silk merchants who also produce silk in the Northeast displays a high level of Internet usage for business purposes. Unfortunately, it is difficult to arrive at a precise description of how this sub-group tends to organize and operate within commodity chains. Some of these EAs are undoubtedly large companies that save costs by occupying a range of positions along commodity chains. Others, however, perform more of a coordinating role by contracting with a fixed group of weavers and supplying them with raw materials.

The results displayed in figures 4.5 and 4.6 offer supportive, albeit non-conclusive evidence that EAs with control over multiple nodes in the commodity chain are more likely than smaller firms or small-scale producers to integrate the Internet into their commodity chains. Firms in category ('b', 'c') [firms that are simultaneously merchants and producers in the Northeast] display a much higher level of Internet usage than any other Northeastern-based group. I was unable to locate a single member of sub-group 'b' (Northeastern merchants) that had a website. Firms in category ('a', 'c') [firms that produce in the Northeast and act as merchants in Bangkok], similarly, are more likely to have a website than other producers in the Northeast, but at the same time are less likely to have a website than Bangkok-based merchants who do not produce silk (sub-category ['a']). These data, however, do not speak to the size of the firms or their productive abilities.

## *Firm Size*

Two survey questions did seek to measure firm size. Respondents were asked to reveal their approximate annual turnover in addition to the number of workers that they employ. Unfortunately only fifty eight (out of a potential one hundred and seventy three) respondents provided information about their annual turnover, consequently rendering any potential descriptive statistics rather meaningless. The response rate to the question about workers was somewhat higher. Slightly over half of respondents (ninety-five) revealed the number of administrative, clerical, or sales workers that they employ, while one hundred twenty-one EAs were willing to state how many production workers they managed. The following analysis must therefore be regarded with an appropriate amount of caution.

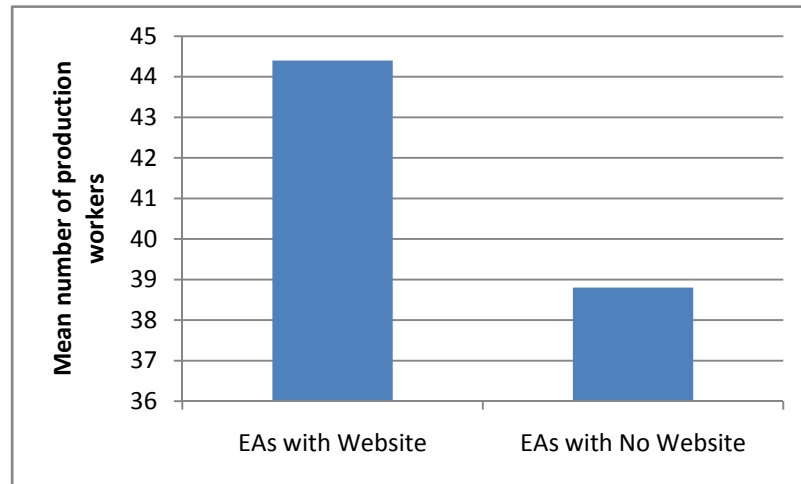
Figure 4.7: Mean Number of Administrative/Clerical/Sales Staff



The mean number of administrative/clerical/sales workers at all firms that do not use websites is 3.3, while the same statistic for firms that do use the Internet is 13.3. Looking only at firms that produce silk (i.e. excluding sub-categories 'a' and 'b'), the mean number of production workers at companies that do not use the Internet is 38.8, whereas at firms that use the Internet, the mean is 44.4. It therefore does seem that it is

larger firms, rather than firms with a smaller number of employees, that are more likely to use the Internet.

Figure 4.8: Mean Number of Production Workers



## Summary

The aim behind this chapter has been to examine the nodes and locations at which the Internet is being used in the Thai silk industry. The chapter has demonstrated that Bangkok-based and foreign merchants, large firms, and firms with control over multiple nodes in the production chain are more likely than small firms or Northeastern firms that are either producers or merchants to use the Internet.

These findings imply that few of the theoretical potentials of the Internet are being realized. Many of the EAs located outside of Thailand have harnessed the Internet to escape the spatial constraints that are inherent to selling Thai silk (i.e. having to be physically close to either producers or consumers), and appear to be using the Internet to redefine their global positionalities. These foreign merchants, however, are the exception rather than the rule.

Northeastern producers have, for the most part, been unable to establish cyberpresence, and it is merchants located primarily in Bangkok who have instead positioned themselves as virtual bridges in the buying and selling of silk. It is

conceivable that proximity to markets (in terms of an EA's position on a commodity chain) plays a factor in encouraging Bangkok merchants to create websites, as they adapt to the needs or desires of their customers. Firm size is also a potential factor behind Internet adoption, with larger firms likely having more resources to create a website. Later chapters explore the barriers to, and impetuses behind, Internet adoption, in much more detail. But, irrespective of what the specific factors behind Internet adoption are, the fact remains that the Internet is clearly not flattening space for most producers of silk in the Northeast of Thailand.

## CHAPTER 5

### ALTERED CHAINS

The previous chapter demonstrated that most producers and merchants do not use the Internet. In a general sense, then, the Internet is not making a large impact on the Thai silk industry. But, this does not mean that the Internet is not the source of genuine change at the sites of implementation. This chapter therefore asks: how has the introduction of the Internet altered commodity chains and the flows of capital in the Thai silk industry?

In line with much of the development literatures about the potentials of the Internet, I embarked on this research project assuming that the Internet would be a catalyst behind disintermediations of commodity chains. As such, I hypothesized that:

*The opening up of wormholes through the introduction of the Internet will in most cases shorten, or disintermediate, the overall production chain (hypothesis one).*

Working under the assumption that the above hypothesis would not be rejected, two additional hypotheses were developed to think through the effect that disintermediated chains would have on producers. The second hypothesis again mirrors much of what is presented in some of the literatures on economic development. Specifically, I posited that:

*Shorter and direct production chains alter economic positionalities and allow a greater amount of value to be captured at the nodes of production than longer production chains with more nodes (hypothesis two).*

As a counterpoint to hypothesis one, I speculated that the Internet may not actually be causing widespread disintermediation in the Thai silk industry. I thus hypothesized that:



*The fact that the Internet is available to many producers will not automatically translate into widespread use of the shortest possible production chain. Instead, actors with economic and technological know-how and reserves of capital will most often occupy advantageous positions throughout the value chain of a product (hypothesis three).*

The validity of these hypotheses will be discussed in the conclusion of this chapter, following a discussion of results. The research question framing this chapter (how has the introduction of the Internet altered commodity chains and the flows of capital in the Thai silk industry?) will be addressed in two ways<sup>79</sup>: first, by looking at some of the significant differences between producers and merchants who use the Internet and those who do not; and second, by drawing on interviews with producers and merchants who use the Internet.

An analysis of the differences between EAs that use the Internet and those that do not provides no causal evidence that the Internet has resulted in any widespread topological changes to commodity chains. However, even though it is not a catalyst behind commodity chain reconfigurations, the Internet does appear to be allowing Internet users to extend their spatial reach.

### **The Internet and Distant Customers**

An oft repeated claim is that the Internet, by reducing the importance of physical distance, enables EAs to increase the range at which they are able to effectively sell their products (c.f. Porter 2001; Freund and Weinhold 2004). This study examines this claim in a two ways: by looking at the locations of each EA's three most important customers, and by analyzing the self-reported geographic focus on each EA.

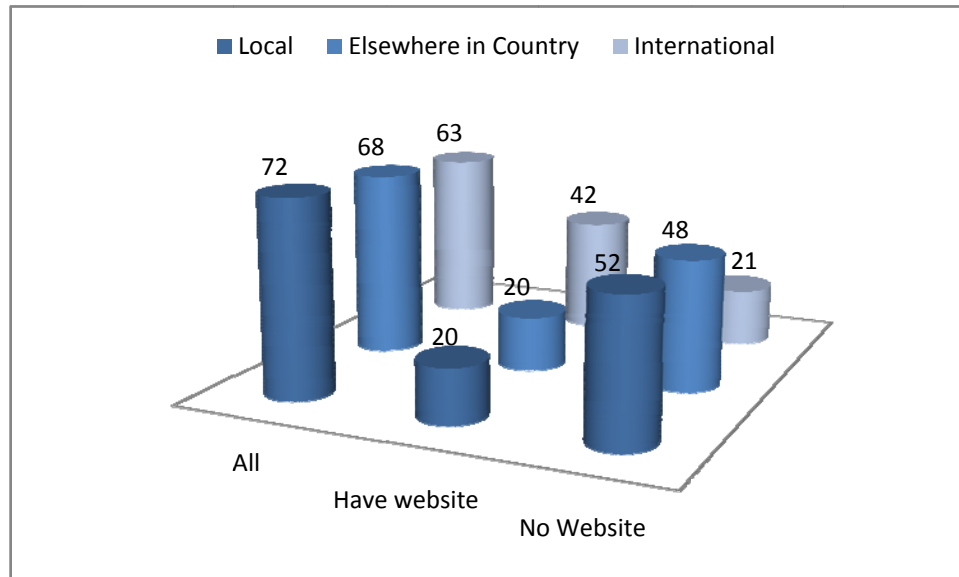
---

<sup>79</sup> As the vast majority of respondents did not complete the section of the survey about their business before they began using the Internet, I am unable to temporally analyze survey data to determine the effects that the Internet might have had on specific producers and merchants.

## Geographic Focus

All survey respondents<sup>80</sup> were asked, “Who do you predominantly try to sell to?” and given the following options for response: local customers, customers elsewhere in your country, international customers, and other. Respondents were instructed to select all responses that apply (i.e. more than one choice could be selected). The graph below (figure 5.1) illustrates responses to this question. In the sample of all survey respondents, EAs with websites are far more likely to sell to international customers than those without websites. Precisely two thirds of EAs who state that they predominantly sell to international customers have websites, while only twenty-eight percent of EAs who focus on local sales and twenty-nine percent of EAs who focus on national sales have a cyber presence.

Figure 5.1: Location of sales focus



It is conceivable that an EA’s position within a commodity chain has a significant effect on the location of sales focus. That is, businesses that primarily sell to end consumers (as opposed to other companies) might be expected to have a more local

<sup>80</sup> Those who completed survey either online or in person.

focus. However, when the dataset is divided into EAs who state that they primarily sell to end-customers and EAs who primarily sell to other companies, no significant change in results is evident. In both cases, an equivalent number of respondents focus on local, national, and international customers. Again, in both cases, slightly over two-thirds of those that focus on international customers have a web presence, while only about a quarter of EAs with a local or national focus operate a website. The only exception is that forty-six percent of EAs who primarily sell to end-consumers and focus on customers elsewhere in their country have a website.

In general, then, EAs with websites are likely to have a strong focus on international sales. But the data alone do not imply that use of the Internet is a causal force behind producers and merchants reaching out to international customers. The desire to add efficiency into existing export relationships may instead be a driving factor behind Internet adoption by EAs focusing on international sales.

#### *Locations of Most Important Customers*

The above findings are given further support by a related question on the survey. Respondents were asked to list, with as much precision as possible, the locations of their top-three customers. Figure 5.2 displays this information from all respondents in Thailand who noted that they focus on international customers, while figure 5.3 contains information from all respondents in Thailand. Both figures display the data using percentages instead of raw counts.

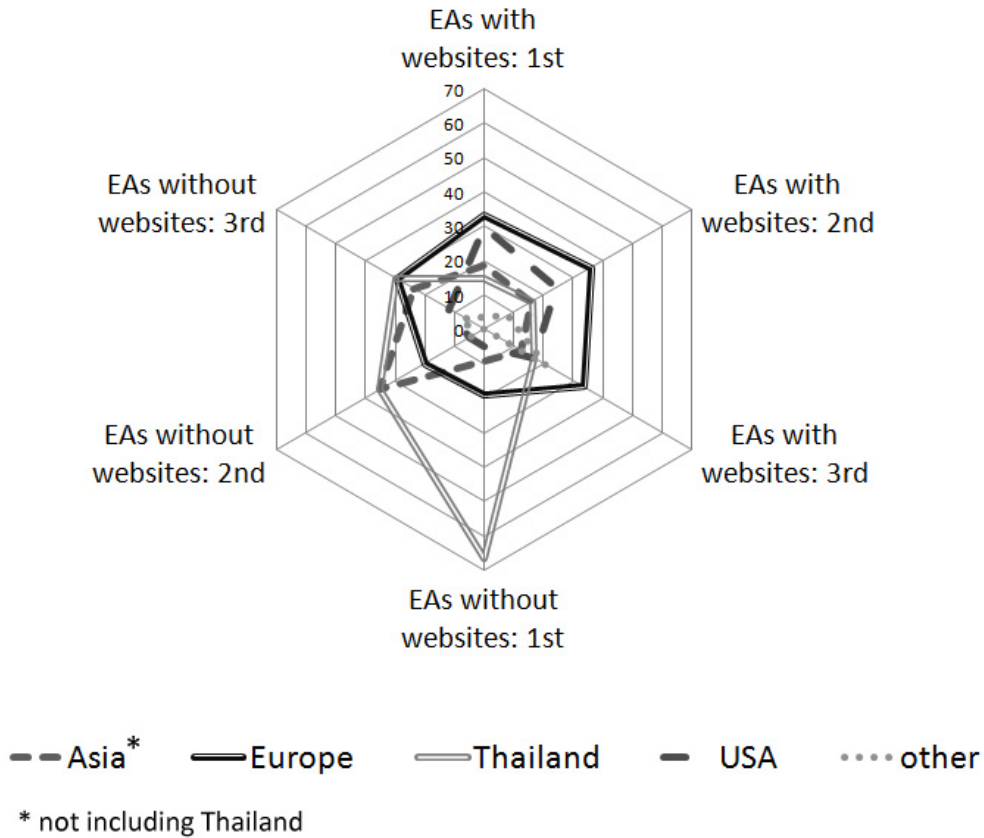
Some interesting patterns emerge in the data from respondents who state that they focus on international customers. The most salient point is that customers in Thailand are the most important customer group for many EAs who state that they focus on international customers. It is unclear why this discrepancy exists. A possibility is that an EA has a few Thai customers who order large amounts of silk, and a large number of international customers who order small amounts. Such a scenario would explain why customers in Thailand are listed with such frequency as their top-three customers by

respondents who state that they have an international focus. However, in all of my interviews, not one producer or merchant described a significant discrepancy in the locations of customers based on the volume of their orders. A more likely explanation is that these producers and merchants focus their attention primarily on international sales despite the fact that the domestic market provides them with the bulk of their revenue. It is even more striking that this phenomenon is most visible in EAs that do not have websites. This is a strong indication that producers and merchants without websites are faced with difficulties when trying to reach an international market.

Looking at only the three axes that display EAs with websites, the percentage of important customers located in Thailand drops significantly. European customers are the largest group, followed by Americans, and then by Asians in all three categories. An unforeseen finding is that American customers are almost exclusively present in the top-three lists of producers and merchants that have websites. Although there is a noticeable drop, Europeans can still be found in the lists of EAs that do not sell silk using a website, while (non-Thai) Asian customers are actually somewhat more prevalent in the top-three lists of producers and merchants without websites.

When EAs that focus on local and national customers are added to the chart (figure 5.3), the differences between EAs that do and do not have websites become even clearer. Customers in Thailand are undoubtedly the most important customers for the vast majority of producers and merchants without websites. However, when looking at EAs with websites, although Thailand-based customers remain more important than customers from any other single region, non-Thai customers remain a majority in the top-three rankings.

Figure 5.2: Location of “Top-Three” Customers among EAs in Thailand who Indicate that they Focus on International Customers

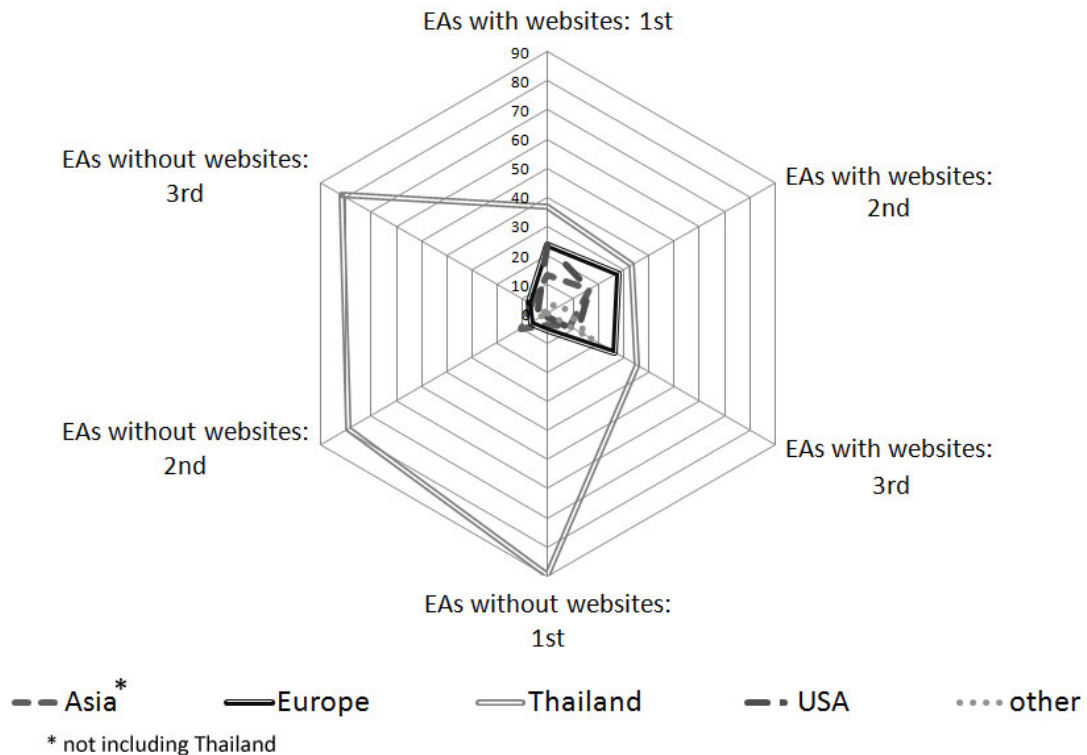


Key: Each axis measures the percentage of responses<sup>81</sup> that fall within each of the regions listed in the legend. The number following each axis label indicates which “top-three” customer to which the axis refers. For example, “EAs without websites: 2nd” counts the percentage of customers from each region who are second in the “top-three” customers category amongst EAs without websites.

These diagrams clearly illustrate a strong relationship between the use of a website and the locations of important customers. Specifically, amongst producers and merchants who do not have websites, there is actually a distance-decay pattern that can be seen: Thai customers are by far the most important, followed by customers elsewhere in Asia. No such statement can be made about producers or merchants that use websites, as their important customers are far more geographically dispersed.

<sup>81</sup> Responses to the question: “For your top three customers, where is each customer’s location (region and country)?”

Figure 5.3: Location of “Top-Three” Customers among all EAs in Thailand



Key: Each axis measures the percentage of responses that fall within each region. The number following each axis label indicates which “top-three” customer the axis is referring to. For example, “EAs without websites: 2nd” counts the percentage of customers from each continent who are rated second in the “top-three” customers category amongst EAs without websites.

Again, these data provide no causal proof that the Internet causes EAs to spatially extend their sales foci, as many of the producers and merchants surveyed that now have important international customers might have had those same customers before they operated a website. These results do however make two clear geographical points. Namely, the Internet is assisting producers and merchants that sell internationally, while it is highly unlikely for those without websites to sell internationally. However, while the relationships between operating a website and geographical reach are clear, there has not yet been any discussion on links between Internet usage and commodity chain topology. The following section will address this issue.

## **The Internet and Reconfigured Chains**

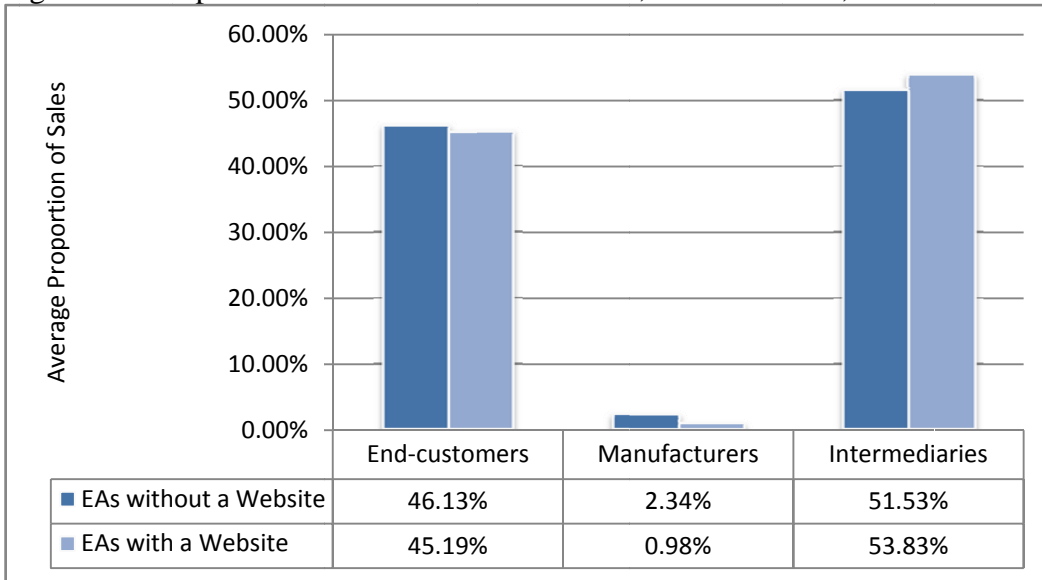
All survey respondents were asked to approximate the type of customers who buy their silk. They were given the options of ‘individual customers’, ‘retailers’, ‘wholesalers’, and ‘other’ and asked to specify the proportion of their sales to each group.

### *Topological Changes*

Figure 5.4 separates the responses to this question into two groups: EAs that sell using a website, and EAs that do not. There was some confusion during the survey process about the definitions of ‘retailers’ and ‘wholesalers’, as a number of respondents were unable to distinguish between the two categories. To address possible inaccuracies within the results, both categories have been dispensed with and combined into a category called ‘intermediaries’. The ‘other’ category has also been renamed as ‘manufacturers’ because all entries in that group specifically referenced the selling of silk to individuals or firms that added value to the material by physically altering it in some way. The graph is thus able to illustrate the mean proportion of sales to three distinct groups: ‘end-consumers’, ‘manufacturers’, and ‘intermediaries’.

When compared to EAs that sell silk with the assistance of a website, EAs that do not have a website sell a surprisingly similar amount of their silk to end-customers, manufacturers, and intermediaries. So although Internet usage is clearly related to the geography of customers, Figure 5.4 demonstrates that having a website has a negligible effect on immediately proximate commodity chain positions. Or in other words, one of the most significant claims about the transformational power of the Internet is not being realized: namely, producers and merchants with websites are, in general, not bypassing intermediaries.

Figure 5.4: Proportion of Sales to End-Customers, Manufacturers, and Intermediaries



Total # of respondents: 47 with a website and 106 without a website.

Because this finding stands in contrast to much commentary on the potentials and promises of the Internet, the results displayed in figure 5.4 deserve closer scrutiny. Ignoring manufacturers<sup>82</sup>, the coefficients of variation in all cases hover between sixty and eighty percent (see table 5.1)<sup>83</sup>. These statistics indicate that while the data do display aggregated similarities, a considerable amount of variation remains within each distribution. An examination of skewness reveals that both the distribution of percentages in the category of EAs without a website selling to end-customers and the distribution of percentages in the category of EAs with a website selling to end-customers are slightly positively skewed. On the other hand, the distributions of both types of EAs selling to intermediaries are slightly negatively skewed. What this means is that a number of respondents who sell all or most of their silk to end-customers are skewing the distribution towards a higher mean. Conversely, a number of respondents who sell little or none of their silk to intermediaries are negatively skewing the distribution of EAs with websites that sell to retailers or wholesalers towards a low

<sup>82</sup> The very small proportion of EAs that sell to manufacturers render many of the statistics in the *manufacturers* column meaningless. Manufacturers will therefore not be referenced in any future discussion of Table 5.1.

<sup>83</sup> The coefficient of variation is calculated as: (standard deviation/mean)\*100.



mean. The negative kurtosis values in each category indicate relatively flat distributions. Or put another way, there are not any significant clusters of values in each distribution. So, this means that the averages in table 4 are made less representative of each distribution by the diversity of responses rather than skewed clusters of answers.

Table 5.1: Descriptive Characteristics, Organized by Sales to End-Customers, Manufacturers, and Intermediaries

	EAs without a Website			EAs with a Website		
	<i>end-customers</i>	<i>manufacturers</i>	<i>intermediaries</i>	<i>end-customers</i>	<i>manufacturers</i>	<i>intermediaries</i>
Mean	46.132	2.340	51.528	45.191	0.979	53.830
Standard deviation	32.431	13.282	32.518	36.110	6.710	35.868
Coefficient of variation	70.300	567.707	63.107	79.903	685.565	66.633
Skewness	0.176	6.211	-0.095	0.280	6.856	-0.217
Kurtosis <sup>84</sup>	-1.184	39.612	-1.179	-1.509	47.000	-1.507

The similarities in the proportion of sales to end-customers versus intermediaries by EAs that do and do not use websites therefore masks a meaningful amount of variation in the commodity chain positions of those EAs. Nonetheless, were the Internet to have a significant effect on the commodity chain position of silk producers and merchants, one would expect to see much larger differences in the average proportion of silk sold to end-consumers and intermediaries.

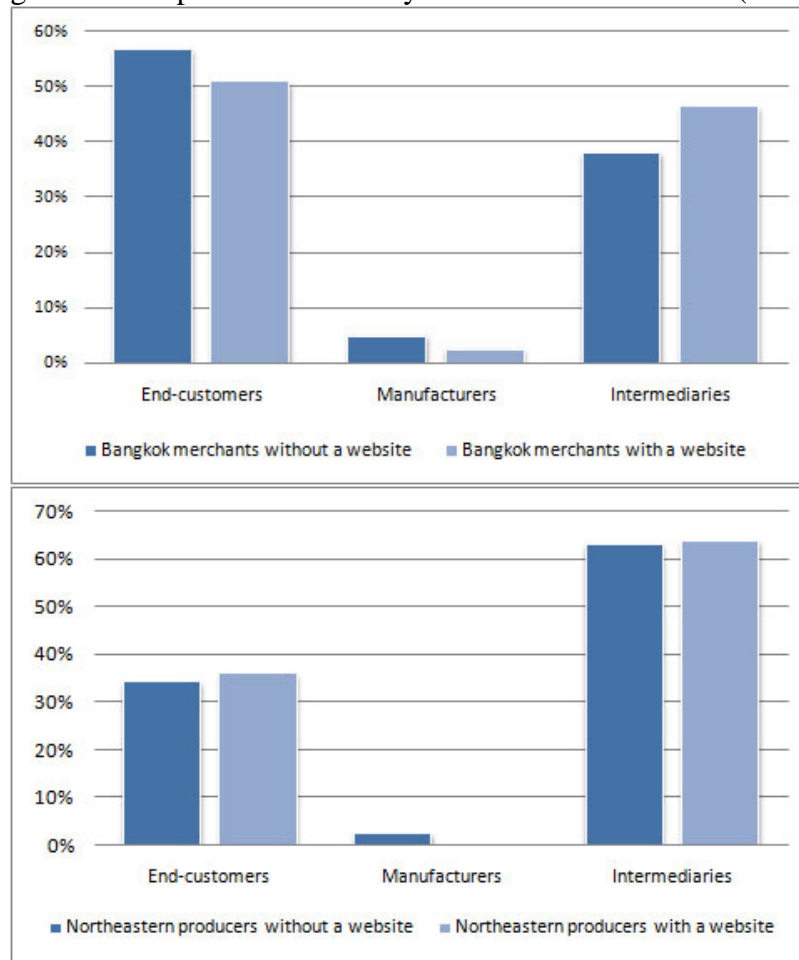
A potential source of bias originates from one of the main findings of the previous chapter. Internet users are far more likely than EAs that do not use the Internet to be intermediaries. It therefore stands to reason that the dissimilar composition of commodity chain positionalities in each category could have an effect on the above results. This bias could be avoided by examining the outputs of each specific sub-group separately (i.e. only Internet users that are Bangkok merchants, only producers in the Northeast who do not use the Internet, etc.). However, breaking down the sample into

$$\left\{ \frac{n(n+1)}{(n-1)(n-2)(n-3)} \sum \left( \frac{x_j - \bar{x}}{s} \right)^4 \right\}$$

<sup>84</sup> Kurtosis is defined as:  $\frac{3(n-1)^2}{(n-2)(n-3)}$  where 's' is the standard deviation.

increasingly smaller categories results in most sub-groups possessing extremely low populations. It is nonetheless revealing to look at the two categories with the largest sample sizes: Bangkok merchants and Northeastern producers.

Figure 5.5: Proportion of Sales by Bangkok Merchants (top), and Figure 5.6: Proportion of Sales by Northeastern Producers (bottom)



Notes: Northeastern producers include Northeastern producers who also act as merchants. The Y axis indicates the average proportion of sales to each category. Total numbers of respondents are as follows: Bangkok merchants without a website (16), Bangkok merchants with a website (18), Northeastern producers without a website (50), Northeastern producers with a website (7).

Figures 5.5 and 5.6 demonstrate that the topologies of commodity chains vary substantially between Bangkok merchants and Northeastern producers (i.e. merchants are more likely than producers to sell a lot of silk to end-customers). However, in both cases, it is remarkable that so little difference exists between Internet users and EAs

without websites in the proportion of sales to end-customers versus intermediaries.

While the small sample sizes are certainly a reason to judge this finding with caution, the fact that the dataset as a whole displays the same pattern (figure 5.4) is reason to believe that use of the Internet is having no noticeable effect on commodity chain topology. In other words there is no convincing evidence that the Internet is allowing producers or merchants to bypass intermediaries in order to topologically shorten commodity chains.

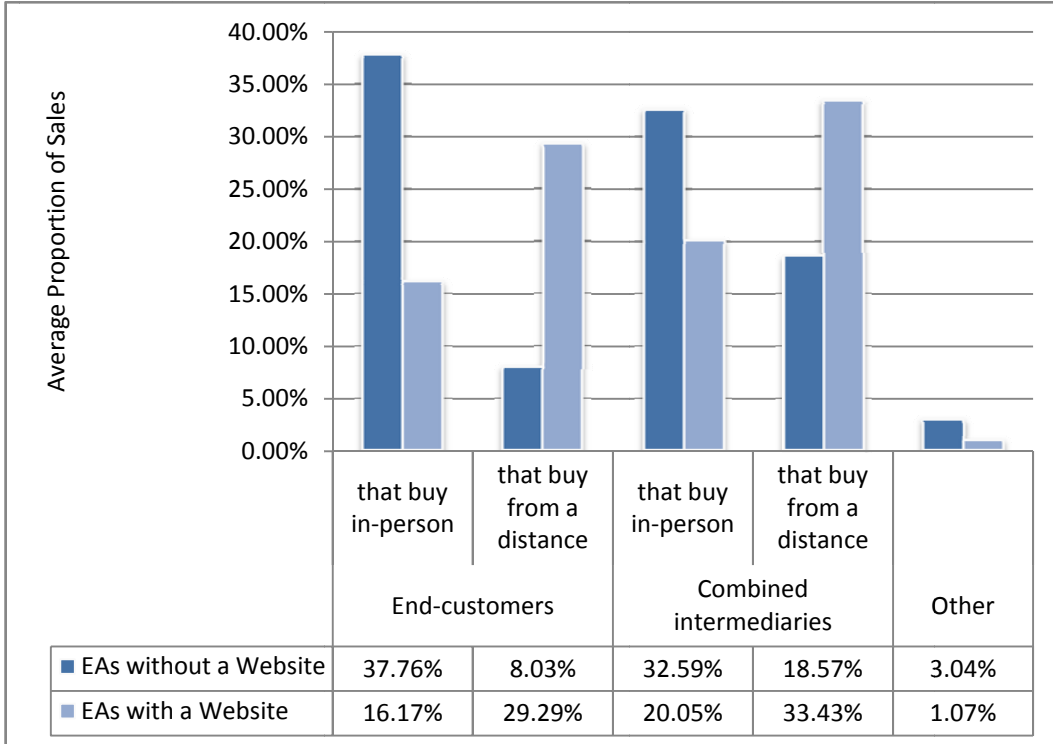
### *Geographic and Topological Characteristics of Sales*

Even though the Internet may not be having any noticeable effect on commodity chain topologies, important differences between Internet users and non-Internet users can be observed when end-customers and intermediaries are sub-divided into two distinct geographical groups. In addition to detailing the percentage of their sales going to individuals, retailers, and wholesalers, survey respondents were asked in subsequent questions to specify two additional details: the proportion of each group that buys in person versus from a distance (Figure 5.7), and the proportion of each group that is based locally (Figure 5.8).

Some of the starkest differences between EAs that have websites and EAs that do not can be observed in figure 5.7. EAs that have websites are far more likely than producers or merchants without websites to sell a large percentage of their silk to customers (both end-consumers and intermediaries) that buy through a non-proximate transaction (i.e. not face-to-face). Figure 5.8 reinforces this point by highlighting the fact that Internet users are far more likely to sell a large portion of their silk to end-consumers or intermediaries in other towns or cities. Particularly in the case of selling to intermediaries, EAs with websites (in contrast to those that do not use the Internet) are particularly unlikely to sell locally. This result is somewhat predictable and reinforces the idea that the Internet is allowing EAs with websites to expand their geographic reach. However, it is interesting to note that while the Internet in theory allows all producers

and merchants with websites to sell directly to distant end-consumers, EAs with websites remain instead much more reliant on sales to distant intermediaries.

Figure 5.7: Proportion of Sales: Sub-divided by Distance

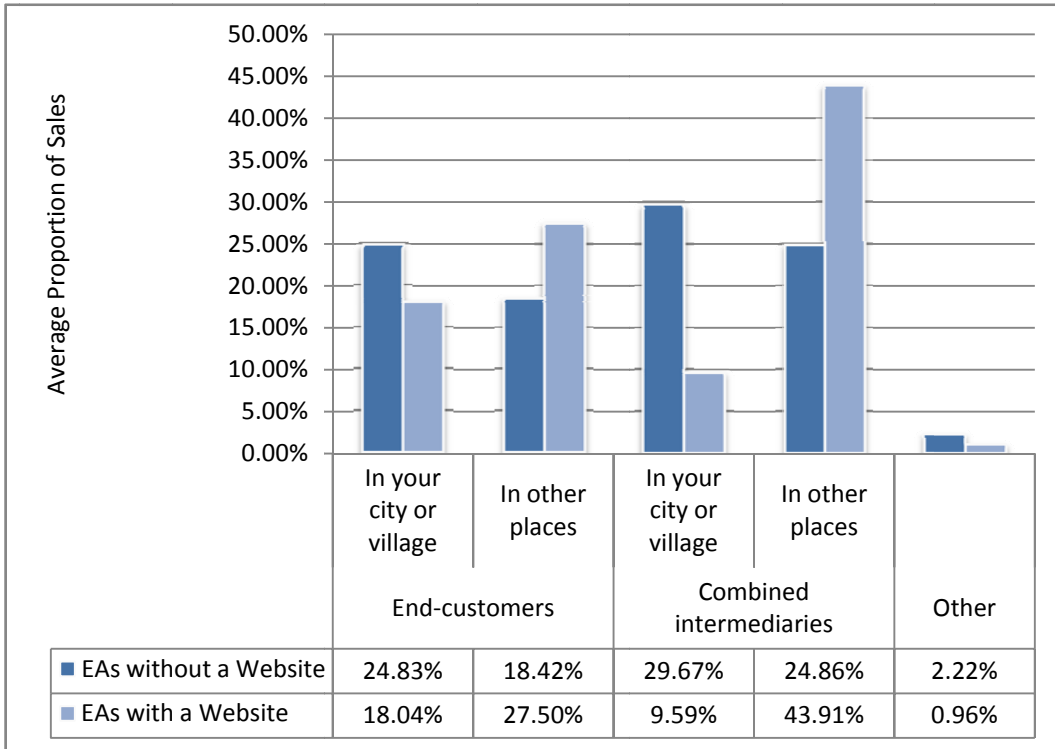


Total # of respondents: 42 with a website and 103 without a website. Note: This graph displays the mean proportion of sales to end-customers, combined-intermediaries, and other EAs. “Combined-intermediaries” refers to sales to both retailers and wholesalers.

Sub-dividing the analysis by looking at only Bangkok merchants and Northeastern producers is again possible, and the results are displayed in Figure 5.9<sup>85</sup>. Once more it can be seen that in almost all cases there is a relationship between use of the Internet and geographical reach. Internet users are more likely to sell their silk non-locally and non-proximately.

<sup>85</sup> While it would be most helpful to analyze all sub-groups, the sample size is simply too small to allow for any meaningful analysis.

Figure 5.8: Proportion of Sales Sub-divided by Location

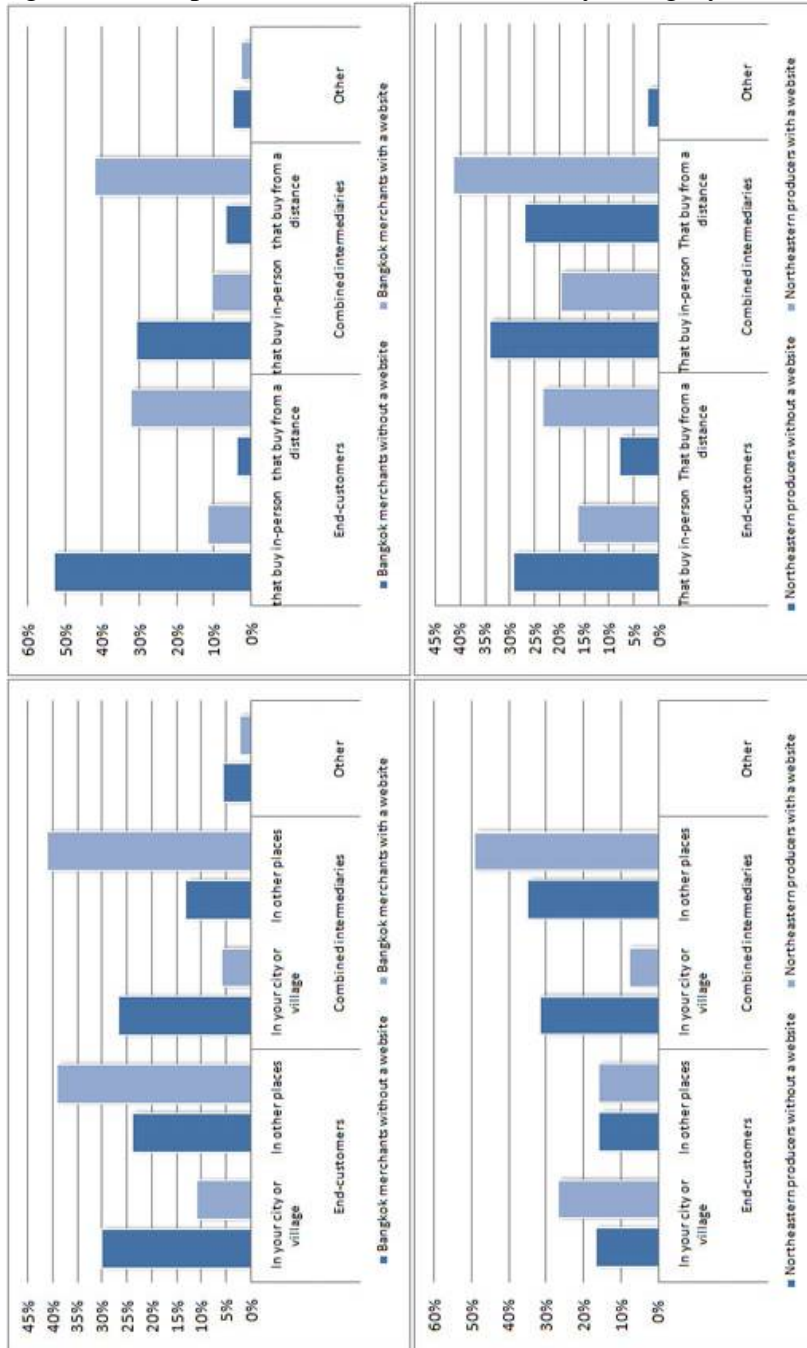


Total # of respondents: 46 with a website and 96 without a website.

*Differences in Supply Chains*

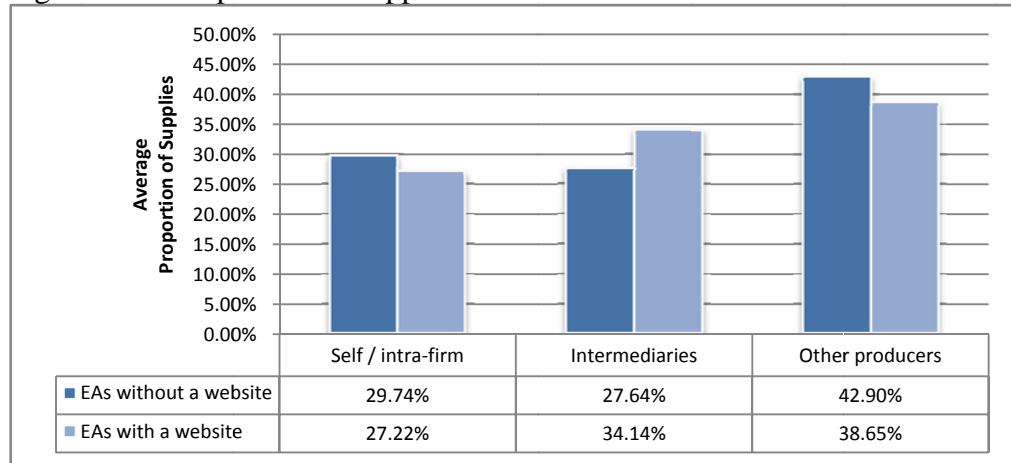
More surprising results are evident in an analysis of the commodity chain nodes from which inputs are sourced. All survey respondents were asked to approximate the proportion of local and non-local supplies originating from their own production facilities, intermediaries, and external producers. There is little difference between EAs that do and do not use websites in regards to the average percentage of supplies originating from any of the three possible sourcing options for silk (see figure 5.10). However, when subdividing the data by location of suppliers (figure 5.11), stark differences can be observed. In cases where EAs with websites produce large amounts of silk themselves, the site of production is highly likely to be located non-locally. EAs without websites, in contrast, are highly likely to produce silk locally.

Figure 5.9: Proportion of Sales Sub-divided by Category and Geography



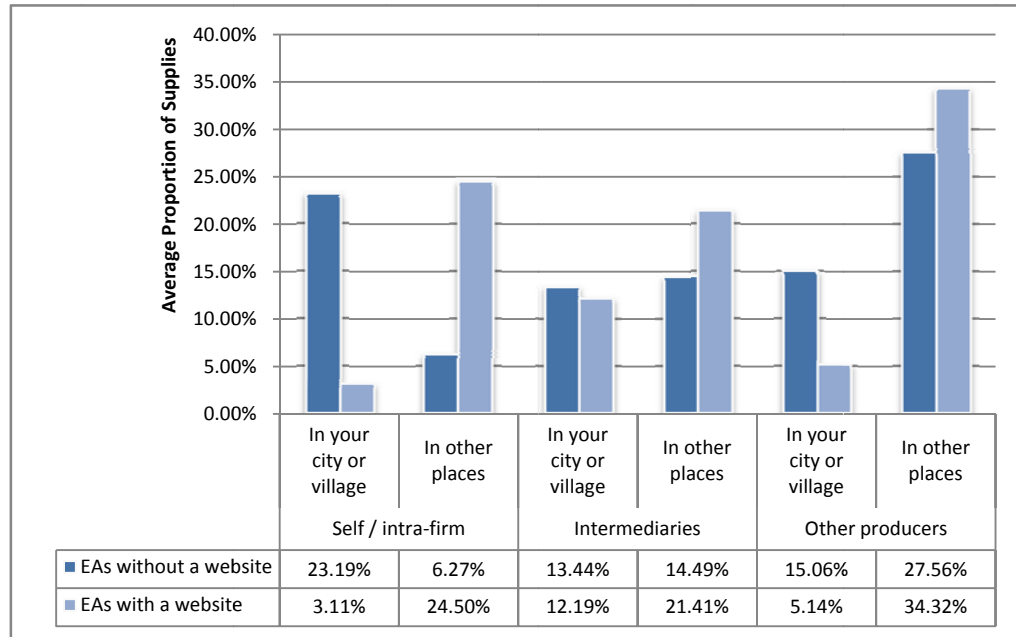
Notes: Northeastern producers include Northeastern producers who also act as merchants. The Y axis indicates the average proportion of sales to each category. Total numbers of respondents for each chart are as follows (starting from top-left and moving clockwise): Chart 1, Bangkok merchants without a website (14), Bangkok merchants with a website (18); Chart 2, Bangkok merchants without a website (16), Bangkok merchants with a website (16); Chart 3, Northeastern producers without a website (48), Northeastern producers with a website (7); Chart 4, Northeastern producers without a website (45), Northeastern producers with a website (7).

Figure 5.10: Proportion of Supplies



Total # of respondents: 37 with a website and 105 without a website.

Figure 5.11: Proportion of Supplies Sub-divided by Location

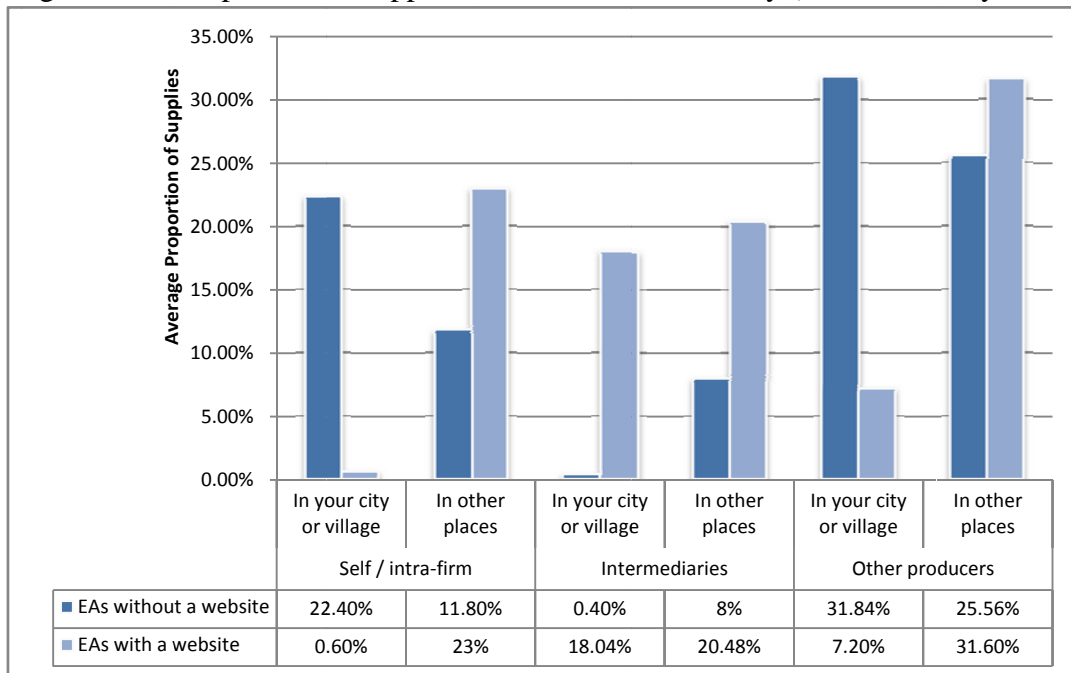


Total # of respondents: 37 with a website and 105 without a website.

Because the word “supplies” has a variety of meanings in the context of silk production (most notably raw silk and silk fabric), it was noted whether or not the EA primarily referred to finished fabric. Examining only supplies of finished fabric highlights some of the most glaring differences between EAs that do and do not use the Internet (Figure 5.12). Particularly important is that fact that EAs with websites receive

an average of 18% of their fabric inputs from local intermediaries and 20.5% of their inputs from non-local intermediaries, while those without websites obtain an average of only 0.5% from local merchants and 8% from non-local merchants. EAs with websites are thus more likely than EAs that do not have websites to have additional upstream nodes on their commodity chains. The reasons why EAs with websites are more likely than EAs that do not have websites to buy from intermediaries is unclear. One possibility is that since many of the EAs with websites are based in Bangkok, it is simply easier for them to buy from other intermediaries in the city rather than producers in the Northeast<sup>86</sup>.

Figure 5.12: Proportion of Supplies of Finished Fabric Only (Sub-divided by Location)



Total # of respondents: 25 with a website and 25 without a website.

## Conclusions

In response to the research question framing this chapter, (How has the introduction of the Internet altered production chains and the flows of capital in the Thai silk industry?) it was hypothesized that:

<sup>86</sup> The fact that only 0.6% of EAs with a websites buy silk from producers in their same location might support this argument.



*Hypothesis One: The opening up of wormholes through the introduction of the Internet will in most cases shorten, or disintermediate, the overall production chain.*

This chapter has demonstrated that the above hypothesis, in the case of Thai silk, must be rejected<sup>87</sup>. Where the Internet has been employed, there is often no noticeable change in the topological length of commodity chains. Internet adopters are equally or more likely than EAs who do not use the Internet to sell silk to intermediaries, and are more likely to buy silk from intermediaries. Looking at only Northeastern-based producers or Bangkok-based merchants reveals the same findings. This is not to say that there are no incidences in which the Internet is being used to shorten commodity chains, but simply that such cases are the exception and not the rule. Although the Internet is having no significant widespread topological effects, its geographical manifestations have been more pronounced. Internet users are not only more likely to sell non-locally and non-proximally, but are also more likely to obtain their supplies from a distant source.

In sum, the Internet is in some ways partially fulfilling its geographical potentials. That is, absolute distance is made less relevant and less of a barrier for firms that have a presence in cyberspace. However, despite being able to sell to new markets,

---

<sup>87</sup> Rejecting hypothesis one, also means that hypothesis two:

*Shorter and direct production chains alter economic positionalities and allow a greater amount of value to be captured at the nodes of production than longer production chains with more nodes (hypothesis two).*

cannot be discussed in further detail. This hypothesis was formulated under the assumption that the Internet would more often than not topologically shorten commodity chains. This chapter has demonstrated that the assumption upon which hypothesis two is based is faulty; the hypothesis will therefore not be addressed in any additional detail. Hypothesis three (listed below), on the other hand, is more relevant to the findings of this chapter. However, the hypothesis also draws upon details presented in the following chapter and, as such, will be discussed in more detail in the following pages.

*The fact that the Internet is available to many producers will not automatically translate into widespread use of the shortest possible production chain. Instead, actors with economic and technological know-how and reserves of capital will most often occupy advantageous positions throughout the value chain of a product (hypothesis three).*

most firms that use the Internet seem unable to break out of their commodity chain positionalities. The opening up of wormholes therefore does not appear to be causally related to the disintermediation of commodity chains. The virtual conduits through which non-proximate communications and economic transactions are occurring are doing little to de-lodge intermediaries from their positions in the commodity chain. While the Internet may have sparked a governance shift towards market or modular types of governance in buyer-driven chains in global textile industries (Porter 2001; Gereffi 2001b; Gereffi and Memedovic 2003), it has neither lessened the importance of intermediaries in the Thai silk industry or shown that disintermediation is ever likely to occur. This point runs counter to much that is written about the potentials of the Internet and is the focus of the following chapter.

## CHAPTER 6

### **MORE THAN JUST A DIGITAL DIVIDE: ECONOMIC TRANSPARENCY AND THAILAND'S UNEVEN GEOGRAPHY**

The previous two chapters showed that: first, the Internet is not being used by most economic actors in the Thai silk industry; and second, where it is being used, it is not associated with topologically reconfigured commodity chains. Instead of focusing on change that the Internet is precipitating, then, this chapter will examine why the Internet is not altering the lives of producers. The first section of this chapter will discuss the uneven economic, cultural, and cyber- geographies of Thailand. The second section will explore the idea of economic transparency and the possibilities for transparency in silk commodity chains. The final section will focus on three case studies of organizations that have attempted to use the Internet to disintermediate commodity chains.

#### **Thailand's Uneven Geography**

The Northeast of Thailand may only be a one day bus ride away from Bangkok, but by almost all measures, its people live in a very different world<sup>88</sup>. As the following sections will demonstrate, Isan's inhabitants are faced with not only a digital divide, but also barriers that are spatial, linguistic, economic, and educational. These myriad factors ultimately lead to a significant skills and knowledge gap between the sites of silk production and Thailand's primary city, Bangkok.

#### *The Spatial Divide*

From the mid-19<sup>th</sup> Century onwards Thailand undertook a series of programs of modernization. Roads and railways were built to both exercise tighter control over the

---

<sup>88</sup> Thai literature often presents Bangkok and Isan as utterly distinct regions; and one of Thailand's most famous writers, Kamsingh Srinawak has stated that the two should be considered different countries (Platt 2002; Boccuzzi 2007).

provinces and to better integrate them into the national economy (Dixon 1999). However, the Northeast of Thailand (Isaan) was integrated at a much slower pace<sup>89</sup> (Riggs 1966; Wyatt 1966; Keyes 1995). Isaan, thus came to be largely considered as economically, and culturally, and linguistically backward (Cripps 1965; Kirsch 1966; Keyes 1967). Such ideas are reflected in Grahame's (1912 in Dixon 1999: 39) account of the region:

*A population of some million and a quarter Laos, Siamese and Kambodians, that is about 20 people to the square miles [sic], inhabits this inhospitable land, wresting from the reluctant soil, crops barely sufficient to maintain an existence which, passed amidst damp and mud for one half of the year in dry, hot dust-laden atmosphere for the other, is one of the most miserable imaginable, more especially since the whole neighbourhood is peculiarly liable to the visitations of epidemics of diseases affecting both men and cattle.*

It was not until the conflict in Vietnam that the Thai government devoted large amounts of resources to transportation projects that would connect the Northeast with Central Thailand (Wilson 1966; Long 1966). Today, wide roads, two rail spurs, and a number of airports connect the Northeast with Bangkok. In comparison to Central Thailand, however, the Northeast remains relatively isolated from the rest of the world. On its northern and eastern borders, the Northeast abuts the Mekong River and Laos PDR. Only a few bridges exist, and very little documented trade passes across the borders<sup>90</sup>. The border with Cambodia is even more of an impediment. Very few roads exist, and the ones that do are mostly unpaved, pass through mined sections of the Cambodian jungle, and are impassable during parts of the rainy season. Other than return trips from the hundreds of thousands of Northeasterners that have migrated to Bangkok to find higher paying jobs, very few Thais or foreigners visit the region.

---

<sup>89</sup> This was in part to avoid antagonizing the French in Cambodia and Laos.

<sup>90</sup> Laos PDR is the twenty seventh largest destination of Thai exports and does not even enter onto the list of thirty largest importers (Department of Export Promotion 2007). However, a fairly significant amount of undocumented trade is thought to exist between Thailand and Laos PDR.

### *The Linguistic Divide*

One of the most noticeable differences between the Northeast and Central Thailand is a linguistic one. While almost all Thais are able to comprehend standard Thai,<sup>91</sup> most Northerners speak an Isaan dialect. The three dialects of Isaan are similar enough to standard Thai to enable basic communication, but Isaan is much closer to Lao than to Thai (Keyes 1966). Further complicating the issue is the fact that many Northerners in the southern part of Isaan near the Cambodian border speak a Khmer dialect as their first language (Smalley 1994).

In the silk industry, I encountered only a handful of Thais who spoke Chinese<sup>92</sup>, Japanese, or German. These individuals had all spent part of their lives abroad and for the most part operated shops in Bangkok geared toward the export market. Otherwise, English was the most widespread non-native language. Many Bangkok merchants could speak and understand some basic English phrases related to the selling of silk (such as phrases related to quantities, prices, haggling, telecommunications, and logistics). Merchants in the Northeast were less likely to speak English. However, many were similarly able to communicate and understand basic commerce-related phrases (such as 'expensive', 'cheap', 'good quality', and 'discount'). On the other hand, I did not once encounter anyone involved in the production of silk that could speak English.

### *The Educational Divide*

The lack of language skills is not the only impediment that hinders Northerners from engaging in international commerce. By almost all measures of educational achievement, the Northeast is ranked below every other region in Thailand. The United Nations Development Programme (2007: 7) estimates that "The top fifth of the population by income receives over half of all public spending on higher education." The significance of this statistic to the Northeast is highlighted in the same report's

---

<sup>91</sup> Central Thai is the lingua franca of Thailand.

<sup>92</sup> This is despite the fact that a large proportion of textile traders are of Chinese descent (Thomson 1993).

Education Index<sup>93</sup>. Figure 6.1 illustrates the Education Index by province and highlights the fact that Northeastern provinces are overwhelmingly ranked lowest.

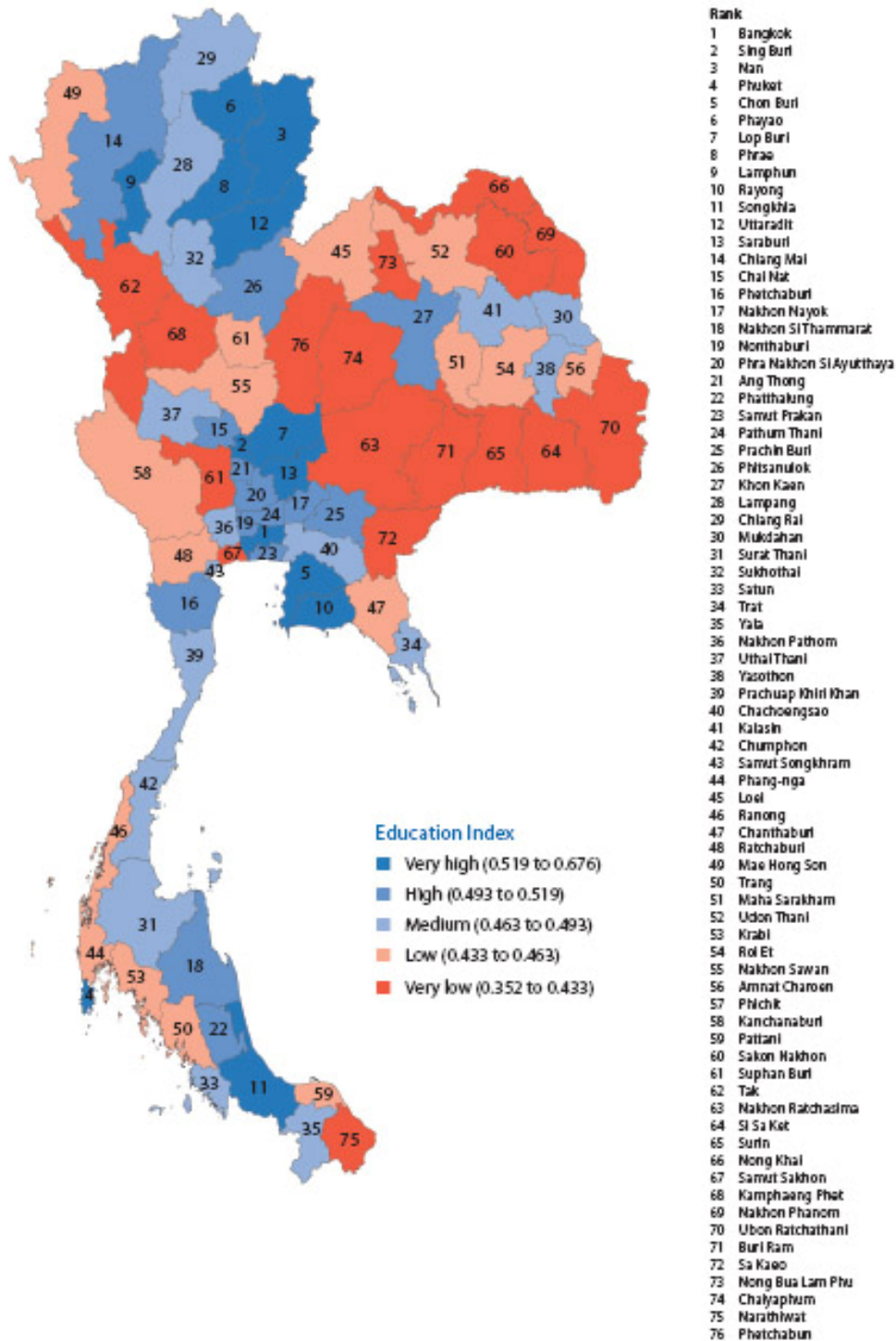
Over the course of my fieldwork, weavers' relatively low levels of education when compared with shopkeepers became evident on a number of occasions. I was interviewing a shopkeeper at a silk shop in Chonnabot, Khon Kaen when a weaver walked in. She was carrying a basket with six pieces of checkered silk she had recently finished. The weaver was hoping to sell the silk to the shopkeeper for four hundred baht per piece. The shopkeeper was unwilling to accept the starting price and attempted to reduce the sale price to three hundred and fifty baht per piece. However, instead of simply stating the desired sale price, the shopkeeper began bargaining in units of two (despite the fact that both the weaver and the shopkeeper intended all six pieces to be sold). The shopkeeper, told the weaver: "ok, I'll give you seven hundred [baht] for two pieces." The weaver objected to the counter-offer, stating "no, no, no, no. the best I can do is one for three hundred and fifty." The two agreed, and all six pieces were sold for 2,100 baht.

The shopkeeper may or may not have been trying to deliberately confuse the weaver. But regardless of intention, bargaining in units of two confused the issue in the favor of the shopkeeper. Elsewhere in the Northeast, weavers I spoke with had completed no formal schooling. Some are functionally illiterate, while others are uncomfortable performing mathematical calculations. This state of affairs leaves many vulnerable to exploitative business practices.

---

<sup>93</sup> The Education Index is based upon: mean years of schooling, upper secondary and vocational enrolment, lower secondary test scores, and lower secondary students per classroom.

Figure 6.1: Education Index



Source: UNDP<sup>94</sup> (2007:90)

<sup>94</sup> Permission to reproduce this map has been obtained by email from Punnipa Ruangtorsak of the United Nations Development Programme.

### *The Economic Divide*

The average Thai household spends eighty-nine percent of its income on consumption (UNDP 2007). This fact means that there are few resources remaining for savings or investment. Large levels of debt, often taken out in the informal sector with high interest rates, only serve to exacerbate the issue (Siamwalla et al. 1990). In the Northeast of Thailand, almost seventy-nine percent of households are indebted (the national average is sixty-six percent). Furthermore, the amount of debt held by households has been rising steadily in the first decade of this century. By 2004, the average amount of household debt was 104,571 baht (UNDP 2007). While household debt is almost ubiquitous throughout the Northeast, studies have found that microfinance business loans have generally benefitted only the wealthiest people in Northeastern communities (Coleman 2006).

Studies carried out in the Northeast of Thailand have also found that, unsurprisingly, wealthier households are far more likely to invest in their businesses than poorer households. For this reason, there are more significant hurdles to entrepreneurial activity in the Northeast than in the Central region (Paulson and Townsend 2004).

### *The Cultural Divide*

Commentators such as Keyes (1983) have pointed to a common feature of Northeastern society being the relatively low value placed on maximizing economic profit. This characteristic often leads to derogatory comments from Central Thais, but is also a source of pride among many Northerners. In defining characteristics of an entire region, there is always the danger of essentializing the many complex and often contradictory forces at work. The Northeast of Thailand is certainly home to many people who devote a large portion of their lives to maximizing their economic profit. However, it remains that there are a large number of weavers (as well as many other people) who frequently make what outsiders might view as economically irrational



decisions. In June 2006, I interviewed Professor Jintana Iamlaor, an Agricultural Economist, specializing in Thai sericulture who commented extensively on this issue. She noted that at certain times of the year much of the production of silk in the entire region grinds to a halt due to rice production. The fact that people are willing to so readily abandon silk production in order to plant or harvest rice has, according to Professor Iamlaor, had severe consequences on a number of producers. She recounted stories of producers who had lost contracts or been blacklisted for failing to meet deadlines during the rice production season. Nongluk Seeboonjun, Director of the Queen Sericulture Center in Chonnabot, recounted similar stories in another interview, conducted in June 2006. Throughout the Northeast, people prioritize rice farming whether or not rice farming is the most immediately lucrative activity (c.f. Scott 1976).

While it is clear to weavers that returning to the fields will in many cases financially hurt them, most still abandon weaving when they are needed in the farms. A prime reason is that the nurturing of rice gives many families a sense of security that money does not. The market for silk can sometimes offer high returns, but remains unstable. Rice, on the other hand, is a source of stability. It remains that many buyers in Bangkok and abroad see the readiness of Northeasterners to abandon production as irrational, and as a liability for their business.

The King's 'sufficiency economy' philosophy has likely gone some way to encourage further moderation in personal and group consumption patterns in rural communities in the Northeast. However, due to the sensitive nature of the topic, Northeasterners have no choice but to agree if asked whether they are implementing 'sufficiency economy' principles into their lives.

### *The Digital Divide*

Methodologies used to measure Internet usage vary, making it difficult to obtain a reliable account of how many Thais regularly use the Internet. However, there is no doubt that Internet use has skyrocketed in the past decade (see figure 6.2) (Palasri, Huter,

and Wenzel 1999; Prammanee 2003; NECTEC 2004; United Nations 2003a) . As of 2007, the number of Thais connected is likely somewhere between 8.5 and 14 million out of a population of sixty-seven million people (NECTEC 2007; Internet World Stats 2007)<sup>95</sup>. The National Statistical Office of Thailand (2007) claims that 1.8 million Bangkok residents (29% of the population) and 2.1 million Northerners (10.6% of the population) use the Internet. Compared to Northerners, Bangkok residents are thus almost three times as likely to access online information<sup>96</sup>. Interestingly, these findings closely mirror income distribution in the country. In 2006, people in Bangkok<sup>97</sup> made an average of 33,088 THB<sup>98</sup> a year, while those in the Northeast made an average of only 11,815 THB.

Further data from the National Statistical Office reveal that e-commerce and computer use is not common practice among Thai businesses. Of the 827,051 business establishments in the Kingdom of Thailand, 20.5% used computers, 11.3% used the Internet, 1.3% made purchases via the Internet, and 0.7% conducted sales via the Internet. Unfortunately, these data are not broken down by region (National Statistical Office 2007). However, it seems safe to assume that establishments in Bangkok would use the Internet more than businesses in the Northeast. The statistics have been subdivided into firm size, and in table 6.1, one can observe the strong correlation between number of employees and level of computer and Internet usage.

---

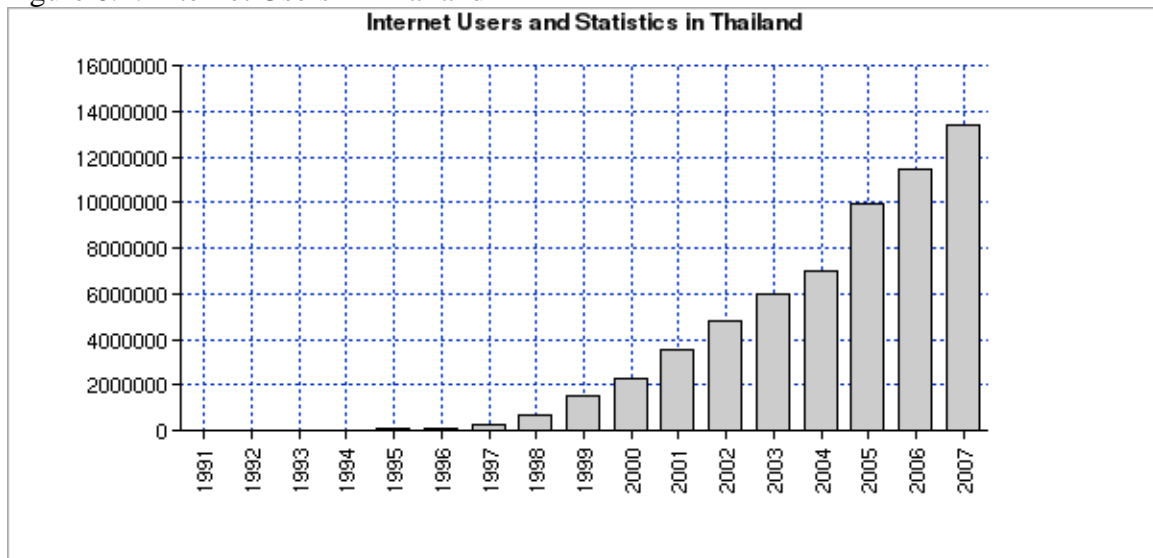
<sup>95</sup> The National Statistical Office of Thailand estimates that the number of Thais using the Internet is 8.5 million and puts the number of Thais using computers at 15 million. It is possible that Internet World Stats confused these two numbers, thus overestimating the number of Internet users. If the Thai government's numbers are correct then about twenty two percent of Thais use the Internet.

<sup>96</sup> Mephokee (2002) argues that compared to Northerners, Bangkok residents are five times more likely to use the Internet. Irrespective of which statistics are closer to the truth, a significant regional gap in the potential for online accessibility clearly exists.

<sup>97</sup> Following the National Statistical Office of Thailand, the word 'Bangkok' is used to refer to the greater metropolitan area of the city: an area which encompasses Nonthaburi, Pathum Thani and Samut Prakan.

<sup>98</sup> Thai Baht

Figure 6.2: Internet Users in Thailand



Source: NECTEC (2007)

Table 6.1: ICT Usage by Establishment Size, 2006<sup>99</sup>

Employees	Number of establishments	Use of Computer	Use of the Internet	Use of Website	Purchases product via the Internet	Sale via the Internet	Use of EDI
1 - 15 Persons	798,071	18.1%	9.2%	2.8%	1.0%	0.5%	0.2%
16 - 25 Persons	10,310	78.6%	54.7%	21.2%	6.8%	4.4%	1.3%
26 - 30 Persons	2,594	88.0%	64.4%	28.0%	9.6%	5.5%	1.5%
31 - 50 Persons	5,807	90.1%	69.6%	35.0%	9.8%	8.0%	3.0%
51 - 200 Persons	7,714	96.7%	83.5%	46.3%	11.7%	10.3%	4.8%
More than 200 persons	2,555	99.5%	93.5%	65.6%	15.0%	14.8%	13.3%
<i>All</i>	<i>827,051</i>	<i>20.5%</i>	<i>11.3%</i>	<i>3.9%</i>	<i>1.3%</i>	<i>0.7%</i>	<i>0.3%</i>

Source: Adapted from data in the National Statistical Office's (2007) Key Statistics of Thailand dataset.

The cause of such low usage levels is not related to the infrastructural capacity of Thailand, as only ten percent of the Internet infrastructure deployed by Thai Internet Service Providers (ISPs) is used daily. According to Pongpaibool (2007: 4) "such low utilization levels could mean that there is a low demand for local Internet contents, or there are not enough interesting local contents available." It is challenging to get a sense

<sup>99</sup> The percentages do not add up to 100% because more than one category could be selected.

of the amount of Thai-language content available on the Internet; although it is clear that the Thai demand for content centers around distinctly non-businesslike themes.

According to a study by Koanantakool (2007), the most popular Thai-language search words are: 'games'; 'horoscope'; 'music'; and 'jobs.' Visits to business websites on the other hand comprise only 3.7% of Thai Internet usage, and seventy-one percent of Thai Internet users have never made a purchase online (UNCTAD 2007).

## **Transparency**

The previous chapter highlighted how Internet adopters in the Thai silk industry are in some ways living up to the space-transcending potentials of cyberspace. Particularly when the locations of important customers are examined, it is clear that Internet Adopters have become heavily dependent on distant buyers. However, when commodity chain positions are examined, we see rather surprising results. Instead of fulfilling one of the most widely touted benefits of the Internet (that it directly connects producers with consumers, thus eliminating intermediaries), we see Internet adopters occupying mediating roles. Not only is it highly probable that Internet users will sell to and buy from intermediaries, it is also likely that they will be intermediaries themselves.

These findings contrast with many of the assumptions present in development literatures. The Internet does not seem to be transcending, or allowing a jumping-over, of the commodity chain positions occupied by intermediaries. The results of this research thus beg a question: why is Internet use associated with mediation rather than disintermediation in the commodity chains of Thai silk?

### *Pakthongchai*

To address this question, it is helpful to briefly discuss the geography of the silk industry in Pakthongchai, Thailand. Pakthongchai is a small town situated thirty-five kilometers south of the city of Nakhon Ratchasima (commonly referred to as Khorat City). The town has long been a center of silk production and specializes in the

production of plain colored cloth (although almost all varieties of silk are woven in the area). Very few shops and markets in Bangkok are without at least some silk from Pakthongchai in their displays, and many retailers almost exclusively stock Pakthongchai silk. Despite this, Pakthongchai has not been able to establish a well-known geographic brand amongst either Thai or foreign consumers. In Bangkok, many Thai residents (who are not originally from the Northeast) know that silk generally comes from Isaan. However, only a few of the locals that I spoke with knew the names of any towns that specialized in particular types of silk. My discussion with numerous foreign nationals in Thailand suggests that they are generally even less knowledgeable about the geography of Thai silk. Many know that silk comes from ‘somewhere up North’, and frequently assume silk production to be based in the Northern provinces (as opposed to the Northeast)<sup>100</sup>. Some of the silk merchants in Pakthongchai even joke about the fact that both residents of Bangkok and foreigners will take trips to Chiang Mai (a city that, by road, is at least eight hours from Isaan and eleven from Bangkok) just to buy silk in the hope of obtaining a bargain. Such beliefs are reinforced by the fact that some Chiang Mai-based merchants re-brand silk from Pakthongchai<sup>101</sup>.

Throughout the commodity chains of Thai silk there are abundant amounts of confusion and misinformation, resulting in an almost absolute lack of transparency. Yet, it is not only end-consumers who are lacking a complete picture of the flows of silk within Thailand. Very few producers, intermediaries, or consumers know about what happens more than one link in the silk commodity chain away from their own position. Consumers often do not know exactly where their silk comes from, and weavers usually know little about what intermediaries do with their silk. For example, when asked about the end-customers that use her silk, Ms. Worawan, the head of a weaving group that sells large amounts of silk to local merchants told me:

---

<sup>100</sup> In fact, on numerous occasions when I have told either Thais or foreigners about my project, they insisted that I should be spending more time in Chiang Mai (under the assumption that the majority of Thai silk is produced there).

<sup>101</sup> Two of the merchants that I spoke with in Pakthongchai revealed to me that the intermediary that they sell to in Chiang Mai specifically rebrands silk as “locally produced in Chiang Mai.”

*There is such a long chain of people, and I really just don't know where it goes. I don't know if the retailers that buy from us export our silk.*

However, the quote from Ms. Worawan is perhaps not fully representative of the knowledge possessed by producers and merchants in the Northeast. Many of my interviewees had either a vague idea about the sites at which their silk was ultimately consumed or at least a general understanding about the directions in which their silk moved after it was sold. Ms. Boonsin, head of another weaving group, explained:

*Some of the people who buy from me export my silk, but I have no idea to where.*

Although Ms. Boonsin has some knowledge about the movement of her silk after it is sold, there is a lack of any specific information about sites in the commodity chain beyond one node removed from her own position. Her statement is symptomatic of the lack of transparency through the entire network. People are highly unlikely to be able to see past the haze created by each successive node in the chain, even if only small absolute distances separate those nodes, a point that can be best seen by returning to the geography of weaving and selling in Pakthongchai.

Pakthongchai (see figure 6.3) is comprised of a series of settlements built beside narrow walled streets. These settlements are sited outside the central business district for a few kilometers in most directions<sup>102</sup> (the central business district is represented by region 'A'), and for the most part are set back from the main roads leading through the town. One of the roads that transects Pakthongchai is a major North-South artery (route 34) and almost all of the local silk shops are sited on it (again in region 'A'). These shops all have large signs on the road, ample parking space, and glossy cabinets filled with rolls of silk categorized by pattern or color. Most of the shops have air-conditioning, elaborate decorations, and furnishings; they employ neatly-dressed

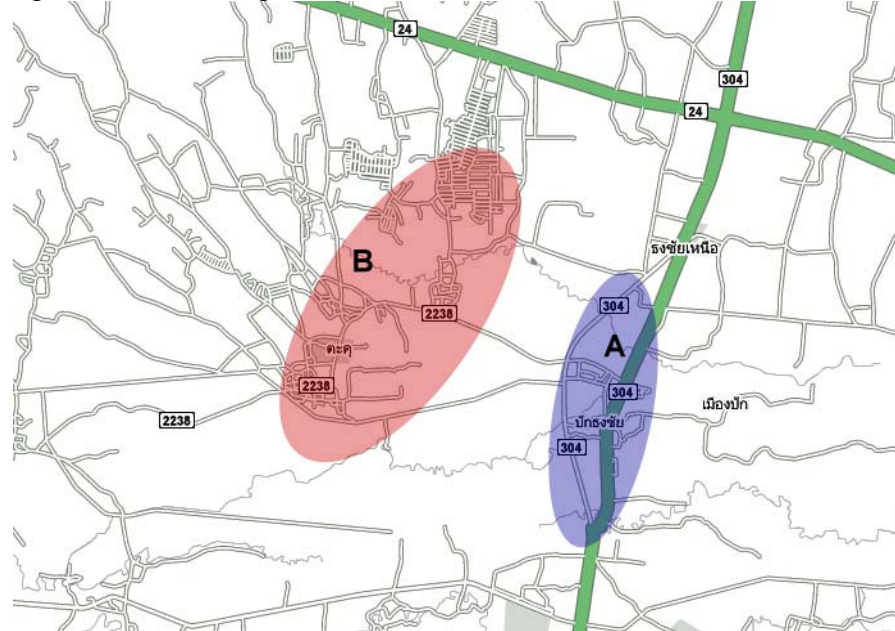
---

<sup>102</sup> Some of the settlements are separated from Pak Thong Chai proper by rice fields or animal pastures, while others meld into the urban form of the town.

employees who offer customers water or coffee, while leading them through the displays (see for example Watchara MaiThai in figure 6.4).

Some of the shops on the main road employ weavers in small spaces behind their shops. However, most buy from producers who live in small villages on the outskirts of the town (the settlements that I visited are represented by region 'B'). To reach these areas, one must navigate a somewhat labyrinthine street network<sup>103</sup>. The sites of production stand in stark contrast to the shops on the main road despite their proximity. Weaving is performed either underneath houses or in small covered courtyards accommodating anywhere between two and ten looms (see figure 6.5).

Figure 6.3: Pakthongchai, Nakhon Ratchasima, Thailand<sup>104</sup>



Sources: Google Maps (base-map), and author.

Other than locals, few end-customers ever visit the weavers who work in the Pakthongchai villages, and so the weavers and their representatives sell almost the entirety of their silk to intermediaries. Mr. Thai who lives in Noinakeh village (a village

<sup>103</sup> Houses in these settlements tend to have tall walls made of concrete, brick, or sheet metal fronting the public roads. This fact, combined with the narrow roads that snake through the area (connecting to the main arteries in only a few spots), turn the villages into mazes for anyone not thoroughly familiar with the area.

<sup>104</sup> The location of Pakthongchai in relation to other Northeastern towns is shown in figure 1.4.

sited behind the Pakthongchai high school) is one of these weavers. His house (displayed in figure 6.6) contains a platform for spinning and three looms that are operated by his wife and two neighbors.

Figure 6.4: Watchara MaiThai Silk Shop



Figure 6.5: Looms Underneath a House



Mr. Thai deals with financial issues for the group and has a number of concerns about the group's economic situation. Early in our discussion, he touched on a theme that was repeated by many of the weavers and heads of weaving groups with whom I spoke: namely, that the price of silk fabric was too low. Mr. Thai stated that his group weaves as much as they physically can and would be unable to increase production if



they wanted to. I therefore asked him why he chose not to raise prices. He responded that:

*If I sell in Pakthongchai district, I can't control the price. The middlemen fix the price. I worry about this, but I have no choice; I need money to buy the raw materials. In the past I gathered a group of weavers to fix the price, but there was conflict and people stopped weaving and the group stopped. So it is better to work for yourself anyway. Some companies come to visit. But I can't sell to them because I can't increase production.*

Figure 6.6: Spinning Platform



When pressed for more details about the companies that buy his silk, he stated:

*I have no idea about the shop that buys from me. I just know they want the silk in long pieces. Some of silk I sell to Nanoi [a merchant who also employs weavers located in Noinakeh village] and sometimes the customers come here every week. Sometimes I have to sell for 100bt a yard if I need money [a price lower than the cost of production]. One of the biggest problems for me is that the costs of raw materials are high. I cannot control the price. It is terrible.*

*The money I make is enough for everyday, but I have no savings. Sometimes I worry about the future because this is the only way I know how to earn money and I don't get any money from my children. My daughter is going to work in the [Japanese-owned sewing] factory, so maybe I can get money from that in the future. I have been doing this continually from my parents (old generation). Our weavers only weave, they don't farm.*

I asked whether there would be any way for him to sell silk to different customers who might be willing to pay a higher price. Mr. Thai simply laughed in response, shook his head while still smiling, and said:

*I really have no idea about that. I just wait for the customer to visit here.*

At the crux of Mr. Thai's problems is the fact that he is locked into exploitative economic relations. Intermediaries know the price at which they are able to buy silk from producers and are generally unwilling to pay more. If Mr. Thai were to attempt to raise his prices, his customers could easily buy from other producers. This threat is so powerful that Mr. Thai is occasionally convinced to sell his silk below the cost of production.

Mr. Thai's absolute spatial positionality in relation to large population centers (Bangkok is 250 km away) seems not to be the most important factor contributing to his economic woes. The silk shops located on the Pakthongchai main road are equally as removed from Bangkok and other important markets, yet are kept in business by end-customers and purchasing agents for other intermediaries who travel long distances to buy silk at its source.

While this example does not involve any virtual commodity chains, it's relevance for EAs attempting to sell silk on the Internet is clear. The example illustrates that Mr. Thai's problems might not be solely borne out of his geographic positionality. Regions A and B are equally as far removed from important distant markets, and yet visiting buyers in many cases prefer to buy silk from intermediaries rather than producers who

are a mere few hundred meters away. Opening up wormholes in attempts to alter relative distance might therefore mean little to producers if there are still significant language, education, and resource divides.

Mr. Thai's inability to reach alternate (higher-paying) customers perhaps rests on a relative distance from new markets that is unbreachable with any space altering technologies. The intermediaries that purchase from him keep him in the dark about how they convert, market, and distribute his silk, leaving him with little practical knowledge about how to accomplish such tasks if he were to attempt to do so himself on route 34. The commodity chain positions into which Mr. Thai and his group are locked thus make him invisible in a way that his absolute distance from markets cannot.

The filtering of market transparency through intermediaries not only prevents producers from developing detailed understandings of downstream consumer tastes and preferences, but also inhibits the flow of knowledge about producers to the consumers of silk. Merchants throughout the world are generally loath to reveal their sources for fear of losing a competitive advantage, and intermediaries within the Thai silk industry are no exception. Some intermediaries were straightforward about their reasons for not wanting to allow end-customers to communicate with producers. For instance, Mrs. Wongpituk of the Ganez company in Bangkok (an intermediary) professed:

*Information can be dangerous to villagers because if there is direct contact with foreigners then foreigners will also want low prices.*

The logic behind her argument is that producers are benefiting from the high prices that foreigners are willing to pay<sup>105</sup>. Yet Mrs. Wongpituk did not go into detail about how the ability of intermediaries to charge high prices will benefit weavers.

Unlike Mrs. Wongpituk, most silk merchants were unwilling to provide detailed explanations as to why they strove to maintain communication barriers between their suppliers and their customers. Throughout the course of my interviews with silk

---

<sup>105</sup> During the course of my fieldwork, I encountered numerous stories about weavers who were able to sell silk for high prices to foreigners. However, such stories, as recounted by weavers, were always presented as one-off occasions as opposed to regular occurrences.

merchants, I consistently encountered a significant amount of suspicion when inquiring about suppliers. I usually mitigated these concerns by stressing that I had only an academic interest in the topic, and by producing letters of reference and a business card to prove the point.

It is not only intermediaries who actively try to prevent customers from achieving an uninterrupted overview of the silk commodity chains. A commonly repeated complaint that I heard from a majority of producers with whom I spoke, related to the poor state of the economy since the military coup in 2006. Some told me sales were down to fifty or seventy-five percent of what they had been in previous years. Others, however, had much more dramatic stories, telling me that they were selling only twenty or thirty percent of the silk they had the previous year. Producers are thus careful to maintain any customer relationships in which they are involved and are naturally worried about competition. Ms. Laong, the head of a weaving group in the Chonnabot area, affirmed:

*We take our products to the retailers who buy from us. I don't like it when they come here because they bargain and see the competition...After that I don't know what the retailers do with the silk and I don't care.*

The desire to maintain the status quo is common throughout the industry; but interestingly, some of the least transparent commodity chains I encountered involve companies that use the Internet. Four separate producers and merchants recounted stories of third-party companies that set up online consignment stores in association with their own businesses. Kantima Yatsangkad, the owner of Rattanasuran Thai Silk (a small silk shop at a Bangkok market) told me:

*Some company takes pictures of my silk and puts them on the Internet. They only pay me if it sells... I don't know the name of the company though.*

In all four cases, the EAs not only had no information about end-customers, but moreover knew very little about the Internet-based companies who sell their silk.

Talking to the Internet Adopters about their suppliers was frequently even less revealing. Some stated simply that their silk was from “upcountry” or “the market” and were reluctant to provide further details. It is not only merchants who are reluctant to reveal information about their suppliers, however. A few organizations that describe themselves as “non-profits,” are equally unwilling to encourage transparency in their supply chains.

### *Ban Reng Khai*

An interview I conducted in April 2007 with Linda Belonje, the marketing manager of Léa Silk, provides a stark example of the desire shared by many companies to control the ways in which weavers are represented. The Léa Silk company was founded by Léa Laarakker Dingjan, a Dutch artist and businessperson who also established the Bangkok-based Ban Reng Khai Foundation. According to the company website (see figure 6.7) “all profits from sales of Léa Silk are returned to this foundation” (Léa Silk 2006). Ms. Belonje told me:

*Our aim is to support the village. That is why we exist. We don't exist as a profit making enterprise. All our profits will be returned to the village anyway. There have been a lot of changes in the village, because Léa started the foundation and started the silk weaving in the village again. The grannies in the village had been weaving when they were younger, so there were still some old looms around and some old pieces of silk, but people weren't really weaving any more. So, Léa came there and she taught the people to weave again, she taught them how to raise the silkworms, how to get the silk out of the cocoon.*

*She started 20 years ago. Since then the village has come a long way. They have electricity and running water now, and they have bank accounts with a little bit of saving in it. They have the rice bank where they keep the rice; they grow some fish so that they have proteins to eat. And the good thing is that the young mothers can stay at home and take care of the children and weave and there is no need to leave the village anymore.*

Me: How does this village compare to others in the province?

*Well, our project has actually expanded to five villages. So there are five villages nearby that are benefiting from us. We have an education fund to help send their kids to school, so I think these five villages have definitely stabilized in their existence and they are starting to become quite self-sufficient. Whereas you notice in other villages in the neighborhood that people are still leaving the village as young people are going to Bangkok and women are working in the bars. The villages are emptying out and we have given them the possibilities to stay in the village and to work in the village.*

Me: Which province are these villages in?  
*Isaan.*

Me: Do you know specifically which province it is in?

*Isaan. I'm not sure right now about which province they are in.*

Figure 6.7: Screenshot of <http://www.lea-silk.com/pages/foundation.html><sup>106</sup>

### The Foundation

**Ban Reng Khai** is a remote village in the Northeastern region of Thailand, known as "Isaan". Village destitution was to be dispelled beginning with the initial visit of **Léa Laarakker Dingjan** in 1985, which led to the establishment of **Ban Reng Khai Foundation** in 2001. The foundation supports the silk weavers and their families. All profits from sales of Léa Silk are returned to this foundation.



<sup>106</sup> This screenshot was captured on November 19, 2007.

The interaction described here is symptomatic of much of our conversation. Details were forthcoming when I inquired about the ways in which the organization operated or helped producers. However, despite the cordial interview atmosphere, when attempting to discover any specifics about the producers, I was met either with silence or an attempt to change topic. This also happened when I asked whether they could “tell me how the pay is distributed?”

*You can but I don't know the answer.*

Me: Do you know if it is more than what other weavers in the province make?

*I don't know how other weavers weave, because in a lot of villages they are using the kikaduk technique where they use the automatic shuttle, but ours is completely hand-woven where they have to hand-throw the shuttle as well. So our weaving is much slower and I would think that relatively they would get paid more for this than they do a meter on an automatic shuttle.*

Me: So after they get paid, the rest of the money goes to pay silkworm producers and others?

*You know our financial situation is extremely complicated because Léa has made different funds to different groups of people, so I'm not sure which part of the money goes to which groups and also Léa has put some personal investment to that as well and that all goes to the weavers and the sericulture.*

At the end of the interview I asked if it would be possible for me to visit the village at some point.

*Is it necessary? Because they don't take kindly to tourists.*

Me: Really?

*Yeah because it is a very isolated community and anybody who is there who doesn't belong there sticks out like a sore thumb, so you'd have to be accompanied by somebody to talk to anybody. It is almost like a gated community. It is very isolated in itself. It is not easy. There is nowhere to stay, there is nothing to do.*

*It is probably better for you to find one of the other villages that sell directly themselves because they are more used to talking to different people. Léa is quite protective of the village because she doesn't just want people there gawking at the weavers.*

The commodity chain positionality of Léa silk allows them to effectively filter and control the knowledge that can pass between producers and consumers. Most customers' knowledge of the production chain of Léa Silk's products will inevitably be based on Internet images and photographs in the glossy brochures that can be found in their physical store. Barriers between nodes on the commodity chains of Thai silk are clearly not easily broken down, and EAs such as Léa silk that use the Internet are no exception<sup>107</sup>.

The Internet, in theory, allows for the bypassing of intermediaries on commodity chains. It can foster the creation of a shared market-space with limited impediments to the flow of economic knowledge in both directions between producers and consumers. In practice, however, the Internet has had rather contrastive effects. My research has shown that while use of the Internet is associated with EAs selling silk to distant customers, the Internet has rarely been used to cut through the fog of commodity chains. There are often distinct differences between the structures of commodity chains that use the internet and those that do not, yet disintermediation has not happened on a scale expected by many commentators.

It is thus revealing to explore three case studies that center on projects which have specifically attempted to encourage disintermediation in the Thai silk industry: Room for Life, World of Thai Silk, and the Thaitambon.com project.

---

<sup>107</sup> It is worth noting that Léa silk were actually one of the EAs willing to talk with me. Many other EAs did not even grant permission for an interview. It is conceivable that at least some of my requests for interviews were refused by EAs that did not want any specifics about their operations to be publicized.



## Case Studies

### *Case Study: Room for Life*

*“We want to cut out all the middlemen.” John Hawker,  
Director of Sat-ed (2006)*

The Room for Life project was started by Sat-ed: an Australian-run NGO based in Bangkok. The NGO’s mission revolves around the idea that a ‘digital divide’ persists in most parts of rural Thailand. The Room for Life website states:

*All over SE Asia, people are divided by the Digital Divide. Those that have access to it [the Internet] are a part of the digital generation. Those without easy access are separated by the great digital divide. That side of the digital divide is disproportionately populated by the poor and uneducated. If nothing is done to address the problem, the divide widens and deepens (Sat-Ed 2006).*

The two ‘Rooms for Life’ that have thus far been constructed in rural villages are essentially Internet cafes complete with video on demand learning systems and a resident specialist/facilitator who can advise villagers on how to engage in non-proximate communications, learning, and trade. Each ‘Room for Life’ is thus designed to be a “bridge across the digital divide” with the intention of altering the positionalities of all involved participants.

Altered positionalities are supposed to benefit participants in a variety of ways: most interesting perhaps is the desire to use reconfigured geography to develop shared market-spaces. On their website, Sat-ed claims:

*Also there is the opportunity to bring the market to the village. By using Ebay and other sites to sell their goods, villagers can cut out the middleman who marks up the fruits of their labor and makes a profit simply because the villagers do not have access to the marketplace. With the Sat-ed Room for Life the global village becomes a reality.*

In June 2006, I interviewed John Hawker, the founder of Sat-ed in order to gain a better insight into how Sat-ed planned to involve silk weavers in their 'Room for Life' in Sakhon Nakhon province. He told me that the plan was to get as much local silk onto eBay as possible, with the ultimate aim being to integrate weavers into the global economy: "We have to take the market to the village. It is a core thing of what we do." This would be accomplished by encouraging weavers in surrounding villages to physically bring their silk into the 'Room for Life.' Once there, the facilitator would take digital photos of the silk and either upload the information to eBay himself or pass along the information to Sat-ed's Bangkok office so that it could be listed on [www.sat-ed.com](http://www.sat-ed.com). The pieces of woven silk would also have to be either left at the 'Room for Life' in Sakhon Nakhon or forwarded to the Sat-ed office in Bangkok.

In order for the silk to be appealing to international customers, Hawker maintained that traditional designs needed to be adapted. He compared the process to *Morlam*: Lao music that is a fusion between traditional melodies and commercial western pop sounds. "We are modernizing them. We are taking traditional designs and making them funky. I even encourage them to make run-ons to sell locally" (Hawker 2006). In sum, the project intended to simultaneously encourage weavers to adapt their silk to a global marketplace and enable a shared virtual marketplace in which weavers and consumers could trade.

The second time that I met Hawker was almost a year after our initial conversation. He was disappointed about the progress that they had made:

*we have had a small amount of success with selling silk online, but not a huge amount. We tried using eBay, but we were competing against people doing the same thing...People on eBay would take junky silk and sell it for cheap. Machine-made silk [the other main type of silk on eBay] just looks nicer and ours is much more expensive. It just didn't take off like we wanted it to (Hawker 2007).*

Because of this, Hawker was far less optimistic about being able to disintermediate the chains of silk:

*Instead of selling to end users, I would rather sell to existing networks. We want to find wholesalers. We will make a user friendly ecommerce site that will be easy for users. We will find them by hard work, emails, phone calls, and business cards (Hawker 2007).*

Yet, Hawker's decision to sell silk to intermediaries does not mean that he does not still want to fundamentally alter silk commodity chain structures. Hawker maintained: "we want to remove the middlemen." What he means is that he wants to eliminate the traditional chain of intermediaries and instead replace it with Sat-ed and a subsequent downstream chain of foreign wholesalers. Telling me about his initial plans to set up a Room for Life, Hawker noted: "There are always village elites, [and] if we empower them, no money reaches down to the workers...In the village we first went to, the elites wanted a stake in it, but we just pulled out."

Sat-ed are thus trying to bring a global marketplace to the villages in which they operate without going through existing commercial channels. Yet it is this attempt to circumvent the existing commodity chains of silk that results in their failure to find customers. The "village elites" that Hawker alludes to do skim large amounts of profit from the sale of local silk, but they also actively maintain and coordinate a network of upstream suppliers and downstream customers. Hawker recognizes this fact but imagines and continues to hope that the Internet will allow the desired circumvention to happen.

#### *Case Study: World of Thai Silk*

World of Thai Silk is a private company based in a Bangkok suburb. The director, Richard RothHaas, an American immigrant to Thailand, initially founded the company as a non-profit organization based in Chaiyapoom (a town in the Northeast of Thailand that is home to a sizable number of weavers). According to Mr. RothHaas, the original idea behind the project was to:

*Help rural weavers. That's how it began by trying to help our neighbors market their silk worldwide, but...there is no market upcountry, so they [weavers] usually sent it to a relative in Bangkok; and, why would anyone go upcountry to find silk? They would have no idea where to get it. Are they going to go to Kalasin? No way. Even Thais are scared of going up there. So, this was the original vision. It wasn't set up to make money, It was set up to help the poor guys in the rural areas. We tried to connect the weavers to the consumers. Directly from under some guy's house in Chaiyapoom directly to the end user, and that was the goal.*

World of Thai Silk was one of the first attempts at e-commerce in the Thai silk industry. In early 2000, they had a full-functioning electronic payment system in place on their website in order to be able to accept credit cards from around the world. The company did not attempt to directly connect weavers with end-consumers, but instead tried to position themselves as a crucial link on the commodity chain. However, orders did not arrive in the quantity they expected, and the orders that did arrive were often problematic. In explaining his decision to shift the focus of World of Thai Silk away from direct connections with producers, Mr. RothHaas stated:

*We don't do that any more. I tried. I speak Thai and I had a local guy working for me who of course spoke Thai. We just could not communicate. It wasn't a matter of English to Thai. It was a matter of Thai to Thai. Unfortunately we want to help them, but they are not helping themselves. They are not being flexible and not doing what anybody wants...*

*We would pay all this money [to the weavers] and wait all this time and it was not what they [the customers] ordered. You know simple things like stripes that needed to be one centimeter, but they would do some at one centimeter, but then some twelve millimeters, some thirteen millimeters but the customers would freak out...*

*Now we think, well if we help somebody, that's nice, but we tried to help them and they wouldn't help themselves so we had enough with the social work. Now it's much more commercially oriented. We have stopped working with*

*people upcountry because we failed to bridge the gap between east and west. So we changed our tactics. Because when somebody orders something you cannot do whatever you want. So if I hand you a piece of material to copy, you can't half way through decide it doesn't have to be that way and just drift off...And the summary after it is all over: 'well that's ok I'll sell it to somebody else'. Or you wait two or three months. You can imagine you are a Brit or an American and you've paid all this money upfront and you're waiting for this fabric for months and then when it's all done they just say 'ah' its like there is no disappointment or remorse or anything. It's just like 'oh well I'll sell it to somebody else'. Its like it's a negotiable, it's a liquid commodity it's like money. Especially if the design came from some top person in Houston who is doing some new line of clothes, of course you can sell it to somebody else because that particular designer is quite good at what she is doing and nobody has ever done it before... Deadlines don't work here. This is Thailand! Thais are Thais.*

In general, World of Thai Silk simply found it too problematic to maintain such close links between producers and their customers. The expectations and business practices of weavers in Chaiyapoom proved to be incompatible with the expectations and business practices of American and British customers. One important problem that the company faced was trust. Mr. RothHaas observed that:

*The basic problem is Thailand has a very big problem that has gotten worse as far as business goes. Which I'll give you one simple example. If I order an art print with my own credit card from an Ohio bank to my billing address in America, when they check the IP address and see I am doing it in Thailand, that's it. Allposters.com refuse to sell to Thailand now. They will not sell to me in Thailand simply because I am in Thailand. A year or two ago they would. Now they say forget it. They are willing to completely sacrifice any sales to this country because obviously they lose less money that way than all the fraud that they suffer by being willing to deliver to this country. Otherwise why would they do it? There are so many thieves. That hurts people like us and it also creates an image problem. 'Well I can't trust you just because you are in Thailand'.*

The most fundamental issues faced by World Of Thai Silk, however, related to the nature of silk itself.

*We have lots of disclaimers now. Silk doesn't really lend itself to online because you have to go through a computer screen and there are no standards on a computer screen. So you have the problem that color is subjective and who knows what you see through your eyes when I look at the exact same thing. So because it is subjective and light is a very important factor with silk. You know artificial light, natural light, day light, moon light, star light, the angle of the viewer, and all this other stuff. So it is really hard to communicate that what you see is what I see and make sure you are on the same page. So we have a lot of disclaimers about color. We no longer accept returns for any reason other than it is not silk because it got to be ridiculous. People would say 'this isn't the shade of brown that we had in mind'; and the weavers, do you think they want it back? They spent the money before we even paid them. Everybody is in debt. Thailand has probably got as much debt as Americans. They are all up to their eyeballs in debts, drugs, disease, crime, AIDS. It's like it's a mess and you want your money back? No way. Weavers have no money back guarantee or anything. Once I got your money that's it. So, the basic problem is that it's light. It's color and light. It's feeling. It's texture, it's tactile, it's sensory, so how do you get all that through a computer screen? So that's why we have so many color charts and so many photographs and so many examples and we have three different levels of fabrics sizes full screen and super zoomed in, to try to overcome some of the shortcomings of viewing silk on the screen.*

*Because it is hand done, you can't just push a button and make more. So you go to all the trouble to make a catalog and when it's gone it's gone. If you order it and we go to the weaver and it's all gone, then tough luck. You can make more if you want, but it won't be exactly the same. Even Jim Thompson will not make any claims that the next version of their pattern or styles will be the same. They have their own disclaimer. So if Jim Thompson can't do it, what's the poor guy out in the field going to do. He can try, and people get quite close. But if you don't have clear cut disclaimers in place...*

As a result of the problems outlined above, Mr. RothHaas acknowledges that World Of Thai Silk was forced to abandon its original project and largely disengage from economic interactions with both weavers and end-consumers. He notes:

*We are not so idealistic now. Now it is much more of a business than a social project. I don't feel sorry for them any more. I was upcountry for about 12 years. I don't think they deserve the help any more...We are now focusing more on wholesale rather than retail product. It is a big headache, but most of this stuff still comes from upcountry. What it means is that you are helping out a guy in rural areas and saving rural areas to not have to come to Bangkok. Which was the original vision. It wasn't set up to make money, it was set up to help the poor guys in the rural areas. And the fact that we make some money off of it is kind of like a reward for trying to help them out. We didn't set this up to make money. We set this up to help somebody and make money. Now we think, well if we help somebody, that's nice, but we tried to help them and they wouldn't help themselves so we had enough with the social work. Now it's much more commercially oriented.*

With World Of Thai Silk now based in Bangkok instead of Chaiyapoom, the company's suppliers are mostly Bangkok-based intermediaries. Instead of enduring the difficulties inherent to the production of silk, World Of Thai Silk essentially outsources these problems to the intermediaries from which they purchase silk. This change has resulted in a higher commodity cost for World Of Thai Silk, and they can no longer claim to be directly supporting weavers. Mr. RothHaas, however, felt that this tradeoff was worthwhile, as it allowed him to secure a reliable source of fabric. He likewise expressed no regret at the decision to seek intermediaries as customers in place of end-users. The intermediaries that purchase from World of Thai Silk are familiar with the properties of silk and therefore less likely to ask for refunds or use up as much customer service time per piece as end-customers.

The company now employs approximately twenty workers and had two million website hits last year. Yet, it was ultimately only by disconnecting themselves from both producers and end-consumers and occupying a position in between other intermediaries

within global commodity chains of Thai silk that World of Thai Silk became economically sustainable.

*Case Study: Thaitambon.com*

Thaitambon.com was founded in 2000 as one of then Prime Minister Thaksin Shinawatra's initiatives to ground more capital in rural parts of the country. The intention of the project was to allow craft products from every tambon in the country to be marketed globally. I met with Somkiet Phaloprakan, Director of Thaitambon.com, on two occasions to discuss the project. The first meeting took place in July 2006 while Thaksin Shinawatra was still Prime Minister. The second interview occurred in June 2007 following the coup d'état and the installation of a military government hostile to Thaksin's administration.

A staggering amount of work has been undertaken by Thaitambon.com. As of June 2007, seventy thousand products by twenty thousands producers have been listed on the website. The popularity of the site peaked in 2006 when Thaitambon.com received between one hundred and one hundred and thirty thousands page views a day (and over 1,600,000 unique visitors over the course of the year). These statistics mean that Thaitambon.com receives over ten times as many visitors as the next most popular government website (Phaloprakarn 2006). Product information is entered onto the site in two ways. The most straightforward, yet least used, procedure is for producers to either physically or electronically mail information about the items that they wish to sell to the thaitambon offices in Bangkok. However, according to Somkiet: "even in the most developed provinces, not more than ten percent update us with information in this way." The primary way in which product information is uploaded onto the website is by teams of thaitambon employees that travel through the country with laptops and digital cameras. Using the OTOP databases of producers in every tambon of the country, the thaitambon teams are able to visit a large number of craft producers and electronically index a selection of their products without having to search for them in advance. Each of



the twenty thousand producers has been assigned a section of the website, and their products are listed next to links that allow customers to finalize an order and enter payment details. Contact information for each producer is also provided in the event that a customer wants to speak with a producer directly.

Although Thaitambon.com is closely affiliated with One Tambon One Product (OTOP), the Thaitambon.com project is actually independent from the government-run OTOP project. According to its director, Thaitambon is fully owned and funded by the Shinawatra family and the Shin corporation (started by Thaksin). The incentive for Thaksin to invest his personal funds into Thaitambon.com likely centers around that fact that he would “frequently plug Thaitambon.com on the radio and in his speeches” (Phaloprakarn 2006). In other words, the project was in many ways intended to symbolize new economic practices that could be possible for Thailand.

Somkiet revealed that the initial goal behind Thaitambon.com was to establish a pure e-commerce interface in which craft producers would be directly connected with willing buyers. In this setup, Thaitambon.com would act a non-profit intermediary only when necessary. The desire to implement this country-wide e-commerce system originated with Thaksin himself. Somkiet noted that “at that time there was e-commerce fever and Dr. Thaksin liked to have e-commerce.” Thaitambon.com managed a credit card payment system and transferred funds into the bank accounts of producers. In cases where producers did not have their own email addresses, project staff also informed producers when an order arrived and ask them to send it within a designated period of time. Producers were expected to keep their products and prices updated and promptly ship orders to end-customers.

This e-commerce model did not last. Because of producers’ desire to avoid taxation, exact sales figures were impossible to obtain<sup>108</sup>. Yet, Somkiet felt that e-commerce had to be abandoned as there was very little desire on the part of customers for small scale ecommerce. Most customers were wholesalers or retailers searching for bulk amounts of crafts and were therefore wary of entering into an instantaneous e-

---

<sup>108</sup> Somkiet stated that “producers are not willing to tell us about sales statistics because they do not want to pay us, and most do not pay tax.”

commerce transaction. The wholesalers and retailers who intended to buy products listed on Thaitambon.com frequently wanted to make contact with the producer in order to discuss exact product specifications, delivery timelines, and to negotiate prices and down-payments. However, due to language barriers, very few foreign customers could communicate with producers, and so the Thaitambon.com staff had to mediate and translate. Somkiet detailed one of the problems inherent in trying to mediate between buyers and sellers: “The problem was that nothing could be automatic. Sometimes us middlemen could not contact the producers and the customer can’t connect directly with producer...They would change their number and be impossible to reach.”

Because of these seemingly insurmountable problems, Somkiet decided to shift Thaitambon.com’s focus away from a pure e-commerce system towards what he dubbed ‘electronically assisted commerce.’ No longer could customers make instantaneous purchases from the website; instead the website became a database of seventy thousand products, complete with photographs and contact information. Despite this change, Somkiet maintains that many of the desired effects of the project are still not being realized. He was able to recount numerous anecdotes about problems they had experienced. The crux of most of these stories was that previously disconnected producers and consumers who were brought together by Thaitambon.com were entirely unprepared to trade with one another. For instance, he told me about a cotton producer who took on an ambitious and unprecedented order from a foreign buyer, and who was then not able to weave fast enough to fill the order. Many buyers of craft products are highly dissatisfied with the items they ultimately receive because the photos on Thaitambon.com never exactly match subsequent uniquely designed pieces. Buyers frequently want to return these items and when they are unable to do so, contact the Thaitambon.com administrators to vent their anger about not being able to obtain a refund. Somkiet also mentioned issues that buyers experience in having items shipped to them. Some products cannot be easily shipped without incurring damage, while others are lost due to incorrectly filled out customs paperwork or theft.

Problems specific to silk were mentioned as well. Somkiet noted the absence of a sensory shopping experience. Online silk cannot be touched or folded to see how light affects different tones in the warp and weft. Fabric samples cannot be sent as each piece is usually a unique and complete product. It is therefore difficult to gauge the quality of silk listed on Thaitambon.com without either having prior experience with a specific producer or choosing a producer with an established reputation for quality.

The manner in which content is uploaded onto the thaitambon website has also prevented Northeastern silk producers from receiving significant amounts of sales exposure. The roving teams of Thaitambon.com employees that enter information onto the site must physically visit each participating tambon. The Northeast is seen by many Thais as a cultural backwater, and many Bangkokians do not enjoy making the long trip upcountry<sup>109</sup>. On my second interview with Somkiet, he told me “We don’t go to the Northeast very often. It is far. We go by car, so we don’t go very far. Now the CDD [staff from the Community Development Department] won’t go with us in the car.” He continued, “and the products are not very good. There is no good weaving in the Northeast. There is good weaving in the Central, Southern, and Northern provinces.” It is ironic then that the very geography of silk producers in Thailand is preventing them from taking advantage of a service that claims to make geography less of a barrier to economic transactions. Furthermore, while one of the original ideas behind the project was to provide small craft producers with the means to sell to a global market, Somkiet pointed out that a lack of resources is causing the service to focus on larger producers. He noted: “many producers have only a small amount of products and so we often can’t use resources on them. It is sometimes better to deal with producers that make more things.”

Finally, while the politically charged nature of Thaitambon.com has provided the project’s funding and the impetus for its expansion, the way in which the project is embedded in the Thai political landscape is now proving to be the source of its demise. At the time of my second interview with Somkiet, Thaksin Shinawatra, the most

---

<sup>109</sup> People in Bangkok frequently make references to the poverty and lack of ‘modern’ services in the Northeast.

powerful supporter of Thaitambon.com, had been removed from power. The junta installed in place of Thaksin's government frequently made references to the need to implement the King's sufficiency economy philosophy and set about dismantling many of the Thaksin's economic programs<sup>110</sup>. Somkiet relayed a few of the ways in which the changed political landscape had affected Thaitambon.com:

*We used to be in the Shin Corporation building, but in November we had to move. Shin paid our salaries, but they started to sell their shares and we became just an awkward expense to them. After consulting with Dr. Thaksin through his brother, he said Thaitambon.com would continue, but under the sponsorship of the thaicom foundation<sup>111</sup>. They now pay the salaries and expenses.*

In June 2007, I interviewed another high-ranking official who is intimately familiar with issues of e-commerce and economic development in Thailand. Because of the harsh penalties that can be inflicted on people who criticize ideas emanating from the royal family<sup>112</sup>, I have decided to anonymize this source. The source, who I will call Sunthorn<sup>113</sup>, did not ask me to anonymize his comments. It should also be stated that he did not make any critical remarks about any government officials (elected or otherwise) either on or off the record.

On the topic of thaitambon.com, Sunthorn commented that:

*Nobody is giving them any direction but they still do the same thing; they are doing it quietly though. They are not aggressive about going about their publishing anything [on the website] because the government is watching everything involving Dr. Thaksin. They took out the photo of Dr. Thaksin before the revolution from the website. If they didn't do that, the junta would cause them [thaitambon.com] and a lot of local OTOP people*

---

<sup>110</sup> One of the best-known examples of this occurred when the new government renamed OTOP despite the millions of dollars that had already been spent in order to give the OTOP brand global recognition (Praiwan and Jitpleecheep 2006).

<sup>111</sup> The Thaicom foundation is non-profit organization funded by the Shinawatra family that focuses on education.

<sup>112</sup> Many Thais fear that the country's strict lèse-majesté laws can be applied for not only insulting members of the royal family, but also for criticizing their ideas.

<sup>113</sup> The name is taken from Sunthorn Phu: a famous nineteenth century Thai poet.

*problems. They don't advertise or write articles, and they don't talk about how Thaitambon.com will help grassroots people<sup>114</sup>. If they do any of this, the junta might think thaitambon is promoting Dr. Thaksin.*

*The junta is trying to kill OTOP to prove it is unsuccessful. If people speak out, they won't be selected to go to OTOP fairs<sup>115</sup>. People cannot sell much now, so people are very glad to have Thaitambon.com But the local [provincial and tambon] governments are very frightened of being seen to contradict the new sufficiency economy ideas in any way so thaitambon does not get good cooperation from various provinces. Sometimes the CDD<sup>116</sup> hide when thaitambon people come. Now, sufficiency economy may be good for poor people not to spend money on cockfighting, whiskey, cell phones, and motorcycles, but small producers wouldn't be able to compete globally. We can't talk about this though, because the idea comes from the king.*

Many of Thaitambon.com's problems are clearly related to the Thai political climate, but these problems are not unique to Thaitambon.com. Many silk merchants and producers spoke out openly about the economic hardships they faced under Thailand's new administration. Many lamented the fact that large OTOP fairs in Bangkok were no longer subsidized. Most talked about the ways in which they were experiencing firsthand the effects of the economic downturn brought about by Thailand's political instability. Sales were almost always down compared to the previous year, and figures of fifty, sixty, and even eighty percent lower income were not uncommon in the stories told to me. Thaksin's 'Thai Rak Thai' movement enjoys broad support in the Northeast of Thailand, and those involved in the silk industry are no exception. On a few occasions,

---

<sup>114</sup> I had encountered difficulties in getting any managers at OTOP to meet with me and suspected similar logic was behind the unwillingness of high-ranking OTOP staff to have an on-the-record conversation. Somkiet confirmed my suspicions when he remarked that "the director of OTOP and OTOP itself is trying to keep a low profile."

<sup>115</sup> OTOP fairs are a major source of income for many silk sellers. Many producers told me that they win a majority of their contracts at the yearly OTOP City fair in Bangkok. In previous year, booths at the fair were provided to OTOP sellers at no cost. However, in 2007 large fees were implemented. Total sales at OTOP City subsequently dropped from 1,127 million baht in 2006 to 359 million baht in 2007 (Phaloprakarn 2007).

<sup>116</sup> Community Development Department

silk merchants in Chonnabot and Pakthongchai even pulled out a framed picture of Thaksin from behind a stack of silk or a desk drawer to make this point to me.

However, not once did anyone speak out against the ‘sufficiency economy’ philosophy. The manager of [originalthaisilk.com](http://originalthaisilk.com), for example, spent a lot of time telling me about his desire to expand his business internationally and find new customers. He told me “I have big ideas of globalization, but unfortunately no budget.” But he quickly added “I follow sufficiency economy though. I think it matches Thai silk, and I think what I am doing helps 100%.” Due to the severity of punishments for those convicted of *lèse-majesté* and a social conditioning of love towards the King instilled into almost all Thais from birth, the fact that nobody in the silk industry would criticize the sufficiency economy philosophy is not surprising, but it nonetheless speaks volumes about the ability of those in the silk industry to protest against policies that work against their economic self interest.

## Conclusions

The reasons why the Internet is not being used en-masse to reconfigure commodity chains in the Thai silk industry are undoubtedly complex and varied, but this chapter has attempted to highlight some of the most significant hurdles.

First, the uneven geographies of trade, language, education, wealth, culture, and Internet access all play a role in deciding who can stake a claim to, and establish a presence in, cyberspace. On a sub-national level, each one of these indicators puts the Northeast at a disadvantage over the rest of the country. On average, Northeasterners are far less equipped than people from other regions to compete in a global marketplace. On a global scale, Thailand itself is at a disadvantage for many of the same reasons. More worrying for Thai sellers, though, is Mr. RothHaas’ assertion that the country is blacklisted from a variety of payment systems and online marketplaces<sup>117</sup>. Echoes of

---

<sup>117</sup> Thai merchants do not face as many problems with blacklisting (none of my respondents mentioned having any issues with email blocking) as their counterparts in other countries that are more noted for fraud (e.g. Nigeria and Ghana). Nonetheless, assertions that Thailand is developing (or has developed) a

similar stories can be heard throughout the country. For instance, Mr. Boonchuay, a silk merchant at a Bangkok market who experimented with eBay sales, commented that:

*People on eBay wouldn't transfer the money to my account. Probably because I had a Thai bank account and they didn't trust me. The shop next to me is run by a German, but he can sell on eBay because he has a German account - even though the product is made in Thailand. If you search for Thai silk you can't find my website now.*

It is within this context that the findings in chapter five (that the use of websites to sell silk is concentrated among foreign sellers and Bangkok merchants) can be better understood.

Second, while some of the space-transcending properties of the Internet can allow people and firms to peer through the fog of distance and potentially bring about greater transparency in any commodity chain, those potentials have not been widely realized in the Thai silk industry. The Internet instead allows those with access to carefully construct a narrative about the ways in which silk and money flow through commodity chains. Those creating the narrative can claim to be benefiting producers, but in doing so they, for better or worse, remove the producer from any interaction with a global marketplace. Producers, then, can become dependent and locked-into potentially exploitative relationships if they do not possess the economic skills to find alternate customers. A lack of transparency thus becomes a barrier between producers and many potential buyers. This finding hints that the Thai silk industry may not be an exception to Gereffi's (2001b: 1620) observation that "profitability is greatest in the relatively concentrated segments of global commodity chains characterized by high barriers of entry of new firms."

Third, much can be learned from the case-studies of Room for Life and Thaitambon.com. Room for Life attempted to almost fully disintermediate the commodity chains of silk as a result of what Sat-ed saw as an unacceptable economic

---

reputation for Internet fraud are creating networks of imagination with potentially powerful repercussions for all online sellers in Thailand (c.f. Zook 2007).

relationship: intermediaries keeping an inequitable amount of profit from the sale of silk. It is perhaps because Sat-ed underestimated the myriad relationships that intermediaries coordinate and manage on any commodity chain that the organization has ultimately been unsuccessful in circumventing the entrenched power of intermediaries in the commodity chain. Even though establishing a commodity chain devoid of intermediaries is now a technical possibility, it is an unworkable proposition if neither the end-consumer nor the producer is willing or able to take up some of the tasks previously performed by merchants and wholesalers.

Thaitambon.com proceeded with an even more ambitious model for ecommerce in Thailand. However, they also quickly encountered numerous difficulties inherent in direct connections between producers and consumers, difficulties that intermediaries in traditional commodity chains are well equipped to manage. The obstacles to disintermediated chains in Thailand's craft industries seemed so insurmountable that the manager of Thaitambon.com even exclaimed that "maybe producers just shouldn't interact directly with an end-customer."

Finally, the larger cultural and political contexts through which Internet use is filtered in the Thai silk industry should not be underestimated. The King's sufficiency economy philosophy has played a large role in discouraging not only the expansion of OTOP and Thaitambon.com, but also Internet use amongst smaller businesses. For example, Mr. Veera, the manager of a shop in Pakthongchai told me that:

*I believe in sufficiency economy. Everything is enough, I don't want to be the biggest, but I do keep improving. A small business with small debt is better than a big business with big debt. Also, my business is small so there is no reason to have a website.*

Ms. Phorn, a Bangkok merchant, when asked if she would like to increase sales similarly expressed:

*No, I am careful when I own too much. Buddha teaches that you need to be careful and stay medium all the time. I don't*



*need more and want to protect what I have. Sufficiency economy is the path to be happy. If I have more sales then I will have more risk.*

Based on the findings of previous chapters, that the Internet is rarely being used by producers of silk, this chapter has attempted to analyze some of the reasons why the Internet is not being used to alter the lives of producers<sup>118</sup>.

In summary, it is actors with economic and technological know-how who are able to occupy advantageous positions throughout the commodity chains of silk. This chapter has shown that even when producers and consumers were brought into the same cyberspace, economic transactions for the most part did not occur. That is because a number of significant barriers to economic interaction remain (i.e. education, language, trust, cultural differences, standardization issues, taxes, and lack of personal networks and contacts) even when the barrier of physical distance can be breached.

The infrastructural and institutional connections between producers and consumers that are made possible by the Internet and the organizations promoting its use did not break through all of the divides and barriers to establishing a shared marketplace. This is largely because intermediaries often occupy not only an important geographical position (in physical space) between producers and consumers, but also because they occupy a crucial organizational position on the commodity chain. Put another way, the Internet changes the relative spatial positionalities of intermediaries in the sense that they are no longer a crucial transacting point in-between producers and consumers, yet it does little to alter their economic, cultural, and educational positionalities.

Copyright © Mark Graham 2008

---

<sup>118</sup> An initial goal was to use this chapter to focus on the effects of reconfigured chains. But, because the Internet is rarely reconfiguring commodity chains in the Thai silk industry, the hypotheses that were proposed to examine reconfigured chains are now superfluous. The previous chapter did leave one hypothesis unaddressed (hypothesis three), and through highlighting a number of the problems faced when attempting to construct short commodity chains, this chapter lends support to that hypothesis:

*The fact that the Internet is available to many producers will not automatically translate into widespread use of the shortest possible production chain. Instead, actors with economic and technological know-how and reserves of capital will most often occupy advantageous positions throughout the value chain of a product.*

## CHAPTER 7

### JUSTIFYING CYBERPRESENCE: ALTERED CHAINS, CLAIMS ABOUT BENEFITS, AND THE LINKS BETWEEN DATA AND DISCOURSE

This chapter examines the discourses being put forward as justification for altered commodity chains using a content analysis of websites that sell Thai silk. A particular focus is placed on claims about directness and the ways in which such claims are used to underpin assertions about benefits to both producers and consumers.

In April and May 2008, I visited every page of every website in my database of sites that sell Thai silk<sup>119</sup>. There has been a large amount of turnover since I initially gathered the database in late 2006. Of the one-hundred-and-thirty-nine hyperlinks collected in 2006, only ninety-seven continue to direct to websites<sup>120</sup>. The remaining forty-two either returned a “server not found” message or linked to holding pages hosted by domain registrars. Bates and Lu (1997) have suggested that, due to the dynamism of the Internet, performing research relying on a sample of webpages is challenging. The amount of turnover is nonetheless surprising, and during my interviews there were few hints that the scale of failure was so significant.

It is also unclear how important the now defunct websites were to the EAs that operated them. Creating a fully functioning website has the potential to be a significant expense for many producers and merchants<sup>121</sup>, but for those with knowledge and

---

<sup>119</sup> In performing content analyses of websites, some researchers have proposed focusing on only homepages or randomly drawn pages (Haas and Grams 2000; Koehler 1999). Weare and Lin (2000) argue that performing a content analysis on an entire site as a whole is unrealistically demanding. However, none of the websites within my sample contained an unmanageable number of pages linked from the main index page. I therefore opted to include every page in the study in order to minimize bias that could arise from using a sampling method.

<sup>120</sup> In 2006, all one-hundred-and-thirty hyperlinks directed to websites.

<sup>121</sup> All survey respondents were asked how significant they considered the costs of setting up a website to be and were given the options of “low”, “medium”, and “high”. Twenty five percent indicated that the costs of setting up a website were high, thirty-five percent chose medium, and forty-one percent noted that costs were low. Similar responses were received from all survey respondents when I asked people to rate the difficulty of setting up a website (respondents were again given the options of “low”, “medium”, and

experience, a website can be created and a domain name registered in a matter of a few hours. Some of the failed websites could have been important business strategies for the involved producers and merchants, while others might never have represented a serious attempt to initiate new trade. Given the impossibility of obtaining detailed information about why so many websites have ceased to exist, it is difficult to comment on the precise reasons for this large scale abandonment. The finding does however point to a common theme in many of the interviews and surveys conducted. Namely, using the Internet to find new customers proved to be more challenging than many people expected. This is a theme that will be revisited in more detail in the final chapter. Discussion in the remainder of this chapter will involve only the ninety-seven websites with active domain names.

This chapter will review a number of findings from the content analysis that I performed on the ninety-seven websites. The discussion will, however, be structured around a hypothesis which was proposed to the research question framing this chapter<sup>122</sup>. The hypothesis states:

*Claims are being put forward that direct producer to consumer supply chains will benefit and empower producers. These claims are used to lend support to development programs.*

In order to discuss this hypothesis, the chapter focuses first on claims being made about benefits accrued from participating in electronically-assisted commerce as well as some of the geographic assertions that underpin those claims. Focusing on those claims about benefits, this chapter looks not only at EA's pointed assertions about the effects of the Internet, but also at less pointed signifiers of benefits which are present on the websites of silk sellers. A reading of images present on websites reveals that pictures can be used as signifiers for a variety of themes: the preservation of traditions, the prevention

---

"high"). Nineteen percent indicated the level of difficulty was high, forty-one percent chose "medium", and forty percent chose "low".

<sup>122</sup> The research question framing this chapter asks: "What discourses are being put forward as justifications for re-configured production chains and development programs?"

of migration, the purchasing of authenticity, and the purchasing silk from modern factories. The chapter concludes by comparing claims about economic benefits to price and wage data collected in surveys.

### **Benefits of Buying Silk**

During the coding process, I examined each website for any claims related to the potential benefits of buying silk. A pilot content analysis of silk websites suggested that two main themes are present. Some EAs claim that buying their silk is of particular benefit to the buyer (as opposed to purchasing silk from another source), while others highlight the benefits that accrue to producers of silk. Websites were only coded as containing claims to help consumers or producers if such statements were made directly. Websites that hinted at benefits that could be accrued to consumers or producers (but did not directly state that they provide such benefits) were not included into this coding scheme.

Of the ninety-seven websites, fifteen make a claim to be helping customers, twenty-one claim to help producers, and three claim to help both customers and producers. The remaining fifty-seven make no textual reference to benefits that could be obtained by customers or producers due to the buying (and selling) of silk.

#### *Benefits to Customers: Directness*

Claims to help customers were often related to the theme of disintermediation. A variety of words suggestive of spatial proximity and positionality were used by members of the group claiming to help customers. But, the most common word used was “direct.” A selection of words relating to altered spatial positionalities are bolded in the quotations below (all capitalizations are present in the original texts):

*Most [pieces of silk] are acquired **directly** from the artists or workshops that produce them. This allows us to offer*

*lower pricing and provides greater control over the quality and designs of the products. [asianartmall.com]*

*The crafts that you see on our site are supplied **direct from source** which helps us to keep our prices very competitive, against other Thai and non Thai suppliers. [chiangmaicraft.com]*

*Asian Silks deals **direct** with the manufactures in CHINA and THAILAND. **We cut out the middle man** (several) and pass the SAVINGS on to YOU! We are constantly updating our website to bring you NEW STYLES and products. We have satisfied thousands of people from all over the world. [asiansilks.com]*

*So that we can ensure to all buying agents or any other international traders that you are now getting **in touch directly** with the manufacturer online right now [dechsuwan.com]*

*We Will Ship It To Your Doorstep. Our Factory **Direct Contacts** Give Us Immense Bargaining Power And We Pass On The Benefits To You. [kaisilver.com]*

*Orientations is committed to offering clients quality products at a fair price...Wherever possible we buy **directly** from craftsmen and ethnic minorities in the villages... [orientations-online.com]*

*By buying **direct** from foreign loomers we save you from 30% to 50%. We have **no in-betweens** which add to the cost of your fabrics [thaisilks.com]*

The heavy focus on the idea of “directness” is noteworthy, especially because only one of the firms using the idea of “directness” is an actual producer of silk. By employing the word “direct,” firms are suggesting not only that an Internet-enabled disintermediation of a more complex commodity chain is a possibility if customers purchase their silk, but also that such chains allow silk to be sold for a cheaper price because less profit is extracted throughout the chain (in comparison with more traditional chains).

*Benefits to Producers: Proximity to Markets*

A focus on proximity is also present in some of the websites of EAs that claim to help producers. Below is a selection of quotations from some of those websites (again with words relating to altered spatial positionalities bolded):

*World of Thai Silk online fabric shop **connects you directly** to Thailand's rural village weavers as well as the wholesale fabric of the largest weaving mills. No matter how **distant** you are from these villages, now you have **access** to them online. [bangkok-thailand.com]*

*We also aim to provide a platform for the skillful Thai craft people. Many of those live in **remote villages** and do not have **access to the world market**. [thailandfashion.net]*

*We **make the world smaller** than ever so you can **reach** Thailand everywhere you are. [thaisilversilk.com]*

*It is hoped that an **expanded market** for their silk craft can be developed. We are encouraging the female weavers to produce more of their 'folk art' silk for a **market previously beyond their reach**. [thavillagesilk.com]*

*We purchase our products as **close to the original source** as possible to keep prices down and provide more capital to those who make them. [siamese-style.com]*

*However, a craft passed down through generations was all but abandoned due to **lack of direct markets** and exploitation by unscrupulous buyers...Village destitution was to be dispelled beginning with the initial visit of Léa Laarakker Dingjan in 1985 and would lead to the establishment of Ban Reng Khai Foundation in 2001. [banrengkhai.com]*

*During this time there were no other health facilities in this area. Indeed there were no roads and the only **access** available was by boat, elephant or a trek on foot [until...] with SIDA assistance, Kent started a textile weaving and basket making project. [sopmoeiarts.com]*

There remains a focus on disintermediation, as can be seen in the way “directness” is used. The word “direct” is again used to imply that less surplus can be extracted by intermediaries. However, in contrast to the previous examples, the focus in these comments is on the idea that disintermediated chains naturally provide the greatest benefits to producers.

Among this group there is also broader range of geographic words used to convey altered economic positionalities (as compared to the group that claim to be helping customers). These EAs also talk about access (both from consumers to producers and from producers to consumers/markets), reach, and closeness. The difference is noteworthy because these terms expand on ideas of disintermediation and directness. In such formulations, the EAs operating the websites present clear links between ideas of a universally accessible, virtual world market and disintermediation. Buying from an EA owning a website is presented as a way to “reach” or “access” producers that have been brought into a virtual marketplace.

*Benefits: Unique Opportunities*

A trope of exceptionalism can also be found in the websites that were analyzed. Some of the firms and NGOs with websites hint at the idea that they are doing something few other EAs in the Thai silk industry are attempting. That is, they imply that a combination of their: (1) care and concern for the producers of silk and (2) commodity chains that are configured differently to the majority of silk commodity chains in Thailand, are unusual in the Thai silk industry. In some cases this is clearly stated:

*There are plenty of retail and wholesale outlets here in Thailand selling to visiting travelers and merchants. Few have an eye for quality. Few have interest in the welfare and well being of the artists and craftspeople who create the unique Thai wares. [exporthai.com]*

However, even when differences between EAs that operate websites and other EAs in the Thai silk industry are not clearly stated, by simply stating that they are doing something (i.e. demonstrating concern for producers and disintermediating commodity chains), there can be an underlying assumption that others are not<sup>123</sup>.

Exceptionalism is also present in a temporal sense. In the above quotes, EAs refer to altered positionalities brought about by the Internet as a particularly new phenomenon, either using words such as “now” and contrasting the present to a past in which weavers were more likely to be exploited (See the above bangkok-thailand.com quote as an example), or simply employing words such as “previously” in order to imply that the present is different.

In many cases, then, there is a focus on disintermediation and altered positionalities and a suggestion that altered positionalities are unique and uncharacteristic of the commodity flows that characterize other EAs. However, it should not be forgotten that the majority of websites make no such claims. The lack of clear claims on most websites about benefits being accrued by producers does not mean that there are not more subtle ways of suggesting that producers are being helped by the sale of silk. Specifically, the use of words or images that represent the rural, the village, and the traditional can all be used as substitutes for more pointed statements about why buying silk benefits producers<sup>124</sup>. It is impossible to know with full certainty how the designer of each website intended every photo and description to be interpreted. However, some designers do intend imagery of rural weaving life to convey, to potential customers, a sense that buying silk is beneficial to the producers. Such sentiments were expressed by John Hawker, the director of Sat-ed.com when I asked him about his Internet strategy. He commented<sup>125</sup> that “we photograph people making the silk [in

---

<sup>123</sup> This is not to imply that all claims that a=b automatically exclude c, d, or e from also equaling b. However, advertising any particular features or characteristics of a firm or business model is often suggestive that all (or most) other firms or business models are different.

<sup>124</sup> During the content analysis, I was able to identify photographs of sites of production on twenty-five websites. However, it should again be pointed out that this number does not speak to the intentionality behind the displaying of these images.

<sup>125</sup> This quote is taken from my first interview with Mr. Hawker in June 2006.



Northeastern villages]. We get these pictures online because we want to get a sympathy vote out there.”

### **Traditional and Modern Imagery**

Precisely and objectively stating the number of EAs who use websites to convey a message that they are helping<sup>126</sup> producers of silk is not possible. The motives underlying each image and story are undoubtedly unique to each EA. Yet, irrespective of intentionality, imagery of poverty and rural life does elicit feelings of sympathy and benevolence in many buyers: a phenomenon which has been labeled as “development pornography” (Goldfinger 2006; Quist-Adade and van Wyk 2007). Examining websites that use words and imagery that convey rural, village, and traditional life can therefore provide some insight into the effects that such imagery is being put to.

During the content analysis I constructed two categories in order to capture instances in which EAs employed text and images to represent either: (A) a general vision of their place in a traditional and non-modern Thailand or (B) their ability to be modern and contemporary. A website was placed into the first category if any of the following words were used on the website<sup>127</sup>: “tradition,” “culture,” “village,” or “natural.” Websites were placed into the second category if the words “modern,” “contemporary,”<sup>128</sup> or “foreign”<sup>129</sup> were employed anywhere on the website.

Forty-four websites use the words “tradition,” “culture,” “village,” or “natural” (category A) and twenty websites use the words “modern,” “contemporary,” or “foreign” (category B). Nine websites can be assigned to both categories (category C) (see figure 7.1). Furthermore, eighteen websites show photographs of rural Thai villages, villagers, or non-mechanized production processes. Nine of these websites are not found in the group of websites that make explicit claims to be helping customers or producers. Or, in

---

<sup>126</sup> That is, helping producers of silk more than other silk sellers do.

<sup>127</sup> Derivatives of the words listed here were also included. E.g. “traditional” instead of “tradition.” A word would not be counted if it was used in the negative. E.g. “not modern” instead of “modern”.

<sup>128</sup> Descriptions of new technology were also placed into the modern/contemporary/foreign category.

<sup>129</sup> Substitutes for the word “foreign” could include descriptors of non-local people and places such as “Japanese” or “Western.”

other words, this point demonstrates that the total number of websites within the category of EAs that make distinct claims to be benefitting either producers or customers (discussed earlier in this chapter) may be under-representing the degree to which EAs are attempting to convey the potential benefits associated with buying their silk.

Figure 7.1: Websites Containing Themes Relating to Traditions and Modernity (as textual references)



A: Websites that use the words “tradition,” “culture,” “village,” or “natural” (44 websites)

B: Websites that use the words “modern,” “contemporary,” or “foreign” (20 websites)

C: Websites that fall into both categories (9 websites).

#### *Authentic, Traditional, and non-Modern Themes*

The following discussion draws upon the texts and images on websites of EAs that convey a general vision of their place in a traditional and non-modern Thailand. Using these texts and images, a few themes can be uncovered. First, by focusing on the village and rural Thailand, EAs are conveying the idea that by keeping producers employed they are actively preventing rural to urban migration. Second, by focusing on difference, and non-modern production practices, EAs can assert that they are preserving traditional methods of production that might otherwise cease to be reproduced. Third, by again highlighting differences between the sites of production and consumption (in terms of both people and places), EAs are able to highlight the authenticity of their silk.

#### *Preventing Rural to Urban Migration*

The phenomenon of economic migrants relocating from poor rural areas to wealthier cities is perceived as a significant problem by decision-makers in many

localities, and governments throughout the world have enacted policies to keep rural people in their villages. Using rural enterprises such as silk production to prevent migration is not a novel development strategy, but it is a compelling one, and likely works to attract some potential customers.

However, in any discussion of rural-urban migration in Thailand, a subtext is that a vast majority of women employed in the sex industry in Bangkok, Pattaya, Phuket, and other cities are migrants from rural areas in the Northeast of the country (and are often the daughters of silk weavers) (Lyttleton 1994; Askew 1998). There is therefore a powerful implicit warning and threat in any texts that claim to be preventing rural to urban migration.

Although prostitution is never explicitly mentioned on any of the websites selling Thai silk, the use of economic incentives to prevent the migration of sex workers and potential sex workers is a prominent feature of the silk industries of some of Thailand's neighbors (i.e. Cambodia and Laos). Much of the fledgling<sup>130</sup> Cambodian silk industry relies on NGOs that recount a narrative of preventing migration from rural areas in order to attract foreign buyers. During a month of preliminary fieldwork that I conducted in Cambodia while searching for a suitable research site, I interviewed the managers of ten silk shops in central Phnom Penh, and every one of the managers brought up this theme. The mission to prevent rural Cambodian women from entering the sex industry by keeping them employed in the silk industry has enabled NGOs such as [villageleap.com](http://villageleap.com) to attract powerful backers (Apple, MIT, Deutsche Bank, and others). I interviewed the manager of the [villageleap.com](http://villageleap.com) project in Tokyo in July, 2006 in order to ask him detailed questions about the project. I pointed out the success that he has had in attracting influential sponsors (in contrast to many projects based in Thailand), and he commented that it is far easier to convince people to contribute to a project that is preventing prostitution than one that aims to preserve weaving styles or traditions.

---

<sup>130</sup> Like the Thai silk industry, the Cambodian silk industry has roots that stretch back centuries. However, four years of Khmer Rouge rule which killed one third of the Cambodian population practically annihilated the practice of weaving.

Relationships between rural-urban migration and preventing prostitution are also prominent in a number Thailand-focused development discourses. The National Commission on Women's Affairs<sup>131</sup> (NCWA) specifically aims to prevent the entry of women into the sex industry by reducing rural to urban migration through educational and occupational training (with the silk industry being a target occupation) (ILO 2005; Tonguthai, Thomson, and Bhongsug 1998). Links between migration to the city and prostitution also feature in Thai literature<sup>132</sup> and film<sup>133</sup>.

The idea that by keeping weavers employed, they are staying in the villages where they currently reside is also one of the themes highlighted in my sample of websites (key themes are bolded):

*The result of this heritage [Supplementary weft weaving] is that a group of weavers in Amphoe Tung Hua Chang, which contains around 150 household, have an increased income and do not, like many other northern villagers, **need to leave their villages to go into the cities to seek work.** [pensirithaisilk.com]*

*Siw Thai Silk is proud to honor Thailand's ancient weaving traditions and support local artisans' goal to sustain self-sufficiency. With every Siw Thai Silk purchase, you will **directly support and help to empower village women and their families** in Thailand. [siwthaisilk.org]*

***Impoverishment and despair forced younger villagers to seek work elsewhere** as unskilled laborers while those remaining in the village became dependent on what funds could be sent by those who had departed...As the program began to take hold, many who had been forced to leave returned. Reunited families were, once again, able to work in and for their village. [banrengkhai.com]*

---

<sup>131</sup> An organization attached to the Office of the Permanent Secretary, which advises the Prime Minister on the need for new or revised legislation concerning women's rights.

<sup>132</sup> One example is a story by Pira Sudham (1994) in which a taxi driver makes it his mission to repeatedly drive prostitutes from the Bangkok brothel and bar districts back to their Northeastern villages in the hope that they will stay there permanently.

<sup>133</sup> Two examples are: "Hotel Angel" (Yukol 1974) and "Song of Chao Phraya (Nong mia)" (Yukol 1990).

*If you buy from us, you will support the job to help them improve and modernize. So that **rural people can work in their own community.** [originalthaisilk.com]*

In all of these websites there are thus explicit claims about migration: purchasing silk helps to maintain village cohesiveness and prevents the break-up of families and communities.

### *Preserving Traditions*

Another prominent theme taken from the forty-four websites<sup>134</sup> concerns the idea that buying Thai silk will preserve traditions which might otherwise cease to be reproduced. Five examples of this theme are listed below. The first two are from websites that do not explicitly state that they are helping producers, while the following three are from websites that explicitly claim to help producers (key themes are bolded):

*Our silk fabrics are woven by people in the northeastern part of the country. **Silk weaving is a tradition carried out by people in this region for hundreds of years.** [aboutthaisilk.com]*

*Silk of Siam is 100% Thai silk, handwoven and hand-dyed. Our scarves, clothing, and silk accessories are of the finest quality, but prices are well below market. Most of our silk is made in a village in northeastern Thailand as part of the OTOP program (where villages are taught a craft in order to be able to earn wages) where fine **silk weavers make silk according to traditional patterns for us.** [silkoofsiam.com]*

*In fact, handicraft production helps to **restore and revive these traditions** which otherwise might have been forgotten. [ttcrafts.co.th]*

*We collect most of our products from cottage industries in remote rural areas of northeastern Thailand and Laos.*

---

<sup>134</sup> Websites that use the words “tradition”, “culture”, “village”, or “natural.”

*Sourcing products from us helps those people with their livings and assists them in **preserving their treasured cultures**. [thaigifthouse.com]*

*These are craft skills of love which involve much time, patience and talent. Crafts are vitally important as means of **preserving the traditional** life value of community life and protecting the environment in Thailand. For example, many craftspeople have revived techniques that had almost disappeared, such as the use of natural dyes in silk... Sustaining a market for their crafts provides support for these people and their families through income generation as well as the dignity and confidence derived from creative production. These people wish to be recognised as proud artisans who have painstakingly hand-craft the items shows in these pages. They have adapted and developed their indigenous craft skills for marketing productions rather than, as formerly, just for their own families or local community use. [thaicraft.org]*

Pictures on some of the websites further accentuate the themes of traditional production practices. For instance, originalthaisilk.com features photographs of classical temple paintings displaying Thais in traditional dress preparing raw silk and weaving (see figure 7.2). Thaivillagesilk.com highlights a Thai woman in a formal Thai dress (which appears to be made of silk) sitting at a traditional loom (figures 7.3 and 7.4). The scene is clearly staged for the photographs, as a weaver would never wear such a formal dress to work. It is also clearly directed at a non-Thai audience, because a Thai viewer would instantly recognize the incongruities in the image. The photos are therefore consciously constructed with the intent of highlighting a vision of traditional Thai imagery.

Figure 7.2: Screenshot from Originalthaisilk.com



Traditional imagery is displayed in a significantly different manner on some of the other websites. In place of women wearing formal Thai costume, and looms surrounded by expensive silk draped on walls, weavers are shown in village settings wearing clothing more characteristic of what most Northerners wear on a daily basis. Images on Chattongthaisilk.com, for example, show a woman in a rural setting weaving silk on what is clearly a traditional loom made of wood and bamboo (figure 7.5) and another woman sitting on the floor outside of a building (not constructed in a contemporary style) reeling silk, again on a traditional spinning wheel (figure 7.6). Figure 7.6 is a particularly powerful signifier of the theme of traditional. The continuity of a long bundle of thread being spun by an old woman is highly symbolic of the continuity of traditional silk making practices in the Northeast as well as the age and history of those traditions. Her very age however also suggests the tenuousness of traditions which are increasingly associated with a dying generation.

Siamese-style.com also highlights a combination of rural and traditional imagery (figure 7.7). An old woman is shown sitting at a traditional loom in a village setting (as evidenced by the giant clay water pots, traditional-style raised house, and pickup truck). Here again, the age of the weaver, and the non-contemporary elements that continue to exist in modern Thailand are indicative of the continuity and age of traditions. The common theme in all three photographs demonstrates the hand-made nature of Thai silk and sites it within the context of village scenes: thus linking the ideas of traditional practices and rural places.

Figures 7.3 and 7.4: Screenshots from Thaisilkvillage.com



Figures 7.5 and 7.6: Screenshots from Chattongthaisilk.com



Figure 7.7: Screenshot from Siamese-style.com





The message on these websites, and indeed on many of the forty-four websites that use the words “tradition,” “culture,” “village,” or “natural,” is that the silk being sold is either identical or highly similar to silk woven centuries ago (or in other words: “traditional”). Furthermore, not only is the fabric itself highly similar to silk made centuries ago, but the actual methods of production are likewise identical to pre-industrial production practices. The websites (either explicitly or implicitly) make clear that, by purchasing silk, customers are actively enabling the reproduction of traditions that might otherwise cease to be reproduced.

### *Emphasizing Difference and Promoting Authenticity*

The text and photographs that center around themes of “tradition”, “culture”, “village”, or “natural” present a world that is very different from contemporary Bangkok, North America, Europe, or Japan. No electrified machines are shown, nor are any elements depicted or described that could be called remotely “modern”. The general attempt seems to be to depict lifestyles not only fundamentally different from what people are accustomed to in urbanized Asian and Western societies, but also to demonstrate that they are unchanged, non-contemporary, and non-Western. Indeed, a few of the websites prominently feature non-Western imagery. Sopmoeiarts.com, for instance, on the first page of their website (figure 7.8), prominently displays a photograph of an elderly woman who is not engaged in any sort of silk production (she is simply looking at the camera). The woman looks clearly “ethnic” and non-modern, as her clothing and jewelry do not appear to be mass produced; and it is likely that her image is made so conspicuous on the website in order to accentuate the differences between producers and potential customers. Her age again symbolizes continuity but also fragility, and her style of dress gives the impression of a person (and a culture) disconnected from the outside world, untouched, and isolated.

Figure 7.8: Screenshot from Sopmoeiarts.com



Differences between sites of production and consumption are not only highlighted through rural, village, and “ethnic” imagery. Difference, non-Western-ness, and orientalism<sup>135</sup> can all be identified on the first page of [silkofsiam.com](http://silkofsiam.com)<sup>136</sup> (see figure 7.9). Here, a young, scantily clad Thai woman is shown modeling silk scarves. The effect is to give a rather simple piece of fabric (a one-color, plain weave scarf) an exotic air and to link it to its Thai origins by draping it over a female Thai body. These images are part of a long line of orientalist art and share interesting similarities<sup>137</sup> with Igres’ *Grande Odalisque* (an image considered an icon of the orientalist gaze)<sup>138</sup> (figure 7.10). The Thai model (in figure 7.9) wears her headscarf in manner reminiscent of Near- and Middle-Eastern women featured in orientalist art (non-Muslim Thai women rarely wear

---

<sup>135</sup> The term orientalism here refers to Said’s (1978) arguments about how differences between East and West are constructed through representations of the “Orient”, rather than the dictionary definition of the term.

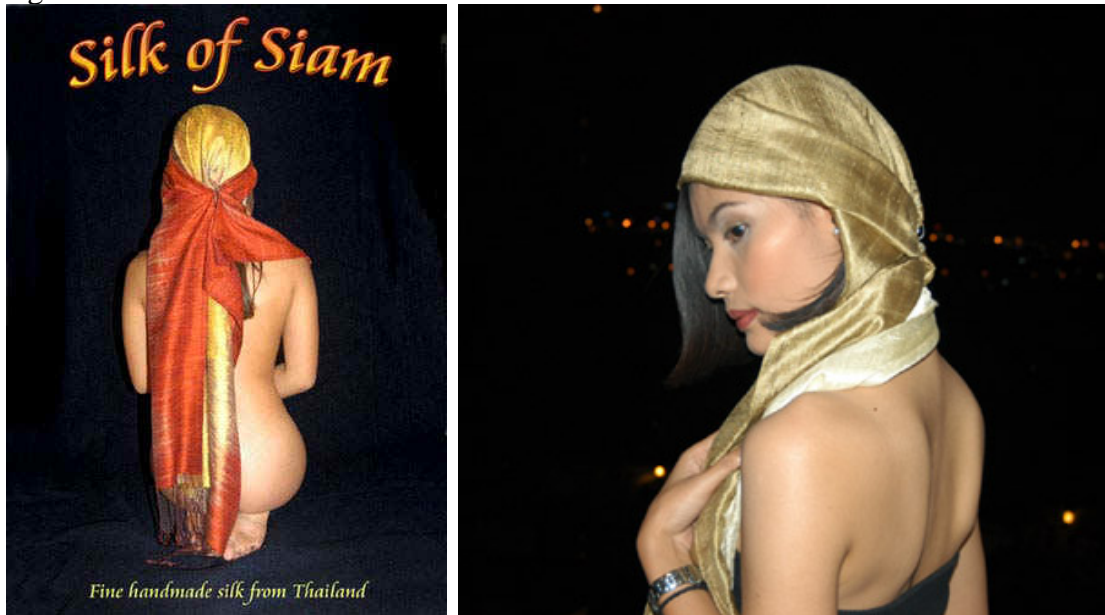
<sup>136</sup> It should be pointed out that this example is not representative of a majority of websites that sell Thai silk. A few other websites do display young women modeling silk, but most websites only host photographs of the fabric itself.

<sup>137</sup> The two images of the Thai model combined would create a similar composition to Igres’ painting.

<sup>138</sup> These points were suggested to me by Dr. Ellen Boccuzzi.

headscarfs). Both women are positioned as a sexualized other, and both women appear to be inviting the viewer into a partially obscured space. It is possible that the photographs featured on silkofsiam.com are an attempt to conflate the Thai body and the harem in order to highlight the idea of an exotic other. The use of a Thai woman in this sense is especially effective given the widespread association (outside of the country) between prostitution and images of young Thai women.

Figure 7.9: Screenshot from Silkofsiam.com



In Thailand silk is worn by Thai men and women to symbolize a formal occasion. However, outside of Thailand (and specifically in the Western world) silk is worn in ways that allude to its Asian heritage. Silk is seen as exotic, ethnic, and sexy. The images shown above can thus be seen as ways of marketing otherness by associating silk with ethnic and exoticist imagery. The focus on the female body is perhaps also another way to appeal to feelings of altruism in potential silk buyers. The women shown in the above photographs (especially the elderly women) could be seen to embody a certain sense of vulnerability. Some of the women appear old and frail (much like the silk industry itself); and the images might thus work to both remind the viewer of the susceptibility of all that is associated with the silk industry to powerful external

economic and cultural influences, while at the same time inviting the viewer to intervene or help by purchasing silk.

Figure 7.10: Ingres' Grande Odalisque<sup>139</sup>



It is also possible that the depictions of difference highlighted here, and in particular depictions of various interpretations of Thainess, are attempts to add a sense of authenticity to the silk being sold. This is not to claim that the images presented here are in any way representative of a true, essential, or authentic Thailand. The images which exoticize both the female Thai body and the rural setting are rather constructions of common perceptions of what much of the rest of the world perceives an authentic Thailand to be. Research on craft industries in other contexts has shown that “traditional” and “natural” images have been used successfully to make crafts “authentic” and consequently appealing to Western consumers as part of the emergence of an “ethnic chic” (Hendrickson 1996; Scrase 2003; Stephen 1993).

Indeed, it is argued that production processes themselves may constitute authenticity more than the actual products being created (MacLeod 2006). Building on Featherstone’s (1991) observation that shopping is a self-validating experience (i.e.

---

<sup>139</sup> This image by Jean Auguste Dominique Ingres is a public domain photographic reproduction of the original in the Louvre.

pleasure gained through the act of shopping can be greater than pleasure gained from the craft or commodity being purchased), Scrase (2003: 458) argues that by purchasing an artisanal craft, Western consumers are also purchasing:

*the experience of authenticity and traditionalism in a way that symbolically connects the commodity back to the producer. This is reinforced by a direct experience of buying from the producer, as in a tourist encounter, or from a fair trade shop or through a catalogue, where the details of the craft and the producers themselves are provided.*

Scrase's comment is especially poignant when read in the context of Internet adopters in the Thai silk industry. The idea of directness highlighted earlier in this chapter can be seen as not just a way to call attention to an economic advantage. It is also a method of emphasizing the authenticity of traditional silk fabric, and pointing out a way for potential buyers to direct their altruism by reinforcing the production process of a craft not made using modern, industrial production methods. Potential buyers see photographs and read descriptions of the sites of production, and a conceptual link is created between themselves and the site of production (as constructed by website owners). Whether or not the imagery of authentic, traditional silk production is accurate will be discussed later. However, the fact remains that by drawing on the narrative of an age-old unaltered cultural practice, EAs with websites are able to surround their business in commercially beneficial auras of authenticity and altruism.

### **Contemporary and Modern Themes**

It should be pointed out that there also remains a fairly significant grouping of websites that describe either modern or non-local production methods or styles of silk using words such as "modern" or "contemporary". Twenty websites out of the ninety seven in the sample use the words "modern" or "contemporary". A majority of these websites use the word "modern" to describe a product that they have for sale. In these

cases, the word “modern” most often precedes the words “design” or “style”. However, there are other cases in which the words “modern” or “contemporary” are used in more general descriptions on the website (for example an “about us” page). Some examples include (key themes are bolded):

*Now in the 21st century, Silk etc. continues to maintain the standards of the mother company, Shinawatra Thai Silk, while shifting market **focus to modern** contemporary home decor. - shinawatrathaisilk.com*

*Silk Avenue has a reputation for having 100% pure Thai silk fabric manufactured in Thailand. A well-trained staff of nearly 200 together with the **application of new technology** has enabled Silk Avenue to produce beautiful silk and distribute it to our customers throughout the world. -silkavenue.co.th*

*The company also promotes **exquisite modern products** and luxury brands from Thailand, one of the owner's birth country. – satinbox.com*

One company even uses the word “modern” five times in their description:

*Excellent service, good quality products and **modern** concept make "River arts" more progressive than other product or manufactures and successful in developing various kinds of Thai silk product, such as ready - made dress, home decoration, utensils, new and uncommon souvenirs "River arts" has compete against others to become an important leader in selling and producing designed and **modern** concept of Thai silk which has a perfect integration of **modern** lift. Furthermore, "River arts" has responded to demands of customers who own **modern** concept by providing a team of new designer who have always aspired to **modern** - concept adjustment which is a heart of "River arts's production". - riverartsbangkok.com*

These firms offer a significantly different narrative to the EAs that employ imagery of the village and traditional production practices. The descriptions are highly

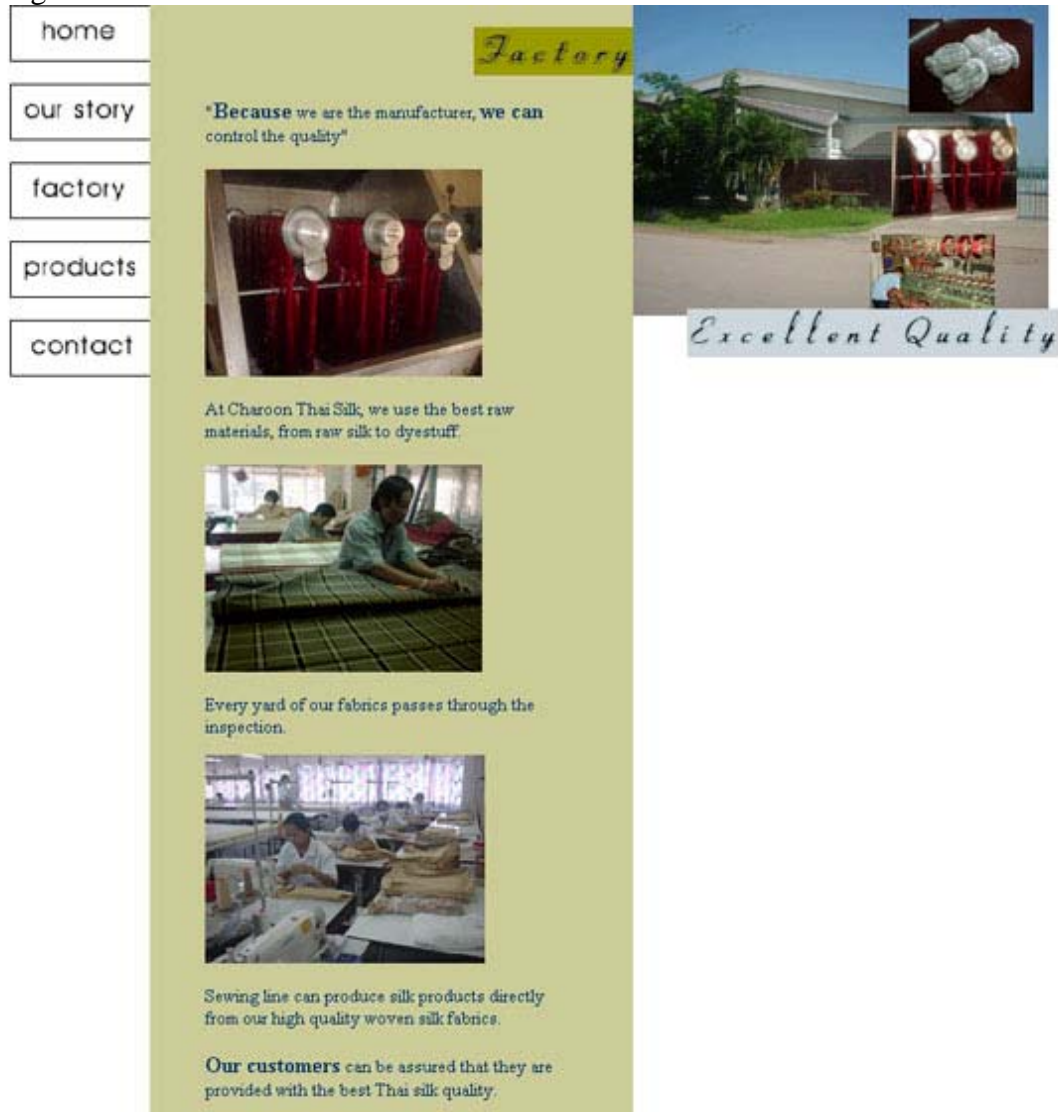
outwards-looking; there is little mention of any traditional production styles. There is likewise no mention of the sites of production, other than the word Thailand (there is especially no mention of villages or rural Thailand), and no attempt to exoticise the silk or the production methods. Amongst this group there appears to be an attempt to compete with other firms based on quality, efficiency, and reputation, instead of authenticity and altruism. Images from this group of sites only reinforce these ideas (for example, figures 7.11 and 7.12).

Figure 7.11: Screenshot from Thailandfashion.net



None of the images on this group of websites depict village scenes, poverty, or people in formal silk costumes. Instead there are symmetrical lines of workers, clean factories, and a variety of mechanized tools. One website (see figure 7.13) even dispenses with any images involving production practices and instead displays only a sleek, modern building (which does not appear to be in Thailand, and is not a photograph of the company's main office in Bangkok).

Figure 7.12: Screenshot from Charoonthaisilk.bizland.com



It is interesting to note that Thai-owned businesses are more likely to use modern imagery, while foreign-owned businesses focus more on traditional imagery (see figure 7.14). Of the twenty EAs which describe modern or non-local production methods or styles of silk, twelve are Thai owned or managed and four are foreign owned<sup>140,141</sup> (four

<sup>140</sup> For the remainder of this chapter, the terms “owned” and “managed” will be used interchangeably. Precise organizational structures are often impossible to obtain by simply looking at a website. However, a major decision maker is often listed as a “manager”, “director”, “owner”, “founder”, or any number of other similar terms.

<sup>141</sup> Ownership information has been obtained using three methods: (1) from direct statements about the nationalities of owners/managers on websites; (2) from statements about ownership that only involve a name. In such cases, Thai names were placed into the Thai ownership category, and non-Thai names



are undetermined). Furthermore, three of the four foreign owned businesses also use the words “tradition,” “culture,” “village,” or “natural” somewhere on their websites. Yet, if the forty-four websites that highlight the themes of “local” and “traditional” are looked at, a very different pattern of ownership is evident<sup>142</sup>. It was not possible to identify the nationalities of eighteen of the forty-four owners. Of those that could be identified, only seven are Thais and nineteen are foreigners. Even though the results need to be viewed with a large degree of caution due to a non-comprehensive methodology, and incomplete data, the findings remain striking.

Interview questions rarely dealt with this theme, and the issue was also not addressed in any of the surveys, so it is difficult to speculate as to why there seems to be such a large difference between Thais and non-Thais in the narratives about authenticity versus modernity being recounted online. It is possible that non-Thais, being more familiar with their home markets, are aware that using imagery which represents authenticity, traditions, and the village is an effective sales strategy. Many Thais, on the other hand, might be assuming that potential foreign buyers will be attracted by imagery

---

placed into the foreign ownership category; and (3) information from interviews and surveys (when available). While the second method of determining ownership is potentially problematic (because Thais can have non-Thai names and non-Thais can have Thai names), I would argue that it remains preferable to use these methods than to eliminate the information from the dataset.

<sup>142</sup> In order to attempt to determine the ownership of websites listed as “undetermined” in figure 7.14, I employed a WHOIS lookup service on each of the twenty-two “undetermined” domains. Where available, I obtained location data from the “administrative contact” section of each WHOIS record. In the cases where this information was missing, I obtained location data from the “registrant” section of the record. The method allowed me to obtain location information for twenty-one of the twenty-two “undetermined” domains. However, I refrain from using these data to eliminate the “undetermined” domains from figure 7.14 for a number of reasons. First, some of the administrative contacts of registrants appear to be registrars or website design firms. These firms appear to be mostly based outside of Thailand; thus potentially skewing EAs formerly in the “undetermined” category into the foreign-owned category. Second, EAs formerly in the “undetermined” category might actually be skewed in the other direction (i.e. too many of them being placed into the category of Thai-owned firms) for an entirely separate reason. Many entries into the administrative context or registrant sections of the Whois record contain only the name of a firm and a Thai street address. The information, while pointing to a base in Thailand, provides no indication as to the nationality of the owner.

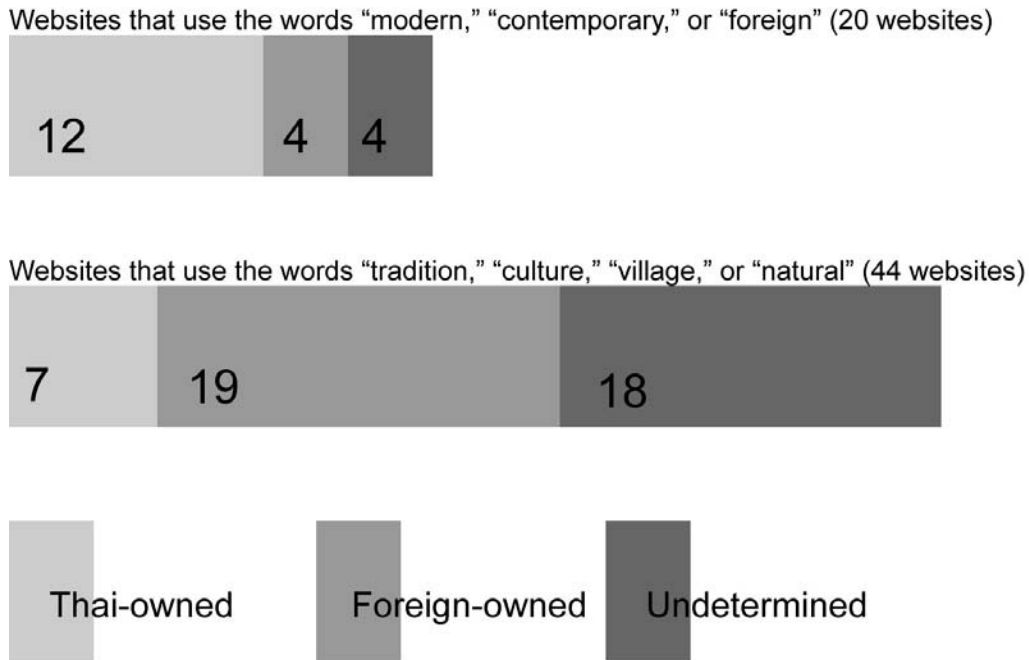
Nonetheless, if these data limitations are accepted, and the WHOIS data is used, it remains that similar patterns are present in the data. Thai-owned businesses are still more likely to use modern imagery and foreign-owned businesses are more inclined to focus more on traditional imagery. Of the twenty EAs that describe modern or non-local production methods or styles of silk, thirteen are now Thai-owned or managed and seven are foreign owned. Looking at the forty-four websites that employ the words “tradition,” “culture,” “village,” or “natural,” thirteen are Thai-owned, and thirty are foreign owned (one remains undetermined).

they associate with global business interactions (i.e. modern, standardized, sanitized, etc.). The idea that relative closeness to end-customers might influence the ways that silk is represented is given support by the fact that nine out of the twenty websites (45%) that describe modern or non-local production methods or styles of silk are producers. At the same time, only eleven out of the forty-four websites (25%) that use the words “tradition,” “culture,” “village,” or “natural” produce silk themselves. Merchants might be more likely to employ the theme of traditional silk as a consequence of many of their focuses on targeting end-customers; while producers, being more likely to sell to other businesses, might be more inclined to highlight their ability to be efficient partners to businesses who buy from them in bulk.

Figure 7.13: Screenshot from Vc-fabric.com



Figure 7.14: Website Ownership and the use of “Modern” versus “Traditional”



**Links between Data and Discourse**

It has been shown that many of the websites belonging to EAs that sell silk present themselves as providing benefits (economic and social/cultural) to producers and/or consumers. It is therefore fitting to briefly examine the bases of these claims. Specifically, with regard to claims about economic benefits made by EAs, I was able to obtain information about prices of silk and wages paid to staff from many of the EAs who completed surveys. This allows me to look at whether EAs with websites are indeed paying more and charging less for their silk.

*Prices*

Willing EAs revealed the prices of a number of items that they sold in their shops or on their websites. This information was then placed into categories in order to be able to compare prices between different sellers. Placing visual and verbal information about

the cost of silk into standardizable categories proved to be somewhat problematic. Given the variety of silk sold within Thailand, it was difficult to select categories of silk prices that were broad enough to allow comparison, but specific enough to be meaningful. The final list of categories selected is as follows: “ties,” “plain one ply silk,” “plain two ply silk,” “plain four ply silk,” “cheapest four meter mudmee silk on sale,” “most expensive four meter mudmee silk on sale,” “cheapest praewah silk on sale,” “most expensive praewah silk on sale.” Following each survey or interview, relevant pricing information from any EA was placed into the most appropriate category<sup>143</sup>. For EAs with websites, pricing data was collected directly from each website.

Despite the attempts to minimize the number of categories, most categories contain too few observations in the group of EAs with websites. Only two categories contained any meaningful amount of samples: “plain two ply silk” (twelve observations amongst EAs with websites, and thirty-seven observations amongst EAs that do not have websites) and “cheapest four meter mudmee on sale” (nine with websites and forty-six that do not have websites)<sup>144</sup> (see table 7.1). Among EAs with websites the mean price of plain two ply silk is 587 baht<sup>145</sup>. Contrary to claims made on some websites, the mean price of plain two ply silk among EAs that do not have websites is much lower. At 306 baht<sup>146</sup>, the average price of plain two ply silk from EAs without cyberpresence is almost half that of EAs with websites (52 percent of the amount to be precise).

---

<sup>143</sup> During fieldwork there was a significant amount of confusion during discussions about lengths of fabric. Plain silk was always sold in meters. However, when selling pieces of mudmee, praewah, or other types of silk, some people used yards (although most people still used meters) (1 meter = 1.09 yards). Discussions were complicated by the fact that some people used the term meter when their fabric was actually measured in yards, and some used the term yard when their fabric was actually measured in meters. Furthermore, some people would state that a piece of fabric to be a certain length only for it to actually be slightly longer or shorter (by a few centimeters). Unlike plain silk which is sold by the meter, mudmee and praewah are usually sold on a per piece basis, making the precise length less relevant. For ease of discussion, pieces of mudmee and praewah which are four meters long and measured in meters or yards have all been labeled as “four meter mudmee” and “four meter praewah” even though a more accurate description would be “mudmee/praewah between 4 and 4.36 meters in length”.

<sup>144</sup> These two types of silk are probably the two most commonly found varieties in Thai silk shops.

<sup>145</sup> The range of values is between 250 and 1400 baht per meter. The standard deviation is 312 baht.

<sup>146</sup> The range of values is between 150 and 1000 baht per meter. The standard deviation is 179 baht.

Table 7.1: Mean Prices of Silk

Unit of measure	<b>Website:</b> Mean price from EAs that have websites	<b>No Website:</b> Mean price from EAs that do not have websites
Plain two ply silk (per meter)	587 THB	306 THB
Mudmee silk (four meters)	4314 THB*	2406 THB

\*(the figure becomes 2229 THB if the highest value is removed from the dataset)

Similar results are seen when examining the prices of mudmee silk. The mean cost of the lowest priced four meter piece of mudmee from EAs with websites is 4314 baht<sup>147</sup>. Again, when looking at EAs that do not have websites, the mean cost of silk is approximately half (0.56) of the cost of buying from those with websites (2406 baht)<sup>148</sup>. However, if the highest value (10,000 baht for a piece of mudmee) is taken away from the group of EAs with websites, the mean cost of mudmee from EAs with websites becomes 2229 baht: a figure quite similar to the average cost of mudmee from EAs that do not have websites.

Silk pricing can also be examined through a question that was asked to all survey respondents with websites. EAs were asked “Would an item that you sell on the Internet sell for a different price than the same item not sold on the Internet?” Out of forty-three respondents, twenty-four (56%) stated that their pricing of silk did not vary based on the sales channel. Eight respondents (18%) mentioned that they did sell silk for lower prices to Internet customers, and interestingly, eleven (26%) noted that having a website allows them to sell silk at higher prices.

<sup>147</sup> The range of values is between 1420 and 21,000 baht for a four meter piece. The standard deviation is 6280 baht.

<sup>148</sup> The range of values is between 1500 and 10,000 baht for a four meter piece. The standard deviation is 1813 baht.

Two themes emerged for having a higher price listed on the Internet. First, there is the idea that selling online is a value-added service which benefits customers. Mr. Benito, a merchant in Bangkok, for example told me that selling online “is an extra service that I give to customers, so customers should pay for being able to easily find and buy silk instead of coming to this market.” Another theme is that selling via the Internet actually incurs higher costs than face-to-face transactions. A representative<sup>149</sup> of Worlddesigns, a New York-based intermediary, noted that face-to-face transactions from other outlets could be cheaper because online “sales require sales tax collection. Silk price may be reduced in person as forums like eBay will not be receiving listing fees and commissions (nor will Paypal).” Other EAs mentioned shipping fees as being the major factor driving up costs.

Two themes also are present in the comments of EAs who state that the Internet allows them to sell for a lower price. The first is that many of the costs associated with traditional bricks and mortar retailing are irrelevant to Internet sales. Justythai<sup>150</sup>, a Bangkok-based eBay seller stated “the cost is cheaper, as I can save the expenditure on physical shop rent, fax/telephone, and salary of a shop keeper.” Finally, there was the idea that selling through the Internet lowers prices because it attracts wholesalers who buy in bulk. For example, Ms. Montigan, the sales manager of Shinawatra silk, a Bangkok-based producer and merchant, responded that “we discount prices by ten to thirty percent when selling online because it is usually only wholesale sellers who spend a lot of money that get in touch with us [through the website]”.

In the discussions of lower prices on the Internet, not one person brought up the theme of directness. There were similarly no mentions of disintermediated, unimpeded chains, allowing more value to be passed onto customers. In fact, the logic for lower prices is grounded in precisely the opposite phenomenon: instead of selling to end-consumers in order to reduce costs (and consequently prices), EAs are finding other intermediaries and negotiating bulk discounts with them.

---

<sup>149</sup> The representative filled out the survey online and did not supply any personal contact details. The representative was initially reached through an email to worlddesigns@earthlink.net (the contact details that are supplied on the company website).

<sup>150</sup> Justythai is the eBay username of this merchant. She or he did not supply other personal details.

Low sample sizes and categorization issues, due to the non-standardizable nature of silk, mean that pointed conclusions are difficult to make from these data. Furthermore, online and offline sellers are reaching out to different groups of customers, and so silk cannot be compared solely in monetary terms. Yet one point is clear; in contrast to claims being made by many EAs with websites, there are no clear indications that the Internet or potential disintermediations of commodity chains are resulting in lower prices for customers.

### *Wages*

The notion that the Internet will allow more capital to reach the producers of silk is both powerful and compelling. The idea that disintermediation and directness will financially benefit producers is suggested or stated both on websites that sell Thai silk and in literature about the uses of ICTs in a development context. Yet, only one of the websites included in this study offered any specific details about economic benefits accrued by producers as a result of their involvement with commodity chains linked to websites<sup>151</sup>. Comments are instead always phrased in a more ambiguous manner. For example, on [www.ttcrafts.co.th](http://www.ttcrafts.co.th), it is stated that “the main goal is to pay the producers the highest price as possible and sell the products at a price that is just adequate to meet expenses.” The statement implies that producers are benefitting more from sales at [ttcrafts.co.th](http://ttcrafts.co.th) than from sales through more traditional outlets. However, no information is provided (on [ttcrafts.co.th](http://ttcrafts.co.th) or on any of the other websites) to support the assertions being made. It is therefore useful to examine these claims by reviewing prices that EAs pay to purchase silk from producers<sup>152</sup>.

Before a discussion of results, some of the problems inherent to these data will be highlighted. First, there is rarely a sole producer of a piece of fabric. A weaver turns thread into cloth and often dyes the silk herself, but uses thread that has been spun by

---

<sup>151</sup> The website [Siamese-style.com](http://Siamese-style.com) claims that “When a piece is sold, 50% of the profit goes to the weavers and 50% goes to continue the operation of Siamese Style.”

<sup>152</sup> All EAs who completed surveys were asked about the prices that they pay to purchase silk from other intermediaries or producers.

someone else. Similarly the person turning raw silk into thread is using raw silk produced by a person who (or company that) extracted it from silkworm cocoons<sup>153</sup>. I did obtain salary information about a variety of positions in the production processes of silk; however, weavers are the only group that I have a significant amount of wage data about. The following discussion will thus only involve money earned by weavers in exchange for their labor.

Second, wage data were provided to me in a variety of forms. Some salaries were reported by the day, week, or month, while others were stated by the piece or meter<sup>154</sup>. The temporally structured data were consolidated into a weekly salary category. Anecdotal evidence from my time in the Northeast suggested that most weavers take one day of rest every week. I therefore multiplied all daily salaries by six in order to bring them into the weekly category. Monthly data were divided by 4.35<sup>155</sup> in order to structure them by the week. In some cases it was possible to translate the per-piece salary data into the weekly salary data (for example, if it was reported that weaver A is paid X baht per piece and can make Y pieces in a week). Many respondents were uncertain about the number of pieces produced in any given time period, and in such cases I left the per-piece salary information in its own category<sup>156</sup>.

In addition to the weekly salary category, only one of the per-piece categories (“price paid per meter of plain two ply silk”)<sup>157</sup> contained more than a few responses

---

<sup>153</sup> The chain can of course be traced even further back by looking at the growers of mulberry plants to feed the worms.

<sup>154</sup> Although it would have been possible to request all EAs to report wage data to me in a standardized fashion, I preferred asking respondents to report the information in the manner most comfortable to them in order to minimize potential inaccuracies.

<sup>155</sup> This figure was obtained by taking the average number of days in a year (365.25) and dividing it by the number of months in a year (12) to obtain the average number of days in a month (30.44). This figure was then divided by 7 (the number of days in a week) to obtain the average number of weeks in a month (4.35). This method does not take into account public or private holidays, and it is therefore possible that the monthly data are slightly higher than they should be. Yet, anecdotal evidence again suggests that very few public holidays (other than Songkran – Thai New Year) are used by weavers. I thus decided to keep the figure at 4.35 instead of altering it to account for holidays.

<sup>156</sup> A number of “per piece” categories were created for each of the silk types discussed in the pricing section of this chapter (“ties”, “plain one ply silk”, “plain two ply silk”, “plain four ply silk”, “cheapest four meter mudmee silk on sale”, “most expensive four meter mudmee silk on sale”, “cheapest praewah silk on sale”, “most expensive praewah silk on sale”).

<sup>157</sup> Very few weavers of plain two ply silk are paid by the hour, day, week, or month; they are instead most often paid by the meter.



from EAs that have websites. Even the two categories to be looked at in this chapter are characterized by extremely low response rates from EAs with websites. In the category of “price paid per meter of plain two ply silk” there are twenty-nine responses from EAs that do not have websites and only six responses from EAs that do have websites. The response rate is slightly higher in the “weekly salary” category (forty-nine responses from EAs that do not have websites and eleven responses from EAs with websites).

Having a website seems to make little difference to the price paid per meter of plain two ply silk (see table 7.2). The mean price paid by EAs that do not have websites is twenty-five baht per meter, while the same figure for EAs that do have websites is twenty-three baht per meter. When looking at mean weekly salaries, it can be seen that weavers working for EAs that have websites do earn a slightly higher wage (1103 baht per week) than weavers working for EAs that do not have cyberpresence (959 baht per week): thus lending support (albeit weak) to the idea that EAs with websites are able and willing to pay the producers of silk higher wages.

The fact that so few respondents with websites are included in these statistics makes it challenging to infer any causal effects from the data. Even though the data provide mixed indications that EAs with websites are likely to pay weavers a higher than average salary (due to directness, disintermediation, or any other reason), it is conceivable that claims about the benefits of the Internet to producers (i.e. buying from websites allows more capital to directly reach producers) are in various cases being realized. However, even if such claims are being realized, benefits accrued to weavers do not appear to be particularly large. The results presented in this chapter indicate that even if there are weavers associated with Internet adopters who are benefitting financially, such instances are not characteristic of the distribution of capital in all cases. Or, in other words, if the Internet is benefitting weavers, the benefits are not occurring on an industry-wide basis.

Table 7.2: Mean Wages

Unit of measure	<b>Website:</b> Mean wage for weavers working for EAs that have websites	<b>No Website:</b> Mean wage for weavers working for EAs that do not have websites
Plain two ply silk (per meter)	23 THB	25 THB
Weekly salary	1103 THB	959 THB

## Conclusions

The hypothesis framing this chapter posits that:

*Claims are being put forward that direct producer to consumer supply chains will benefit and empower producers. These claims are used to lend support to development programs.*

Based on the findings of this chapter, the first part of the hypothesis can be accepted. The content analysis has shown that a variety of discourses are present on the websites of producers and merchants selling silk. Notions of altered spatial positionalities are a particularly prominent feature of many websites. The idea of “directness” is used to represent potential economic benefits of disintermediated chains that can be accrued by consumers. The idea of “directness” is also used by EAs to highlight potential benefits of disintermediation to producers of silk. Other terms found on websites of silk sellers such as “access to markets” and “reach” put forward the idea that the Internet is bringing producers and consumers into a single, virtual marketplace. These themes mirror many of the claims made by commentators who contribute to the literatures on development and globalization (outlined in chapter three). Economic integration and increased connectivity are presented (in the literatures outlined earlier in this dissertation as well as on websites discussed in this chapter) as being both

increasingly possible due to the space altering abilities of the Internet, and as inherently beneficial to all involved (non-intermediary) actors.

I had originally hypothesized that claims of directness would be used to lend support to development programs (i.e. I hypothesized that there would be government and NGO programs that attempted to reduce the amount of surplus extracted by intermediaries). While such programs do exist, it is ironic that the discourse of directness is employed mostly on the websites of commercial intermediaries.

A majority of websites make no claims about disintermediation or reconfigured positionalities. Nonetheless, the claims made about directness are far from insignificant. The claims are possibly reflective of widely circulating discourses about the links between disintermediation and development (discussed in chapter two). Even on websites which do not clearly point out their facilitation of direct links between producers and consumers, other elements (such as photographs of producers or the sites of production) can more subtly make the same claim.

On the websites of Thai silk sellers, ideas are also presented that buying silk from a company with a website will provide material and cultural benefits to both the producers and consumers of that silk. These ideas are put forward in a variety of forms and are particularly visible in the images present on websites.

Imagery symbolizing particular visions of authenticity and difference features heavily in the photographs looked at in this study. Two themes have been identified. First, by invoking rural imagery and stressing the fact the silk is almost always produced in Northeastern villages, the idea is presented that small-scale silk production is preventing rural to urban migration. Every purchase of silk can therefore be seen as a way to both keep silk production practices economically viable and reduce the appeal of other professions. This point perhaps becomes more salient to buyers when seen in the context of the highly visible and well-known relationships between prostitution and migration in Thailand.

Second, difference between producers and consumers is highlighted in order to serve two objectives: demonstrate the need to preserve traditional production practices,

and emphasize the authenticity of silk. Producers are presented as non-modern and rural, engaging in production practices that appear to be unchanged since pre-industrial times. These representations stand in stark contrast to places inhabited by most consumers (Europe, North America, Australia, and urban Asia). Describing and depicting traditional production practices undoubtedly appeals to altruistic tendencies in many potential customers. A customer engages in more than an exchange of money for silk; he or she also contributes to enabling traditions and a way of life that might otherwise cease to be reproduced.

The representation of difference is also a core component of the construction of ideas of authenticity in silk being sold. Difference is highlighted not only through the presentation of rural and village imagery and photographs of non-modern production practices (as discussed above), but also through photographs of people who embody visions of Thainess that have been othered or orientalized (e.g. the old woman in traditional attire, the young woman draped in silk). Even though these images do not show women weaving, the women themselves provide the conceptual links back to sites of production. This imagery perhaps appeals less to altruism, and more to a desire amongst some customers to purchase “the experience of authenticity” (Scrase 2003).

The effectiveness of imagery suggestive of authenticity or altruism and the theme of directness in attracting buyers of silk is unclear. Many websites are pointed in their implications of the potential benefits of purchasing silk, while others are more subtle and may not have consciously constructed their website to convey the idea that economic or social benefits can accrue to producers or consumers.

Finally, this chapter examined claims that direct chains result in less profit being captured by intermediaries (i.e. cheaper silk for consumers and higher salaries for producers) and compared them against pricing and salary data collected from surveys and websites. There is no convincing evidence that prices are lower online than offline. There are hints that salaries of producers for EAs with websites might be higher than salaries of producers for EAs that do not have websites; however, the data are not convincing, comprehensive, or able to prove causal relationships.

Discourses about benefits, accrued to either producers or consumers, are only clearly and unambiguously projected from a minority of websites, but because of more subtle ways of projecting statements about benefits (to either producers or consumers) it is difficult to fully know how widespread intentionality behind discursive constructs about benefits is. Ultimately, this chapter shows that the idea of disintermediation (or directness) is used as a base from which other more powerful claims are made. Claims are constructed that altered chain topologies will necessarily alter the power-geometries of all involved actors (i.e. more direct chains will have economic and cultural benefits for producers and/or consumers). Looking specifically at weavers, this chapter (in addition to earlier chapters) has demonstrated that there is little proof that the integration of the Internet into commodity chains provides tangible economic benefits to weavers. Moving away from the idea that the Internet can have positive effects on producers, (and to return to a theme introduced in chapter two) there remain fears that the use of the Internet to create and sustain global commodity chains can have serious negative effects on producers. It is to this issue that chapter eight now turns.

## CHAPTER 8

### FEARS OF NETWORK INTEGRATION: THE REPRODUCTION AND REPLACEMENT OF WEAVING TRADITIONS

*One day surely I will be gone.  
You, children, can continue to weave,  
With mother's silk and children's yarn,  
So the old cloth can turn a new leaf.*

- The final stanza from a poem entitled "Real Silk From Mother's Hand" by Paiwarin Khao-Ngam (1995: 39).

A common critique of globalization centers around the notion that traditions, crafts, art, music, and beliefs that are not profitable or compatible with a global marketplace will ultimately cease to be practiced and reproduced. As the Internet is slowly becoming integrated into silk commodity chains, many of these fears are surfacing in Thailand. In order to examine this topic, this chapter asks whether traditions are being replaced as producers interact with distant customers through the Internet.

#### **Sustainability Issues in the Silk Industry**

Some weaving styles have uniquely Thai heritages and are only produced in certain regions of the Northeast. Many weaving patterns are similarly unique to particular regions and have been handed down from mothers to daughters for generations. Ms. Wingduan, a weaver in Khon Kaen province, told me, "I have been weaving some of these designs since I was born." The weavers sitting next to her laughed at the statement, but then agreed that they too have been producing certain styles since they were taught to weave. These comments are not uncommon, and almost any weaver in the Northeast can point to distinct designs and patterns that they have seen and woven all of their lives and that are distinct to their village, town, or province.

Even the plain handmade silk that can be found in most Thai silk shops is a rarity on the global market, due to the fact that most silk produced in other countries is machine made. However, praewah and mudmee have especially important meanings to a number of Thais. Praewah has symbolic ties to the royal family, and the Princess Maha Chakri Sirindhorn does in fact subsidize the production of praewah in at least two locations in Kalasin province. While the mudmee style of weaving is practiced in locations throughout Asia, the designs woven in the Northeast of Thailand are usually unique to the tambons in which they are produced and are generally passed down from mothers to daughters.

Throughout Southeast Asia, fabrics have been seen as a reflection and container of surrounding cultural influences (Naenna 1990; Maxwell 2003; Bowie 1993; Cheesman 2004; Green 2000). Thai silk is often assigned powerful meaning in constructions of Thai identity. Links between silk and Thai identity are expressed in a variety of forms. Non-Thais often come into contact with Thai silk through the heavy use of the fabric in the marketing campaigns for Thai Airways and most international hotel chains in Thailand; the highlighting of the Jim Thompson silk museum as a must-see tourist destination; and the fact that foreigners are actually prohibited by royal decree from making silk products by hand in Thailand (Ratprasatporn and Thienpreecha 2002; Jory 1999; Koanantakool 2002).

For Thais, silk is assigned a role in numerous traditions (marriage, funerals, Buddhist rituals etc.), and many patterns and colors convey distinct cultural meanings<sup>158</sup> (Lefferts 1988, 1990). Weaving has been commonly seen as an expression of Thai womanhood, and many men will not touch a loom after it has been set up (Conway 1990). In the contemporary Thai culture, it serves as both a highly functional item (e.g. as a pakomah: a piece of cloth that can be used as a windbreak, hammock, and hat amongst other things), and a distinct signifier of Thainess. For example, at formal events throughout the country, Thai men are expected to wear thick silk shirts instead of suits and ties or tuxedos. Silk's association with the nation is also reproduced every Monday

---

<sup>158</sup> One source states that many of the Northeastern designs were originally used to ward off evil spirits (Silk of Siam 2008).

when government workers, both male and female, are expected to wear silk (usually yellow silk) to work. Silk is also used in Thai literature to symbolize the reproduction of Thai culture (due to the fact that ideas and patterns are passed between generations through the looms underneath many Northeastern houses).

Despite the strong links between silk and Thai identity, there is widespread concern that many practices of silk production are economically unsustainable and will therefore slowly cease to be reproduced. Government support for the industry is not focused, and it can be intermittent due to endless political maneuvering in Bangkok. Some ranking politicians are simply indifferent to the industry and see it as a relic of the past. For example, during the February 2007 Praewah Red Cross festival in Kalasin city, I asked the then-governor of Kalasin province, Kawi Kittisathaphon, about his thoughts on the possibilities to increase the flow of money to preawah producers in his province. He shocked me by insisting that the producers are making too much money. He argued that: “You shouldn’t think like a capitalist. Silk here is far too expensive. I need to go to Bangkok a lot and take gifts and I have the most expensive gifts [compared to gifts that other governors have to bring to meetings in the capital]. We need to get the silk makers to lower their prices so that it is more affordable. They are harming themselves by charging so much.” Part of Kittisathaphon’s objection to the suggestion that producers might capture more of the value from the final sale price of their silk might be explained by the fact that governors rarely hail from the province that they govern and are frequently moved around. This practice is aimed at preventing corruption, but it also prevents governors from developing an intimate understanding of economic problems in their provinces.

The clearest sign of unsustainability in the silk industry is the fact that very few young Northeastern women are willing to become weavers. During my fieldwork I encountered hundreds of weavers, yet only a handful were in their teens or twenties. Many Northeasterners associate the production of silk with the past, and while they lament its disappearance, young women remain largely unwilling to engage in the practice. I was told on numerous occasions that weaving is not modern, and that it is



backwards. Young women often prefer to work in large Japanese and European owned factories in Bangkok and the Northeast. They acknowledge that the pay is similar, but cite air conditioning, uniforms, and ability to work with friends as reasons for preferring factory work. Some women also cite health issues inherent to the silk industry (back problems, and rashes from chemical fumes) as reasons to find employment in factories (Nilvarangkul et al. 2006). For many of these young women, the practice of weaving seems to be associated with an older generation, and the fact that salaries in the silk industry are rarely higher than those in any other profession gives Northeastern youth little incentive to learn their parents' trade.

Exacerbating this problem is the fact that producing silk by hand is economically inefficient. Electric looms can produce a significantly larger volume of silk<sup>159</sup> and machine made silks are often cheaper than their handmade equivalents<sup>160</sup>. Furthermore, many buyers actually prefer machine made silk. Bulk buyers who convert fabric into products such as clothing or bags value the fact that machine made silk is much easier to standardize than hand made silk. Hand made silk is always produced in relatively small batches, and as such it becomes difficult to reproduce the exact color and thickness of the fabric for a large order. Because dyes are usually mixed by hand in a large cauldron, variations in the amounts of chemicals added and the temperature of the water can cause slight variations in the final color<sup>161</sup>. Individual buyers sometimes prefer machine made silk to traditional hand made varieties for a very different reason. One of silk's most renowned qualities is the fact that it has an extremely smooth texture. The word 'silky' has become a synonym for 'smooth' and even Thai Airways, the national airline of Thailand, uses the phrase 'smooth as silk' on all of their advertising and promotional

---

<sup>159</sup> A factory that I visited in Korat province claimed that they could make forty yards of silk brocade a day on each of their machines. The same textures and patterns produced by hand would take at least ten times as long.

<sup>160</sup> However, this is not the case for Thailand's largest silk producing company: the Jim Thompson Corporation. The Jim Thompson brand name allows the company to charge prices per meter that are well above market averages. The lower cost machine-made silks that can be found in Thailand either come from smaller Thai companies or are imported from China or Vietnam.

<sup>161</sup> Many of the producers and merchants that I spoke with believe that all else equal (i.e. using the same producers and the same dyes) such factors can cause a five to twenty percent difference in the final tone of the fabric.

materials. Yet, in contrast to machine-made varieties, handmade Thai silk is rarely smooth: coarseness is actually a defining characteristic of traditional Thai silk.

As a result of the unique qualities of handmade Thai silks, many producers and merchants worry that international consumers, and even many urban Thais, will not understand the ways in which designs, techniques, and patterns have generally been assigned economic value by informed buyers. Or, in other words, a worry exists that consumers will see no reason to buy anything other than the cheapest silk. Ken Sura, the vice-president of the Korat Silk Association, summed up this fear by commenting that:

*I am worried that in 20 years the only silk left will be Indian silk with made in Thailand stickers on it. We are cutting our quality, have no good fashion, and can't compete on price. Everyone is trying to compete on price and this is impossible.*

In this context, the effects of the Internet can be viewed in two ways. On the one hand, some believe that digital technologies can be used to open up wormholes between producers and customers in order to “push” out selected narratives, pictures, and methods of economic and cultural communication without producers being “pulled” into participating in non-local practices<sup>162</sup> (c.f. UNESCO 2006). It is possible that the use of pictures, text, sounds, videos, and hyperlinks on the Internet will allow consumers to learn more about why Thai silks (and especially why certain textures and designs) cost more than machine made fabrics. Seen this way, the Internet would help to sustain traditional work practices in the Thai silk industry by simultaneously opening up a marketplace for Thai fabrics and educating customers about the often complex meanings and traditions woven into the silk. Such ideas, of course, rest on particular ways of understanding the spatial, social, and economic impacts that commodity chain alterations can have. In particular, there are assumptions not only that the Internet can open up wormholes and reconfigure chain topologies, but that those topology changes will in turn alter power-geometries (specifically, in ways that benefit producers).

---

<sup>162</sup> See Gereffi (2001a) for a similar use of the pushing and pulling analogies.

On the other hand, the Internet could lead producers to alter or cease to reproduce ancient patterns and techniques in order to appeal to customers who are largely unfamiliar with Thai silk. The underlying assumptions about the transformative power of the Internet are similar to those mentioned above: the Internet can open up wormholes, transform commodity chains, and consequently alter power-geometries. However, in this formulation, new power-geometries rarely benefit producers. Wormholes can be seen as having a “pulling” effect on producers by facilitating relationships based on uneven power relations (i.e. producers losing even more bargaining power and being forced to significantly alter production practices) <sup>163</sup> (Dahles and Zwart 2003; Sardar 1996; Ohno and Jirapatpimol 1998).

### **Responses to the Market**

As this project is not a longitudinal study, it is difficult to judge the precise effects that the Internet has had on silk patterns. However, there remain a number of ways to approach this research question. This chapter will first draw upon interviews and open-ended responses to surveys in order to explore the ways in which producers and merchants are talking about how they respond to market forces that do not always lead to the reproduction of traditions. The chapter will then examine sales data from producers and merchants that operate websites in order to determine whether the types of silk sold vary significantly among producers and merchants who do not have websites.

Most comments on the theme of market forces and the reproduction of traditions were in response to the question: “Please describe or list the main types and designs of silk products that you sell.” and can be divided into three categories: claims to only make traditional patterns, claims to combine the production of traditional styles with newer or non-traditional elements, and the production of only non-traditional fabrics.

There were only a few EAs that claimed to focus solely on traditional styles of silk. This category includes two merchants in Bangkok and one in the Northeast, two

---

<sup>163</sup> A more detailed account of these theories is presented in chapter two.

Northeastern producing firms, and three self-employed weavers. Reasons for focusing only on traditional styles varied. Every self-employed weaver claimed to avoid more modern styles because they are more expensive to make. However, in all cases the weavers were unable to elaborate on why modern styles would be more expensive. One weaver, Ms. Bualan, did note that:

*Weaving is part of the lifestyle of people in Chonnabot. I always sell to the same people and always sell for the same amount. What I make is not enough but I don't have enough money to increase my production. I would like to increase orders to existing customers and find new customers, but don't know how.*

Another theme to emerge was the idea that some foreigners appreciate and are willing to pay for traditional Thai silk. Ms. Janthorn, the head of a Northeastern producing group that specializes in the 'Pa Yok' style of weaving, only produces a few pieces of Pa Yok per year; as a result, her silk is comparatively expensive. She does not have any trouble finding a market for her products and claims that foreigners especially like to hang her silk in their homes. Ms. Wongpituk, a Bangkok merchant, similarly maintains that "we make only traditional styles and focus on exports so that we find people who like hand-made products and people who want to support villagers." The notion that the production of traditional fabrics helps villagers in the Northeast was an idea echoed by the director of the Phonatha weaving group, which produces only praewah fabric. She remarked:

*Praewah is a product from the Phu Thai people [an ethnic minority who live in Northeastern Thailand] and I want to save their culture. I want to protect the heritage of ancient traditions by developing and selling Praewah silk. We have lots of buyers and it earns lots of money for us.*

In general, even though most EAs do not focus exclusively on traditional fabrics, those who do have found a viable niche and are able to financially support themselves without compromising their designs. Indeed, it is the uniqueness and heritage of their

silk that adds value to the fabric. Even the self-employed weavers who earn only a small fraction of the final sale price of their silk are still able to support themselves by uncompromisingly producing the same styles of silk that they have always made. Nonetheless, even though these EAs are successful in selling only traditional styles of silk, the fact that so few respondents claimed to belong to this group seems to indicate that the market for such styles is extremely limited.

A majority of comments that I received from producers and merchants related to the fact that they either sell traditional as well as non-traditional silk, or hybrid fabrics that combine contemporary or non-local elements into older Thai designs and patterns. The EAs that sell traditional and non-traditional styles usually mention that traditional styles comprise a smaller amount of their total sales. For instance, Mr. Saragut, the manager of a made-to-order silk business in Khorat province, told me that the styles of fabric that their company makes are entirely up to the customer. However, it is usually only old women who request traditional patterns. Most other customers want designs similar to ones they see in designer shops or in magazines. As a result, Mr. Saragut's weavers weave only a small number of traditional designs.

Hybrid silks that combine traditional and non-traditional elements are created in a variety of ways. The Chabatik Company, based in Bangkok, employs weavers who make mudmee using traditional methods (i.e. the use of handlooms and tie-dyeing of the silk). However, what sets them apart from other producers is the fact that they design all of their patterns electronically using Adobe's Photoshop software (see figure 8.1). Those patterns are then converted into instructions for weavers on how to dye the warp and weft strands of each piece<sup>164</sup>. Chabatik's designs have proven popular, albeit only among non-Thais. The manager of Chabatik noted:

*These patterns are very different from the silk you find everywhere else in Thailand. Maybe that is why Thais don't buy a lot of our silk. Also, we sell mostly wall*

---

<sup>164</sup> This method contrasts sharply with traditional ways of communicating designs. Designs are most often passed from mother to daughter, and between weavers in the same area. This is done using written notes, fabric samples, or simply through observation and memory.

*hangings and scarves. People here [in Bangkok] don't buy many wall hangings and don't wear scarves, so that is why we focus on foreigners.*

Figure 8.1: Chabatik Silk<sup>165</sup>



Although Chabatik sells their mudmee-styled silk almost exclusively to foreigners, most mudmee sold in Thailand is consumed by Thais. This fact was a common observation echoed by mudmee producers with whom I spoke. For instance, Ms. Jutarut, a shopkeeper in Korat province, remarked:

*Foreigners prefer plain silk, not mudmee. . I tell the weavers what to weave and we make about 40% traditional and 60% modern. We focus on mudmee and kit [another type of silk] though to make a difference from other shops.*

---

<sup>165</sup> This photograph shows an employee of Chabatik holding up the computer generated design of a piece of silk next to the fabric that was created using the design.

A majority of mudmee producers echoed the idea that foreigners do not understand the complexities inherent in mudmee production and are therefore less likely to become customers.

Ms. Noi, the head of a weaving group in the Pakthongchai district, rarely sold any traditional designs any more, and even refused to sell me a traditionally styled mudmee cloth that she kept in her display cabinet because she was worried about forgetting the pattern. However, when asked if she feared that customers would lose interest and forget about old patterns, she did not display any signs of concern:

*I don't think so [that people will forget the old fashioned designs], we keep teaching. But anyway, customers love new patterns. I focus almost entirely on modern designs, and only make a few old fashioned designs, but sometimes mix with new.*

These comments, however, should not give the impression that a dichotomous relationship exists whereby traditional silk is consumed by Thais and non-traditional silk by foreigners; such a view is disputed by other merchants. Mr. Pook, the manager of Khampang silk, a Bangkok-based merchant, remarked that:

*We sell some traditional silk and some modern silk to various kinds of customers. Japanese and Americans and Europeans all like different things. The Japanese like our ancient textures [traditionally styled silks] and they make clothes from it. They make dresses and blouses from mudmee and kimonos from plain silk.*

Mr. Tim, a merchant in Bangkok, offered yet another explanation of the relationship between the location of buyers and the type of silk sold:

*We sell both traditional and modern designs. Thais like modern silk and turn it into clothes, while farang<sup>166</sup> [foreigners] like traditional things for decoration.*

---

<sup>166</sup> The word *farang* is the Thai word for the guava fruit. However, the word is also used by many Thais to describe foreigners with white skin (Guavas are white underneath their skin). *Farang* is often used in a neutral manner, but depending on context can also be used to mock or insult foreigners.

Ms. Kantima, the manager of the Rattanasuran Thai Silk shop similarly claimed:

*Thai people like plain colors and bright colors. My stuff is subdued and dull. Foreigners like these ancient soft silks very much. In the past the Japanese liked it a lot, but now mostly Europeans.*

Among this group that sells both traditional and non-traditional types of silk, then, there is not widespread agreement as to whether links to distant customers are an instigator of change or a way to preserve existing weaving methods. And while many producers and merchants distinguished between the tastes of local and non-local customers, it was age rather than location or nationality that respondents identified as the factor behind consumers' choices. Mr. Pook, a shopkeeper in a Bangkok mall, stocked only "modern silk, because we don't want buyers to feel that they are old." In a similar vein, Ms. Kamolphon sold:

*yellow silks and shiny threads; also silver threads a lot. Traditional things don't sell well except to a few locals and old people.*

Finally, there is a small group of merchants and producers that sell only what they consider to be non-traditional or modern silk. Interestingly, these sellers of silk focus almost entirely on domestic customers. Mr. Niram of the Silkavenue company, for example, discussed the topic at some length:

*Elephant designs sell very well: elephant cushions, keychains, anything with elephants really. Gold printed patterns are our best sellers. We stock no traditional stuff really. We have a cotton polyester blend that looks a lot like silk, but is much cheaper. We invented it because the [name of a large Bangkok] hotel had to reduce their costs. It is three times cheaper and the weavers weave this mudmee on the same hand looms. It costs 800bt per yard. There is much competition from China; and we can't compete on price.*



In this situation, it is not non-local customers that are precipitating ripples of change throughout the commodity chain, but rather external competitive forces causing the company to alter their production process.

There are clearly a variety of reasons for and approaches to straying from traditional styles. Perhaps the most cited change relates to the color of silk. Almost every producer or merchant with whom I spoke had something to say about consumer tastes in color. There are a multitude of opinions for specific colors favored by various groups of consumers, but there remains a general consensus that foreigners do not appreciate the same color schemes that Thais do. I was told by various producers and merchants that Thais like “bright colors”, “red”, “yellow”, and “pink”<sup>167</sup>. I was told that foreigners appreciate “standardized colors”, “pastel colors”, and “natural colors.” Europeans were claimed to prefer “plain colors”, “earth tones”, “colors from natural dyes”, “the color blue, but also red if they have a Thai wife”; while the Japanese are said to favor “natural colors”, “standard colors”, “dark colors”, “light colors”, and “earth tones.”

Even though many producers and merchants refer to brightly colored silk as an example of traditional or local cloth, it is interesting that the chemical dyes used to make brightly colored silks are a relatively recent introduction to the country. Older ways of coloring fabric (i.e. using plants, charcoal, minerals, and animal products) are now associated with some of the ‘earth tones’ and ‘natural colors’ favored by foreigners.

Many of the interviews conducted demonstrate that the presence of foreigners as either intermediaries or end-customers in the commodity chains of silk often has tangible effects on the ways in which silk is produced. This finding is in line with other research, including Tantong’s (2003) finding that successful Thai exporters are likely to adapt their products to foreign market conditions, while less experienced exporters are less prone to do so. However, not all foreign consumers of silk precipitate change in the production process through a combination of purchasing power and tastes that do not

---

<sup>167</sup> The colors yellow and pink are both colors that are associated with the Thai monarchy. In Thailand, every day of the week is associated with a specific color. Yellow is the color of Monday, while pink is associated with Tuesday. Yellow is traditionally worn on Mondays due to the fact that the King was born on a Monday. Pink is worn to wish good health to the king (in early 2008, he was released from hospital on a Tuesday after spending three weeks as an inpatient).

match the styles and methods of production that have been (until recently) reproduced by relatively isolated weavers. Differing tastes among generations of Thais are likely an equally powerful agent of change.

The fact that such a large proportion of Thai silk is ultimately exported makes the finding that non-local links are having effects on silk making practices somewhat unsurprising. However, one argument frequently made about the Internet is that in contrast to previously existing economic links with the outside world, the Internet can bring about more powerful and intrusive cultural effects (c.f. Sardar 1996; Ohno and Jirapatpimol 1998). Using survey data, the following section will examine that proposition more closely.

### **The Internet and Silk Styles**

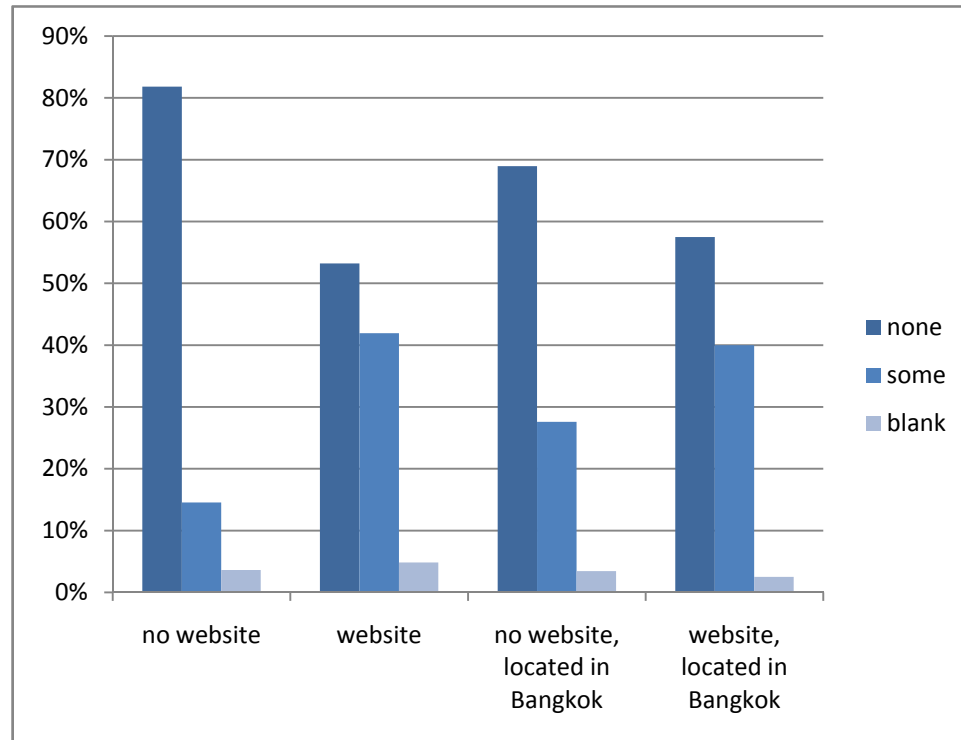
In each survey, respondents were asked to specify the amount of machine made, plain hand made, and mudmee silk that they sell. Producers and merchants noted whether they sold 'none', 'little', 'medium' or 'most' of each type of silk. The following three graphs display the amount of each type of silk sold by: EAs that do not have websites, EAs that have websites, EAs located in Bangkok that do not have websites, and EAs located in Bangkok that do have websites<sup>168</sup>. For the following analysis, the categories 'little', 'medium' or 'most' have been folded into a single 'some' category in order to more clearly observe presence versus absence of each type of silk.

Looking at the first of the graphs (figure 8.2), in all cases, machine made silk is far more likely to be sold by EAs that have web sites than those that do not. The difference is more pronounced looking at only those EAs that are not located in Bangkok, with Northeastern producers and merchants far less likely to sell machine made silk.

---

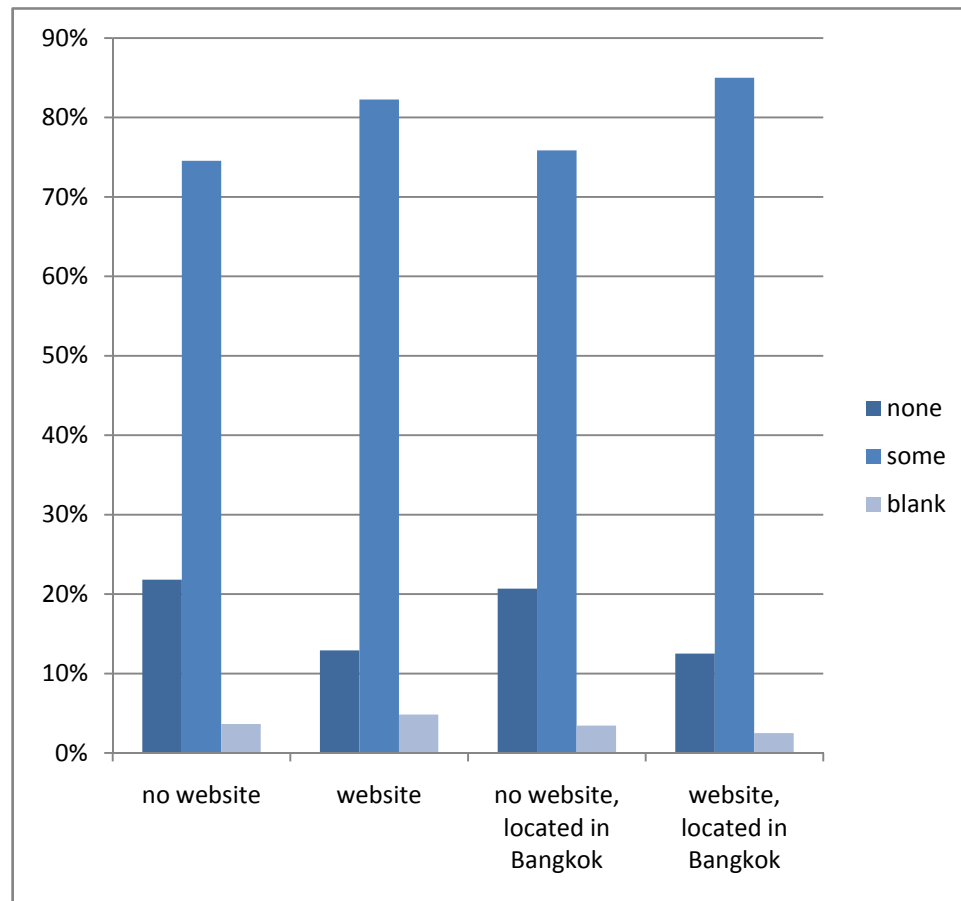
<sup>168</sup> EAs located in Bangkok are displayed as a separate category in order to account for the differences that urban versus rural locations might have on these data.

Figure 8.2: Sales of Machine-Made Silk



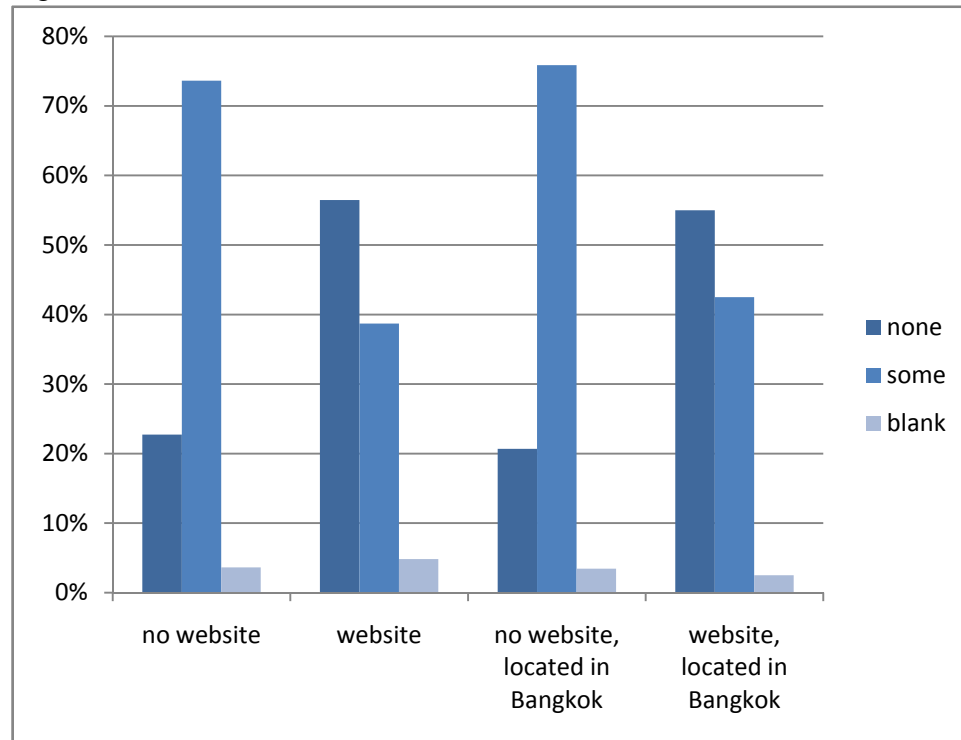
The second graph (figure 8.3) displays the amount of plain hand-woven silk sold by each of the four categories of EAs. Here, differences between Internet users and EAs without websites are less evident. A vast majority of EAs sell at least some handmade silk and only a small percentage of each category sell no handmade silk at all. However, given that most Thai silk is handmade, it would be unexpected if any of the four categories of EA sold a relatively small amount of plain hand-made silk. The results from the third graph (figure 8.4) are more interesting. Firms and individuals with websites are far less likely to stock that mudmee silk than are EAs with an online presence. In fact, producers and merchants with websites are more likely not to stock any mudmee silk at all.

Figure 8.3: Sales of Plain Hand-Woven Silk



A final observation to be made from these data is that in all cases, there is very little difference between the types of silk sold in Bangkok and the rest of the country in the dataset as a whole. This finding indicates that the medium through which silk is being sold may have more of an effect on the types of silk that are being sold than the site of the sale itself or the location of end-customers. However, given that most customers of EAs with websites are located outside of Thailand, it is possible that the location of end-customers is a significant explanatory factor. In order to better explain this issue, this chapter returns to two interviews conducted with Internet Adopters and attempts to understand how they decide which types of silk to sell on their websites.

Figure 8.4: Sales of Mudmee Silk



## Case Studies

The following section explores comments made by representatives of the two companies (Jagtar and World Of Thai Silk) that have undoubtedly achieved the most success in running Internet-based businesses (i.e. almost all transactions taking place non-proximately with cyberspace being the primary means of communication).

### *Case Study: Jagtar*

Jagtar is a self-described Internet-based company located in Bangkok. The company made a profit of 45 million baht (approximately \$1.5 million USD) last year and it is clear that they are one of the largest and most successful silk exporters in my survey sample. Ninety percent of their silk is exported to foreign distribution companies. My interview with Bala Subramanian, the sales manager, took place in June, 2007. Mr. Subramanian revealed that:

*We buy what the market wants and keep stock. If we would manufacture, we would lose our focus. We are purely a stocking company: stock and sell. We are also going to keep a warehouse in the US in order to stay close to market. We can't compete with the manufacturers, so we wanted to compete in the markets where there is a need for B2B services instead of here.*

Some of Mr. Subramanian's most interesting comments were within the context of a conversation about his ability to track and codify transactions. He noted:

*Our stock in the ordering system can be shown to all showrooms. We have a real time ordering system and we have all of this active so people can keep track of our stock. We get this from [our online yield management provider]. Everything needs a record and data are very important for us. Our stock in the system can be shown to all showrooms. We have a real time ordering system. Thai yarn export is a banned item, so you can only export the fabric, and we mostly do that in small batches that are sent door to door by FedEx.*

Jagtar has become integrated into the purchasing networks of distribution companies throughout the world. This was achieved through use of an online yield management provider and the company's own electronic links with other firms. Jagtar does rely on showrooms operated by their distribution companies, but a combination of the codifiability of all of their fabric and the ability to transmit that information across the Internet remains crucial to their business strategy<sup>169</sup>. This situation was perhaps best summed up by Mr. Subramanian when he stated, "now the Internet is our life."

Jagtar's reliance on codifiable electronic transactions appears to have a significant influence on the types of silk that they are able to sell. The company primarily sells machine-made silk as well as a significant amount of plain handmade silk. Yet, they do not even attempt to sell some of the more complex handmade styles such as mudmee, jok, or praewah.

---

<sup>169</sup> The need for standardized codification schemes has been argued to be necessary for the transmission of codified knowledge (Balconi 2002; Baldwin and Clark 2000; Sturgeon 2003).

Machine made silk is easily standardized and categorized with human error largely effaced by the repetitive abilities of electric looms that produce fabric in enormous batches. Plain handmade silk can be more difficult to standardize for a number of reasons. The density of the silk largely depends on the strength with which the weavers are able to pull the weft threads into the warp. Any large order of silk requires multiple weavers, each working on a different machine; this ultimately means that each piece of fabric will have a slightly different density.

Standardizing color is also a significant problem for Thai silk sellers. From his own experience, Mr. Subramanian conceded that “People [customers] accept color variations by about ten percent.” Jagtar and other large silk sellers such as Jim Thompson or Shinawatra Silk invest significant resources into ensuring that dye chemicals are mixed at exactly the right proportions and boiled at exactly the right temperature using silk of similar grade and quality in order to adhere to a pre-defined color code (one of Jagtar’s color charts is shown in figure 8.5). Smaller producers are unable to maintain such rigid quality controls and therefore end up with silk that cannot be standardized or precisely reproduced. This topic came up as a significant issue with a few other EAs. Ms. Noi, the manager of a production company in Pakthongchai, told me:

*Some people asked me to use the Internet, but I am scared. Some companies from Bangkok asked me. They wanted exact colors, amount made per week. I said forget it. I don't know how to do anything with the Internet. The company was too strict: exact colors, exact amount.*

The most important implication of this difference in capabilities between large and small producers centers around the different types of silk produced by each group. Complex silk designs such as mudmee or praewah are rarely, if ever, produced by weavers working for large companies. These complex and uniquely Thai designs often contain multiple colors, and they are usually produced by weavers who work either independently at home or as part of a village weaving group. As a result, it is practically

impossible to order a large batch of mudmee or praewah fabric and have the colors match.

Figure 8.5: A standardized color chart used by silk producers



I asked Mr. Subramanian why his company did not sell any uniquely Thai styles of silk. He responded:

*Well, first of all there is not much market for these traditional silks. The distribution companies and the designers that buy from us wouldn't know what to do with them. They are really not that appealing for people who aren't Thai. You would never see anyone anywhere else in the world walking around in a Thai silk shirt made from some of the mudmee you see here. Nobody else appreciates it. But even if there was a market for it, it doesn't fit into our business model. You can't repeat the same patterns exactly and they [the producers] are not good at matching colors. We need to be a reliable supplier to our customers and we wouldn't be able to through no fault of our own.*

#### *Case Study: World of Thai Silk*

It is also informative to look at an interview about the business practices of World of Thai Silk in order to examine the ways that the Internet can influence the types



of silk that are sold. On May 9, 2007, I interviewed Mr. RothHaas, the owner of World Of Thai Silk. As discussed in chapter six, Mr. RothHaas had by that time abandoned the idea of using his business to provide a link between producers and consumers, in part because of what he saw as the unwillingness of Northeastern weavers to adapt to non-local production practices. He noted:

*...they are out of touch; they are not up to date, they are not doing things the modern way. They are still trying to do it their own way. It's like they are not very competitive any more. This is the big problem; they are not very efficient and they are not very competitive... They really don't care either that they are not competitive. They won't cut prices, they won't reduce margins, they will not do anything to make themselves more competitive. It is kind of like the Frank Sinatra way of doing business. I'll do it my way. The fact that the country is going down the tubes economically; crime is higher than New York. It's quite a mess. Unless they adjust I don't know how they are going to improve... Unfortunately we want to help them, but they are not helping themselves. They are not being flexible and not doing what anybody wants.*

Despite his frustration at what he saw an unwillingness to adapt on the part of his Thai suppliers, Mr. RothHaas did acknowledge that his company was having very tangible effects in the Thai silk industry.

*We have designers in Houston and the weavers themselves were so impressed they adopted some of the concepts and ideas and ran with it. So their orders have influenced the direction. I would take much credit for it. The designers asking us to create custom work has created designs Thais could never conceive before.*

*So a lot of the cool new stuff you see around is actually not local; they have just copied stuff our customers ordered custom made: Even some of the traditional weavers. And the Thais were shocked 'wow that's like really nice'. Because in the beginning they were locked into doing things like this is the way we have always done it. So who cares if the colors are really garish, and they call it Indian colors. It's not very nice looking at all. It looks very nice in*

*a folksy way a long time ago but you know if you want to deal internationally, then you need earth tones. There were no earth tones! And there was no subtlety. It was like contrasting motif mudmee kind of stuff.*

*Weavers make mudmee the way their parents and grandparents did it, and the way they know how. And then here comes a designer who says throw out all of those ridiculous colors. I want based on the color wheel – break it down into numbers, plug in these colors. Sometimes I see very close colors, sometimes I see knockoffs. Like earth tones. Nobody did any earth tones. So if you see any earth tones, I would give the designers in Texas credit for that. There weren't any earth tones or a combination of earth tones or patterns with earth tones. It was all garish traditional colors. So, I would say Texas, but we have had designers from a variety of places order stuff.*

*When it comes out well you don't have to convince anybody to make more. The weavers see it. 'Ahh. I can see it, so I don't have to imagine it'. Which is a big problem with Thais trying to conceptualize or thinking outside the box or abstract thinking.*

Many of the above comments point to more than imperialist tendencies and dismissals of Northeastern production practices. The company is actively striving to persuade their suppliers to change silk to meet the demands of customers, rather than to persuade customers to buy existing styles, patterns, and colors. Indeed, Mr. RothHaas has noted that “some of our success is because we can erase the local flavor. We try to add objectivity and remove subjectivity”. World Of Thai Silk’s position as a connection point between foreign buyers and local suppliers, therefore, does seem to instigate change in production practices. Yet, while the divergent tastes of non-local customers certainly seem to be a strong influence, the actual medium through which information about silk is transmitted (i.e. the Internet) seem to be at least an equally powerful factor in Mr. RothHaas’s explanations; that is, certain types of silk seem almost impossible to sell online.

## Conclusions

Both the production and consumption of silk in Thailand are embedded with cultural meaning and significance. Silk production in the Northeast of the country has long been a way of life for many women, and silk occupies a unique position as a signifier of many aspects of Thai identity. However, the entire industry is now faced with problems from multiple sides. On the production side, many young women are unwilling to engage in what they see as a dated profession and prefer to work in export-oriented factories throughout the country. The silk industry is, in turn, unable to offer prospective weavers a competitive salary. On the consumption side, Thai silk is uncompetitive on the global market and offers few advantages over Chinese silk to foreign buyers. Thai silk bears a higher cost than its Chinese counterpart, and the patterns and designs woven into the fabric are often meaningless and unattractive to non-locals.

The industry is therefore faced with a survival dilemma. Without significant change, it is unlikely that weaving will continue to be as widely practiced as it is today. Change could come in a variety of forms. Silk production practices could be made more economically efficient, and styles of silk could be altered to match the tastes of foreign buyers. If this happens, though, the practices and the products in the Thai silk would be fundamentally transformed.

This chapter has sought to examine whether change is being instigated through the commodity chains of Thai silk and to discuss the potential effects that the Internet is having. The Internet was seen to offer silk producers a lifeline: by opening wormholes and bridging geography the Internet enables potential customers to learn about the meanings and value embedded into each piece of fabric, thus adding economic value to a practice that has in many cases become economically unsustainable. Yet fears exist that the Internet will simply amplify globalizing economic pressures by bringing producers relationally closer to sites of production. The hypothesis that this chapter centers on is

based on the latter fear; namely that “pre-Internet economic practices and types of knowledge are being supplanted by those that are more profitable in the global network.”

Although a small group of people is able to use the Internet to highlight the unique nature of praewah or mudmee styles of silk, this group remains a minority and is only able to sell to a niche market. By and large, this chapter has demonstrated that contemporary Thai silk is not a container of static, unchanging design elements. Producers and merchants revealed that in many cases, buyers’ non-traditional or non-local preferences and tastes are filtering through nodes on silk commodity chains.

Survey data and two in-depth cases studies indicate that the medium through which silk is sold to a large extent influences the types of silk that can be sold, with firms that use the Internet more likely to sell machine-made silk and less likely to sell complex or traditional styles. Any use of the Internet requires knowledge to be codified. Sturgeon (2003) argues that the transfer of codified knowledge through value chains often requires the creation of codification schemes (see also Balconi 2002; Baldwin and Clark 2000). A number of commodity chain-specific codification schemes (such as color charts) are used by the producers and merchants with whom I spoke. Yet the most straightforward way to smoothly transmit codifiable knowledge about silk is to sell machine made and standardizable fabrics.

The tastes of non-local markets and the nature of the Internet appear to be forces that amplify each other’s effects. Most producers or merchants in the Thai silk industry have not developed a presence in cyberspace. However, the ones that have have developed a strong international focus. Companies such as World of Thai Silk are attempting to both change Thai silk to match international tastes and to adapt silk to make it compatible with virtual transactions. The Internet is then doing both things for different people. A limited number of merchants are able to use it to reach across space to highlight what makes their silk unique (and consequently valuable). If conceived of spatially, EAs that perform this feat can be understood to be opening up wormholes through which they actively push targeted information toward customers. Yet, based on the interviews presented in this chapter, it seems that most EAs are actually being pulled

through wormholes into the economic orbits of the customers with whom they interact, while being encouraged by them to change their practices.

It has been seen that this ‘pulling’ certainly occurs in traditional commodity chains (i.e. commodity chains lacking cyber-mediation). The simple fact that much of the silk produced in Thailand is seen to be internationally uncompetitive has encouraged many EAs to adapt and change. However, a combination of the nature of the commodity (the uniqueness of every piece of silk) and of the Internet (the need to standardize) seems to intensify this ‘pulling’ effect.

In summary, this chapter has demonstrated that many of the fears about traditional practices being replaced as producers become ever more integrated into global networks are being realized. Supplantations of earlier production practices are in few cases instigated by weavers themselves. Instead, the impetus for change usually arrives in the form of an order from a downstream merchant or wholesaler, and the desire of some merchants to sell silk online in most cases only intensifies the need for altered practices.

## CHAPTER 9

### OVERVIEW AND CONCLUSIONS

This research project looked at attempts to use the Internet to create new markets, reconfigure commodity chains, and alter flows of silk and capital. The broader aims behind this exercise were to examine whether the Internet has been able to live up to claims that it can disintermediate chains and connect producers with consumers, and ask how the myriad ways in which geographers theorize the relationship between virtual and physical space apply to the Thai silk industry.

#### **Summary**

Becoming visible to non-proximate customers is a crucial step for any producer or intermediary wanting to sell internationally, and this dissertation has demonstrated who has and has not been able to achieve this visibility online. Chapter four shows that large firms and firms with control over multiple nodes in the production chain are more likely than small firms or Northeastern<sup>170</sup> firms that are either producers or merchants to use the Internet, with Bangkok merchants remaining the single largest group of Internet users.

Chapter five demonstrates that the Internet is rarely creating virtual marketplaces that are able to disintermediate commodity chains. Producers and merchants who use the Internet often see no noticeable change in the topological length of their commodity chains; in fact, firms that use the Internet are equally or more likely than those that do not to sell silk to intermediaries and are more likely to buy silk from intermediaries. Instances in which the Internet is being used to shorten commodity chains are simply exceptions and not representative of common experiences with the Internet. This is not to say that the Internet has no geographical effects: Internet users are not only more

---

<sup>170</sup> i.e. the region in which most Thai silk is produced.

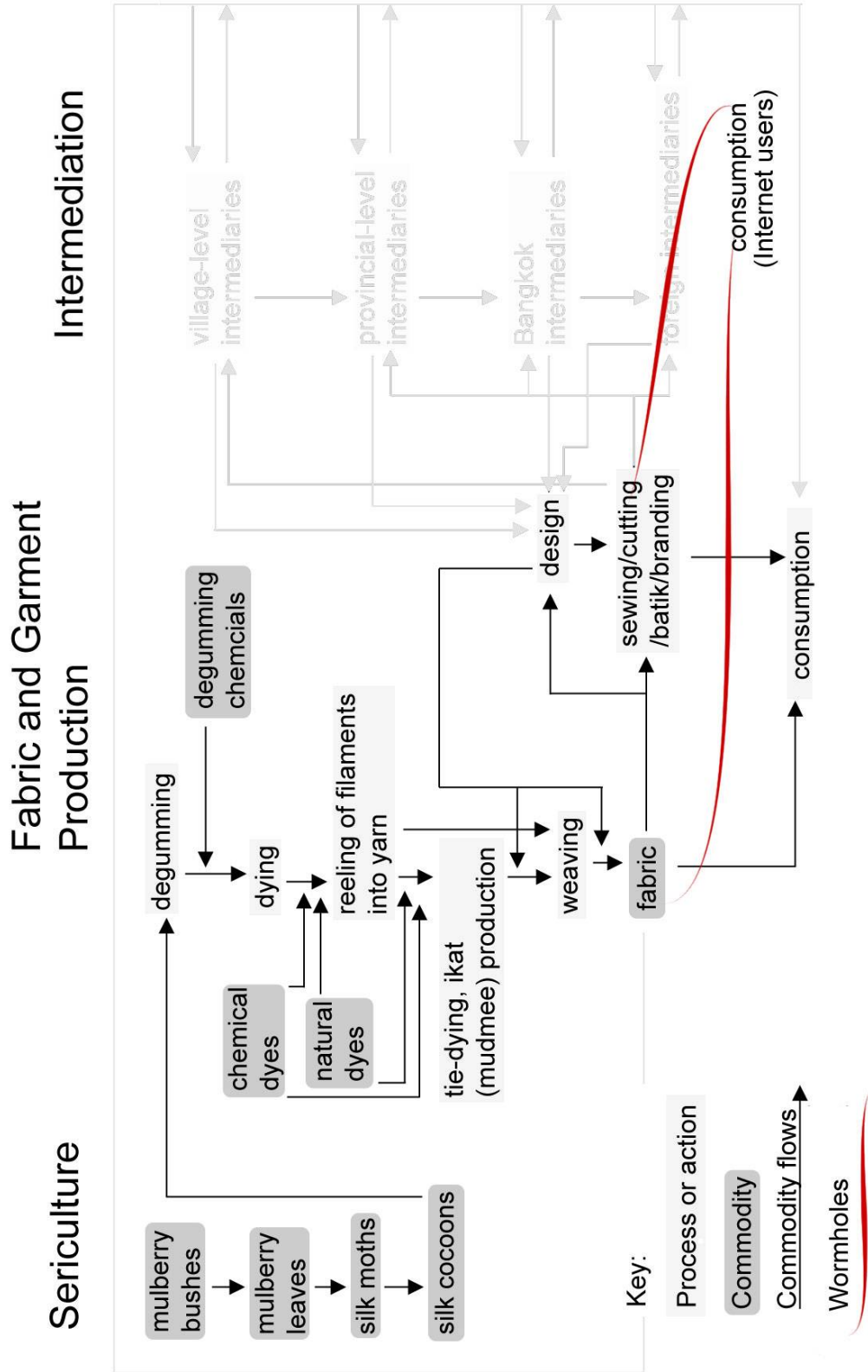
likely to sell non-locally and non-proximally, but they are also more likely to obtain their supplies from a distant source. In some ways, then, the Internet is altering the manner in which distance is experienced by firms in the Thai silk industry. Absolute distance is made less relevant and less of a barrier for firms with cyber-presence.

This finding indicates that although becoming visible to non-proximate customers is a crucial step to altering the customer-base of a firm, visibility is not a determinant of altered commodity chains. Although intermediaries have been able to use their changed visibility to interact with foreign merchants, cyberspace has in very few cases allowed either intermediaries or producers to share virtual markets with buyers further downstream in the commodity chain. That is, cyberspace has not brought about the mass disintermediation that it was predicted to. Returning to the schematic diagram of simplified and generalized commodity chains of Thai silk (figure 1.13) presented in chapter one, it could be imagined that the Internet would potentially divert the flows of silk away from the series of intermediaries on the right hand side of the diagram (see figure 9.1)<sup>171</sup>. Yet, even though the space-transcending properties of the Internet can allow producers and merchants to peer through the fog of distance and can potentially bring about greater transparency (and visibility) in a commodity chain, those potentials have rarely been realized.

---

<sup>171</sup> Like figure 1.13, figure 9.1 is subject to a number a caveats (all of which can be found in footnote 39). In figure 9.1, intermediaries and the linkages they are involved in have been de-emphasized in order to highlight the transformative potentials of wormholes. In this diagram, wormholes shrink the absolute and relative distances between end-customers (who are Internet-users) and the producers of silk, thus rendering intermediaries unnecessary. It should again be noted that the ideas upon which this diagram is based, are not based on empirical research. They are instead drawn from many of the writings about the potentials of the Internet in the contexts of economic development (reviewed in chapter two).

Figure 9.1: Potential Commodity Chains of Thai Silk after the Introduction of Wormholes





The most frequent users of the Internet<sup>172</sup> are those topologically furthest from the nodes of production. These Internet users are often using the Internet not to forge new topological linkages with unfamiliar nodes, but rather to ease the movement of silk through the highly intermediated chains that it needs to traverse as it moves from producer to consumer. Most interesting is the fact that chain topology is more of a barrier than physical distance to Internet users. Internet adopters can use the Internet to open up wormholes between themselves and distant customers: jumping over all in-between places. But, most are rarely able to use the space altering properties of the Internet to circumnavigate intermediaries in commodity chains.

Chapter six shows that there are a number of powerful economic and social divides that separate the sites of silk production from the sites of resale and consumption and that prevent producers from sharing anything resembling virtual market-space with consumers. The uneven geographies of trade, language, education, wealth, culture, and Internet access all play a role in deciding who can stake a claim to, and who can establish presence in, cyberspace. The powerful 'sufficiency economy' philosophy further discourages small businesses from using the Internet. The case studies of Room for Life and thaitambon.com illustrated that even though disintermediation is not impossible, it remains unworkable if neither the end-consumer nor the producer are willing or able to take up some of the tasks previously performed by merchants and wholesalers.

Again it can be seen that instead of bringing into being an openly accessible marketplace, the Internet allows those with access to carefully construct a narrative about the ways in which silk and money flow through commodity chains. The fact that intermediaries are removing producers from any direct interaction with global marketplaces has both beneficial and harmful effects. Producers can become dependent and locked in to potentially exploitative relationships, despite their lack of the economic skills needed to find alternate customers, while intermediaries can create and circulate narratives that describe their roles as beneficial to producers.

---

<sup>172</sup> A majority of Internet adopters are either Bangkok-based or foreign intermediaries.

At the same time, there remains a worry that direct connections between producers and foreign buyers can have damaging effects on the producer. Far from fostering a virtual commons, the Internet creates highly commodified spaces (Haraway 1997; Zook and Graham 2007a). Dean worries that connecting the previously disconnected, even within the contexts of supposedly beneficial development projects, is a way of expanding governance regimes that alter previous behavior in order to integrate people into the global market (Dean 1999). Ziauddin Sardar goes further in his critique. He worries that the Internet can assist in changing and destroying all that is non-Western: “Cyberspace is a giant step towards museumisation of the world...anything remotely different from Western culture will exist only in digital form” (Sardar 1996 in Schech 2002: 19).

Chapter seven reinforces some of the findings in chapter six. EAs with websites often make claims that they are constructing direct commodity chains that involve a minimum of mediation between producers and customers. The idea of directness is used as base from which to make a number of further claims. Directness is used to highlight potential economic and cultural benefits of disintermediation to both producers and consumers of silk. Statements purport the ability of disintermediation to lower the prices of silk to customers while raising the wages of producers. However, an analysis of survey data provides no unequivocal evidence that either claim can be substantiated.

Images of Thai bodies and Thai rural scenery are also prominently featured on some websites. Rural imagery likely works to assert that the purchasing of silk works to make sustainable, traditions that might otherwise cease to be reproduced; and in doing so supports rural economies throughout the rural Northeast. As such, silk-production can be also seen as a way to prevent rural to urban migration and reduce the appeal of alternate professions (such as sex work). Difference between producers and consumers is also highlighted in ways that emphasize the idea of authenticity. This is likely done in order to appeal to a desire amongst some customers to purchase “the experience of authenticity” (Scrase 2003).

Chapter eight moves away from the claims about benefits made by website owners and instead asks whether traditions are being replaced as producers interact with distant consumers through the Internet. A few merchants have been able to use the Internet to sell distinctly Thai styles of silk such as mudmee or praewah. Most producers and merchants, however, incorporate at least some non-local or non-traditional elements into the silk that they sell. While integration with foreign markets is the major impetus behind changes to the silk being made and sold, the nature of the Internet as a medium speeds up an industry-wide move away from traditional silks by favoring the sale of standardizable fabrics.

Gereffi et. al.'s (1994) differentiation of producer and buyer driven commodity chains is particularly apposite to chapter eight's research question. Gereffi et. al. single the garment sector out as an economic sector usually characterized by buyer driver chains. Producer driven chains, in contrast, are often controlled by large companies who coordinate much of the networks in which they are involved. Except in the case of the Jim Thompson Corporation, which arguably could be said to manage a producer driven chain, Gereffi et. al.'s observation that the garment sector is highly buyer driver certainly applies to the Thai silk industry. Very few producers even know where the ends of their chains lie, let alone attempt to manage or coordinate them. Gereffi et. al. (2005) expand on their typologies of value chains and distinguish between five types of chain governance (laid out in chapter two). Of the five types, only 'captive value chains' applies to the Thai silk industry. Asymmetric power relations that favor buyers (such as those witnessed in the Thai silk industry) are a core element within this type of value chain.

However, all buyer-driven and captive chains are not created equal. Buyers exist for both traditional weaving styles and contemporary or non-traditional patterns. So why are some producers able to continue weaving traditional designs, while others are encouraged to change their practices? The issue is not so much that some EAs are embedded in buyer driven chains and others in producer driven chains or that some EAs

are embedded into captive chains while others participate in modular or hierarchical<sup>173</sup> ones. Rather, there seems to be a certain ‘pushing’ or ‘pulling’ that happens as Thai producers and merchants interact with distant buyers.

This ‘pushing’ and ‘pulling’ is occurring not in an open and transparent market-space, but rather through what Sheppard (2002) refers to as wormholes. The wormhole metaphor is used to conceptualize the ways in which the Internet can alter the relative positionalities of non-proximate people and places. I would characterize firms that sell traditional styles of silk as engaging primarily in ‘pushing’ in order to open up wormholes with distant places. They are pushing targeting information about what makes their silk unique and consequently valuable in order to find potential buyers. On the other hand, most producers and merchants can be thought of as being ‘pulled’ through wormholes into the economic orbits of their customers in order to become versatile suppliers. Producers and merchants being pulled are encouraged to alter the types of silk that they make and sell in order to meet the demands of distant customers. Very few connected producers or merchants engage in pure forms of ‘pushing’ or ‘pulling’—they are both ‘pulled’ into the needs of buyers, while they ‘push’ their own desire to sell certain styles of silk. The distinction between ‘pulling’ and ‘pushing’ is nonetheless a useful one to make, as it highlights power relations not necessarily captured by Gereffi et. al.’s frameworks, but rather a degree of self-determination and decision making that can be hidden if one looks only at buyer versus producer driven chains.

Chapter eight demonstrates that weaving styles which are not commercially marketable to international buyers have little chance of being reproduced in successive weaving seasons. Commodity chains in the silk industry are highly buyer-driven with Thai suppliers rarely able to exert governance over many aspects of the chains in which they are embedded. When the Internet is embedded into chains, suppliers are often unable to resist a pulling effect from their customers. Selling on the Internet necessitates the standardization of colors and work practices as well as repeatable patterns. These

---

<sup>173</sup> See chapter two for a more detailed discussion of Gereffi et. al.’s five types of value chains.

factors in many cases provide a strong impetus for change, one that leads to the supplanting of earlier traditional silks with more commercially viable fabrics.

## **Discussion**

Northeastern silk producers rarely earn a significant portion of the final sale value of the silk that they produce. Many intermediaries argue that far from presenting an ethical dilemma, the distribution of profit throughout the commodity chain is just. For example, Ken Sura who is both the vice-president of the Korat Silk Association and an intermediary himself argued that:

*A lot of times they [the government and NGOs] propose cutting out the middlemen. But the middlemen do a lot of good things. The villagers often have no idea about the outside world. They wanted to cut middlemen because they are taking profit. But, middlemen are also quality control. We also do communication, and become fashion coordinators. When there is no middlemen, no one tells you how to produce. We invest money; we give loans to producers so that they can buy more [raw silk].*

The argument that intermediaries are creating value that producers would otherwise not add to their silk is certainly a reasonable case to make. Conversely, many observers, and of course the producers themselves, see the usual distribution of value as inherently unjust and as a factor that is contributing to the decline of silk production in the Northeast (due to the low pay received by most producers). Some producers are reluctant to comment on the matter, while the situation breeds resentment in others. In commenting on a neighboring large business that buys mudmee silk from villagers for one- to two thousand baht and then repackages it and sells it for ten times that amount, Mr. Jeerasak, the head of a weaving group, angrily stated: “I don’t know how they can do that. I would feel ashamed to do this in my own hometown.”

Irrespective of how added value might be justly, or best, distributed, any altered economic relations would likely require altered economic and spatial positionalities and

power-geometries. Producers have little contact with customers willing to pay high prices, and the two groups operate in entirely different marketplaces. Before the introduction of fees, the bi-annual OTOP fairs in Bangkok got around this separation of producers and customers. Producers would travel to Bangkok from Northeastern provinces to meet the throngs of customers who attended the fairs. Here, for a limited amount of time, producers and consumers were co-present in the same space and marketplace, and large amounts of trade occurred. However, for most of the year, producers and consumers are kept apart not only by absolute distance, but also, as illustrated in chapter six, by a lack of knowledge about one another. The nature of silk commodity chains allows intermediaries to cast a veil over each successive node by limiting knowledge about producers to consumers and vice-versa, with only a few participants possessing anything resembling a comprehensive overview of the entire chain.

Co-presence in any marketplace is not a necessary determinant of economic interaction or trade, but it is a prerequisite. Any attempts at altering the distribution of value throughout the chains of silk must first tackle this crucial issue. With OTOP fairs now out of the financial reach of most producers, the Internet is constantly proposed as a way to give producers visibility and bring them into the same marketplace as distant customers.

### **Ontic, Infinite, and Fixed Virtual Market-Spaces**

Attempts at giving producers visibility through the Internet are always grounded in spatial metaphors. Words like ‘cyberspace,’ ‘marketplace,’ ‘reach,’ and ‘visibility’ are inherently geographic concepts. These geographic metaphors embedded into discourses about using the Internet as a tool of economic development are certainly useful heuristic devices. However, cyberspace is increasingly taking on an ontic role. Cyberspace, in this sense, is conceived of as both an ethereal alternate dimension which is simultaneously infinite and everywhere (because everyone with an Internet connection can enter) and

fixed in a distinct location, albeit a non-physical one (because despite being infinitely accessible all willing participants are thought to arrive into the same market space). This idea of cyberspace thus, like other spaces, has a mapable form but exists beyond the physical realm (Batty and Miller 2000; Dodge and Kitchin 2001b, 2001a). It is a shared virtual reality and a consensual hallucination (Gibson 1984), which is “generating an entirely new dimension to geography” (Batty 1997: 339).

The sources of this *a priori* ontology of cyberspace as simultaneously infinite and fixed are unclear. Representations or allusions to the Internet in popular culture often reinforce the ontic role given to cyberspace. For instance, Dave Chappelle’s (2004) comedy sketch titled ‘What if the Internet was a place that you could go to?’, in which he strolls around cyberspace, deliberately gives the Internet physical, spatial, and fixed properties<sup>174</sup>. The Matrix trilogy of films, which in many ways reverses the ideas of cyberspace and physical space, can similarly be seen to assign the virtual an ontic role (Wachowski and Wachowski 1999). The Matrix (an illusion of the physical world) can be exited from anywhere using a telephone. Doing so brings the user of the telephone back into a shared alternate dimension.

It is likely that development professionals have also played a hand in either creating or reproducing this discourse through reports by, or reports used by, international organizations. Kirkman and Sachs’ Global Information Technology Report, for instance, implies that there is ‘a’ market that can be tapped by entering the infinity of cyberspace (Kirkman et al. 2002). Similar conceptions of ‘a’ global market can be found in the World Economic Forum’s other Global Information Technology Reports and Global Competitiveness Reports, as well as publications by the World Trade Organization, various UN agencies, the World Bank, and countless other international organizations and NGOs (c.f. Porter et al. 2002). The World Bank’s ‘Artisan as Entrepreneur’ project supports concrete programs that aim to bring “crafts from Latin

---

<sup>174</sup> The premise of the sketch is that “if the Internet was a real place, it would be disgusting and intolerable” (Chappelle 2004). To prove the point, Chappelle walks around cyberspace (a fixed and distinct place) populated by other Internet users from around the world. He is initially looking for a news site, but ultimately gets waylaid by free music, pornographic videos of Paris Hilton, and doctors selling male herbal enhancements.

America, Asia, and Africa onto *the* global market” (World Bank 2000: 3, emphasis mine). Hundreds of articles in the popular press recycle similar stories about the potentials of e-commerce and the Internet to provide access to ‘a’ global market that can be entered through the gateway of the Internet (c.f. Faucon 2001). Many of these articles again contain the idea that cyberspace contains ‘a’ fixed marketplace, which despite being a singular location, is infinitely accessible.

The fixed and infinite ontology of cyberspace also appears in the comments of silk producers and merchants. Responses to the question “If you do not use the Internet for business, how do think that it could potentially impact you?” can be categorized into three general responses: many argued that the Internet would have no effect on their business; some considered the question amusing and responded with laughter; and many saw the Internet as a sure way to come into contact with new, primarily foreign, customers. There was a sense that establishing a website was in many ways equivalent to setting up a stall at an OTOP fair. By constructing it (either a market stall or a website), there would be many passersby, many window shoppers, and ultimately, many customers. Ms. Tip, a Bangkok merchant told me:

*I think it would bring me a lot of customers. Thai people already know this shop, but foreigners don't. Foreigners know the Internet better.*

Mr. Samrong, the manager of a group of producers, stated:

*Now I sell to wholesalers, but Internet could let others buy from me, such as [end] customers.*

Two other Bangkok merchants, Mr. Sitipong, and Mr. Athip, answered:

*I will have more overseas customers. I think it would increase sales a lot mostly from foreigners.*

*I want to make the website to expand my market and attract new customers.*



In all of these cases as well as in responses from other producers and merchants, there was the sense that constructing a business website is comparable to constructing a physical storefront, albeit one in an alternate dimension. EAs are, essentially, placing their business into a marketplace pre-populated with customers.

The fixed and infinite ontology of cyberspace can also be found on websites of EAs that sell silk. Two examples include:

*Through dechsuwan.com, one will be able to harness all the advantages of the Digital Age by bringing their businesses directly to the fast-expanding global online community of shoppers and traders, for maximum benefits in accessibility and business potentials...So that we can ensure to all buying agents or any other international traders that you are now getting in touch directly with the manufacturer online right now. [dechsuwan.com]*

*We also aim to provide a platform for the skillful Thai craft people. Many of those live in remote villages and do not have access to the world market. [Thailandfashion.net]*

Again, in these examples, cyberspace is presented as a correlate to a physical marketplace. A virtual (world) market (community) already containing customers can be interacted with through the construction of a virtual store-front.

It is interesting, then, to note the differences between the ontology of cyberspace as simultaneously infinite and fixed that is present in the words of producers and intermediaries, and the ways that academic geographers have theorized the existence of cyberspace. Geographers have largely moved beyond the idea that space-transcending possibilities of cyberspace will render geography meaningless. Spatial differences continue to exist because, far from being uniformly distributed, communications technologies and opportunities for production and consumption have a pronounced geographic bias (Castells 2002; Dodge and Kitchin 2001a; Zook 2000; Townsend 2001). Graham (1998) argues for complex and parallel considerations of electronic and physical propinquity. Technology is described as being an appendage to life in the physical world rather than a replacement. Communications technologies can alter and redefine relative

distance, but they are unable to cancel out geography, and as a result we live in a state of suspension between our de-localized presences and our physical existences (Robins 1995; Castells 2002).

Other geographers have suggested envisioning cyberspace “as a socially constructed discourse that simultaneously reflects and constitutes social reality” in order to focus on the social outcomes it brings about (Warf 2001: 6). Kitchin (1998) recommends that cyberspace be conceptualized as existing in a symbiotic relationship with geographic space. Zook and Graham (2007a, 2007b) similarly use the term DigiPlace to focus on the hybrid natures of cyberspace and physical place. DigiPlace “encompasses the situatedness of individuals balanced between the visible and the invisible, the fixed and the fluid, the space of places and the space of flows” (Zook and Graham 2007c: 468). In other words, the Internet and other ICTs can give rise to an individual sphere of hybrid geography in which certain space transcending activities can be performed while being simultaneously embedded in and influenced by the performer’s positionality in physical space.

Many EAs in the Thai silk industry do not view the Internet as a way to open up wormholes and alter relative positionality between themselves and distant customers, nor do they conceive of a hybrid space in which they are co-present between the physical and the virtual. Instead, cyberspace is seen as an ontological entity: a separate, discrete, and largely disconnected dimension.

Of the businesses that attempted to start websites, there was as a result frequently disappointment that the Internet had not lived up to their expectations or delivered new customers. Prior to the adoption of the Internet, there seems to have been little understanding of the ways in which cyberspace is ordered and ranked. The disconnect between initial high expectations of the Internet as a leveling force and the reality of a highly ranked and hierarchical cyberspace appears to have resigned many Internet Adopters to low expectations of what the Internet can do for them. Owners of websites remarked:

*I think maybe people are looking for wholesale, but we don't do that so much. Selling through the Internet is not a good way to sell silk. We don't have advertisements so it is hard to find customers. – Ms. Somwong, Bangkok.*

*Nothing is changing drastically; slowly, slowly. But, people aren't really finding us. – Ms. Ramos, Bangkok.*

*If you search for Thai silk you can't find my website. – Ms. Suthasinee, Bangkok.*

*I have heard about companies that put the website into the first page of Google, but that is not necessary for me because my customers are not end users, and so wouldn't see me. – Ms. Phaudsapa, Bangkok.*

*I expected the Internet to give me a lot more customers, but it has still helped me a bit. The website is not famous. It is not in Google, so I will try to make a new website. – Ms. Karn, Bangkok.*

The focus on Google among these Internet Adopters is important to note, as it is a theme that reoccurred throughout my fieldwork. In May 2007, I gave a short talk to the bi-annual meeting of the Korat Silk Association (a trade group consisting of silk producers and merchants in Korat province). Following the talk, the president of the Association invited the audience to ask questions. The first question I received was: “Which search engine do most foreigners use?” This question was then followed by a host of other questions about how search engine rankings work and how to gain visibility in cyberspace. The meeting of the Korat Silk Association was not the only time I was asked such questions.

Search engine optimization (SEO) was a topic that frequently came up when I talked to business owners who had websites. Only a handful of people had much knowledge of SEO techniques, and had generally used their knowledge to gain presence in either the first or second page of results in most search engines. A few other EAs mentioned that they had hired professionals to raise their search engine rankings. But, most sellers did not engage in any sort of SEO and used their websites primarily to keep contact with existing customers.

In summary, providing EAs with visibility in a foreign market is frequently touted as a way to allow them to interact with new silk buyers. With the demise of the OTOF project due to its apparent incompatibility with the ‘sufficiency economy’ philosophy, use of the Internet to find new markets has gained newfound relevance. However, *a priori* ontologies of cyberspace that posit a universally accessible yet fixed and bounded dimension rarely match up to the experiences that EAs have with the Internet. The primary reason for this disconnect is that cyberspace is not a container of a singular globally accessible market. Spaces brought into being by the Internet are often scattered, disconnected, individual, hybrid, and perhaps most important: ranked and ordered.

## Conclusions

The commodity chains of silk are often long, highly mediated, and non-transparent<sup>175</sup>. End-consumers frequently know little about the sites of production, and in many cases producers know little about the sites of consumption. It is intermediaries that tie the long chains together. They coordinate with producers and seek out customers. In doing so, there is always a push to drive down prices from suppliers and raise prices for customers. The Internet has often been presented as a way to significantly alter the ways in which silk and capital move between producers and consumers, and this dissertation has sought to examine the differences the Internet can make within the commodity chains of Thai silk.

It is clear that while the Internet is not widely used, it is far from insignificant in the commodity chains of Thai silk. There have been many attempts to use the Internet as an agent of change. Many try and fail, while a few achieve their objectives. Those that succeed, however, are rarely those who would benefit the most from reconfigured commodity chains; and even though the Internet is mostly being employed by a select

---

<sup>175</sup> This finding echoes Duncombe and Heek’s (2002) work which demonstrated that Botswanan firms not connected to ICTs were frequently unable to access useful economic information and as a result could become locked into dependent business relationships.

group of merchants, its effects are often felt at looms underneath houses and in factories throughout the Northeast of Thailand. The potentials and possibilities of the Internet thus rarely match the actualities of Internet adoption in the Thai silk industry.

The idea that the Internet will allow disintermediation to occur has gained much traction in development discourse. Yet, it is apparent that the Internet is not a simple substitute for intermediaries, nor is it an intermediary itself. Within the contexts of Thai silk, cyberspace is not a middle ground or an intermediate virtual space that bridges non-proximate buyers and sellers. Producers and merchants that are able to use the Internet as a tool to sell silk are, in most cases, interacting with non-proximate customers through highly individualized and non-transparent conduits, or wormholes. Transactions thus take place not in an alternate virtual space, but in the real world through virtual conduits. Seen this way, it seems unsurprising that Internet Adopters have been able to sell much of their silk to distant buyers, but at the same time have been unable to disintermediate the chains that they are involved in. Disintermediation would likely require co-presence between end-customer and producer, not just in a physical or virtual sense, but also linguistically and culturally. Selling to distant intermediaries, on the other hand, is a much simpler proposition. Foreign intermediaries have on-the-ground knowledge about their local markets and are generally comfortable using the Internet to create communication and sales channels between themselves and their Thai suppliers.

Precisely what cyberspace is, and the effects it has on real world cultural, economic, and political processes are highly contested topics. This dissertation has shown that, contrary to widely circulated discourses inherent in many development strategies which suggest that the Internet can be a disintermediating force, the Internet is rarely able to bring into being a cyberspace in which producers and consumers can interact without the need for mediators. The Internet is a powerful tool, and it does have the potential to alter positionalities of actors within the commodity chains of Thai silk. For most producers and merchants of silk, however, the Internet remains a communication technology, not a portal into a virtual world.

## Appendix A: Definitions

ADB – Asian Development Bank

APEC – Asia-Pacific Economic Cooperation

ASEAN – Association of Southeast Asian Nations

Brocade – fabric interwoven with raised patterns or designs

CARE – Cooperative for Assistance and Relief Everywhere

CDD – Community Development Department

EA – Economic Actor

FAO – Food and Agriculture Organization of the United Nations

GPS – Global Positioning System

GPN – Global Production Network

GVC – Global Value Chains

ICT – Information and Communication Technologies

Intermediary – A third party that mediated between two trading parties.

Isan/Isaan – The Northeast of Thailand

ISP - Internet Service Provider

Merchant – a firm that sells silk from more than one producer in a space solely designated for selling (in contrast to a space designated for production)

Mudmee – a Thai ikat silk

NCWA – The National Council on Women’s Affairs (Thailand).

NECTEC – National Electronics and Computer Technology Center (Thailand)

NGO – Non-governmental organization

OECD – Organisation for Economic Co-operation and Development

OTOP – One Tambon One Product

Praewah – A silk style produced in Kalasin province that combines a continuous supplementary weave with a discontinuous supplementary weave.

Tambon – an administrative district smaller than a province and larger than a village

Thaksinomics – A medley of Keynesian and market-led, export-oriented economic ideas associated with the former Prime Minister of Thailand: Thaksin Shinawatra.

THB – Thai baht

SEO – Search Engine Optimization

Sufficiency Economy – A philosophy put forward by the King of Thailand in order to promote low-consumption lifestyles and encourage local and national self-sufficiency.

Warp – a set of lengthwise yarns through which weft threads are woven

Weft – yarn that is drawn over and under warp threads

WTO – World Trade Organization

UN – United Nations

UNCTAD – United Nations Conference on Trade and Development

UNDP – United Nations Development Programme

USAID – United States Agency for International Development

USD – United States dollar

## Appendix B: List of Websites Selling Thai Silk

6pm.com	gotostp.com
aboutthaisilk.com	gxonlinestore.org
alangthaisilk.com	handicraftdecor.com
alpreedathaisilk.com	houseofthaisilk.com
ancientmoods.com	indrafashion.com
anitasilk.com	iqproducts.8m.com
asiadragon.co.uk	jagtar.com
asia-fabric.com	jimthompson.com
asianartmall.com	joliefemme.com
asianclothesimport.com	kaisilver.com
asian-silkdecor.com	kamibashi.com/textiles
asiansilks.com	khongfakthai.com
asiatradingonline.com	kkthaisilk.com
balajiclothers.com	kongthai.com
bangkok-thailand.com	leelahthaisilk.com
banrenghai.com	lilychartier.com
bestthaisilk.com	lpthaisilk.com
bettythailand.com	maibarthaisilks.com
bolinat.com	maithipthaisilk.com
buasiamsilk.com	marlamallett.com
chalisathaisilks.com	meeboonma.com
charoonthaisilk.bizland.com	minthameethaisilk.com
chattonthaisilk.com	mulberrywood.com
chiangmaicraft.com	nibh.com
classicthai.net	nitchy.trustpass.alibaba.com
dechsuwan.com	nomadsjourney.com
designerbags.de	nuala-orthaisilk.com
distinctgowns.co.uk	nuntanachiangmai.com
easternleaf.com	orientations-online.com
ebuythai.com	originalthaisilk.com
engel-textil.com	pensirithaisilk.com
ethnicarts.com	phuketdir.com/shm
exporthai.com	picturetrail.com/mythai
exquisitethaisilk.com	pinksaaalu.com
ganez.com	pookza.com
goodorient.com	princessofsilk.com



qualitythaisilk.com	thailandfashion.net
queenthaisilk.com	thailsilkstore.com
riverartsbangkok.com	thailand-ware.com
satinbox.com	thai-otop-city.com
shinawatraithaisilk.com	thaishop2you.com
shopasianproducts.com	thaishop4you.com
shopping.thailand.com	thai-silk.biz
siamese-dream.com	thaisilk.net
siamese-style.com	thaisilkandsapphires.com
siamobelle.com	thaisilkclothes.com
silkavenue.co.th	thaisilkco.com
silkboulevard.com	thaisilkdresses.com
silkdirect.com.au	thaisilkfabric.com
silkmaster.co.th	thaisilkimports.com
silkofsiam.com	thaisilks.com
silkproduct.com	thaisilkvillage.com
silkroomthailand.net	thaisilkvillagehuahin.com
silkshirtco.com	thaisilkweaver.com
silk-thai.com	thaisilversilk.com
silkthailand.com	thaistyle.co.uk
silktrading.com	thaitextilemuseum.com
sirishaglobalbazaar.com	thaitimesilk.com
siwthaisilk.org	thaivillagesilk.com
smithsonianstore.com	ttcrafts.co.th
sopmoeiarts.com	twojoyssilk.com
soto-uk.com	vaniche.com
surinthaisilk.com	vassana.co.th
tanriyapatthaisilk.com	vc-fabric.com
thaicottonsilk.com	vvg-vietnam.com/fabrics.htm
thaicraft.org	wannawatthaisilk.com
thaidirect2u.com	worldesigns.com
thaiexotictreasures.com	
thaigifthouse.com	
thaigoldsilk.com	
thaigoods.com	
thailand411.com	

## Appendix C: English Survey

### Structure of the firm

1) Please provide the address at which you are headquartered:  
 .....

**Please shade  
 in all that  
 apply.**

2) How frequently do you use:

	<i>Never</i>	<i>About once a month</i>	<i>About once a week</i>	<i>A few times a week</i>	<i>More than once a day</i>
Computers	①	②	③	④	⑤
Internet/email	①	②	③	④	⑤

3) Do you use the Internet or email to help you sell silk?

- ① No
- ② Yes

4) Do you (check all that apply)? And which is most important

- ① Sell silk to consumers
- ② Sell silk to other companies
- ③ Manufacture (weave) silk
- ③ Manufacture (sew or cut) silk products
- ④ Other (please specify).....

5) What is your organization's approximate annual total sales (in baht)? .....

6) Roughly what percentage of the products that you sell is silk? ....%

7) Roughly what percentage of your total silk sales is Thai silk? ....%

8) Are there any reasons why your business is located where it is?

9) Do you consider your use of the Internet to be (check all that apply):

- ① a way of advertising my physical store
- ② a way of selling products to new customers
- ③ a way of selling more products to existing customers
- ④ a way of finding new suppliers
- ⑤ other .....

### Technology

10) In what year did you start to use the Internet for business purposes? .....

11) Do you sell silk using (check all that apply):

- ① A physical shop
- ② A physical market
- ③ Your own website (instantaneous using an ordering system)?
- ④ Your own website (non-instantaneous...e.g. an email request form)?
- ⑤ A third-party website (owned by somebody else)?
- ⑥ An Internet marketplace such as eBay?

12) What is the most important form of ordering above?.....

13) For the transactions received over the Internet, do you use an ordering system that is (shade all that apply):

- ① Developed by you or your employees
- ② Developed with the help of a non-profit group or NGO
- ③ Developed with the help of a government agency
- ④ Developed by another firm
- ⑤ Other (please explain) .....

14) Whose idea was it for you to sell products through the Internet (shade all that apply)?

- ① Your own
- ② Your employees
- ③ A non-profit group or NGO
- ④ A government agency
- ⑤ Another firm
- ⑥ Other (please explain) .....

15) Where did the investment come from to purchase computers and modems to access to the Internet (shade all that apply)?

- ① Your business
- ② A non-profit group or NGO
- ③ A government agency
- ④ Another firm
- ⑤ Other (please explain) .....

16) Have you (or employees of your organization involved in the selling of silk through the Internet) ever received any formal computer training?

- ① No
- ② Yes (briefly describe the training).....

**Please shade in all that apply.**

17) How frequently do you order supplies (e.g., raw silk, dyes, other raw materials /semi-finished inputs) via the following methods?

19) How frequently do customers order products from you via the following methods?

	<i>Never</i>	<i>Not very</i>	<i>Somewhat</i>	<i>Very</i>	<i>Never</i>	<i>Not very</i>	<i>Somewhat</i>	<i>Very</i>
Phone/Fax	①	②	③	④	①	②	③	④
Internet/email	①	②	③	④	①	②	③	④
In person	①	②	③	④	①	②	③	④
By mail	①	②	③	④	①	②	③	④

What is the **most important** form of ordering above?

18).....

20) .....

21) With regard to the significance of the costs of setting up your website, do you consider those costs to be?

- ① Low/not very significant ② Medium / moderately significant ③ High / very significant

22) With regard to the difficulty of setting up your website, do you consider it to be?

- ① Not very difficult ② Moderately difficult ③ Very difficult

23) Who are you predominantly trying to sell to with your website (check all that apply)?

- ① Local customers ② Customers elsewhere in your country ③ International customers

**Workers**

24) Approximately how many administrative (e.g., clerical, sales, management) workers are employed at this organization? ..... and how many were employed before you used the Internet .....

25) Approximately how many production workers are employed at this organization (if any)?

Full-time ..... and how many before you used the Internet .....

Part-time ..... and how many before you used the Internet .....

26) If applicable, please list some employee salaries for various positions in your organization:

For example:

Position Weaver                      Salary (baht) X                      for how many hours of work: 45 weekly  
 Position Sales manager              Salary (baht) X                      for how many hours of work: 20 weekly

- ① Position.....                      Salary (baht) ..... for how many hours of work:.....  
 ② Position.....                      Salary (baht) .....for how many hours of work:.....  
 ③ Position.....                      Salary (baht) .....for how many hours of work:.....  
 ④ Position.....                      Salary (baht) .....for how many hours of work:.....

**Silk**

**Please shade in all that apply.**

27) Of your total silk sales, what proportion of the following types of silk do you sell?

	<i>None</i>	<i>Little</i>	<i>Medium</i>	<i>Most</i>
Machine-made Thai silk	①	②	③	④
<b>OTHER</b> Hand-made Thai silk	①	②	③	④
'Mudmee' Thai silk	①	②	③	④
Other Thai silk	①	②	③	④

28) Please describe or list the main silk products that you sell (e.g. cloth, ties, dresses, etc.):

29) Please describe the main designs, colors, and types of silk that you sell (e.g. a particular style of mudmee):

30) Do you intend the styles and designs of silk that you sell to be predominantly bought by?  
① Mostly people in Thailand ② Mostly people outside of Thailand ③ Both ④ Don't know

31) How much influence do you have on the designs, types, colors, and styles of silk that you sell? (check all that apply)

- ① I make it myself / our organization makes it .
- ② We contract with a manufacturer to make some of our silk according to our specifications.
- ③ We buy some of our silk from weavers or manufacturers and have no direct influence on designs, types, colors, and styles.

**Outputs**

32) Did you expect the Internet to deliver more customers to you than it actually has?

- ① I expected the Internet to help me find more customers
- ② Yes, it has met my expectations
- ③ Internet has delivered more customers to me than I expected it to

33) Approximately what percentage of your sales are to:

- ① Individual consumers that buy in-person .....%
- ② Individual consumers that buy from a distance (phone, fax, internet.....%
- ③ Retailers who buy in person .....%
- ④ Retailers who buy from a distance .....%
- ⑤ Wholesalers who buy in person.....%
- ⑥ Wholesalers who buy from a distance.....%
- ⑦ Other (please specify) .....%

33a) Approximately what percentage of your sales are to:

- ① Individual consumers in the same town/location .....%
- ② Individual consumers in a different town/location (phone, fax, internet.....%
- ③ Retailers in the same town/location .....%
- ④ Retailers in a different town/location .....%
- ⑤ Wholesalers in the same town/location.....%
- ⑥ Wholesalers in a different town/location.....%
- ⑦ Other (please specify) .....%

34) For your top three customers, where is each customer's location (region and country)?

①..... ②..... ③.....

35) Can you describe some general characteristics of your customers?

36) What is the dominant way in which you ship your goods to customers?.....

(you can list more than one mode; for example postal service, car and bicycle, train and airplane etc.)

37) How many times a month do you receive product orders through the Internet or via email? .....

38) Do you have any guaranteed or repeat order purchase contracts?

- ① No
- ② Yes

39) Who would you ideally like to sell more silk to? and where are they located? Do you have any strategies to make this happen? Please explain:

40) What is the approximate total monthly monetary value of silk products that you sell (in baht)? ...

41) What is the approximate total monthly monetary value of silk products that you sell using the Internet or email (in baht)? .....

42) Would an item that you sell on the Internet sell for a different price than an item that you do not sell on the Internet?

- ① No
- ② Yes (please explain).....

43) Approximately what percentage (by volume) of your sales occurs through the Internet? .....%

44) Are you trying to sell to new markets (or groups of customers)?

- ① No
- ② Yes

45) If you answered 'yes' on the previous question, have you encountered any difficulties selling to new markets?

- ① No
- ② Yes (please explain).....

46) Have you been disappointed by your Internet sales? i.e. did you expect more Internet sales?

- ① No
- ② Yes (please explain).....

47) Have you faced any difficulties in finding customers to purchase from your website?

- ① No
- ② Yes (please explain).....

48) Before you started using the Internet, did you expect your use of the Internet to increase the amount of silk you sell to (check all that apply)?

- ① Local People
- ② People in Thailand
- ③ People outside of Thailand
- ④ None of the above
- ⑤ Don't know
- ⑥ Other

49) Do you expect that using the Internet would increase the amount of silk you sell to (check all that apply)?

- ① Local People
- ② People in Thailand
- ③ People outside of Thailand
- ④ None of the above
- ⑤ Don't know
- ⑥ Other

**Inputs**

50) Approximately what percentage of your supplies (e.g., raw silk, dyes, other raw materials/semi-finished inputs, garments etc.) come primarily from:

- ① Internal producers within your own organization (and in the same town/location) .....%
- ② Internal producers within your own organization (at a different location) .....%
- ③ External producers (in the same town/location as yourself) .....%
- ④ External producers (in a different town/location) .....%
- ⑤ Middlemen / Wholesalers (in the same town/location as yourself) .....%
- ⑥ Middlemen / Wholesalers (in a different same town/location) .....%
- ⑦ Other (please specify).....%

51) Are you utilizing new suppliers because of your use of the Internet?

- ① No
- ② Yes (please list regions and country locations of new suppliers).....

52) For your top three suppliers, where is each supplier's location (region and country)?

- ①..... ②..... ③.....

53) Can you describe some general characteristics of your suppliers?

54) What is the dominant mode of transportation through which you receive supplies?..... (you can list more than one mode; for example postal service, car and bicycle, train and airplane etc.)

55) Has your use of the Internet increased or decreased your reliance on any modes of transportation by which you buy your supplies?

- ① No
- ② Yes (please describe).....

**Influences and Changes**

56) Did you sell silk products before you started using the Internet?

- ① No (if no, then skip to question 63)
- ② Yes

57) Before your use of the Internet, who were you predominantly trying to sell to (check all that apply)?

- ① Local customers ② Customers elsewhere in your country ③ International customers

58) Which of the above was most important? .....

**Please shade in all that apply.**

	59) Before your use of the Internet, what proportion of the following types of silk do you sell?			
	<i>None</i>	<i>Little</i>	<i>Medium</i>	<i>Most</i>
Machine-made Thai silk	①	②	③	④
Hand-made Thai silk	①	②	③	④
'Matmee' Thai silk	①	②	③	④
Other Thai silk	①	②	③	④

60) Before your use of the Internet, approximately what percentage of your supplies (*e.g.*, raw silk, dyes, other raw materials/semi-finished inputs) came primarily from?

- ① Internal producers within your own organization (and in the same town/location) .....%
- ② Internal producers within your own organization (at a different location) .....%
- ③ External producers (in the same town/location as yourself) .....%
- ④ External producers (in a different town/location) .....%
- ⑤ Middlemen / Wholesalers (in the same town/location as yourself) .....%
- ⑥ Middlemen / Wholesalers (in a different same town/location) .....%
- ⑦ Other (please specify).....%

61) Before your use of the Internet, how much influence did you have on the designs, types, colors, and styles of silk that you sold? (check all that apply)

- ① I made it myself / our organization made it.
- ② We contracted with a manufacturer to make all of our silk according to our specifications.
- ③ We bought some of our silk from weavers or manufacturers and had no direct influence on designs, types, colors, and styles.
- ④ Other .....

64) Before your use of the Internet, and for your top three suppliers, where was each supplier's location (region and country)?

- ①..... ②..... ③.....

65) Before your use of the Internet, approximately what percentage of your sales were to:

- ① Individual consumers .....%
- ② Retailers .....%
- ③ Wholesalers .....%
- ④ Manufacturers .....%
- ⑤ Other (please specify) .....%

66) Before your use of the Internet, and for your top three customers, where is each customer's location (region and country)?

- ①..... ②..... ③.....

67) Before your use of the Internet, what was the approximate total monthly monetary value of the silk that you sold (in baht)? .....

68) Do you believe that you use of the Internet has had an effect on your transportation costs?

- ① No
- ② Yes (please provide details).....



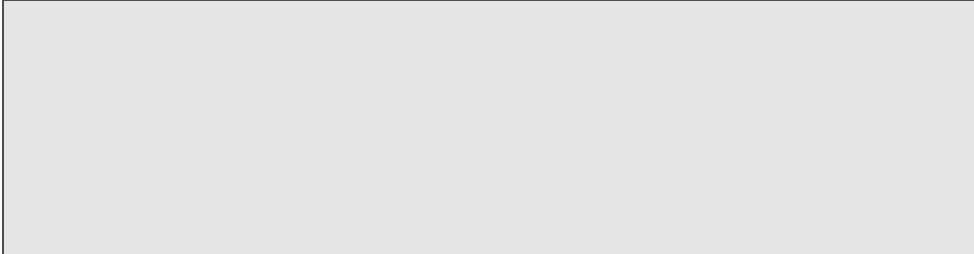
69) Do you believe that you use of the Internet has had an effect on your labor costs?

① No

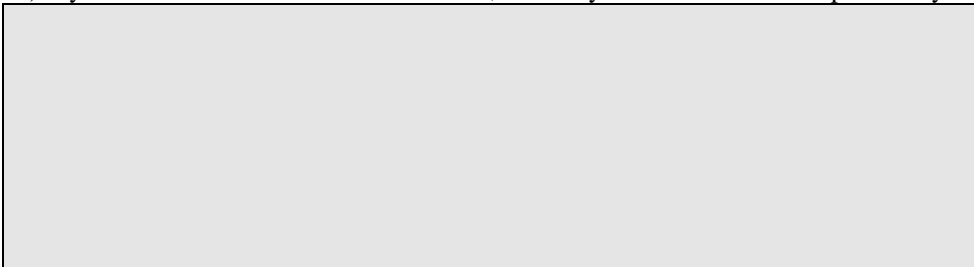
② Yes (please provide details: has it increased or decreased those costs?) .....

.....  
.....

70) Please provide some general impressions of how your use of the Internet has impacted your business or organization:



71) If you do not use the Internet for business, how do you think that it could potentially impact you?



## Appendix D: Thai Survey

### โครงสร้างของธุรกิจ

2) กรุณาระบุชื่อของคุณและชื่อของบริษัท/ร้าน ของคุณ:

.....  
 .....

กรณมา เลือกข้อที่เกี่ยวข้องกับ ธุรกิจของคุณ	2) คุณใช้อุปกรณ์เหล่านี้บ่อยแค่ไหน?				
	ไม่เคยเลย	ประมาณ เดือนละครั้ง	ประมาณสัปดาห์ละครั้ง	2-3 ครั้งต่อสัปดาห์	มากกว่า 1 ครั้งต่อวัน
คอมพิวเตอร์	①	②	③	④	⑤
อินเทอร์เน็ต / อีเมล	①	②	③	④	⑤

3) คุณได้ใช้ อินเทอร์เน็ต หรือ อีเมล ในการช่วยคุณจำหน่ายผ้าไหมหรือไม่?

- ① ไม่ใช้
- ② ใช้

4) อะไรคือสิ่งที่สำคัญที่สุดสำหรับธุรกิจของคุณ? (เลือกได้มากกว่า 1 ข้อ)

- ① การขายผ้าไหมที่ร้าน ให้กับลูกค้า
- ② การขายสินค้าให้กับบริษัทอื่นๆ
- ③ กระบวนการผลิตและการทอ
- ④ กระบวนการตัดเสื้อไหม / ผลิตภัณฑ์จากผ้าไหม
- ⑤ อื่นๆ (โปรดระบุ).....

5) ในแต่ละเดือน กิจการมียอดขายโดยประมาณ เป็นจำนวนเท่าใด (เป็นเงินบาท)? .....

6) ในกิจการของคุณ จำหน่ายผ้าไหม คิดเป็นร้อยละเท่าไรโดยประมาณ (เช่น ผ้าไหม 80 ผ้าฝ้าย 20)? .....

7) ในกิจการของคุณ จำหน่ายผ้าไหม ที่เป็น**ไหมไทย** เป็นจำนวนร้อยละเท่าไร (เช่น ไหมไทย 70 ไหมจีน10 ไหมลาว 20)? .....

8) เพราะเหตุใด จึงเลือกบริเวณนี้เป็นทำเล ในการดำเนินธุรกิจ?

9) คุณตัดสินใจที่จะใช้อินเตอร์เน็ตเพื่อที่จะ (สามารถเลือกได้มากกว่า 1 ข้อ):

- ① เป็นช่องทางในการโฆษณาร้านของคุณ
- ② เป็นช่องทางในการแสวงหาลูกค้าใหม่
- ③ เป็นช่องทางในการเพิ่มยอดขายให้แก่กลุ่มลูกค้าเดิม
- ④ เป็นช่องทางในการค้นหาผู้ค้าส่งใหม่ / แหล่งวัตถุดิบใหม่
- ⑤ อื่นๆ .....

## เทคโนโลยี

10) คุณเริ่มใช้อินเตอร์เน็ตเพื่อธุรกิจของคุณมาเป็นระยะเวลากี่ปีแล้ว? .....

11) คุณใช้วิธีใดบ้าง ในการจำหน่ายผ้าไหม? (เลือกได้มากกว่า 1 ข้อ):

- ① การขายผ้าไหมที่ร้าน
- ② ตลาดค้าผ้าไหม
- ③ เว็บไซต์ของตนเอง (มีระบบการสั่งซื้อสินค้า เพียงพร้อม)?
- ④ เว็บไซต์ของตนเอง (ไม่มีระบบสั่งซื้อสินค้า เช่น ใช้อีเมลแทนเวลาสั่งซื้อสินค้า)?
- ⑤ เว็บไซต์ของบุคคลที่สาม (ที่ผู้อื่นเป็นเจ้าของ เช่น เว็บไซต์ของOTOP)?
- ⑥ ตลาดกลางบนอินเทอร์เน็ต ?

12) จากคำถามในข้อที่ 11 อะไรคือสิ่งที่สำคัญที่สุดสำหรับกิจการของคุณ? .....

13) สำหรับระบบการซื้อขายบนอินเทอร์เน็ต ใครเป็นผู้พัฒนาระบบเหล่านี้ให้แก่คุณ? (เลือกตอบได้มากกว่า 1 ข้อ)

- ① พัฒนาโดยตัวของท่านเอง หรือ พนักงานในองค์กร
- ② พัฒนาโดยกลุ่มผู้ไม่หวังผลประโยชน์ใดๆ
- ③ พัฒนาคด้วยการช่วยเหลือจากรัฐบาล (เช่น เว็บไซต์ของ OTOP)
- ④ พัฒนาโดยบริษัทอื่น
- ⑤ อื่นๆ (โปรดอธิบาย) .....

14) ใครเป็นผู้ริเริ่มความคิดในการขายผลิตภัณฑ์ผ่านทางอินเทอร์เน็ต?

- ① ความคิดของคุณเอง
- ② พนักงานในองค์กรของคุณ
- ③ กลุ่มผู้ไม่หวังผลประโยชน์ใดๆ
- ④ ตัวแทนรัฐบาล
- ⑤ บริษัทอื่น
- ⑥ อื่นๆ (โปรดอธิบาย) .....

15) คุณได้แหล่งเงินทุนสนับสนุนในการซื้อคอมพิวเตอร์ และ อุปกรณ์ในการเชื่อมต่ออินเทอร์เน็ตจากที่ใด (เลือกตอบได้มากกว่า 1 ข้อ)?

- ① ธุรกิจของท่านเอง
- ② กลุ่มผู้ไม่หวังผลประโยชน์ใดๆ
- ③ ตัวแทนรัฐบาล
- ④ บริษัทอื่น
- ⑤ อื่นๆ (โปรดอธิบาย) .....

16) คุณ (หรือพนักงานในองค์กรของคุณ) ที่มีหน้าที่จำหน่ายสินค้าผ่านทางอินเทอร์เน็ต เคยได้รับการฝึกอบรมทางด้านคอมพิวเตอร์มาหรือไม่?

- ① ไม่เคย
- ② เคย (โปรดอธิบายอย่างย่อ).....

กรุณา เลือกข้อที่เกี่ยวข้องกับธุรกิจของคุณ	17) คุณสั่งซื้อสินค้าจากผู้ผลิต (ตัวอย่างเช่น เส้นไหม และวัตถุดิบต่างๆ หรือ ผ้าไหมที่ทอเสร็จแล้ว) ผ่านทางช่องทางเหล่านี้บ่อยเท่าใดไหน?				19) ลูกค้านำของผ่านสั่งซื้อสินค้าผ่านทางช่องทางเหล่านี้บ่อยแค่ไหน?			
	ไม่เคยเลย	ไม่บ่อยเท่าใด	บ่อยพอสมควร	บ่อยมาก	ไม่เคยเลย	ไม่บ่อยเท่าใด	บ่อยพอสมควร	บ่อยมาก
โทรศัพท์ / โทรสาร	①	②	③	④	①	②	③	④
อินเทอร์เน็ต / อีเมล	①	②	③	④	①	②	③	④
มาติดต่อด้วยตนเอง	①	②	③	④	①	②	③	④
ทางไปรษณีย์	①	②	③	④	①	②	③	④
ข้อใดคือสิ่งที่สำคัญที่สุดสำหรับการสั่งซื้อสินค้าที่กล่าวมาข้างต้น	18).....				20) .....			

21) ในมุมมองของคุณแล้ว การลงทุนในการสร้างเว็บไซต์ของท่าน มีความหมาย (ความคุ้มค่า) ต่อบริษัทของคุณมาก/น้อยเพียงใด?

- ① ต่ำ / ไม่คุ้มค่าเท่าที่ควร ② ปานกลาง / คุ้มค่าในระดับปานกลาง ③ สูง / คุ้มค่าสูง

22) ในความคิดของคุณ การก่อตั้งเว็บไซต์ของคุณมีระดับความยากที่เท่าไร?

- ① ไม่ยากมาก ② ปานกลาง ③ ยากมากๆ

23) กลุ่มลูกค้ากลุ่มใดที่คุณพยายามที่จะทำการค้าด้วยผ่านทางเว็บไซต์ (สามารถเลือกคำตอบได้มากกว่า 1 ข้อ)?

- ① กลุ่มลูกค้าในท้องถิ่น ② กลุ่มลูกค้าในประเทศ ③ กลุ่มลูกค้าที่อยู่ต่างประเทศ

## พนักงาน

24) พนักงานในองค์กรของคุณมีจำนวนเท่าไรโดยประมาณ (ตัวอย่างเช่น, ฝ่ายขาย, ฝ่ายจัดการ, ผู้ครัว?) .....และก่อนที่จะเริ่มใช้อินเทอร์เน็ตแล้ว มีพนักงานที่ทำงานในองค์กรกี่คน.....

25) คนงานในองค์กรของคุณมีจำนวนประมาณเท่าไร (ระบุโดยประมาณ)?

คนงานแบบประจำ ..... และมีจำนวนเท่าใด ก่อนที่คุณจะใช้อินเทอร์เน็ต .....

คนงานแบบพาร์ท ไทม์ ..... และมีจำนวนเท่าใด ก่อนที่คุณจะใช้อินเทอร์เน็ต.....

26) หากไม่เป็นการรบกวนจนเกินไป, กรุณาระบุ เงินเดือนในตำแหน่งต่างๆของพนักงานในองค์กรของคุณ.

ตัวอย่างเช่น:

ตำแหน่ง ช่างทอผ้า เงินเดือน(บาท) ..... ต่อจำนวนชั่วโมงทำงาน .....

ตำแหน่ง ผู้จัดการฝ่ายขาย เงินเดือน(บาท) ..... ต่อจำนวนชั่วโมงทำงาน .....

① ตำแหน่ง..... เงินเดือน(บาท) ..... ต่อจำนวนชั่วโมงทำงาน.....

② ตำแหน่ง..... เงินเดือน(บาท) ..... ต่อจำนวนชั่วโมงทำงาน.....

③ ตำแหน่ง..... เงินเดือน(บาท) ..... ต่อจำนวนชั่วโมงทำงาน.....

④ ตำแหน่ง..... เงินเดือน(บาท) ..... ต่อจำนวนชั่วโมงทำงาน.....

โปรดเลือกข้อที่เกี่ยวข้องกับบริษัทของคุณที่สุด

27) จากสินค้าทั้งหมด, อัตราส่วนของผ้าชนิดที่คุณจำหน่ายในร้าน เป็นจำนวนมากน้อยเพียงใด ?

	ไม่มีเลย	เล็กน้อย	ปานกลาง	มาก
ผ้าไหมไทย ทำจากเครื่องจักร	①	②	③	④
ผ้าไหมไทยทอมือ	①	②	③	④
ผ้ามัดหมี่ ไหมไทย	①	②	③	④
ผ้าไหมไทยชนิดอื่นๆ	①	②	③	④

28) โปรดอธิบายถึงผลิตภัณฑ์หลักๆที่คุณทำการขายอยู่ขณะนี้ (เช่น เสื้อไหม, เนคไท, เครื่องแต่งกายต่างๆ):

29) โปรดอธิบายถึง ลักษณะการออกแบบ สี และ ชนิด ของผ้าไหมที่คุณจำหน่าย (ตัวอย่างเช่น ลักษณะพิเศษของผ้าไหมมัดหมี่)

30) ชนิดและรูปแบบของผ้าไหมที่คุณจำหน่ายนั้น มุ่งเน้นเพื่อจะจำหน่ายให้กับลูกค้ากลุ่มใด

- ① ผู้ที่อยู่ในประเทศไทย ② ชาวต่างชาติ ③ ทั้งคนไทยและคนต่างชาติ ④ ไม่ทราบ / ไม่แน่ใจ

31) คุณมีส่วนร่วมในการออกแบบ รูปแบบ ลวดลาย สี และ ชนิด ของผ้าไหมที่คุณจำหน่ายมากน้อยเพียงใด

- ① เรา / องค์กร เป็นผู้ออกแบบและผลิตเองทั้งหมด /  
② เราติดต่อกับทางโรงงานของผู้ผลิต เพื่อที่จะผลิตลวดลายที่เราสั่งทำเป็นพิเศษ.  
③ เราซื้อผ้าไหมจาก ชาวบ้าน และ ผู้ผลิตเท่านั้น ไม่ได้มีส่วนร่วมในการออกแบบเลย.

## ผลิตภัณฑ์

32) คุณตั้งความหวังไว้หรือไม่ว่า การทำการค้าผ่านทางอินเทอร์เน็ต จะเป็นช่องทางที่จะทำให้มีลูกค้าเพิ่มมากขึ้น

- ① ผมหวังไว้ว่า อินเทอร์เน็ตจะช่วยให้ผมมีลูกค้ามากขึ้น  
② ใช่, มันเป็นไปได้ตามที่ผมคาดเอาไว้เลย  
③ อินเทอร์เน็ตช่วยเพิ่มลูกค้าได้มากขึ้นกว่าที่ผมคาดไว้เสียอีก

33) กรุณายกยอขายของคุณโดยประมาณเป็นร้อยละ โดยแยกเป็นกลุ่มๆดังนี้ (รวมทั้งหมดเป็น 100 เปอร์เซ็นต์)

- ① ลูกค้าขายปลีก ที่เข้ามาซื้อสินค้าที่ร้านของท่าน ....%
- ② ลูกค้าขายปลีก ที่สั่งซื้อจากสถานที่อื่น ๆ (ทาง โทรศัพท์ โทรสาร หรือ อินเทอร์เน็ต).....%
- ③ ลูกค้าขายส่ง ที่เข้ามาเลือกซื้อสินค้าที่ร้านของท่าน .....%
- ④ ลูกค้าขายส่ง ที่สั่งซื้อสินค้าจากสถานที่อื่น ๆ (ทาง โทรศัพท์ โทรสาร หรือ อินเทอร์เน็ต).....%
- ⑤ ตัวแทนจำหน่ายขนาดใหญ่ ที่เข้ามาซื้อสินค้าที่ร้านของท่าน.....%
- ⑥ ตัวแทนจำหน่ายขนาดใหญ่ ที่สั่งซื้อจากสถานที่อื่น ๆ (ทาง โทรศัพท์ โทรสาร หรือ อินเทอร์เน็ต) .....
- ⑦ อื่นๆ (โปรดระบุ) .....

33a) กรุณายกยอขายของคุณโดยประมาณเป็นร้อยละ โดยแยกเป็นกลุ่มๆดังนี้ (รวมทั้งหมดเป็น 100 เปอร์เซ็นต์)

- ① ลูกค้าขายปลีกที่อาศัยอยู่ในเมืองเดียวกัน / จังหวัดที่เดียวกัน .....
- ② ลูกค้าขายปลีกที่อาศัยอยู่นอกเมือง / คนละจังหวัดกัน (ใช้ โทรศัพท์ โทรสาร หรือ อินเทอร์เน็ต ทำการค้ากัน).....%
- ③ ลูกค้าขายส่งที่อาศัยอยู่ในเมืองเดียวกัน / จังหวัดที่เดียวกัน .....
- ④ ลูกค้าขายส่งที่อาศัยอยู่นอกเมือง / คนละจังหวัดกัน (ใช้ โทรศัพท์ โทรสาร หรือ อินเทอร์เน็ต ทำการค้ากัน).....%
- ⑤ ตัวแทนจำหน่ายขนาดใหญ่ ที่อาศัยอยู่ในเมืองเดียวกัน / จังหวัดที่เดียวกัน .....
- ⑥ ตัวแทนจำหน่ายขนาดใหญ่ ที่อาศัยอยู่นอกเมือง / คนละจังหวัดกัน (ใช้ โทรศัพท์ โทรสาร หรือ อินเทอร์เน็ต ทำการค้ากัน) .....
- ⑦ อื่นๆ (โปรดระบุ) .....

34) ลูกค้าที่ซื้อสินค้าจากคุณ มากเป็น 3 อันดับแรกคือลูกค้าชาติใด ( เชื้อชาติอะไร และ ประเทศอะไร )?

- ① ..... ② ..... ③ .....

35) กรุณาระบุ ลักษณะทั่วไปของลูกค้าที่มาซื้อสินค้าจากคุณ (อายุ เพศ หรือ อาชีพ เป็นต้น)?

36) คุณส่งสินค้าให้แก่ลูกค้าโดยวิธีใด ?.....

(คุณสามารถเขียนได้มากกว่า 1 อย่าง; ตัวอย่างเช่น ทางไปรษณีย์, รถยนต์ รถตู้ รถกระบะ, รถไฟ และ เครื่องบิน เป็นต้น.)

37) คุณได้รับการสั่งของจากลูกค้า ผ่านทางอีเมลล์ หรืออินเทอร์เน็ตประมาณกี่ครั้งต่อเดือน? .....

38) แล้วลูกค้าที่เคยสั่งซื้อสินค้าไปแล้ว มีการสั่งเข้ามาซ้ำๆ เป็นประจำบ้างหรือไม่ (เช่น สั่งทุกๆ 3 เดือน, ทุก 6 เดือน เป็นต้น)?

- ① ไม่มี
- ② มี

39) ในขณะนี้ คุณต้องการที่จะขายสินค้าให้แก่ใครเป็นพิเศษหรือไม่ (เจาะกลุ่มลูกค้าใหม่?) และพวกเขาอยู่ที่ไหน? คุณมีแผนการอย่างไร? โปรดอธิบาย:  
(เช่น เจาะกลุ่มลูกค้าชาวญี่ปุ่น ที่ประเทศญี่ปุ่น โดยการนำผ้าไหมไปตัดเป็นชุดกิโมโน เป็นต้น).

40) คุณขายสินค้าได้คิดเป็นเงินประมาณเท่าไรต่อเดือน (เป็นเงินบาท)? .....

41) คุณขายสินค้าของคุณ โดยผ่านช่องทางอินเทอร์เน็ต คิดเป็นเงินประมาณเท่าไรต่อเดือน(เป็นเงินบาท)? .....

42) สินค้าที่คุณประกาศขายทางอินเทอร์เน็ตนั้น มีราคาแตกต่างจากที่ขายอยู่ที่ร้านหรือไม่?

- ① ไม่แตกต่าง
- ② ต่าง (เพราะเหตุใด).....  
.....

43) จากยอดขายของคุณทั้งหมดแล้ว ยอดขายผ่านทางอินเทอร์เน็ตนั้น คิดเป็นกี่เปอร์เซ็นต์? .....%

44) คุณเคยพยายามที่จะหาตลาดใหม่บ้างหรือไม่ (หากกลุ่มลูกค้าใหม่)?

- ① ไม่
- ② ใช่

45) ถ้าคุณตอบว่า “ใช่” ในข้อที่แล้ว,คุณเคยประสบกับความยากลำบากในการขายสินค้าให้กับกลุ่มลูกค้าใหม่บ้างหรือไม่?

- ① ไม่เคย
- ② เคย (อย่างไร โปรดอธิบาย).....  
.....

46) คุณเคยผิดหวังกับการขายสินค้าทางอินเทอร์เน็ตหรือไม่? และคุณคาดหวังให้ยอดขายที่เพิ่มขึ้นหรือไม่?

- ① ไม่
- ② ใช่ (อย่างไร โปรดอธิบาย).....  
.....

47) คุณเคยประสบกับความยากลำบากในการหาลูกค้าเพื่อมาซื้อสินค้าของคุณ บนอินเทอร์เน็ตหรือไม่?

- ① ไม่
- ② ใช่ (อย่างไร โปรดอธิบาย).....  
.....

48) ก่อนที่คุณจะเริ่มใช้อินเทอร์เน็ตเพื่อการค้า, คุณได้คาดหวังไว้หรือไม่ว่า มันจะช่วยเพิ่มจำนวนลูกค้ากลุ่มในใดบ้าง (สามารถเลือกได้มากกว่า 1 ข้อ)?

- ① คนในท้องถิ่นเดียวกัน / จังหวัดเดียวกัน
- ② ลูกค้าในประเทศไทย
- ③ ลูกค้าต่างประเทศ
- ④ ไม่มีข้อมูล
- ⑤ ไม่ทราบ
- ⑥ อื่นๆ

49) เมื่อเริ่มใช้อินเทอร์เน็ตแล้ว คุณได้คาดหวังไว้หรือไม่ว่า มันจะช่วยเพิ่มจำนวนลูกค้ากลุ่มในใดบ้าง (สามารถเลือกได้มากกว่า 1 ข้อ)?

- ① คนในท้องถิ่นเดียวกัน / จังหวัดเดียวกัน
- ② ลูกค้าในประเทศไทย
- ③ ลูกค้าต่างประเทศ
- ④ ไม่มีข้อมูล
- ⑤ ไม่ทราบ
- ⑥ อื่นๆ

## วัตถุประสงค์

50) วัตถุประสงค์ที่ท่านสั่งซื้อมานั้น (เช่น, เส้นไหม, สีย้อม, ผ้าไหม, อื่นๆ) ได้มาจากที่ใดบ้าง (รวมทั้งหมดเป็น 100 เปอร์เซ็นต์):

- ① เป็นผลิตภัณฑ์ภายในองค์กร (ในชุมชน / ภายในจังหวัดของท่าน) .....%
- ② เป็นผลิตภัณฑ์ภายในองค์กร (ที่มาจากที่อื่น / จังหวัดอื่น) .....%
- ③ สั่งซื้อมาจากภายนอก (แต่ยังอยู่ภายในชุมชน / ภายในจังหวัดของท่าน) .....%
- ④ สั่งซื้อมาจากภายนอก (ที่มาจากที่อื่น / จังหวัดอื่น) .....%
- ⑤ พ่อค้าคนกลาง / พ่อค้าขายส่งขนาดใหญ่ (ในชุมชน / ภายในจังหวัดของท่าน) .....%
- ⑥ พ่อค้าคนกลาง / พ่อค้าขายส่งขนาดใหญ่ (ที่มาจากที่อื่น / จังหวัดอื่น) .....%
- ⑦ อื่นๆ (โปรดระบุ).....%

51) คุณได้พบกับผู้ผลิตวัตถุประสงค์รายใหม่ที่ดีกว่าเดิม เพราะคุณใช้อินเทอร์เน็ตหรือไม่?

- ① ไม่
- ② ใช่ (โปรดระบุชื่อและข้อมูลของผู้ผลิตวัตถุประสงค์รายใหม่).....

52) โปรดระบุผู้ผลิต 3 อันดับแรกที่คุณสั่งซื้อเป็นประจำ, ตั้งอยู่ที่ไหน (จังหวัดอะไร)?

- ① ..... ② ..... ③ .....



53) กรุณาระบุ ลักษณะต่างๆไปของผู้ผลิตที่คุณไปสั่งซื้อวัตถุดิบด้วย (อายุ ,เพศ,ลักษณะของธุรกิจ)?

54) เมื่อคุณสั่งซื้อวัตถุดิบจากผู้ผลิตแล้ว ผู้ผลิตมีวิธีจัดส่งสินค้าให้คุณอย่างไร?.....  
(สามารถตอบได้มากกว่า 1 ข้อ, เช่น จัดส่งให้ทางไปรษณีย์ , มีรถมาส่งให้ หรือ ทางคุณต้องเอารถไปรับมาเอง.)

55) การที่คุณได้ใช้ อินเทอร์เน็ตในการสั่งซื้อสินค้าจากผู้ผลิตนั้น ทำให้ ค่าขนส่ง เพิ่ม หรือ ลด หรือไม่?

- ① ไม่
- ② ใช่ (โปรดระบุ).....

### อิทธิพล และการเปลี่ยนแปลง

56) คุณได้จำหน่ายผลิตภัณฑ์ ที่ทำมาจากผ้าไหมมาก่อนหน้าที่จะใช้อินเทอร์เน็ตเพื่อการค้าหรือไม่?

- ① ไม่ (ถ้าคุณตอบ “ไม่” ให้ข้ามไปทำข้อที่63ได้เลยครับ)
- ② ใช่

57) ก่อนที่คุณจะใช้อินเทอร์เน็ตเพื่อการค้า ข้อใดคือกลุ่มลูกค้าที่คุณพยายามจะทำการค้าด้วย (เลือกได้มากกว่า 1 ข้อ)?

- ① ลูกค้าในท้องถิ่น
- ② ลูกค้าภายในประเทศ
- ③ ลูกค้าชาวต่างชาติ

58) จากคำถามข้อที่ 57 ข้อใดสำคัญที่สุด? .....

โปรดเลือกข้อที่ตรงกับบริษัทของคุณ	59) ก่อนที่คุณจะเริ่มใช้อินเทอร์เน็ต, อัตราส่วนของผ้าชนิดที่ท่านจำหน่ายในร้าน เป็นจำนวนมากน้อยเพียงใด ?			
	ไม่ได้ขาย	เล็กน้อย	ปานกลาง	มาก
ผ้าไหมไทย ทำจากเครื่องจักร	①	②	③	④
ผ้าไหมไทยทอมือ	①	②	③	④
ผ้าไหม “มัดหมี่”	①	②	③	④
ผ้าไหมไทยชนิดอื่นๆ	①	②	③	④

60) ก่อนที่คุณจะเริ่มใช้อินเตอร์เน็ต, วัสดุพิมพ์ที่ท่านสั่งซื้อมานั้น (เช่น, เส้นไหม, สีย้อม, ผ้าไหม, อื่นๆ.) ได้มาจากที่ใดบ้าง (รวมทั้งหมดเป็น 100 เปอร์เซ็นต์)?

- ① เป็นผลิตภัณฑ์ภายในองค์กร (ในชุมชน / ภายในจังหวัดของท่าน) .....%
- ② เป็นผลิตภัณฑ์ภายในองค์กร (ที่มาจากที่อื่นๆ / จังหวัดอื่น) .....%
- ③ สั่งซื้อมาจากภายนอก (แต่ยังอยู่ภายในชุมชน / ภายในจังหวัดของท่าน) .....%
- ④ สั่งซื้อมาจากภายนอก (ที่มาจากที่อื่น / จังหวัดอื่น) .....%
- ⑤ พ่อค้าคนกลาง / พ่อค้าขายส่งขนาดใหญ่ (ในชุมชน / ภายในจังหวัดของท่าน) .....%
- ⑥ พ่อค้าคนกลาง / พ่อค้าขายส่งขนาดใหญ่ (ที่มาจากที่อื่น / จังหวัดอื่น) .....%
- ⑦ อื่นๆ (โปรดระบุ).....%

61) ก่อนที่คุณจะเริ่มใช้อินเตอร์เน็ต, คุณมีส่วนร่วมในการออกแบบ รูปแบบ ลวดลาย สี และ ชนิด ของผ้าไหมที่คุณจำหน่ายอย่างน้อยเพียงใด? (สามารถเลือกได้มากกว่าข้อ)

- ① เรา / องค์กร เป็นผู้ออกแบบและผลิตเองทั้งหมด /
- ② เราติดต่อกับทางโรงงานของผู้ผลิต เพื่อที่จะผลิตลวดลายที่เราสั่งทำเป็นพิเศษ.
- ③ เราซื้อผ้าไหมจาก ชาวบ้าน และ ผู้ผลิตเท่านั้น ไม่ได้มีส่วนร่วมในการออกแบบเลย.
- ④ อื่นๆ.....

64) ก่อนที่คุณจะเริ่มใช้อินเตอร์เน็ต, โปรดระบุผู้ผลิต 3 อันดับแรกที่คุณสั่งซื้อเป็นประจำ, ตั้งอยู่ที่ไหน (จังหวัดอะไร)?

① ..... ② ..... ③ .....

65) ก่อนที่คุณจะเริ่มใช้อินเตอร์เน็ต, ส่วนแบ่งทางการตลาดของกลุ่มลูกค้าของคุณคิดเป็นร้อยละเท่าไรโดยประมาณ (รวมทั้งหมด 100 เปอร์เซ็นต์)

- ① ลูกค้าชายปลีก .....%
- ② ลูกค้าชายส่ง .....%
- ③ พ่อค้าค้าขายส่งขนาดใหญ่ .....%
- ④ ลูกค้าที่เป็นโรงงาน .....%
- ⑤ อื่นๆ (โปรดระบุ) .....%

66) ก่อนที่คุณจะเริ่มใช้อินเตอร์เน็ต, ลูกค้าที่ซื้อสินค้าจากคุณ มากเป็น 3 อันดับแรกคือลูกค้าชาติใด (เชื้อชาติอะไร และ ประเทศอะไร)?

① ..... ② ..... ③ .....

67) ก่อนที่คุณจะเริ่มใช้อินเตอร์เน็ต, รายได้ต่อเดือนที่กิจการของคุณทำได้ ประมาณเท่าไร (บาท)? .....

68) คุณเชื่อหรือไม่ว่า การที่คุณใช้อินเตอร์เน็ตนั้นมีผลกับค่าขนส่งสินค้าของคุณ?

- ① ไม่
- ② ใช่ (โปรดระบุ).....

69) คุณเชื่อหรือไม่ว่า การที่คุณใช้อินเทอร์เน็ตนั้นมีผลกับค่าจ้างแรงงานของคุณ?

① ไม่

② ใช่ (กรุณาให้รายละเอียดเพิ่มเติม, อินเทอร์เน็ตนั้นช่วยเพิ่ม หรือ ลดค่าใช้จ่ายอย่างไร?) .....

.....

.....

70) กรุณาระบุถึงความประทับใจที่มีต่อการใช้อินเทอร์เน็ตเพื่อการค้า, อินเทอร์เน็ตส่งผลกระทบต่อธุรกิจของคุณ?

71) ถ้าคุณไม่ได้ใช้อินเทอร์เน็ตเพื่อการค้าแล้ว, คุณคิดว่าจะมีผลอย่างไรต่อธุรกิจของคุณบ้าง?

**\*\*\*\*\* ขอขอบคุณที่ให้ความร่วมมือครับ\*\*\*\*\***

## REFERENCES

- Achavasmit, J. 2008. The Never Ending Threads - The Journey from the Traditional to the Contemporary Weaving of Thailand. In *The Thai Textile Society Lecture Series*. The William Warren Library, Bangkok.
- Adams, P. C. 1995. A Reconsideration of Personal Boundaries in Space-Time. *Annals of the Association of American Geographers* 85 (2):267-285.
- Alvares, C. 1992. *Science, Development and Violence. The Revolt Against Modernity*. Delhi: Oxford University Press.
- American Fabrics and Fashions Magazine. 1979. *Encyclopedia of Textiles*. Upper Saddle River, NJ: Prentice-Hall.
- Amighetti, A., and N. Reader. 2003. Internet Project for Poor Attracts Rich. *The Christian Science Monitor*, July 24:<http://www.csmonitor.com/2003/0724/p16s01-stin.html>.
- Anderson, E., and A. T. Coughlan. 1987. International Market Entry and Expansion via Independent or Integrated Channels of Distribution. *Journal of Marketing* 51:71-82.
- Anderson, N. 2005. Building Digital Capacities in Remote Communities within Developing Countries: Practical Applications and Ethical Issues. *Information Technology, Education and Society* 6 (3):1-15.
- APEC. 1998. *The Impact of Liberalisation: Communicating with APEC Communities*. Singapore: APEC.
- Ariel de Vidas, A. 1995. Textiles, Memory, and the Souvenir Industry in the Andes. In *International Tourism: Identity and Change*, eds. M. F. Lanfant, J. B. Allock and E. M. Bruner, 67-83. London: Sage.
- Askew, M. 1998. City of Women, City of Foreign Men: Working Spaces and Re-Working Identities Among Female Sex Workers in Bangkok's Tourist Zone. *Singapore Journal of Tropical Geography* 19 (2):130-150.
- Baily, M. N., and H. Gersbach. 1995. Efficiency in Manufacturing and the Need for Global Competition. *Brookings Papers in Economic Activity: Microeconomics*:307-358.
- Baker, C. 2007. Sufficiency Approach Vital in Globalised Times. *The Nation* January 11:[http://www.nationmultimedia.com/2007/01/11/opinion/opinion\\_30023814.php](http://www.nationmultimedia.com/2007/01/11/opinion/opinion_30023814.php).
- Baker, L. 2008. *Do Links From Foreign Language Sites Have Value?* Search Engine Journal 2008 [cited May 11 2008]. Available from <http://www.searchenginejournal.com/do-links-from-foreign-language-sites-have-value/6584/>.
- Balakrishnan, G. 2003. *Debating Empire*. London: Verso.
- Balasubramanian, V. 1985. Silk Exchange in Karnatka. In *Silk Industry: Problems and Prospects*, eds. A. Aziz and H. G. Hanumappa, 103-115. New Delhi: Ashish Publishing House.
- Balconi, M. 2002. Tacitness, Codification of Technological Knowledge and the Organisation of Industry. *Research Policy* 31:357-379.
- Baldwin, C., and K. Clark. 2000. *Design Rules; Unleashing the Power of Modularity*. Cambridge, MA: MIT Press.

- Baliamoune, M. N. 2002. *The New Economy and Developing Countries*. Helsinki: UNU World Institute for Development Economics Research.
- Bangkok Post. 2006. UN: ICT infrastructure needs to be improved. *Bangkok Post* November 17,.
- Bank of Thailand. 1978. *Annual Economic Report*. Bangkok: Bank of Thailand.
- Baran, P. 1957. On the Roots of Backwardness. In *The Political Economy of Growth*, 134-162. New York: Monthly Review Press.
- Bates, M. J., and S. Lu. 1997. An Exploratory Profile of Personal Home Pages: Content, Design, Metaphors. *Online and CDROM Review* 21 (6):331-340.
- Batty, M. 1997. Virtual Geography. *Futures* 29 (4/5):337-352.
- Batty, M., and H. J. Miller. 2000. Representing and Visualizing Physical, Virtual and Hybrid Information Spaces. In *Information, Place, and Cyberspace*, eds. D. G. Janelle and D. Hodge, C., 133-146. Berlin: Springer.
- Beaverstock, J. V., and M. A. Doel. 2001. Unfolding the Spatial Architecture of the East Asian Financial Crisis: the Organizational Response of Global Investment Banks. *Geoforum* 32 (1):15-32.
- Benjamin, R., and R. Wigland. 1995. Electronic Markets and Virtual Value Chains on the Information Superhighway. *Sloan Management Review* 36 (2):62-72.
- Berthoud, G. 1992. Market. In *The Development Dictionary*, ed. W. Sachs, 70-87. London: Zed Books.
- Bijoy, A. K. 2003. Art Of the Global Village. *Rediff.com*, September 01, <http://www.rediff.com/netguide/2003/sep/01art.htm>.
- Boccuzzi, E. E. 2007. *Becoming Urban: Thai Literature about Rural-Urban Migration and a Society in Transition*, South and Southeast Asian Studies, University of California, Berkeley.
- Boonyaratglin, S. 2006. Constitution of the Kingdom of Thailand (Interim Edition) of B.E. 2549 (unofficial translation). *The Nation* October 2.
- Bowie, K. 1993. Assessing the Early Observers: Cloth and the Fabric of Society in 19th-Century Northern Thai Kingdoms. *American Ethnologist* 20 (1):138-158.
- Brenner, N. 1998. Between Fixity and Motion: Accumulation, Territorial Organization and the Historical Geography of Spatial Scales. *Environment and Planning D: Society and Space* 16:459-481.
- Brown, I. 1980. Government Initiative and Peasant Response in the Siamese Silk Industry. *Journal of the Siam Society* 68 (2):34-47.
- Brunn, S. D. ed. 2006. *Wal-Mart World: The World's Biggest Corporation in the Global Economy*. London: Routledge.
- Buch-Hansen, M. 2003. The Territorialisation of Rural Thailand: Between Localism, Nationalism and Globalism. *Tijdschrift voor Economische en Sociale Geografie* 94 (3):322-334.
- Byrom, J., and D. Medway. 2004. Cyber Solutions to Remote Problems? Online Trading in British Overseas Territories – A Review and Research Agenda. *International Review of Retail Distribution and Consumer Research* 14 (1):71-82.
- Cairncross, F. 1997. *The Death of Distance: How the Communications Revolution Will Change Our Lives*. Cambridge, MA: Harvard Business School Press.
- Campbell, D. 2001. Can the Digital Divide be Contained? *International Labour Review* 140 (2):119-141.

- Castells, M. 2002. *The Internet Galaxy*. Oxford: Oxford University Press.
- Chakraborty, J., and M. Bosman. 2005. Measuring the Digital Divide in the United States: Race, Income, and Personal Computer Ownership. *The Professional Geographer* 57 (3):395-410.
- Chan, A. Y. K., M. Pipatanantakurn, N. Vibulsrisajja, A. Wattanamano, and M. Haenssger. 2008. Silk Products: International Trade. In *BBA International Program Spring Project*. Bangkok: Chulalongkorn University.
- Chandrasekaran, R. 2001. Cambodian Village Wired to Future. *Washington Post*, Sunday May 13:A01.
- Chanyapate, C., and A. Bamford. 2007. The Rise and Fall of the Sufficiency Economy. *Focus on the Global South* July 27 (<http://www.focusweb.org/the-rise-and-fall-of-the-sufficiency-economy.html?mid=36>).
- Chappelle, D. 2004. Chappelle's Show: What if the Internet Was a Real Place?, 22 min. USA: Comedy Central.
- Charoenpo, A., and W. Nanuam. 2007. PM Urges Action on Inequality. *Bangkok Post*, March 6.
- Charsombut, P., and R. Islam. 1992. Adoption and Diffusion of New Technology in Cottage Industries of Rural Thailand: A Case Study of Basketry and Silk. In *Transfer, Adoption, and Diffusion of Technology for Small and Cottage Industries*, ed. R. Islam, 256-282. Geneva, Switzerland: International Labour Organization.
- Cheesman, P. 2004. *Lao-Tai Textiles: The Textiles of Xam Nuea and Muang Phuan*. Chiang Mai, Thailand: Studio Neanna.
- Chumbala, M. L. 1985. The Textile Collection of Princess Boonchiradorn, Winchester School of Art, Winchester.
- Clarke, G. R. G. 2002. Does Internet Connectivity Affect Export Performance? Helsinki: UNU World Institute for Development Economics Research.
- Coer De Roy, O. 1997. The African Challenge: Internet, Networking and Connectivity Activities in a Developing Environment. *Third World Quarterly* 18 (5):883-898.
- Cohen, E. 2000. The Study of Commercialized Crafts in Thailand. In *The Commercialized Crafts of Thailand: Hill Tribes and Lowland Villages*, ed. E. Cohen, 1-24. Honolulu: University of Hawaii Press.
- Coleman, B. E. 2006. Microfinance in Northeast Thailand: Who Benefits and How Much? *World Development* 34 (9):1612-1638.
- Conway, S. 1990. *Thailand: Weaving and the Rice Cycle*. Bangkok: Susan Conway. ———. 1992. *Thai Textiles*. Bangkok: River Books Press.
- Cotlier, M. 2001. The Electronic Catalog: The Payoff of Paid Search Listings. *Catalog Age* 18.
- Cotriss, D. 2002. Marketers Report High ROI With Paid Listings. *B to B* 87 (3):19-20.
- Couclelis, H. 2004. Pizza Over the Internet: E-Commerce, the Fragmentation of Activity and the Tyranny of the Region. *Entrepreneurship & Regional Development* 16:41-54.
- Cox, K. R. 1998. Spaces of Dependence, Spaces of Engagement and the Politics of Scale, or: Looking for Local Politics. *Political Geography* 17 (1):1-23.
- Cripps, F. 1965. *The Far Province*. London: Hutchinson.

- Crispin, S. W. 2006. In Thailand, a Return to 'Sufficiency'. *Asia Times* October 5 ([http://www.atimes.com/atimes/Southeast\\_Asia/HJ05Ae01.html](http://www.atimes.com/atimes/Southeast_Asia/HJ05Ae01.html)).
- Currie, R. 2006. Personal correspondence with Ron Currie: Former Secretary General of the International Silk Association (ISA), April 23.
- Dahles, H., and E. Zwart. 2003. Tourism and Silk Trade in Post-Civil War Cambodia. *Pacific Tourism Review* 6:143-157.
- Daniel, E. M., and D. J. Grimshaw. 2002. An Exploratory Comparison of Electronic Commerce Adoption in Large and Small Enterprises. *Journal of Information Technology* 17:133-147.
- Datta, R., K. ed. 1996. *Global Silk Scenario 2001*. New Delhi: Oxford and IBH Publishing.
- Datta, R., K. , and M. Nanavaty. 2005. *Global Silk Industry: A Complete Source Book*. Boca Raton, FL: Universal Publishers.
- Dean, M. 1999. *Governmentality: Power and Rule in Modern Society*. London: Sage.
- Department of Export Promotion. 2007. *Trade Statistic*. DEP 2007 [cited Dec 13 2007]. Available from [http://www.depthai.go.th/en/trade\\_statistic.shtml](http://www.depthai.go.th/en/trade_statistic.shtml).
- Dhiravegin, L. 1975. *Siam and Colonialism (1855-1909) : An Analysis of Diplomatic Relation*. Bangkok: Thai Wattana Panich, Co., Ltd.
- Dicken, P. 2003. *Global Shift*. 4 ed. New York: Guilford.
- . 2005. Tangled webs: transnational production networks and regional integration. In *SPACES Working Paper 2005-04*: University of Marburg.
- Dicken, P., K. Kelley, K. Olds, and H. W.-c. Yeung. 2001. Chains and Networks, Territories and Scales: Towards a Relational Framework for Analysing the Global Economy. *Global Networks* 1 (2):89-112.
- Dixon, C. 1999. *The Thai Economy: Uneven Development and Internationalisation*. London: Routledge.
- . 2001. The Causes of Thai Economic Crisis: the Internal Perspective. *Geoforum* 32 (1):47-60.
- Dixon, C., and M. J. G. Parnwell. 1991. Thailand: The Legacy of Non-Colonial Rule. In *Colonialism and Development in the Contemporary World*, eds. C. Dixon and M. Heffernan, 204-225. London: Mansell.
- Dodge, M., and R. Kitchin. 2001a. *Atlas of Cyberspace*. London: Addison-Wesley.
- . 2001b. *Mapping Cyberspace*. London: Routledge.
- Dos Santos, T. 1970. The Structure of Dependence. *American Economic Review* 60:231-236.
- Drucker, P. F. 1999. Beyond the Information Revolution. *The Atlantic Monthly* 284 (4):47-57.
- Duncombe, R., and R. Heeks. 2002. Enterprise Across the Digital Divide: Information Systems and Rural Microenterprise in Botswana. *Journal of International Development* 14:61-74.
- Eldridge, J. D., and J. P. Jones. 1991. Warped Space: A Geography of Distance Decay. *Professional Geographer* 43 (4):500-511.
- Elliott, D. 1978. The Socio-Economic Formation of Modern Thailand. *Journal of Contemporary Asia* 8 (1):21-50.
- Escobar, A. 1992. Planning. In *The Development Dictionary*, ed. W. Sachs, 132-145. London: Zed.

- . 1995a. *Encountering Development. The Making and Unmaking of the Third World*. Princeton: Princeton University Press.
- . 1995b. Imagining a Post-Development Era. In *Power of Development*, ed. J. Crush, 211-227. London: Routledge.
- FAO. 2006. FAOSTAT Database Collections: Food and Agriculture Organization of the United Nations. [http://www.fao.org/waicent/portal/statistics\\_en.asp](http://www.fao.org/waicent/portal/statistics_en.asp).
- Faucon, B. 2008. *Getting E-commerce to Africa*. Red Herring 2001 [cited May 4 2008]. Available from <http://www.redherring.com/Home/9506>.
- Featherstone, M. 1991. *Consumer Culture and Postmodernism*. London: Sage.
- Frank, A. G. 1966. The Development of Underdevelopment. *The Monthly Review* 18 (4):17-31.
- . 1979. *Dependent Accumulation and Underdevelopment* New York: Monthly Review Press.
- Freund, C. L., and D. Weinhold. 2004. The Effect of the Internet on International Trade. *Journal of International Economics* 62:171-189.
- Friedman, T. L. 2001. Protesting for Whom? *New York Times*, April 24:A19.
- . 2005. *The World is Flat: A Brief History of Twenty-first Century*. New York: Farrar, Straus and Giroux.
- Gates, B. 1996. *The Road Ahead*. New York: Penguin Books.
- Geldof, M. 2005. Becoming an Information Society: The Role of New Information Technologies in Development. In *Wilton Park Papers*. Steyning, United Kingdom: Wilton Park.
- Gellman, R. 1996. Disintermediation and the Internet. *Government Information Quarterly* 13 (1):1-8.
- Gereffi, G. 1994. The Organization of Buyer-Driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks. In *Commodity Chains and Global Capitalism*, eds. G. Gereffi and M. Korzeniewicz, 95-122. London: Greenwood Press.
- . 1995. Global Production Systems and Third World Development. In *Global Change, Regional Response: The New International Context of Development* ed. B. Stallings, 100-143. Cambridge: Cambridge University Press.
- . 2001a. Beyond the Producer-Driven/Buyer-Driven Dichotomy: The Evolution of Global Value Chains in the Internet Era. *IDS Bulletin* 32 (3):30-40.
- . 2001b. Shifting Governance Structures in Global Commodity Chains, With Special Reference to the Internet. *American Behavioral Scientist* 44 (10):1616-1637.
- Gereffi, G., J. Humphrey, R. Kaplinsky, and T. Sturgeon. 2001. Globalisation, Value Chains and Development. *IDS Bulletin* 32 (3):1-14.
- Gereffi, G., J. Humphrey, and T. Sturgeon. 2005. The Governance of Global Value Chains. *Review of International Political Economy* 12 (1):78-104.
- Gereffi, G., M. Korzeniewicz, and R. P. Korzeniewicz. 1994. Global Commodity Chains. In *Commodity Chains and Global Capitalism*, eds. G. Gereffi and M. Korzeniewicz, 1-14. London: Greenwood Press.
- Gereffi, G., and O. Memedovic. 2003. *The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries*. Vienna: United Nations Industrial Development Organization.



- Gibson-Graham, J. K. 1996. *The End of Capitalism (As We Know It): A Feminist Critique of Political Economy*. Oxford: Basil Blackwell.
- Gibson, W. 1984. *Neuromancer*. London: Harper Collins.
- Gillespie, A., and H. Williams. 1988. Telecommunications and the Reconstruction of Regional Comparative Advantage. *Environment and Planning A* 20:1311-1321.
- Giovanni, F. 1997. *An Economic History of the Silk Industry, 1830-1930*. Cambridge: Cambridge University Press.
- Glassman, J. 2001. Economic Crisis in Asia: The Case of Thailand. *Economic Geography* 77 (2):122-147.
- . 2004a. Economic "Nationalism" in a Post-Nationalist Era: The Political Economy of Economic Policy in Post-Crisis Thailand. *Critical Asian Studies* 36:37-64.
- . 2004b. *Thailand at the Margins: Internationalization of the State and the Transformation of Labour*. Oxford: Oxford University Press.
- . 2007. Recovering from Crisis: The Case of Thailand's Spatial Fix. *Economic Geography* 83 (4):349-370.
- Goldfinger, D. 2006. Development Pornography: Images of the Global South. *Art'ishake* 2:4-5.
- Goldstein, A., and D. O'Connor. 2000. E-commerce for Development: Prospects and Policy Issues. Paris: OECD Development Centre.
- Graham, M. 2008. Warped Geographies of Development: The Internet and Theories of Economic Development. *Geography Compass* 2 (3):771-789.
- Graham, S. 1998. The End of Geography or the Explosion of Place? Conceptualizing Space, Place and Information Technology. *Progress in Human Geography* 22 (2):165-185.
- Grahame, W. A. 1912. *Siam, a Handbook of Practical, Commercial and Political Information*. London: Alexander Moring.
- Green, G. 2000. Indic Impetus? Innovations in Textile Usage in Angkorian Period Cambodia. *Journal of the Economic and Social History of the Orient* 37:277-313.
- Grimes, S. 2003. The Digital Economy Challenge Facing Peripheral Rural Areas. *Progress in Human Geography* 27 (2):174-193.
- Haas, S. W., and E. S. Grams. 2000. Readers, Authors, and Page Structure: A Discussion of Four Questions Arising From a Content Analysis of Web Pages. *Journal of the American Society for Information Science* 51 (2):181-192.
- Hafkin, N., and N. Taggart. 2001. Gender, Information Technology, and Developing Countries: An Analytic Study. Washington, DC: USAID Office of Women in Development.
- Haggblade, S. 2006. Rural Nonfarm Dynamics. In *Beyond Agriculture: The Promise of the Rural Economy for Growth and Poverty Reduction*. Rome: FAO.
- Haggblade, S., and N. Ritchie. 1992. Opportunities for Intervention in Thailand's Silk Subsector. In *GEMINI Working Paper No.27*. Bethesda, Maryland: Development Alternatives, Inc.
- Hamill, J., and K. Gregory. 1997. Internet Marketing in the Internationalisation of UK SMEs. *Journal of Marketing Management* 13 (1):9-28.
- Hammond, A. 2001. Digitally Empowered Development. *Foreign Affairs* 80 (2):96-106.
- Handley, P. M. 2006. *The King Never Smiles*. Boston: Yale University Press.

- Haraway, D. 1997. *Modest\_Witness@Second\_Millennium. FemaleManC\_Meets\_OncoMouseTM*. London: Routledge.
- Hardt, M., and A. Negri. 2000. *Empire*. Cambridge, MA: Harvard University Press.
- Harris, R. W. 2004. *Information and Communication Technologies for Poverty Alleviation*. Kuala Lumpur: United Nations Development Programme.
- Harvey, D. 1989. *The Condition of Postmodernity : An Enquiry Into the Origins of Cultural Change*. Oxford: Blackwell.
- Hausmann, R. 2001. Prisoners of Geography. *Foreign Policy*, 45-53.
- Hawken, P. 1981. Disintermediation: an Economics Buzzword that Neatly Explains a Lot of the Good that is Going On. *The Coevolution Quarterly* Spring:6-14.
- Hawker, J. 2006. Personal Interview with John Hawker: Director of Sat-ed. Bangkok, June 24.
- . 2007. Personal Interview with John Hawker: Director of Sat-ed. Bangkok, May 07.
- Heeks, R. 2002. i-Development not e-Development: Special Issue on ICTs and Development. *Journal of International Development* 14 (1):1-11.
- Henderson, J., P. Dicken, M. Hess, N. Coe, and H. W.-C. Yeung. 2002. Global Production Networks and the Analysis of Economy Development. *Review of International Political Economy* 9 (3):436-464.
- Hendrickson, C. 1996. Selling Guatemala: Maya Export Products in US Mail-order Catalogues. In *Cross-cultural Consumption: Global Markets, Local Realities*, ed. D. Howes, 106-121. London: Routledge.
- Hindley, D. 1968. Thailand: The Politics of Passivity. *Pacific Affairs* 41 (3):355-371.
- Hirschman, A. O. 1981. The Rise and Decline of Development Economics. In *Essays in Trespassing: Economics to Politics and Beyond*, 1-21. Cambridge: Cambridge University Press.
- Hongladarom, S. 2000. Negotiating the Global and the Local: How Thai Culture Co-opts the Internet *First Monday* 5 (8):[http://firstmonday.org/issues/issue5\\_8/hongladarom/](http://firstmonday.org/issues/issue5_8/hongladarom/).
- Hopkins, T. K., and I. Wallerstein. 1994. Commodity Chains in the Capitalist World-Economy Prior to 1800. In *Commodity Chains and Global Capitalism*, eds. G. Gereffi and M. Korzeniewicz, 17-50. London: Greenwood Press.
- Hough, R. F. 1968. Impact of the Decline in Raw Silk on the Suwa Basin of Japan. *Economic Geography* 44 (2):95-116.
- Iamlaor, J. 2006. Personal interview with Jintana Iamlaor: Professor of Agricultural Economics at Mahasarakham University, June 16.
- Ichimura, S. 1990. Institutional Factors and Government Policies for Appropriate Technologies in South-east Asia. In *Technology Transfer in the Developing Countries*, ed. M. Chatterji, 307-319. London: Macmillan.
- ILO. 2008. *Government Programmes in Thailand - National Commission on Women's Affairs*. International Labour Organization 2005 [cited June 3 2008]. Available from [http://www.ilo.org/public/english/employment/gems/eeo/program/thailand/gp\\_ncwa.htm](http://www.ilo.org/public/english/employment/gems/eeo/program/thailand/gp_ncwa.htm).
- Ingram, J. C. 1971. *Economic Change in Thailand: 1850 - 1970*. 2nd ed. Stanford: Stanford University Press.

- Intarachai, T. 2003. Toward a Knowledge-Based Economy: Northeastern Thailand. In *Human Resource Development Toward a Knowledge-Based Economy: The Case of Thailand*, eds. M. Makishima and S. Suksiriserekul, 227-267. Chiba: Institute of Developing Economies, Japan External Trade Organization.
- Intrakummerd, P. 2005. The Roles of Intermediaries in Clusters: The Thai Experiences in High-tech and Community-based Clusters. *Asian Journal of Technology Innovation* 13 (2):23-43.
- International Co-operative Alliance. 2008. *Statement on the Co-operative Identity*, . International Co-operative Alliance (ICA) 2008 [cited July 1 2008]. Available from <http://www.ica.coop/coop/principles.html>.
- Internet World Stats. 2007. *Asia Internet Usage and Population*. <http://www.internetworldstats.com/stats3.htm> 2007 [cited December 4 2007].
- Introna, L. D., and H. Nissenbaum. 2000. Shaping the Web: Why the Politics of Search Engines Matters. *The Information Society* 16:169-185.
- Irwin, J., and P. R. Schwartz. 1966. *Studies in Indo-European Textile History*. Ahmedabad: Calico Museum of Textiles.
- Ishaq, A. 2001. On the Global Digital Divide. *Finance and Development* 38 (3):44-47.
- Janelle, D. G., and D. Hodge, C. eds. 2000. *Information, Place, and Cyberspace : Issues in Accessibility* Berlin: Springer.
- Javalgi, R., and R. Ramsey. 2001. Strategic Issues of E-commerce as an Alternative Global Distribution System. *International Marketing Review* 18 (4):376-391.
- Jipp, A. 1963. Wealth of Nations and Telephone Density. *Telecommunication Journal* July:199-201.
- Jomo, K. S. ed. 1998. *Tigers in Trouble: Financial Governance, Liberalisation and Crises in East Asia*. London: Zed Books.
- Jones, H. M. 1890. Trade Report of Siam. *Rangoon Gazette Weekly Budget*, 18 October:1.
- Jory, P. 1999. Thai Identity, Globalisation, and Advertising Culture. *Asian Studies Review* 23 (4):461-487.
- Kaplinsky, R. 2000. Globalisation and Unequalisation: What can be Learned from Value Chain Analysis? *Journal of Development Studies* 37 (2):117-146.
- Kaufman, G. G., T. H. Krueger, and W. C. Hunter. 1999. *The Asian Financial Crisis: Origins, Implications and Solutions*. New York: Springer.
- Kawakami, M. 2008. Exploiting the Modularity of Value Chains: Inter-firm Dynamics of the Taiwanese Notebook PC Industry. *IDE Discussion Paper* (142).
- Kebede, T. 2001. The Potentials of Electronic Commerce. In *Ethiopia in the Knowledge Age*. Addis Ababa: The British Council.
- Keegan, V. 2006. Caught in the Middle of a Net Revolution. *The Guardian* <http://www.guardian.co.uk/technology/2006/may/04/money.comment>.
- Kelley, P. F. 2001. Metaphors of Meltdown: Political Representations of Economic Space in the Asian Financial Crisis. *Environment and Planning D: Society and Space* 19 (6):719-742.
- Kelly, P. F. 1999. The Geographies and Politics of Globalization. *Progress in Human Geography* 23 (3):379-400.
- Kenny, C. 2001. Prioritizing Countries for Assistance To Overcome the Digital Divide. *Communications & Strategies* 4 (1st Quarter):17-36.

- Kessing, D., and S. Lall. 1992. Marketing Manufactured Exports from Developing Countries: Learning Sequences and Public Support. In *Trade Policy, Industrialisation and Development*, ed. G. Helleiner, 176-193. Oxford: Oxford University Press.
- Keys, C. F. 1966. Ethnic Identity and Loyalty of Villagers in Northeastern Thailand. *Asian Survey* 6 (7):362-369.
- . 1967. *Isan in a Thai State*. Ithaca: University of Cornell Press.
- . 1983. Economic Action and Buddhist Morality in a Thai Village. *The Journal of Asian Studies* 42 (4):851-868.
- . 1995. Hegemony and Resistance in Northeastern Thailand. In *Regions and National Integration in Thailand 1892-1992*, ed. V. Grabowsky, 154-182. Wiesbaden: Harrassowitz.
- Khao-Ngam, P. 1995. *More Poems From Banana Tree Horse*. Bangkok: Amarin.
- Kim, W. C., and R. Mauborgne. 1999. Creating the New Market Space. *Harvard Business Review* 77 (1):83-93.
- Kirkman, G. S., P. K. Cornelius, J. D. Sachs, and K. Schwab. 2002. *The Global Information Technology Report 2001-2002: Readiness for the Networked World*. New York: Oxford University Press.
- Kirsch, A. T. 1966. Development and Mobility among the Phu Thai of Northeast Thailand. *Asian Survey* 6 (7):370-378.
- Kitchin, R. 1998. Towards Geographies of Cyberspace. *Progress in Human Geography* 22 (3):385-406.
- Koanantakool, P. C. 2002. Thai Middle-Class Practice and Consumption of Traditional Dance: "Thai-ness" and High art. In *Local Cultures and the "New Asia": The State, Culture, and Capitalism in Southeast Asia*, ed. C. J. W.-L. Wee, 217-242. Singapore: Institute of Southeast Asian Studies.
- Koanantakool, T. 2007. Important Internet Statistics of Thailand. In [http://internet.nectec.or.th/document/pdf/20070824\\_Important\\_Intenet\\_Statistics\\_of\\_Thailand.pdf](http://internet.nectec.or.th/document/pdf/20070824_Important_Intenet_Statistics_of_Thailand.pdf). Bangkok: NECTEC.
- Koehler, W. 1999. An Analysis of Web Page and Web Site Constancy and Permanence. *Journal of the American Society for Information Science* 50 (2):162-180.
- Kogut, B. 1985. Designing Global Strategies: Comparative and Competitive Value Added Chains. *Sloan Management Review* 26 (4):15-28.
- Krippendorff, K. 1980. *Content Analysis: An Introduction to its Methodologies*. London: Sage.
- Krongkaew, M. 2003. The Philosophy of Sufficiency Economy. *Kyoto Review of Southeast Asia* 4:[http://kyotoreview.cseas.kyoto-u.ac.jp/issue/issue3/article\\_292.html](http://kyotoreview.cseas.kyoto-u.ac.jp/issue/issue3/article_292.html).
- Kuchinskas, S. 2006. *E-Commerce on Ice*. Ecommerce-guide.com, June 13 2005 [cited August 2 2006]. Available from <http://www.ecommerce-guide.com/solutions/building/article.php/3512276>.
- Lacan, J. 1977. *The Four Fundamental Concepts of Psychoanalysis*. London: Hogarth Press.
- Lal, D. 1983. General Conclusions. In *The Poverty of 'Development Economics'*, 103-110. London: Institute of Economic Affairs.

- . 1985. The Miconceptions of 'Development Economics'. *Finance and Development* 22:10-13.
- Latour, B. 1991. *We Have Never Been Modern*. Cambridge: Harvard University Press.
- Law, J., and W. E. Bijker. 1992. Postscript: Technology, Stability, and Social Theory. In *Shaping Technology/Building Society - Studies in Sociotechnical Change*, eds. W. E. Bijker and J. Law, 290-309. Cambridge, MA: MIT Press.
- Léa Silk. 2007. *The Foundation*. Léa Silk. <http://www.lea-silk.com/pages/foundation.html>. 2006 [cited November 20 2007]. Available from <http://www.lea-silk.com/pages/foundation.html>.
- Lefferts, H. L. 1988. The Kings as Gods: Textiles in the Thai State. In *Proceedings of the First Symposium of the Textile Society of America*, ed. J. E. Vollmer, 78-85. St. Paul: Minneapolis Institute of Art.
- . 1990. The Cultures of Boxes: Information Flow and Social Organization Among the Northeast Thai and Lao. *Crossroads* 5 (1):59-68.
- Leinbach, T. R. 2001. Emergence of the Digital Economy and E-Commerce. In *Worlds of E-Commerce*, eds. T. Leinbach and S. Brunn, 3-26. New York: Wiley.
- Leslie, D., and S. Reimer. 1999. Spatializing Commodity Chains. *Progress in Human Geography* 23 (3):401-420.
- Lewandowski, D. 2005. Web searching, search engines and Information Retrieval. *Information Services & Use* 25:137-147.
- Lian, D. 2003. Twin Dimensions of Mr. Thaksin's Dual Track Model *Morgan Stanley Global Economic Forum*:<http://www.morganstanley.com/GEFdata/digests/20030507-wed.html#anchor6>.
- Likitkijsonboon, P. 2006. Thais Pay the Price for Political Turmoil. *Far-Eastern Economic Review* 169 (6):49-53.
- Long, M. F. 1966. Economic Development in Northeast Thailand: Problems and Prospects. *Asian Survey* 6 (7):355-361.
- Love, J., and S. Love. 1999. Third World Development and an e-commerce Revolution. In *Electronic Commerce and Developing Countries*. Presentations made at a Workshop organised by UNDP, UNCTAD, IICD and World Bank/infoDev with live video links to 10 locations worldwide: <http://www.acca21.org.cn/info21/info21/telecom99/Booklet.pdf>.
- Lutz, C. A., and J. L. Collins. 1993. *Reading National Geographic*. Chicago: University of Chicago Press.
- Lyon, S. 2006. Evaluating Fair Trade Consumption: Politics, Defetishization, and Producer Participation. *International Journal of Consumer Studies* 30 (5):452-465.
- Lyttleton, C. 1994. The Good People of Isan: Commercial Sex in Northeast Thailand. *The Australian Journal of Anthropology* 5 (3):257-279.
- Ma, D. 1996. The Modern Silk Road: The Global Raw-Silk Market, 1850-1930. *The Journal of Economic History* 56 (2):330-355.
- MacLeod, N. 2006. Cultural Tourism: Aspects of Authenticity and Commodification. In *Cultural Tourism in a Changing World: Politics, Participation and (Re)presentation*, eds. M. K. Smith and M. Robinson, 177-190. Clevedon, UK: Channel View Publications.

- Malecki, E. J. 1997. *Technology and Economic Development*. Second ed. Harlow: Addison Wesley Longman.
- Marx, K. 1867. *Capital, vol. 1*. Online Version: Marx/Engels Internet Archive (marxists.org) 1999; ed. Moscow: Progress Publishers.
- Massey, D. 1993. Power Geometry and a Progressive Sense of Place. In *Mapping the Futures: Local Cultures, Global Change*, eds. J. Bird, B. Curtis, T. Putnam, G. Robertson and L. Tickner, 59-69. London: Routledge.
- . 1999. Imagining Globalization: Power Geometries of Time-Space. In *Global Futures: Migration, Environment and Globalization*, eds. A. Brah, M. Hickman and M. Mac an Ghail, 27-44. New York: St. Martin's Press.
- . 2005. *For Space*. London: Sage.
- Maxwell, R. J. 2003. *An Introduction to Southeast Asian Textile History*. Hong Kong: Periplus.
- McGuirk, R. 2006. Thai Coup Sparks Condemnation, Unease. *Guardian Unlimited*:<http://www.guardian.co.uk/worldlatest/story/0,-6092356,00.html>.
- McVey, R. 2000. Of Greed and Violence and Other Signs of Progress. In *Money and Power in Provincial Thailand*, ed. R. McVey, 1-29. Honolulu: University of Hawai'i Press.
- Mephokee, C. 2002. Information Technology: Some Implications for Thailand. In *Digital Divide or Digital Jump-Beyond 'IT' Revolution*, eds. M. Kagami and M. Tsuji, 135-159. Chiba: Institute of Developing Economies, JETRO.
- Mills, M. B. 1999. *Thai Women in the Global Labor Force: Consuming Desires, Contested Selves*. New Brunswick, New Jersey: Rutgers University Press.
- Mitchell, W. J. 1995. *City of Bits: Space, Place and the Infobahn*. Cambridge, Mass: MIT Press.
- Molla, A. 2005. Exploring the Reality of eCommerce Benefits Among Businesses in a Developing Country. In *Development Informatics: Working Papers*, ed. D. R. Heeks. Manchester: The University of Manchester.
- Montlake, S. 2007. Uncertain Future Looms for Ancient Thai Silk. *The Christian Science Monitor*, July 31:<http://www.csmonitor.com/2007/0731/p20s01-alar.html>.
- Morton, A. 1989. Thailand's Million-Dollar Moth. *New Scientist* November 25:<http://www.newscientist.com/article/mg12416923.700-thailands-milliondollar-moth-traditional-silk-fromthailand-is-unlike-the-massproduced-fabrics-of-china-and-india-if-thecountry-is-to-revive-its-silk-industry-it-must-look-to-its-misshapen-nativesilk-worm-for-support-.html>.
- Mujahid, Y. H. 2001. Digital Opportunity Initiative For Pakistan. *Pakistan Economist* 33 (11):<http://www.pakistaneconomist.com/issue2001/issue33/etc11.htm>.
- Murphy, C. 2006. A Tug of War for Thailand's Soul. *Far-Eastern Economic Review* 169 (7):23-29.
- Murrell, J. 2007. "Disintermediation Blues" shoots up the charts. [http://svextra.com/blogs/gmsv/2007/10/disintermediation\\_blues\\_shoots\\_up\\_the\\_charts.html](http://svextra.com/blogs/gmsv/2007/10/disintermediation_blues_shoots_up_the_charts.html) 2007 [cited December 03 2007].
- Mutersbaugh, T. 2004. Serve and Certify: Paradoxes of Service Work in Organic-Coffee Certification. *Environment and Planning D: Society and Space* 22 (4):533 – 552.

- Mutersbaugh, T., D. Klooster, M.-C. Renard, and P. Taylor. 2005. Certifying rural spaces: Quality-Certified Products and Rural Governance. *Journal of Rural Studies* 21 (4):381-388
- Myint, H. 1954. An Interpretation of Economic Backwardness. *Oxford Economic Papers* 6 (6):132-163.
- Naenna, P. C. 1990. *Costume and Culture: Vanishing Textiles of Some of the Tai Groups in Laos P.D.R.* Honolulu: University of Hawaii Press.
- National Information Technology Committee Secretariat. 2003. Information Technology Policy Framework 2001-2010: Thailand Vision Towards a Knowledge-Based Economy. Bangkok: National Electronics and Computer Technology Center.
- National News Bureau. 2007a. Hua Hin Jazz Festival 2007 to Draw in 65,000 Visitors. *National News Bureau Public Relations Department* May 15.
- . 2007b. NCCD Launch Anti-Narcotics Campaign, Focusing on Youths. *National News Bureau Public Relations Department* June 05.
- National Statistical Office. 2007. Key Statistics of Thailand. In <http://web.nso.go.th/eng/en/pub/pub0.htm>. Bangkok: Statistical Forecasting Bureau.
- NECTEC. 2002. *Internet User Profile of Thailand 2001*. Bangkok: NECTEC.
- . 2006. *Internet users in Thailand*. National Electronics and Computer Technology Center 2004 [cited August 2 2006]. Available from <http://iir.ngi.nectec.or.th/internet/user-growth.html>.
- . 2007. Internet Users and Statistics in Thailand, ed. <http://internet.nectec.or.th/webstats/internet.user.graph.php>. Bangkok: NECTEC.
- Nilvarangkul, K., J. Wongprom, C. Tumngong, A. Supornpun, S. Pattama, and N. Srithongchai. 2006. Strengthening the Self-Care of Women Working in the Informal Sector: Local Fabric Weaving in Khon Kaen, Thailand (Phase I). *Industrial Health* 44:101-107.
- Nissanke, M., and E. Thorbecke. 2006. Channels and Policy Debate in the Globalization–Inequality–Poverty Nexus. *World Development* 34 (8):1338-1360
- Ntoko, A. 2007. e-Business: A Technology Strategy for Developing Countries. <http://www.itu.int/ITU-D/e-strategies/2007/publications-articles/wmrcjune00/ntoko.html>: International Telecommunication Union.
- O'Brien, R. 1992. *Global Financial Integration : The End of Geography*. New York: Council on Foreign Relations Press.
- O'Keefe, R. M., G. O'Connor, and H.-J. Kung. 1998. Early Adopters of the Web as a Retail Medium: Small Company Winners and Losers. *European Journal of Marketing* 32 (7/8):629-643.
- OECD. 1999. *The Economic and Social Impact of Electronic Commerce*. Paris: OECD Publications.
- Office of Technology Assessment. 1994. *Electronic Enterprises: Looking to the Future*. Washington D.C.: US Government Printing Office.
- Ohno, A., and B. Jirapatpimol. 1998. The Rural Garment and Weaving Industries in Northern Thailand. In *Toward the Rural-Based Development of Commerce and Industry : Selected Experiences from East Asia*, ed. Y. Hayami, 131-159. Washington D.C.: The World Bank.

- Otsuka, K. 1982. The Transfer of Technology in Japan and Thailand: Sericulture and the Silk Industry. *Development and Change* 13:421-445.
- Overå, R. 2006. Networks, Distance, and Trust: Telecommunications Development and Changing Trading Practices in Ghana. *World Development* 34 (7):1301-1315.
- Palasri, S., S. Huter, and Z. Wenzel. 1999. *The History of the Internet in Thailand*. Eugene, Oregon: University of Oregon Books.
- Parnwell, M. J. G. 1993. Tourism and Rural Handicrafts in Thailand. In *Tourism in Southeast Asia*, eds. M. Hitchcock, V. T. King and M. J. G. Parnwell, 234-257. London: Routledge.
- Parry, R. L. 2007. Moment of Vandalism may Lead to a Lifetime in Prison. *The Times* <http://www.timesonline.co.uk/tol/news/world/asia/article1505585.ece>:March 13.
- Pascal, A. 1987. The Vanishing City. *Urban Studies* 24:597-603.
- Paulson, A. L., and R. Townsend. 2004. Entrepreneurship and financial constraints in Thailand. *Journal of Corporate Finance* 10 (2):229-262
- Pendelton, R. L. 1943. Land Use in Northeastern Thailand. *Geographical Review* 33 (1):15-41.
- Phaloprakarn, S. 2006. Personal interview with Somkiet Phaloprakarn: Director of ThaiTambon.com, June 25.
- . 2007. Personal interview with Somkiet Phaloprakarn: Director of ThaiTambon.com, June 07.
- Phongpaichit, P., and C. Baker. 2002. 'The Only Good Populist is a Rich Populist': Thaksin Shinawatra and Thailand's Democracy. *Working Paper Series* 32:[http://www.cityu.edu.hk/searc/WP36\\_02\\_PasukBaker.pdf](http://www.cityu.edu.hk/searc/WP36_02_PasukBaker.pdf).
- . 2004. *Thaksin: The Business of Politics in Thailand*. Chiang Mai: Silkworm Books.
- . 2005. Thailand's Malaise Under Thaksin. *Far-Eastern Economic Review* 168 (8):44-47.
- Pieterse, J. N. 2001. *Development Theory: Deconstructions/Reconstructions*. London: Sage.
- Pil, F., and M. Holweg. 2006. Evolving from Value Chain to Value Grid. *MIT Sloan Management Review* 47 (4):72-80.
- Platt, M. B. 2002. *Regionalism and Modern Thai Literature*, University of London, London.
- Pongpaibool, P. 2007. Characteristics of Internet Traffic in Thailand. In [http://internet.nectec.or.th/document/pdf/20060329ECTI2006\\_panita.pdf](http://internet.nectec.or.th/document/pdf/20060329ECTI2006_panita.pdf). Bangkok: NECTEC.
- Poon, S., and C. Jevons. 1997. Internet-Enabled International Marketing: A Small Business Network Perspective. *Journal of Marketing Management* 13:29-41.
- Poon, S., and P. M. C. Swatman. 1999. An Exploratory Study of Small Business Internet Commerce Issues. *Information and Management* 35 (1):9-18.
- Porter, M. E. 1990. *The Competitive Advantage of Nations*. New York: The Free Press.
- . 2001. Strategy and the Internet. *Harvard Business Review* March:63-78.
- Porter, M. E., J. D. Sachs, P. K. Cornelius, J. W. McArthur, and K. Schwab. 2002. *The Global Competitiveness Report 2001-2002*. New York: Oxford University Press.
- Praiwan, Y., and Y. Jitpleecheep. 2006. Government gives Otop a new name. *Bangkok Post* November 17.



- Prammanee, N. 2003. A Critical Analysis of Adoption and Utilization of the Internet in Thailand for Educational Purposes. *First Monday* 8 (1):[http://www.firstmonday.org/issues/issue8\\_1/prammanee/](http://www.firstmonday.org/issues/issue8_1/prammanee/).
- Prebisch, R. 1981. The Latin American Periphery in the Global System of Capitalism. *CEPAL Review* 13:143-150.
- Purcell, F., and J. Toland. 2004. Electronic Commerce for the South Pacific: A Review of E-Readiness. *Electronic Commerce Research* 4:241-262.
- Pye, E. A. 1988. Artisans in Economic Development: Evidence from Asia, Research Report 262e. Ottawa: IDRC.
- Quelch, J. A., and L. R. Klein. 1996. The Internet and International Marketing. *Sloan Management Review* Spring:60-75.
- Quist-Adade, C., and A. van Wyk. 2007. The Role of NGOs in Canada and the USA in the Transformation of the Socio-Cultural Structures in Africa. *Africa Development* 32 (2):41-65.
- Raikes, P., M. F. Jensen, and S. Ponte. 2000. Global Commodity Chain Analysis and the French *Filière* Approach: Comparison and Critique *Economy and Society* 29 (3):390-417.
- Rangan, K., M. Menezes, and E. Maier. 1992. Channel Selection for New Industrial Products: A Framework, Method, and Application. *Journal of Marketing* 56:69-82.
- Rani, S. G. 1998. *Sericulture and Rural Development*. New Delhi: Discovery Publishing House.
- Ratprasatporn, P., and K. Thienpreecha. 2008. *Foreign Investment in Thailand: Review of the Current Legislative Regime*. Thailand Board of Investment 2002 [cited Mar 14 2008]. Available from [http://www.boi.go.th/english/download/business\\_analysis/26/foreign-investment-laws.pdf](http://www.boi.go.th/english/download/business_analysis/26/foreign-investment-laws.pdf).
- Reynolds, C. J. ed. 2002. *National Identity and Its Defenders: Thailand Today*. Chiang Mai: Silkworm Books.
- Rhodes, J. 2003. Can E- Commerce Enable Marketing in an African Rural Women's Community Based Development Organisation? *Informing Science Journal* 6:157-172.
- Richards, G. 1999. Culture, Crafts, and Tourism: A Vital Partnership. In *Developing and Marketing Crafts Tourism*, ed. G. Richards, 11-35. Arnheim: ATLAS.
- Richmond, A. H. 1994. *Global Apartheid: Refugees, Racism and the New World Order*. Oxford: Oxford University Press.
- Riggs, F. W. 1966. *Thailand: The Modernization of a Bureaucratic Polity*. Honolulu: East-West Press.
- Robins, K. 1995. Cyberspace and the World We Live In. In *Cyberpunk/Cyberspace/Cyberbodies*, eds. M. Featherstone and R. Burrows, 135-156. London: Sage.
- Robison, R., R. Higgott, and K. Hewison. 1987. Crisis in Economic Strategy in the 1980s: The Factors at Work. In *Southeast Asia in the 1980s: the Politics of Economic Crisis*, eds. R. Robison, R. Higgott and K. Hewison. Sydney: Allen & Unwin.

- Roessner, J. D., and A. L. Porter. 1990. Achieving Technology-based Competitiveness in Developing Countries. In *Technology Transfer in the Developing Countries*, ed. M. Chatterji, 94-103. London: Macmillan.
- Romero, S. 2000. Weavers Go Dot-Com, and Elders Move In. *New York Times*, Mar 28.:A1, A4.
- Rose, G. 2001. *Visual Methodologies*. London: Sage Publications.
- Rose, J. 1986. *Sexuality in the Field of Vision*. London: Verso.
- Sahansakul, C. 1992. *Lessons From the World Bank Experience of Structural Adjustment Loans: the Case of Thailand*. Bangkok: Thailand Development Research Institute.
- Said, E. 1978. *Orientalism*. New York: Vintage Books.
- Sambandaraksa, D. 2006. Bringing the Market to the Village. *Bangkok Post*:front page.
- Sardar, Z. 1996. alt.civilizations.faq: Cyberspace as the Darker Side of the West. In *Cyberfutures: Culture and Politics on the Information Superhighway*, eds. Z. Sardar and J. R. Ravetz. New York: New York University Press.
- Sarkar, M., B. Butler, and C. Steinfield. 1998. Cybermediaries in Electronic Marketspace: Toward Theory Building. *Journal of Business Research* 41:215-221.
- Sat-Ed. 2006. *Rooms for Life Village Project*. Sat-Ed System Co. 2006 [cited September 18 2006]. Available from <http://www.sat-ed.com/projects.html>.
- Schech, S. 2002. Wired for Change: The Links Between ICTs and Development Discourses. *Journal of International Development* 14:13-23.
- Schmitz, H. ed. 2004. *Local Enterprises in the Global Economy: Issues of Governance and Upgrading*. Cheltenham: Edward Elgar.
- Scott, J. C. 1976. *Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press.
- Scrase, T. J. 2003. Precarious Production: Globalisation and Artisan Labour in the Third World. *Third World Quarterly* 24 (3):449-461.
- Selwyn, N. 2004. Reconsidering Political and Popular Understandings of the Digital Divide. *New Media & Society* 6 (3):341-362.
- Sheares, C. 1984. Ikat Patterns From Kampuchea: Stylistic Influences. *Heritage* 7:45-53.
- Sheppard, E. 2002. The Spaces and Times of Globalization: Place, Scale, Networks, and Positionality. *Economic Geography* 78 (3):307-330.
- Siamwalla, A., C. Pinthong, N. Poapongsakorn, P. Satsanguan, P. Nettayarak, W. Mingmaneeakin, and Y. Tubpun. 1990. The Thai Rural Credit System: Public Subsidies, Private Information, and Segmented Markets. *World Bank Economic Review* 4 (3):271-295.
- Sidham, P. 1994. *People of Esarn*. Bangkok: Shire Books.
- Silk of Siam. 2008. *Napho (Lai See) Silk*. [silkofsiam.com](http://www.silkofsiam.com) 2008 [cited May 23 2008]. Available from <http://www.silkofsiam.com>.
- Slater, D. 1998. Analysing Cultural Objects: Content Analysis and Semiotics. In *Researching Society and Culture*, ed. C. Seale, 233-244. London: Sage.
- Smalley, W. A. 1994. *Linguistic Diversity and National Unity: Language Ecology in Thailand*. Chicago: University Of Chicago Press.

- Smith, A., A. Rainnie, M. Dunford, J. Hardy, R. Hudson, and D. Sadler. 2002. Networks of Value, Commodities and Regions: Reworking Divisions of Labour in Macro-Regional Economies. *Progress in Human Geography* 26 (1):41-63.
- Smith, P. 2002. What do Thai Wine and 'Thaksinomics' Have in Common? *International Herald Tribune*, November 7.
- South East Asia Monitor. 2004. Economy Risk — Growth To Slow In 2005 15 (11):6.
- Steinmueller, E. W. 2001. ICTs and the Possibilities for Leapfrogging by Developing Countries. *International Labour Review* 140 (2):193-210.
- Stephen, L. 1993. Weaving in the Fast Lane: Class, Ethnicity, and Gender in Zapotec Craft Commercialization. In *Crafts in the World Market*, ed. J. Nash, 25-57. Albany: State University of New York Press.
- Streckfuss, D. 1995. Kings in the Age of Nations: The Paradox of Lese-Majeste as Political Crime in Thailand *Comparative Studies in Society and History* 37 (3):445-475.
- Sturgeon, T. 2001. How Do We Define Value Chains and Production Networks? *IDS Bulletin* 32 (3):9-18.
- . 2003. Exploring the risks of value chain modularity: electronics outsourcing during the industry cycle Of 1992-2002. In *MIT Industrial Performance Center Working Paper 03-002*.
- . 2008. From Commodity Chains to Value Chains: Interdisciplinary Theory Building in an Age of Globalization. In *Massachusetts Institute of Technology Working Paper Series*. Cambridge, MA: Massachusetts Institute of Technology
- Sturgeon, T., V. Biesebroeck, and G. Gereffi. 2008. Value Chains, Networks and Clusters: Reframing the Global Automotive Industry. *Journal of Economic Geography* 8 (3):297-321.
- Sudham, P. 2002. *Shadowed Country*. Bangkok: Asiashire.
- Suphachalasai, S. 1994. Thailand's Clothing and Textile Exports. Singapore: Institute of Southeast Asian Studies.
- Tambiah, S. J. 1970. *Buddhism and the Spirit Cults in North east Thailand*. Cambridge: Cambridge University Press.
- Tameyapradit, K. 2002. Telephone Organization of Thailand. In *APT Seminar on Digital Opportunity for All*. Chiang Rai, Thailand.
- Tanburn, J., and A. D. Singh. 2001. ICTs and Enterprises in Developing Countries: Hype or Opportunity? In *Series on Innovation and Sustainability in Business Support Services (FIT)*. Geneva: International Labour Office.
- Tantong, P. 2003. Market Orientation and Export Performance in Thailand: A Moderating Effect of International Marketing Strategy. Dissertation, Business Administration, Old Dominion University, Norfolk, Virginia.
- Tate, D. J. M. 1971. *The Making of Modern South East Asia*. Kuala Lumpur: Oxford University Press.
- Thailand's National Economic and Social Development Board and the World Bank. 2005. Thailand Northeast Economic Development Report, [http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1097667766090/need\\_report-2005-eng.pdf](http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1097667766090/need_report-2005-eng.pdf). Bangkok: Thailand's National Economic and Social Development Board and the World Bank.

- Thailand Board of Investment. 2008. *PM Backs Finance Ministry Plan To Spur Economy With Village Fund*. Thailand Board of Investment 2008 [cited May 14 2008]. Available from [http://www.boi.go.th/english/how/press\\_releases\\_detail.asp?id=2400](http://www.boi.go.th/english/how/press_releases_detail.asp?id=2400).
- Thomson, C. N. 1993. Political Identity among Chinese in Thailand. *Geographical Review* 83 (4):397-409.
- Thuvasethakul, C., and T. Koanantakool. 2002. National ICT Policy in Thailand. In *Africa-Asia Workshop: Promoting Co-operation in Information and Communications Technologies Development*. Kuala Lumpur and Penang, Malaysia: <http://www.nectec.or.th/users/htk/publish/20020302-National-ICT-Policy-v16-word.pdf>.
- Tobler, W. R. 1970. A Computer Movie Simulating Urban Growth in the Detroit Region. *Economic Geography* 46 (2):234-240.
- Tonguthai, P., S. Thomson, and M. Bhongsug. 1998. *Country Briefing Paper: Women in Thailand*. Manila: Asian Development Bank.
- Tonkiss, F. 1998. Analysing Discourse. In *Researching Society and Culture*, ed. C. Seale, 245-260. London: Sage.
- Townsend, A. M. 2001. Network Cities and the Global Structure of the Internet. *American Behavioral Scientist* 44 (10):1697-1716.
- Toye, J. 1993. *Dilemmas of Development : Reflections on the Counter-Revolution in Development Economics*. Oxford: Blackwell.
- UNCTAD. 2002. Electronic Commerce Strategies for Development: The Basic Elements of an Enabling Environment for E-Commerce. In *Expert Meeting on Electronic Commerce Strategies for Development*. Geneva: United Nations.
- . 2003. E-Commerce and Development Report. Geneva: United Nations.
- . 2005. Information Economy Report. New York: United Nations.
- . 2006a. The Digital Divide Report. New York: UNCTAD.
- . 2006b. Using ICTs to Achieve Growth and Development. New York: UNCTAD.
- . 2007. Information Economy Report. New York: United Nations.
- UNCTAD/WTO. 1997. *Silk Review 1997: A Survey of International Trends in Production and Trade*. Geneva: International Trade Centre UNCTAD/WTO.
- . 2002. *Silk Review 2001: A Survey of International Trends in Production and Trade*. Geneva: International Trade Centre UNCTAD/WTO.
- UNDP. 2007. *Thailand Human Development Report 2007*, ed. C. Baker. Bangkok: United Nations Development Programme.
- UNESCO. 2008. *ICTs for Intercultural Dialogue*. UNESCO 2006 [cited May 1 2008]. Available from [http://portal.unesco.org/ci/en/ev.php-URL\\_ID=14203](http://portal.unesco.org/ci/en/ev.php-URL_ID=14203).
- United Nations. 1994. *Silk In Asia*. Bangkok: The Economic and Social Commission for Asia and the Pacific.
- . 2002. The Monterrey Consensus: Report of the International Conference on Financing for Development, 1-101. Monterrey, Mexico: United Nations.
- . 2003a. E-commerce and Development Report 2003. New York: United Nations.
- . 2003b. *Poverty Reduction Practices: Information and Communication Technology For Rural Poverty Reduction*, ed. Committee on Poverty Reduction,

- [http://www.unescap.org/pdd/CPR/CPR2003/English/CPR\\_4E.pdf](http://www.unescap.org/pdd/CPR/CPR2003/English/CPR_4E.pdf). Bangkok: United Nations Economic and Social Council.
- United Nations Development Programme. 2005. Do Governments Actually Believe that ICT Can Help Alleviate Poverty? In *Poverty Reduction Strategy Papers*, <http://www.apdip.net/apdipenote/2.pdf>: United Nations.
- Vanichvisuttikui, S., and C. Jungthirapanich. 2004. The Assessment of E-commerce Awareness on Highly Valuable Traditional Products in Thailand. In *IEEE International Conference on e-Technology, e-Commerce, and e-Service*, 68-75. Taipei, Taiwan: IEEE.
- Visvanathan, S. 1988. On the Annals of the Laboratory State. In *Science, Hegemony and Violence: A Requiem for Modernity*, ed. A. Nandy, 257-288. Tokyo: United Nations University.
- Wachowski, L., and A. Wachowski. 1999. The Matrix, 120 mins. USA: Warner Bros.
- Waltham, T. 2002. Conference Puts ICT in the Limelight. *Bangkok Post*, December 4.
- Warf, B. 2001. Segueways into Cyberspace: Multiple Geographies of the Digital Divide. *Environment and Planning B: Planning and Design* 28:3-19.
- Warren, W. 1970. *The Legendary American: The Remarkable Career and Strange Disappearance of Jim Thompson*. Boston: Houghton Mifflin.
- Weare, C., and W. Lin. 2000. Content Analysis of the World Wide Web. *Social Science Computer Review* 18 (3):272-292.
- Whittaker, D. H., T. Zhu, T. Sturgeon, M. H. Tsai, and T. Okita. 2007. Compressed Development in East Asia. In *ITEC Working Paper Series 07-29*: Doshisha University.
- Wilson, D. A. 1966. Introductory Comment on Politics and the Northeast. *Asian Survey* 6 (7):349-352.
- Winichakul, T. 1994. *Siam Mapped: A History of the Geo-Body of a Nation*. Honolulu: University of Hawaii Press.
- Wood, F. 2002. *Silk Road: Two Thousand Years in the Heart of Asia*. Berkeley: University of California Press.
- World Bank. 2000. The Artisan as Entrepreneur. *WBINews* Summer/Fall:3.
- . 2005. Equity and Development: World Development Report 2006. Washington D.C.: The World Bank.
- Wyatt, D. K. 1966. Northeast Thailand: An Historical Perspective. *Asian Survey* 6 (7):353-354.
- . 1984. *Thailand: A Short History*. New Haven: Yale University Press.
- Yearman, K., and A. Gluckman. 2005. Falling Off a Cliff. *Dollars & Sense* September.
- Yeung, H. W.-c., and G. C. S. Lin. 2003. Theorizing Economic Geographies of Asia. *Economic Geography* 79 (2):107-128.
- Yeung, H. W.-c., L. Weidong, and P. Dicken. 2006. Transnational corporations and network effects of a local manufacturing cluster in mobile telecommunications equipment in China. *World Development* 34 (3):520-540.
- Yukol, C. 1974. *Hotel Angel*. Thailand: Mangpong.
- . 1990. *Song of Chao Phraya (Nong mia)*. Thailand: Mangpong.
- Zook, M. 2000. The Economic Geography of Commercial Internet Content Production in the United States. *Environment and Planning A* 32:411-426.

- . 2007. Your Urgent Assistance is Requested: The Intersection of 419 Spam and New Networks of Imagination. *Ethics, Place and Environment* 10 (1):65-88.
- Zook, M., and M. Graham. 2007a. The Creative Reconstruction of the Internet: Google and the Privatization of Cyberspace and DigiPlace. *Geoforum* 38:1322–1343.
- . 2007b. From Cyberspace to DigiPlace: Visibility in an Age of Information and Mobility. In *Societies and Cities in the Age of Instant Access*, ed. H. J. Miller, 231-244. London: Springer.
- . 2007c. Mapping DigiPlace: Geocoded Internet Data and the Representation of Place. *Environment and Planning B: Planning and Design* 34 (3):466 – 482.

## VITA

### Place of Birth

Manchester, United Kingdom. May 25, 1980.

### Education

2002-2004 Western Kentucky University, Bowling Green, Kentucky.  
*MSc in Geoscience*

1999-2002 Western Kentucky University Bowling Green, Kentucky  
*BSc in Geography*

### Publications

Graham, M. 2008. Warped Geographies of Development: The Internet and Theories of Economic Development. *Geography Compass*, 2(3), 771-789.

Brunn, S., R. Ghose, & M. Graham. 2008. Cities of the Future and the Future of Cities. In *Cities of the World, 4th edition*, eds S. Brunn, M. Hays-Mitchell, and D. Ziegler. Rowman and Littlefield.

Zook, M. & M. Graham. 2007. The Creative Reconstruction of the Internet: Google and the Privatization of Cyberspace and DigiPlace. *Geoforum*, 38, 1322-1343.

Zook, M. & M. Graham. 2007. From Cyberspace to DigiPlace: Visibility in an Age of Information and Mobility. In *Societies and Cities in the Age of Instant Access*. Ed. H. J. Miller. Springer, 231-244.

Zook, M. & M. Graham. 2007. Mapping DigiPlace: Geocoded Internet Data and the Representation of Place. *Environment and Planning B: Planning and Design*. 34(3) 466-482.

Graham, M. 2006 For Space. Book review essay in *Growth and Change*, Vol 37:4, 643-645.

Zook, M. & M. Graham. 2006. Wal-Mart Nation: Mapping the Reach of a Retail Colossus. In *Wal-Mart World*. Ed. S. Brunn. Routledge, 15-25.

Graham, M. 2005. Working in Silicon Valley. Book review essay in *Urban Studies* Vol. 42:13, 2535-2537