

CHAPTER VII

CONCLUSION

“The question, which I have often asked myself in this connection, albeit with the benefit of hindsight, is whether we have been a little too unquestioning and a little too fast in embracing forces of the market from outside? Could we have been more discriminate and selective in our approach?” - Former Prime Minister Prem Tinsulanonda

There is no doubt that the key to understanding situations using an actor-network approach is to understand how to “see differently.” Not only in the manner of how observation is approached by an observer, but also in the manner of how to understand the way others, the objects of study, see each other. My dissertation examines changes in the knowledge and understanding of networks by using the concept of translation whereby new information is acquired by networks, analyzed, mapped into knowledge, transformed and mobilized by practice, resulting in a displacement of network into a new shape and action. Such is how we see organic farming because the concept itself is vague, disputed, and constantly acquiring new definitions. If it was enough to be pesticide free then almost half of the agricultural practices in Thailand would be organic, but its not. The propitiators of organic regulations have spread their arms wide to codify many practices and embrace many claims, including biodiversity, fair trade, and social welfare, all of which are seen differently by the various networks producing regulations for agricultural practices to match their claims. All of these criteria must, in the end, be independently certified by a recognized third party organization, providing legitimacy to the production process and excluding all other producers from the certified marketplace.

7.1 General conclusions

This dissertation organized the many different concepts, ideals, processes and beliefs of Thailand’s certified agriculture using an actor-network approach.

Certified, agricultural commodity networks were classified into four general approaches, being corporate, governmental, NGO, and private. Each of these groups has the ability to offer farmers different incentives and access as rewards for entering into their networks. Certification was analyzed as discursive objects practiced by different coalitions possessing unequal power. The attributes of certification were seen to become symbolized as labels, logos, and even as spaces, communicating the qualities and social ideals used in the agricultural production processes. As network objects, regulatory standards hold commodity networks together through the participation and acceptance of discourse coalitions. Together, the assemblage of coalitions enacts the various functions of the network, bringing about stability and shape. Finally, agricultural networks were described as complex arrangement of objects bounded by practice. The ordering and organization of one network distinguished it as unique from all others. However, networks are permeable, and new information, as network objects, may be accepted by a network, transformed and hybridized into something new, become a new form of practice. The network becomes displaced as something new, its shape changed and its functioning altered. The example given in this dissertation demonstrated how an entirely new network can emerge from the acceptance and translation of multiple network objects.

Objects of agricultural certification are complicated by the imposition of social, economic and environmental values. These were spatially distinguished as neoliberal, global, national, and local attitudes, opinions, practices. The values at the local level were described as community culture, a term which though contested helps to describe the social conditions in the Northern Thai village. Economic concerns include access to local, national and global markets, the difference between farm-gate price of certified and uncertified vegetables, and the relative power over pricing commanded by different labeling. Environmental issues, such as biodiversity, were considered as some forms of certified agricultural allow the use of pesticides, others allow non-discriminatory traps, while still others do not allow the chemicals or non-discriminatory devices at all.

Agricultural commodity networks are dependent on the participation of farmers. They are the producers; they representing the point of origin of the certified vegetable commodity network. However, farmers need a point of entry to sell their

produce. They need either a market location or an assembler to collect and resell their vegetables. Farmers need training to be certified, they need access to knowledge, one of the key incentives provided by each of the four general approaches outlined in this research. This is the event that determines which regulated agriculture production process, if any, will be practiced. Each of the four approaches to certification mark a point of passage for farmers to enter into a certified commodity network. Each approach is able to express its power over the network in different ways. My first question rests its premise on power and discourse and is answered through examining these approaches.

Corporations offer access to markets, training, and certification. They may also offer direct financial gain. However, the corporation can not offer personal relationships or the security found in communities based on common culture and goals. The corporation operates within a neoliberal framework of free markets and cost structures. Farmer groups will find economic gain as long as consumer demand and producer supply remains constant. The corporation will also specify the cultivars to be used and the quantities and qualities to be produced, these often being introduced crops, not often used by the farmer or the community, if at all. Markets are not readily available for unacceptable produce, and the method of agriculture does not promote mixed cropping or tolerance for local vegetables which are seen as weeds. The government may also offer economic incentives and training, and possibly provide access to market places for farmers participating in government approved projects. In the case of RPF, the government acts as a corporation, directly purchasing the produce from the farmer. However, government projects come with political agendas also complicating commodity network with various ideals and concerns, including issues of patronage and support of the political power and agenda helping the farmer.

Northern Thai farmers enter into economic and social benefits by following certified, pesticide free vegetable production processes. However, while it is possible for farmers to gain access to the certified markets, the opportunities for participation are limited and available only through close association with community organizations or small enterprises. Continued research into this question may seek to find more practical applications of certified agricultural practices for Northern Thai

farmers. Though ACT would like to be the international standard for all of Thailand, many different perspectives and perceptions of organic exist. Different agricultural standards offer access to different scales of production, distribution, and market location. In Northern Thailand, agricultural certification for national markets is limited to GAP, “Safety Vegetable”, NOSA, and MCC standards. Farmers accepting these standards open up some markets and exclude others.

Investigating the certified vegetable market in Northern Thailand demonstrates opportunity for further collaborative investigation into the issues concerning scale, social justice, biodiversity and consumer perceptions of vegetable quality and safety. Small scale farmers are severely restricted from participating in large-scale markets. GAP and “Safety Vegetable” address issues of pesticide safety but not of overall working conditions. Many standards based on IPM techniques do not recognize issues of biodiversity. Further study is needed to understand how these issues become articulated or excluded from regulations and how consumers respond to these issues as purchasing decisions.

At this time different coalitions of Thai consumers have established commodity networks around GAP, “Safety Vegetable”, and NOSA standards. Except for NOSA, the general public appears to have been excluded from direct participation in the creations of production standards. Further research is needed to understand the role of consumers and consumer advocacy groups on official policy regarding certified production processes. Research is also needed to ascertain if the public is involved in the establishment of these standards and the role, if any, of consumer advocacy groups on government policy regarding organic production.

Certified vegetable networks cross over many institutions at differing levels of scale, power, and differing objectives. They bring together the influence of international NGOs, the needs of local farmers, and government resources as directed by key individuals acting as local leaders. Local networks emerge from civil society, through the formation of local governance over specific issues to meet the needs of subgroups otherwise neglected, or unseen, by the government. Further study is needed to determine if these local, and at times quasi-official actions insinuate themselves into official institutions, policy, and action.

NGOs also invest political power and social agendas into their commodity networks. They may provide markets, training and certification. NGOs usually help farmers understand their rights and benefits. They may support the tenants of local production and sufficiency economy, as does NOSA, or they may be directed to neoliberal, export agendas, such as GreenNet. The point is that all of the corporate or institutionally based approaches come with additional messages and unequal power relations placing the farmer into a role of accepting more than certification and a market. Local, private contractors also offer training, marketing, and personal relationships. The scale of these operations requires much close, personal contact. The relationship, based on participation in personal and community events, strengthens the allegiance of the farmer to the contractor. The relationship is based on *krengchai*, a form of social interaction deeply rooted in Thai culture. This type of relationship is different from what is offered to an NGO leader, which is generally the respect given to a teacher, *ajarn*, but not as complicated as the relationship with the government or a corporation, which is a much more complicated process of patronage, which is linked more closely with domination than personal respect.

The network, from producer to consumer, is organized around the acceptance of objects of discourse. These are the regulations of agricultural production process, social values, beliefs, traditions, political objectives, and market policies, to name a few, which guide the actions of the actors in the network. This dissertation presents these actors as discourse coalitions, organized groups of actors agreeing to practice a particular regulatory process, or at least most of the objects within it. The use of concept of object makes a simple way to describe the complex sets of ideas within a network. The role of the certifying body is to be sure that all of the objects within the regulatory process are being practiced by the farmer. The actual certification bounds all of the objects into a single, symbolic representation, usually expressed as a name, a logo, or a sign. Once made symbolic, the certification carries with it power by differentiation the product from all other commodities and the value (price) given to the meaning being the certification from social acceptance.

Certifications are representations of power and authority. The logos and other documentations give legitimacy to the agricultural production processes practiced by the farmer and thereby represent the produce as some understanding or

organic or safe to eat. The certification itself is a conduit of meaning between the producer and consumer. It represents the desires of the consumer for vegetables with specific qualities of healthiness, environmental protection and social responsibility. These discursive values are prized as social values. Certification imparts these values into representational feelings associated with the produce.

Regulatory discourse brings power into the relationship between producer and consumer, and in doing so activates the power relationships throughout the entire commodity network. I have argued that it is the certification itself, based on the regulatory standards practiced in the agricultural process of production which brings these vegetable commodity networks together. The certifier, or certifying body, has great responsibility over the power to approve that specific standards were met and production processes achieved. Once approved, the produce moves through a chain of custody from the farmer to assembler to retailer and finally to consumer, though assemblers and retailers may not always be present in the network. With certification, markets can be established, communication will occur, and transactions can begin.

Network boundaries are the dynamic meeting grounds of regulations and markets. None of the certified vegetable commodity networks stand alone in isolation. Ideas are shared by their producers, certifiers, retailers, and customers. Even when they do not actually intersect in the markets, consumer and societal perceptions impose values on commodity networks. Vegetable regulatory networks are surprisingly high-profile. Failure to follow regulations or to deceive the public can result in illness and even death. Food safety is directly felt by the public and response is usually immediate. Boundaries are pushed, pulled and permeated by the pressures enforced by making bold claims of safety over the foods we eat and then failing to meet up to expectations.

Regulations are objects used to create points of passage between networks. Certification unlocks the point and allows entry and movement between networks and sub-networks. What moves is more than goods and revenue, but also ideas and practice. The points of passage in agricultural commodity networks are both real and discursive. Certification allows produce to move from producer to consumer and revenue to return from consumer back to producer. These are straightforward transactions assured by the establishment of truth in marketing by certifying bodies.

But these networks are based on standards and the perceptions of consumers of various social needs. The consumer is offered several choices, some affordable, others not. When price is not an issue all of the other needs come to play in making a purchasing decision. Each network must respond to these needs to become the number one choice of the consumer.

At this point I refer back to the confusion on the part of the customer about the safety and virtues of certified produce. GAP and “Safety Vegetable” are safe, NOSA and MCC are pesticide free, how can a determination be made as to which is “safe enough”? ACT, IFOAM, and international standards such as Soil Association and JAS loom over the marketplace as international ideals. Some internationally certified vegetables are available at supermarkets in Chiang Mai, but at multiples of GAP or locally certified prices. Customer needs push through the boundaries of certifying bodies and become issues for regulatory and marketing improvement. Weakening market positions create imbalances within a network requiring change.

New ideas, needs, or concerns enter the networks as discursive objects. Many objects move freely across the boundaries between all food safety networks, namely ideas like safe, clean, healthy and fresh. As these nebulous qualities emerge and become part of consumer desire, they are brought into each network, translated, and restated within the parameters of the each network’s ideology. Other consumer needs are not as easily translated. For example, RPF created the “Safety Vegetable” standard to be used with its highland farmers. The standard was adopted by independent farmers and resellers such as the San Sai farm group. But over time the “Safety Vegetable” standard became seen as colloquial and outdated by the urban class. RPF and MOAC responded with new certification called GAP. The main difference between the two, apart from a modernized logo and its name association with GlobalGAP, was that it was designed to certify a location, not an individual. The “Safety Vegetable” standard was displaced and transformed by the acquisition of new discursive objects from GlobalGAP, but the network did not change, it was only displaced as a slightly new practice.

NOSA is continually bringing in new ideas to meet the demands of its consumers. In fact, NOSA is following IFOAM’s translation of new concerns brought by public pressure. Both certifiers have adopted policies of biodiversity, fair

trade, and social responsibility. NOSA's constituents are proud that their organization can adapt to new practices. By and large, NOSA would like to be accepted by IFOAM, but some discursive objects avoid translation.

None of the agricultural commodity networks in Chiang Mai could exist without the community coalitions supporting them. ISAC is a community organization and a community market supported by a consumer coalition supporting its many goals. The coalition is made up of mostly older consumers who identify with *Lanna* values, food safety, and many other social concerns. They tolerate the limited hours of operation to directly experience their values by connecting with farmers and community. Much the same can be observed at MCC. An observation made by GAP retailer Khun Pak Sod, after assisting me in interviews at both MCC and ISAC, is that the community for both of these organizations also overlaps with her own customers. This community is small, cohesive, and fresh market oriented.

Knowing this put my research into a new perspective. After removing the retailing outlets of MCC, ISAC, and Khun Pak Sod, all the certified vegetables left in Chiang Mai are either at hotels, restaurants, or the supermarkets and hypermarkets, and most of those vegetables are from RPF. The coalitions of consumers for these vegetables are not at all cohesive but do share the same values of health and safety. I observed this group to be a small group of foreigners and middle class to wealthy Thai people. I have already discussed the offerings at these markets, and demonstrated that they do not account for a very large portion of vegetable sales. The vast majority of vegetable sales in Chiang Mai are of uncertified vegetables at fresh markets (though the market may be "certified").

This research examined the different scales and objectives with the marketplaces of Chiang Mai. When I began this investigation I placed the local in contention with the global. I sought some kind of dialectic challenge of unrestricted neoliberal markets with community participation and wholesome, organic agricultural ideals. It was only after I dropped my preoccupation with drama, with the need to find absolutes and judgments that I came to find that opposing positions can both be right without being relativistic. Communities can have community markets. People in Chiang Mai are not forced to shop at supermarkets or hypermarkets, they are free to go to any one of many fresh markets or community markets. Competing commodity

networks of different scales can coexist together if customers accept them. Though political ecology approach tends to demonized neoliberal values as detrimental to local farmers, local communities, and local initiative, very little research contends with the fact that ordinary people tend to buy low cost products. In addressing my research questions I found that neoliberalism is a slippery actor. It's easy to find in supermarket aisles and burgeoning shelves of hypermarkets. But the real competitor to local certified farmer is the local fresh market filled with lower priced, fresh vegetables grown on farms using a wide variety of imported insecticides, herbicides, fungicides and fertilizers designed to maximize production per area of land. The global, neoliberal agenda emerges as the marketing force of conventional, agricultural technology. Through globalization, neoliberalism became localized in all market venues in Chaing Mai. Local, certified farmers must either find market venues willing to pay higher prices (because though agricultural input costs may be less, so are yields per area) or find community market space to market directly to the public, bypassing the mark-ups of assemblers and retailer.

The problem for local, certified production is compounded because local retailers compete with each other for the same pool of customers. MCC and ISAC have established community markets operating on the same limited number of days and hours. Small scale GAP certified retailers must find non-competitive products to sell along with RPF products. Local actors attempt to differentiate themselves as locally organic, IPM, GAP, or pesticide reduced. Customers seeking safe foods are confused by competing claims, a matter made even worse by the government's certification of fresh markets, such as Nong Hoi and Thanin, as selling "Safe Food" regardless of its point of origin.

The Thai concept of sufficiency, as explained by sufficiency economy, is not limited to production for personal needs. It is a scalar ideal being promoted to the entire Thai economy. It suggests that Thai can not be isolated from the world, but should neither be dependant solely on global markets. It is a counter proposal to neoliberal goals, stating that growth should not be for the sake of growth alone, but should be combined with social and moral objectives. Profit as a goal to itself leads to cyclical market expansions and contractions where in the end the losers are almost always the poor. Sufficiency is not a path of austerity; it is a path of balancing the

needs of the individual with the needs of society. Its closest corporate equivalent is the idea of corporate responsibility for social justice and welfare. Corporate responsibility is part of the corporate philosophy of Swift Farm. On the local level, sufficiency is well matched to community culture. It asks that individuals appreciate the essential traditional Thai values, such as following the precepts of Buddhism and cooperating in Thai social structures.

There is, of course, both contention and compromise between the various advocates of safe and organic agriculture. Large-scale organic growers find refuge and marketing benefits in international organic certification. They hold the high ground political correctness. They also serve as a baseline to which most small farmers can not achieve because international standards and regulations are costly, time consuming, and beyond the reach of the small farmer. In an overall sense these companies, embraced by large, global, neoliberal markets, are a benefit for Thai society as they bring in much needed foreign currency for a country which consumes many foreign goods. But they offer nothing but contention to the farmers of my study. Being the keepers of political correctness they diminish the quality of local certifications and relegate them into a position of inferior quality.

The Thai government side-stepped the entire organic debate by creating standards that it could call safe and healthy. “Safety Vegetable” and GAP are compromises with the need to assure customers that vegetables are not toxic and the needs of farmers to be given various accommodations for production practices. GAP is “safe enough” to be eaten by the public without fear of excessive pesticide contamination. GAP allows the farmer to decide how much chemical to use, up to the maximum limits of the standards. GAP certification neither prohibits nor requires the use of chemicals, it only places tolerances on their application and maximum residue levels on agricultural commodities. This leaves NOSA and MCC as outcasts in the debate. NOSA is allowed to exit the argument by ISAC’s rejection of international marketing and globalization. Its farmers market through ISAC’s community markets. MCC has developed a mixed strategy by providing their farmers with a community market and by promoting the reputation of the MCC label to be used in local, conventional markets. By staying local and community based, ISAC and MCC farmers find livelihood in the local niches of the organic consumer base.

I found that safe and organic regulations are mostly storylines presenting ideas of what is good, wholesome, clean, safe and natural. I never came across a placard specifying absolute chemical residue tolerances or empirically based claims of environmental safety in the market venues of certified produce. Instead I found statements about how a particular certification was healthier, safer, or cleaner. At community markets I found statements about how supporting their farmers would help reduce global warming, increase the plant and wildlife in a community, and reduce the number of premature births and infant deaths in local communities. I found stories of how once drug ridden villages were prospering as happy constituents of Thai democracy, of how impoverished, unemployed Northeastern Thais were being transformed into independent, organic growers and how the packaged foods in consumer markets were being transformed into safe and healthy products. Certified resellers paint pictures of safety and security to conscientious consumers. Storylines create a mood or disposition, a propensity to buy because the consumer feels good about the product and the decision to buy the product. Certifications, as storylines, appeal to peoples emotions and create experiences on which the marketplace can structure a network around safety, security, environmentalism and social concern.

The Northern Thai farmer participates in communities filled with rich histories of traditions and practice. This dissertation has already detailed several of the life-cycle and Buddhist events that are part of farmer's community lives. A point of particular interest to this investigation is the importance of local vegetables to *Lanna* people in general and to the Northern Thai farmer in particular. There are so many traditional foods requiring the addition of local herbs and vegetables for flavor and content. What was surprising to me personally was the role played by insects, crustaceans, amphibians and fish in the *Lanna* diet. Insects are used to flavor many foods, especially various chili pastes, and eaten as delicacies, especially the eggs of ants and wasps with. Fresh water crabs are eaten as food, made into pastes to eat with sticky rice, and added to many dishes. Frogs and fresh water fish are a staple in village diets.

The expanding local vegetable market is the result of rapid urbanization around Chiang Mai. In the past, local vegetables were available in yards, along fences and in rice fields. Today, most urban dwellers do not have access to open

spaces where local vegetables grow. Likewise, urban homes and condominiums do not offer space to grow local vegetables. MCC researchers estimated that *Lanna* farmers in community market groups make up to 20% of their income on local vegetables. Organizations such as MCC and ISAC encourage their farmers to grow local vegetables because those species are adapted to the local environment and need little to no chemical inputs.

Local vegetables are materially integrated into *Lanna* culture. In the past, everyone living in villages had access to local vegetables. Local vegetables were shared; neighbors would feel free to ask each other for vegetables growing throughout the community. Local vegetables were part of the basis of communication and friendships. As one *Lanna* tradition explains, “it is better to share your pot with your neighbor so you have more variety to eat.” My investigation will pursue the explanation of local vegetables not only in economic terms, but also in terms of the social benefits derived through participation in community culture. Farmers growing and selling local vegetables promote the foods and customs surrounding these vegetables.

Northern Thais enjoy a wide variety of local vegetables (Appendix B), sticky rice, crabs, shrimps, fish, frogs, insects, free range chicken and other products grown in association with rice fields without chemicals or pesticides. Small farming families work together to plant, harvest, and sell their vegetables. The production of local, certified vegetables can not be large, only enough to sell each day. Major events of village life include marriages, deaths, and temple events. Weddings are the largest events involving entire villages. They center on the eating local foods at the bride’s house. Everyone contributes to the event, from set up to clean up. In recent years many weddings are now held inside the city at hotels and other large halls for convenience. Instead of three or more days the wedding lasts for only a few hours. Funerals are also large events. In the past they took place at the home of the deceased. Now they occur often at the village temple. Funerals also last for several days where many local foods are shared.

But the economic importance of local vegetables can not be overlooked. Take the example of *pak wan ban*, as listed in appendix B. Native to Chiang Mai, this local vegetable was promoted by Her Royal Highness Princess Maha Chakri

Sirindhorn as a delicious and nutritious food. The princess promoted the vegetable in Bangkok and then helped to facilitate its cultivation in the impoverished northeastern region of Thailand. *Pak wan boon* is now a major cash crop for Northeastern Thai farmers.

There is no end to the damage done by the application of pesticides and chemical fertilizers to the ability to collect local foods from rice paddy and field. Applications of herbicides destroy local vegetables. Insecticides kill off all insects indiscriminately, as well as reduce and destroy local fish and amphibian populations. Chemical free agriculture assures the farmer the ability to harvest local foods for both personal consumption and sale. This point is proven by the wide variety of these foods offered for sale at both fresh and community markets. Expanding urbanization has limited the ability for many Northern Thai people to gather local foods, making the marketplace an important point of access for Northern Thai consumers. In this way certified safe and organic farming yields more than just commercial vegetables, but a literal cornucopia of local products that can be consume or sold for additional income.

7.2 Theoretical considerations

This dissertation brought forward the several key concepts of actor-network theory as applied to regulated and certified agricultural networks. First, the concept of objects was used to contain the diverse meanings of many different regulations. The definition of objects was primarily that of Latour and Foucault, in that they are created by discourse bound in a set of relations (Foucault 1972, Latour 1991, 1999). Once bound by a relationship, such as certification, objects assume the power of the organizations behind them. They have the ability to motivate opinions, displace networks, and add value to products; the object may carries with it a multitude of meanings and perceptions. The use of objects opens up geographic studies by making discourse an identifiable unit that can be mapped on the landscape. Ideas can have a shape and form, a location and an identity. They can belong to networks, be exchanged, migrate and transform. It can be used as a unit of analysis, or, as in this case, a subset of a larger unit made up of many objects of discourse.

The actor-network approach proved most suitable for analyzing multiple alternative agricultural commodity networks. This research utilized actor-network frameworks to recontextualize many problems as power relationships based on unique discursive objectives. New methods of analysis for commodity networks were developed by reframing old concepts, such as peri-urbanism as network relations. The actor-network approach allowed for the use of discursive formations as units of analysis. The investigation did not look at a specific demographic or organizational arrangement, but rather grouped actors in relation to specific discursive strategies. The single-most important contribution of the actor-network approach is that it allowed this research to break free of the restraints of a space-place approach to consider the inter-relations of far-flung and diverse actors participating in similar strategies. By observing actor-network relationships social science investigators, and geographers in particular, can investigate spatial relations not limited to only cartographic considerations, but to also include abstract spaces of social relationships.

Spatial relationships, observed as social (actor) networks, can be imagined as abstract space of power relations based on discursive practice. These spaces are usually anchored by physical locations, such as marketplaces. Participating actors congregate at these locations to participate in discursive relations between consumers and retailers, discourse coalitions and the public at large, where knowledge is transferred, ideologies promulgated, and valuation determined based on more than quantity and physical properties, but on the social discourse represented by certification.

Many investigations utilize a modernist approach of looking at a single place, such as a city, township, or village, then framing the research using demographic considerations, such as occupation, households, ethnicity, or gender as the unit of analysis. Although these approaches are excellent for specific cultural studies, they fail to embrace the inter-relatedness of specific communities or groups to the rest of the world. Post-modern studies acknowledge that no actor, or group of actors, exist in isolation. Society is socially constructed through the discourse deployed by actors situated with different levels of power. Using actors' strategies as the unit of analysis allows an investigation to observe the full magnitude of multi-scalar relationships contributing to the phenomenon being investigated.

The problem with using strategies is determining what constitutes a strategy. This analysis defined strategy as discourse promoted by coalitions of actors to constitute a network, specifically a codified set of alternative agricultural regulations. As discourse, the strategy is an actor with power to affect the other actors in the network. As a regulation, strategy exist as a guideline for production processes based on a agreement of social and ideological guidelines representing a particular belied alternative agricultural production.

The concept of discourse coalitions, as described by Tim Forsyth, may have caused more problems for discussion than adding understanding the situation. This dissertation distinguished discourse coalitions as a formal organization to differentiate it from discursive practices which are made by individuals in response to personal desires or from a social formation which may also be described as a movement, implying opposition and struggle (Harvey, 2005b: 238). A discourse coalition organizes the objects of the network creating nodes and giving the network shape by promoting, organizing, and enacting the processes within the network. Alternative agricultural commodity networks depend on the ability of discourse coalitions to communicate effective with consumers looking for qualitative or ideological attributes not represented by conventional agricultural products. The most effective discourse coalitions achieve absolute consumer loyalty, being able to distinguish themselves apart from all others as representative of consumer desire. However, this is rarely the case. Instead, consumers shop around, and have variable tolerance for different attributes, such as price, health, safety, social, and environmental concerns.

Network objects are given form by actor relationships striving to create stable relationships. The physical extent of these networks can be measured in terms of power and reach, creating boundaries of tolerance in which to put network objects into practice. Network boundaries describe the power of ideas and the ability of the coalitions behind these ideas to extend them into society. The boundaries are not so different from those of cadastral studies in that all social constructed boundaries mark the extent of power and control.

Network boundaries are spatial relationships of discourse, defined as movements of power through objects, placed into motion by the practice of the actors constituting the network. Coalitions arise within networks, rallying behind sets of

objects codified into network objectives, such as regulations. The geography of networks denies spaces reified by dogmas or a priori assumptions. The post-modern geography maps out new forms of spatiality, trajectories of social and spatial structures, social action and power relationships coming together to form networks, though not in what has been presented as dialectic relations (Soja, 1989: 127), but instead as co-constituting networks.

Translation reshapes networks, extends boundaries, and accounts for discursive mobility of network strategies. Although translation was not stated in the original research questions, its role is intimately connected with boundaries and the role of discourse coalitions. Without translation, networks cannot acquire objects and coalitions cannot be distinguished. Translation provides a method of analysis a way to follow the flow of information between unequal relationships and helps to explain the idea of how networks are “co-constituted”, by explaining that ideas may pass through network boundaries, they may be shared or imposed, but regardless of the force or pressure, be it by affinity or domination, the idea will be transformed in practice and the network displaced into a new shape.

Translation explains that power is not absolute; objects are not indisputable, that problem closures are only temporal occurrences, subject to reopening whenever new information enters the network. Translation occurs at every level of Thai society. Global values, local traditions and national objectives are brought into multi-scalar relationships and transformed into practice. Thai village life is the mobilization of levels of translated discourse. Translation leads to economic flexibility as farmers bring new occupations into their hybridized lives.

Ideas of governmentality and technologies of government present the actions of national authority as something imposed and enforced on a condition called “local.” I will not argue against the case that the national government imposes authority and ideology on subaltern groups. However, in the case of safe agricultural regulations in Thailand something different occurs. The government finds itself in a position of being subjected by larger, international forces. Its sovereignty over national regulations is challenged by globally accepted standards. The producers of agricultural products require conditions not provided by international regulations while the populace as a whole, in the role of consumers, wants affordable assurances.

The proposed technology was a compromise of many different regulatory objects, an attempt to appease all who desired to participate in regulated agricultural networks. Thai “Safety Vegetable” and GAP regulations are not impositions; they are suggestions, or guidelines backed by government authority. They represent a faction of the Thai government apart from the national organic certifying authority, which itself is only given credibility by producers for international markets.

The Thai government is in the business of being Thai. The enforcement of national policies are constantly mediated and compromised with local objectives. Sever impositions, such as those placed on subaltern, highland farmers; occur when practices, such as opium cultivation, are defined as “not Thai.” Thai governmental tolerance has allowed for a proliferation of regulations and certifications. The most negative affects of agricultural governmentality occur in conventional farming. I suggest that the negative impacts of conventional, chemical-capital based agriculture extends neoliberal values into Thailand through agricultural extension, the same bureaucracy. What I suggest is that there is no particular global, national, or local objective within Thailand’s agricultural policy. There are, in fact, many objectives attempting to meet the needs of Thailand’s diverse citizenry.

Thai politics is much too complex to categorize with terms such as domination, governmentality, or rethinking the landscape, at least not for Thai considerations. The Thai government exercises these concepts well when applying the to situations for export, for neoliberal markets, institutions controlled by globalization and powerful foreign actors (Glassman, 2004). But the Thai government is itself subject to the complexities of Thai life, to *krengchai* and patronage, and all of the feelings that Thai express toward Thai. Within its sovereignty and without neoliberal impositions, Thai negotiate spaces of acceptance with each other, as demonstrated by the many different expressions of organic and safe agriculture. Future studies of Thailand’s production processes need to be keenly aware of the networks and objects operating through neoliberal design and those of Thai orientation. This in no way suggests that Thai have an inherent humanism not found in global discourse, or that Thai do not practice free market economics, what I am suggesting is that there are many processes of mediation occurring in Thailand that are not obvious unless looked for.

Thai nationalism is an ongoing process of self-discovery. Thailand is relatively new as a nation-state and a constitutional democracy. Thailand is still discovering the many identities enclosed by its borders. *Lanna* culture is one of many long developed cultural identities of the nation-state. Many *Lanna* people want to preserve their local heritage and, at the same time, participate in the fullness of Thai society. Meanwhile, Thailand is surging headlong into global culture. Seemingly all Thai are proud of the technological advances in Thailand. Thai are fortunate to be able to pick and choose among global, national, and local discourse. In the north, the Thai farmer may decide among many options of development, a cornucopia of local national, and global discourse of agricultural practice, experienced in a local setting and often translated into *Lanna* traditions, such as the cultivation of local vegetables.

Former explanations of peri-urbanization described processes of urban expansion into the countryside leading to the domination of rural livelihood by urban ideals. These descriptions did not account for the rural “pull” of urban culture into the countryside, nor did they adequately account for the hybridization of urban and rural ideals in areas of mixed occupations and lifestyles. Peri-urbanization, recontextualized into an actor-network framework, becomes a process of multiple networks of livelihood and ideology based on discursive practices and power relationships. Domination, negotiation, and acceptance transform the border between urban and rural into new forms of settlement. The peri-urban community, as a function of discourse, can be analyzed by the practices of discourse coalitions. The introduction of new social practices relating to the implementation of alternative agricultural regulations transforms peri-urban spaces into new modes of production.

New forms of agricultural practices does not bring back a return to the rural, instead alternative agriculture increases the opportunity for occupational flexibility, diversifying village livelihoods and creating complex social structures of rural and urban perception. Rural farmers and urban settlers both practice social and economic flexibility. Their lives meet in a socially constructed landscape of multiple perceptions. Neither group is unified in their desires for rural preservation or widespread urbanization. However, the physical forms of urban development, infrastructural changes such as roads, wires, and pipelines, disrupt farming practices making certain forms of agricultural, particularly paddy rice, impractical in highly

developed areas. Additionally, new rules enter into the landscape limiting farming practices perceived as insalubrious, outlawing pigs, cattle, chickens and other farming practices. Urban settlers may desire the rural setting, but do not appreciate the smells, sounds, and insects that go along with rural farming.

Small scale, certified agriculture provides a compromise of social practice. Farmers, typically middle aged and long term residents in their communities, can earn income from their land inside the per-urban environment where water is still available and the land has not been overly partitioned. But this is not a solution for the preservation of rural Thailand. I never found a certified farmer, apart from model farms on government land, adjacent to tract homes or in a highly developed urban setting. Urban discourse, accompanied by asphalt and concrete, can not be translated into organic farming practice without reserving large parcels of land protected by government policies for growth restrictions and exempting farmers from urban regulations.

Thai social relationships are unique interactions based on Thailand's historical development apart from the cultural domination of Western powers, colonization, or communism. Many interactions, such as *krengchai* and *barami* are symbolic, the result of individual interpretation and actions practiced to maintain hierarchical relationships for the preservation of social harmony. These interactions were developed over hundreds of years during Thailand's "feudal" past governed by kingdoms and principalities. Thailand's "industrial revolution" is a 20th century event, as are capitalist class relations. Thailand's historic development, devoid of colonialist occupiers and Western style industrial chronology provided time for Thais to adapt to the new social relations of capitalist society.

Concepts such as social and symbolic capital, though appealing, can not be directly applied to understanding Thai village culture. Within traditional Thai settings, these relationships are not enacted solely for capital accumulation, although, when introduced into corporate market relations, global relations, and urban situations they may become translated into capital seeking events. There is a greater problem of applying many Western concepts to Thai culture. Many Western ideas, such as patronage, were developed by researchers situated in a system of Western values and expectations. They could sympathize with the Thai cultural setting, but lacked the

empathy of an individual experiencing Thai everyday life. That is why I cast aside all aspersions of empathy and sought out source material either from Thai people, or from foreigners who have lived in Thailand continuously for many years

A careful analysis will look first to the symbolic nature of Thai interpersonal relationships as expressions of symbolic power outside the judgmental orientation of Western political economy. In particular, Bourdieu's methods of analysis for social networks contribute greatly to the development of actor-networks. However, concepts such as symbolic capital can not be considered a priori as the basis for Thai symbolic relationships. Thai social interactions are situated at many levels of expectation. Symbolic interactions must be evaluated within the context in which they are utilized before the making generalized statements about the intent of an actor's power relation. This is difficult to grasp from a cosmology based on personal salvation from god, or from a point of view that all interpersonal relationships can be reduced to an economic value. Foreigners investigating Thai society can benefit by understanding that the personal values developed through a Thai Buddhist cosmology, held sacred by Thai people, allow for motivations outside of typical Western understanding.

All of this analysis leads to an inevitable conclusion that observed situations are, in fact, moving targets of investigation. Post modernism postulates that the world is neither absolute nor essential, but instead is made up of social constructions based on contending discourse. The best an analysis can hope for is to identify a set of relations, the referential power of participating actors, and the general movement of ideas. The snapshot provided by an analysis represents a point in time representing the dynamics of all actor relationships. My analysis presents the situation as it existed up to the year 2009. The ideas, opinions, and flows of information may be used to describe a general trajectory of change for policy considerations. However, trajectories may be deflected by the introduction of new information, regulations, or social attitudes.

The term "all things being equal" is often used by economist to state their opinions. In fact, all things are never equal, situations are dynamic, the social body of discourse is in a perpetual state of hybridization. However, trajectories have momentum and inertia. This analysis found that consumers value health, safety, and

freshness above all other qualities in the certified vegetable market. This is the discursive inertia within the trajectory. Until such time as more vigilant discourse coalitions can change consumer concern and awareness, the practice of labeling and disregard for various environmental concerns will dominated Thai alternative agricultural. It was also found that a very small percentage of Thai agricultural land is currently certified. This represents the current momentum of the trajectory. Consuming certified produce is not yet important to most Thai people. The following policy considerations will be given in reference to the current trajectory based on the historic snapshot presented in this dissertation.

7.3 Policy considerations

My conclusion is that in Chiang Mai has a very small group of concerned farmers growing locally certified vegetables meet the needs of a very small group of concerned consumers. Most of these vegetables are sold in community markets sponsored by both the government and NGOs, with the exception of a few private retailing outlets. For the vast majority of people in Chiang Mai organic or safe vegetables are unnecessary, misunderstood, or misrepresented. The expansion of organic or safe vegetables is possible only if the government is willing to:

- Promote consumer awareness as to the hazards of pesticides.
- Promote consumer awareness as to the misapplication of pesticides.
- Discontinue or redefine certifications which unintentionally misrepresent products not grown under safe or organic agricultural production processes, such as the “Food Safety” program.
- Enforce laws regulating the use of dangerous, inexpensive pesticides and other chemical additives which allow farmers to produce cheap but dangerous vegetables, thereby making organic and safe vegetables more competitive.
- Enforce laws to restrict the use of pesticides, chemicals, and practices thereby allowing neighboring farmers to be able to certify under regulations such as IFOAM.

The problem this research found with government ministries is that they are quick to make a law, or regulation, or create a set of standards to ensure public safety,

but they do not provide a method of enforcement to enforce compliance. However I do not wish to advocate an agenda leading to higher taxation, or more government officials attempting to regulate the lives of farmers. Truly some rules should be enforced, such as the application of illegal pesticides which can result in sickness or even death. Yet given the state of Thailand's economy it may be more appropriate for the government to enact more positive policies to entice people to participate in organic agriculture.

One way the government can help promote organic agriculture is to continue doing, on a larger scale, what has already been described as the government approach and make more land available for regulated, certified farming. Low cost, long term leases have already been shown to attract farmers to GAP farming. The government could act in partnership with NGOs, corporations and private contractors to expand organic and GAP farming. The government can also provide more market spaces specifically requiring the sale of GAP and organic products. The government would, of course, have to monitor and inspect vendors, which could be done by requiring a small fee for sales space.

In Northern Thailand, the government could give organizations like NOSA legitimacy by accepting their organic standards. There is too much contention between different agencies and NGOs positioning for power and control. This debate extends into the international reach of IFOAM which supports ACT and ACFS as Thailand's official organic certifying bodies. However, the objectives of NOSA and ACT are entirely different, the former endorsing sufficiency economy and local consumption while the other is focused on exports and large-scale domestic markets. Either the ACFS charter could specify organic standards for national use or the Thai government, through MOAC, could endorse a national organic standard based on NOSA. This is a policy decision that will not be resolved until all actors have negotiated away their contentions. Meanwhile, Thailand remains without a national organic standard acceptable to all.

The majority of Thai people do not consume certified produce. But this is not so different that consumer demand in the rest of the world where organic food purchases account for a small fraction of the total food budget. Increases in organic food consumption will probably not come from the consumer side, but from the

producer. This is why more analysis of the goals and livelihoods of farmers is so important to the expansion of organic and pesticide reduced production is needed in Thailand, to promote changes in production processes of the farmer. This analysis demonstrated that there are price parities between the retail price of locally certified vegetables and conventional vegetables at the community marketplaces. These strategies provided starting points for government and social institutions to develop new forms of alternative agricultural commodity networks.

My last suggestion for the promotion of safe or organic agriculture is in the promotion of sufficiency economy. While this is impractical outside of the largest cities, it is easily practiced throughout the villages of Thailand. Sufficiency is a sustainable way of life. The values promoted by sufficiency economy are much the same as those held by the age group making up most of the village farmers. Extolling the virtues of sufficiency and rewarding it, either through recognition, or support of community projects, and particularly projects promoting community culture, would help farmers following sufficiency's practices to have a good feeling, to experience *chai yen*, which may be reward in itself. The concept of sufficiency will not turn around Bangkok or Chiang Mai, at least not in this generation, but it will help to strengthen communities being weakened by the outward migration of young people seeking the neoliberal, globalized lifestyles into Thailand's growing cities. The policies behind sufficiency may help to promote the objects of community culture and allow them to flow into the urban areas to be translated into something else, something modern, and Thai, and hopefully respectful of a better way of life, one that may even desire safe or organic vegetables.

My research may contribute to a better understanding about the power, meaning, and consumer acceptance of different organic vegetable labels. My research may help government ministries in coordinating the various actors for attributing clear meaning and understanding regarding their particular production practices. The results may be useful for those ministries and associations whose storylines are similar and already share, or want to share the resources available to better assist their constituents. These actors will be explained as sharing hybridized boundaries and are effectively seen by consumers as equivalent. For those actors not wishing to merge

into larger discourse coalitions, this information may be used to help them to distinguish themselves within their own paradigm.

I hope that my research will be of value to researchers investigating certified agriculture and its importance in Northern Thailand. I also hope that my application of the use of actor-networks, and particularly the concept of translation, will be further developed as a tool for analyzing agricultural networks. Although the findings of this study can be generalized to other applications in Thailand, and possibly even to other circumstances in Asia, this study only represents a small understanding of the complexity of organic agricultural networks and the global forces insinuating themselves into local communities.

To the end, this research found more questions than it answered. There are many more situations to be analyzed, especially in the direction of government regulation and enforcement of conventional agriculture, the influence of world market prices on locally grown but internationally certified vegetables, the problems of scale faced by small growers wanting to sell in larger markets, as well as the detrimental effects large markets have on local communities, the advocacy of local foods, and the continuation of local traditions.

My findings were limited only to Chiang Mai and only to certified farmers in the area. The farmers and leaders presented here belonged to either NGO or private certified commodity networks, those being the prevalent operations in Chiang Mai. It was beyond the scope of my investigation to include a detailed study all of Northern Thailand, or the large scale international corporations in Thailand, or the large network of farms coordinated by the Royal Project Foundation. Each of these is worthy of its own analysis which will surely lead to a greater depth of understanding the conditions for organic agricultural in Thailand.

I am led to conclude that actor-network theory and analysis, though now nearly two decades old, is not exhausted in its potential for use, speculation, or further expansion. I only briefly touched on the concept of judgment in geographic analysis. But any challenge to the problems faced by relativism in analysis conducted apart from dialectical constructs can only further expand the concept of co-constitution in actor-networks.