MONETIZATION, TRUST, AND SOCIAL EXCHANGE NETWORKS

James R. Hull

PAA 2009 Extended Abstract

2008 September 22

I. Introduction

The relationship between the structural and the dynamic elements of social life is among the most-studied in sociology. Partly, this is due to the extreme generality of the problem, making it relevant to a wide range of specific substantive questions. But more deeply, the question of how and when social institutions shift and stir and when they remain stolid cannot fail to capture the imagination and attention of the human beings that live poised between stasis and change. It is the tension between these two oppositional ideas, and the difficulty of providing an adequate account of both simultaneously that leads to a common disciplinary division of labor between those who study social structure and those who study social change. So, too, the division between micro-sociological and macro-sociological analysis may hinge upon the great speed at which change may occur at small scales, and the sometimes glacial speed of social change at larger scales.

The proposed analysis presented here is an attempt to stand astride the considerable divide that lies between social structure and social change in order to better understand a ubiquitous form of social interaction: the economic exchange. I examine the process of monetization, a frequently cited but seldom-studied phenomenon that, like the class trouble-maker, is almost always hanging around at just the point when something major happens, but never leaves enough evidence to be directly implicated. Monetization, as I have argued elsewhere (Hull 2008b), is not just a form of institutional change, but the creation of entirely new institutional mechanisms to regulate the flow of information in exchange. The potential for this type of social change to disrupt established social-structural relations within a given social group is enormous, and poorly understood at best.

I present a series of testable preliminary hypotheses that together help to establish the validity of the theoretical framework presented. These multiple propositions can be thought of as variations on the major theoretical argument: Under conditions of high labor demand, monetization, by altering the informational requirements and generally lowering the risk of an exchange for the "seller" but not the "buyer", will permit labor labor-"selling" households to span greater social distances than previously possible. The implications of this general thesis are developed and specific analytic strategies for confirming them are proposed.

II. Nang Rong District, Thailand

Nang Rong District, Thailand is a mostly flat expanse of mostly marginal agricultural land in Northeast Thailand that is noted for both its high levels of traditional smallholder agriculture (Phongphit and Hewison 2001) and for its traditionally high levels of poverty (Dohrs 1988: 12-13; Parnwell 1988). This poverty is attributable in part to the unpredictable monsoon rainfall in the region, upon which the livelihoods of many resident farmers vitally depend (Fukui 1993). Agriculturally speaking, at least two major livelihoods are available: wetland rice agriculture, which is mostly rainfed, and upland cash cropping, which has included the growing of cassava, kenaf, sugarcane, and other field crops at different historical periods. Many households in the region have been observed to practice strategies of "household diversification," managing "diverse portfolios" that help to buffer the effects of such potentially disastrous events as drought, flooding, and destruction of a specific crop by pests (Grandstaff 1992). Beyond agriculture, few economic options have presented themselves to residents of the District in the past, though development projects such as the Community-Based Integrated Rural Development projects, CBIRD-I and CBIRD-II, have increased the number of locally available

non-agricultural jobs and made other substantial contributions to the economic opportunities available to Nang Rong residents (David & Viravaidya 1986, Stoeckel *et al.* 1986, Entwisle *et al.* 1998, CIDA 2007).

An important exception to the above observation is migration to Bangkok and other urban areas in search of work, a strategy that has grown very popular in the villages of the district and stripped many of them of a sizeable proportion of their young adult population, both male and female, some during non-agricultural seasons, others permanently (Guest et al. 1994, Guest 1996, De Jong, Johnson, and Richter 1996, Chamratrithirong et al. 2005). As an economic strategy, migration has been described by many of these researchers as circular or temporary, but over time migrants who initially migrate temporarily often end up settling on a more permanent basis in the destination (Korinek, Entwisle, and Jampakly 2005). In addition to bringing in muchneeded cash and goods to the villages through remittances, the circulation of labor from rural to urban areas brings important changes to many other aspects of life, including aspirations, values, tastes, and knowledge of other lifestyles. Hugo (1982) termed this information flow the "passive" impacts of migration, in contrast to the active impact of removing persons from the village, though this term has the risk of portraying such changes as less powerful than those brought on by absence. Whether "passive" is an accurate portrayal of such information is debatable, however.

Of central relevance to the current study are the somewhat unique characteristics of the annual rice harvest, an event that involves a substantial part of the population of Nang Rong District. While many developing regions are characterized as (or simply assumed to be in many economic theories of development) places in which surplus labor is available during much of the year, due increasingly to the effects of mechanization and agricultural intensification, Nang Rong

continues to experience high demand for agricultural labor at least seasonally. This demand is at its greatest during the rice harvest, when a perfect storm of factors including the unpredictability of late-season rains, the persistent threat of animal and insect pests, and the requirement of processing mature rice in a timely fashion all pressure households to harvest their rice as quickly as possible (Hull 2008a). The result is more work at harvest time than can typically be accomplished by the average household in a timely fashion, a pattern that has grown as average household sizes have declined over the past two decades (Entwisle *et. al.* 2004, Piotrowski 2007). The condition of high seasonal labor demand is important to the arguments that follow, and there is no certainty that the same relationships explored here would hold in a context of low labor demand.

In order to cope with labor demands that frequently exceed the resources of the immediate family, many rice-growing households in Northeast Thailand rely on multiple strategies to obtain the needed additional labor. Households may call upon former members now living in the same or a nearby village along with their spouses, children, and other family members. Former member are usually the children or siblings of household heads who have moved out as a result of marriage or an improvement in the economic standing of the household permitting large extended families to fission into smaller nuclear households. The practice of "lucrilocality", in which newly wed couples choose to live with whichever partner's family provides the greatest potential opportunities in terms of land and other assets, means that couples in the Thai context may move into both maternal and paternal homes or found their own households (Chamratrithirong, Morgan, and Rindfuss 1988). Another major source of labor is provided by household migrants who have been living away from the household for some time (at least 2 months) but who return to assist the family during such periods.

Beyond current, former, and returning household members, most of whom are linked through ties of kinship as well as long-established patterns of interaction, households seeking additional labor for agricultural tasks like harvesting rice may look to village neighbors, individuals from other villages, labor gangs whose reputation can be established, and as a last resort, even near-total strangers to fill their needs. While returning and former household members typically provide labor for free or on an exchange basis (a day for a day), more socially distant laborers are quite often remunerated in cash for their labor.

In previous work, I document a doubling in the number of Nang Rong households using paid labor between 1994 and 2000, but considerable variation in growing conditions and many other conditions between the two years raise the possibility that the observed trend could simply reflect a highly dynamic response to ever-changing conditions, in which paid labor is one of many specific strategies that households have at their disposal during times of need (Hull 2008a). Rainfall, in particular, varied greatly between the two years, with 1994 being a drought year, and 2000 being quite wet. Such crude descriptions fail to capture the extent to which the Nang Rong rice economy is impacted by not only the absolute amount of rain, but the timing of its onset, its regularity, its correspondence to various stages in the rice-growing cycle, and even the timing of the rains' cessation (Fukui 1993). Rainfall represents just one of many aspects of the local context that operate in unison to create dramatic and constant variation in the conditions considered by households when making the types of agricultural decisions described here.

The considerable differences that exist between the social, economic, and even biophysical context between 1994 and 2000 weaken the basis for a claim that a secular trend of increasing labor monetization is indeed underway in Nang Rong, despite the supporting qualitative evidence that exists. Far from being problematic in the present study, I intend to

utilize these differences to demonstrate the potentially strong external validity of the general relationships observed when appropriately contextualized. This requires that extreme care be used when describing context, however. Given that so many factors are shifting simultaneously, it becomes essential to specify not just *which* factors matter for a given outcome, decision, or behavior, but *which* factors matter *when*. Emphasis on the importance of context-specific theory and analysis has been growing in recent decades and was recently highlighted by Entwisle (2007), who describes such contextualization as "putting people into place" (699).

III. Re-Conceptualizing Money and Monetization

It has been noted at several points in the last two decades that in spite of important contributions, sociological theory and analysis of money has remained, to use Ingham's term, underdeveloped (Ingham 1998, 2000; Swedberg 1997; Keister 2002; Deflam 2003). Money and monetary systems have been reconceptualized in interesting and conceptually important ways ranging from Baker's (1987) social structural interpretation of money with its emphasis on money as power to Dodd's (1994) social network interpretation of money, highlighting the role of information, which informs the present analysis. But money and monetary networks, no matter how well-conceptualized, are only a part of the picture. As Zelizer (1996) reminds us, there remain even in ostensibly market-dominated Western capitalist economies many areas of the economy in which money is still today not the sole means of exchange. If one travels far enough back in history, a point is reached at which all exchange was non-monetary, and as one allows the arrow of time to resume its normal direction, money comes into being as a human invention and expands in variety, complexity, and the types of exchange in which it is involved. This process continues to the present day, constantly repeating itself different socioeconomic

contexts around the world for each and every aspect of life that has thus far been "monetized". But where the dynamic and highly consequential process of monetization is concerned, the sociological literature has remained silent in recent years.

Following Dodd's (1994) re-conceptualization of money in more explicitly in terms of social networks and information, the process of social change that goes by the name monetization can be thought of as the introduction of new types, flows, and qualities of information into the set of institutions pertaining to exchange (Hull 2008b). Monetization is a multi-scale phenomenon, discrete at the smallest scale, the individual exchange, and nearly continuous at larger scales such as villages, sectors, economies, or societies. The introduction of these changes may arise from within the society itself (endogenously) as happens when an exchange group spontaneously develops money technology, from without (exogenously) as happens when an exchange group is incorporated into a larger social sphere of influence or adopts money technology wholesale from a neighbor, or some admixture of the two, such as when a social group adopts money technology with modifications and improvements not seen in the origin group.

In each instance, I speak of money as a technology, and monetization as a process of social change affecting the exchange institution. The term *invention* might be more appropriate for money, as today money may just as easily exist as a pure symbol, epitomized in what Zelizer (1994) termed "megabyte money," money that exists only in a virtual state (214). But invention carries with it the unnecessary and often inappropriate baggage of constant newness. If one society adopts an invention from another, to call it an invention may be misleading. Money falls into that class of useful things that includes language, humor, and sports. It is really a *social* invention; an aspect of culture that enables exchanges to take place under a different, usually less

restrictive, set of circumstances. Like the other members of this set, money may take on myriad, very different, physical forms (or no physical form at all) from instance to instance that yet share some common features.

The traditional economic approach to defining money has been functionalist in nature – attempting to explain what money is by appealing to the functions that it performs " (Barker 1913; Bradford 1928; Kemmerer 1935; Shapiro 1975; Plattner 1989; Dobeck and Elliott 2007). The problems inherent in this approach include 1.) the failure to establish a theoretically useful definition that allows for clear and reliable classification of a thing as money or not every time, 2.) a lack of real-world examples of so-called *generalized* money that performs all of the many functions to the maximum degree, and 3.) the theoretical impracticality of the present system of comparing each instance of money to the generalized money standard, which is not a true standard but just a set of guidelines (Hull 2008b, *cf.* Dodd 1994).

Given these concerns, one useful response is to deemphasize money altogether, in favor of refocusing theoretical attention on the process of monetization instead. It is not so much that the pursuit of a functionalist definition of money is hopeless (Smithin 2000 contains a number of insightful articles suggesting newer functionalist formulations that may prove more robust), but that it is the longer and more treacherous of the two roads. Owing to the conceptual relationship between money and monetization, a definition of one concept allows for the conceptual specification of the other. We stand to gain much beyond expediency from focusing on monetization. Chief among these benefits is that focusing on the social change aspects of the phenomenon, rather than the technological aspects brings to attention questions about the relationship of monetization other types of change. The question addressed here is whether there is an empirically observable relationship between monetization and social network structure.

Shifting focus away from money itself and toward monetization also reclaims for sociologists an aspect of what has always been a core sociological subject: exchange. Sociological writings on exchange abound, but those dealing with monetization, a fundamental shift in the nature and conduct of exchange, are generally of just two types: very old or superficial. The works of Simmel (1900, 2006), Marx (1978a, 1978b), and Weber (1978, 1997), as well as those of many of their contemporaries (Novicow 1917; Cooley 1913a, 1913b) often dealt with the theory of money and monetization and touched on the transformative effects of monetization on exchange, but by the second quarter of the twentieth century, writings on such topics had all but vanished from sociological journals. Discussions of monetization, its causes, and its effects reemerge in sociological writing towards the last quarter of the twentieth century, now largely motivated by an international focus among writers in the West who encounter partially monetized societies or "non-market" economies that presented new puzzles to researchers whose own milieu was much more fully monetized (Hull 2008b). But unlike their predecessors who attempted to more fully explore the implications of a shift from non-money to money-based exchanges, these later treatments too often assume a casual familiarity with the concept of monetization and nearly always place it in the background as an aspect of context that, at best, conditions the relationships under scrutiny. The precise relationship of monetization to other factors, as described in such research, remains in the realm of conjecture because of the near-total lack of models that try to explicitly measure monetization (see Gartrell 1981 for a rare exception). This lack of empirical attention among sociologists can, in turn, be traced back to a lack of theoretical attention, and perhaps also to the lingering impact of the Methodenstreit of the early 20th Century, during which time the previously shared domain of sociology and economics was divided up through successive turf wars (Ingham 1998, 2000). Sociology (and anthropology)

acquired social institutions, among other subjects of study, while economics got money. As a result of this crude process of division, progress on understand monetization which requires a grounding in both the theory of money and of social institutions ground to a halt, getting only a slight boost with the advent of the new institutional economics (Williamson 1979, 1981; North 1981, 1992).

IV. Monetization and Trust

Among the many reasons that exchange has re-emerged as a core subject of sociological research is the existence of numerous institutions which have as their purpose the smooth regulation of exchange, the resolution of conflicts surrounding exchange, and the socialization of new exchange partners to the often considerable volume of norms, rules, and protocols surrounding exchange in any society. These various social needs are fulfilled by a diverse group of social institutions that have received considerable attention from sociology, if not always through the lens of exchange (Emerson 1976). It is somewhat surprising then, that the potentially rapid and radical transformation that is monetization receives so little attention in the sociological literature (Hull 2008b). For those who have by chance observed monetization in their field work, it is not uncommon for them to remark on the rapidity and totality with which money is adopted as the new status quo in exchange (Banpasirichote 1993, described in Rigg 2003; Phongphit and Hewison 2001).

The forces behind such rapid shifts are no doubt complex, but on a basic level, monetization involves a reduction in the uncertainty that is borne by the parties to an exchange. Non-monetized exchange is functionally dyadic in nature. Such exchanges may involve multiple parties, objects, services, and so forth, and may be spread across time in a series of "embedded" exchanges that are only commensurate on average (Granovetter 1985; Sahlins 1968, 1972). But

in the absence of money they ultimately involve only the actors themselves, who bear total responsibility for determining essential information about the prospective exchange. They may avail themselves of a wide variety of types and sources for this information that may be available within their social networks such as the opinions of other actors, accounts of past dealings, and so forth, but ultimately the locus of responsibility in non-monetized transactions such as barter lies with the actors involved. The important bits of information each actor seeks to obtain include, but are not limited to an accurate knowledge of the goods involved (both immediately perceivable and knowable only through experience with the good over time), characteristics of the transaction itself (price, conditions of payment, and so forth), and familiarity with the actors (such as reputation for fairness, and degree of trust) (Plattner 1989; Dodd 1994). Dowling has labeled these informational requirements the *caveat mutator* burden – the "barterer beware" (Dowling 1979). A more general and accurate translation of Dowling's phrase might be the "exchanger beware" burden.

In a monetized exchange, by contrast, the key feature is that while the two parties remain embedded in a larger social context, this context contains within it the social institutional machinery for enforcing or guaranteeing the payment of some set value in exchange for the money symbol, immediately or at a later date. Despite the many important and non-trivial wrinkles that are introduced into such a formulation by advanced concepts as inflation, it should nevertheless remain clear that monetization shifts responsibility for some (but not all) of the many informational requirements from the transactors to the social entity (be it a chief, a guild, or a nation-state). Thus, when a shift occurs from non-monetized to monetized institutional

systems of exchange, the nature of the trust invested in the transaction is shifted in qualitative, and possibly in quantitative ways.

One reason that trust has become a central concept in contemporary discussions and theories of exchange is because it provides a simple and compelling answer to the question of why rational actors do not more frequently cheat their exchange partners. Granovetter (1985) argues that it is trust that imbues economic exchanges with a social character and yet keeps them from becoming over-socialized to the point of determinism (487-493). Humans can and do cheat their exchange partners, but such behavior is not normative. Rather, most exchanges take place within a context of trust. This trust, often established over the course of many exchanges in which patterns of consistent reward are established, allows transactors to rate each exchange and exchange partner and use these rankings to determine with whom they will interact. More specifically, Bhattacharya, Devinney, and Pillutla (1998) provide what they argue is a clear definition of trust in both precise mathematical terms and a "verbally imprecise" sense:

"Trust is an expectancy of positive (or nonnegative) outcomes that one can receive based on the expected action of another party in an interaction characterized by uncertainty." (462)

This definition, like most, implies that trust originates as a response to uncertainty, as when just prior to engaging in a highly questionable or risky activity, the architect of the plan may be heard to utter the cliché: *just trust me*. The "expected action of another party" derives directly from the information amassed on a potential exchange partner, whether voluminous or slim. To connect the idea with a concept introduced earlier, to place one's trust in an exchange partner is to put one's imprimatur on the exchange, a symbolic gesture that declares the *caveat mutator* burden has been fulfilled and the trade partner deemed worthy and reliable. But the notion of trust also carries with it an implicit warning: do not violate. Those who break trust are

deemed untrustworthy and often word goes out to other potential exchange partners to avoid dealing with this actor. Not surprisingly, research has supported the idea that stronger bonds of trust develop between actors when exchange is carried out informally, not because of any inherent qualitative different in the relationship but because of the greater tendency for information on such transactions to be shared among other close associates (Molm, Takahashi, and Peterson 2000). Such casual and ongoing associations, what Granovetter (1985) might describe as deeply embedded, provide more frequent occasions for the actors to demonstrate to each other that they can be trusted.

But what becomes of trust when it encounters the shifting informational sands of monetization? One might hypothesize that trust becomes less important in an institutional context of monetized exchange because of the "impersonal" character so often ascribed to money. No longer saddled with the high transaction costs of monitoring and assessing the trustworthiness of a potential exchange partner, the logic goes, actors may experience great relief. A proliferation of exchange ensues. But such thinking fails to take note of the clever act of misdirection that is the institution of money. To use money requires not *less* trust, but *more*, though it is trust directed towards a very different entity (Dodd 1994: xxv). To accept a bit of metal, scrap of paper, or collection of binary bits in exchange for one's labor, the product of one's hands or mind, or some other valued object does indeed require a tremendous amount of trust. But unlike non-monetized transactions, in which the trustworthiness of the potential exchange partner must be evaluated, in monetized transactions it is the state, or equivalent social institution that must be trusted. Similarly, trust must now be invested in money itself, in the monetary system. Monetary systems do not completely remove the need for the social actors to extend one another some modicum of trust, but they transfer a substantial portion of this burden

to a social institution. This idea is well-encapsulated in Dodd's terse statement that "to pay with money is to pay up" (1994: 136). One extension of this view is that the truly generalized form of money sought after by classical economists would be the one that eliminates the need for the actor to trust the exchange partner at all – conveniently in keeping with the assumption of atomized social actors postulated in under-socialized economic theories (Grannovetter 1985).

Current exploration of the impact of monetization on trust fails to note an important problem, however. The shift to monetized exchange may introduce an asymmetry into exchange networks concerning trust that was not present in non-monetary exchanges. This is especially likely to occur for certain "one-way" monetary exchanges in which money is offered in exchange for goods, services, or other valued things. The recipient of cash now has a different constellation of persons and things to trust than the recipient of some non-cash valued thing. To illustrate how this can be so, imagine a simple exchange of agricultural produce for other produce, say oranges for flour. In such an exchange both parties bear the caveat mutator burden to similar degrees -Actor A does not want to procure a bag of sour oranges, nor B a bag of moldy flour. All of the elements of the social relationship in which the exchange is embedded, as well as the powers of observation each actor possesses will be called upon by both parties to protect their interests as best they can. If A and B have already established trust by meeting the *caveat mutator* burden, or if they can do so for the purpose of the exchange, there is a good chance it will take place. Even if actor B does intend to cheat A by attempting to unload a bunch of rotten oranges buried in the bottom of the bag, B still would not wish to get a bad batch of flour in return. In other words, even a potential cheater is subject to the *caveat mutator* burden to a substantial degree, at least in non-monetized exchange.

In monetized transactions, the *caveat mutator* burden may be reduced, but if so, it is only for one party. If one receives payment in exchange for goods, services, or other valued things, and one judges the money received to be legitimate, one has little else to worry about. This is a reasonable presumption in many developing contexts when the source of the money itself is largely exogenous to the exchange community, making the acquisition of technology sufficient for passable counterfeiting a challenge. Thus for what can be termed the "sellers" of valued things, money typically reduces the *caveat mutator* burden. But for the "buyers" of valued things, the burden remains largely unchanged. Working from a different theoretical origin, DiMaggio and Louch (1998) have found that U.S. consumers would prefer to buy an automobile from a friend, and sell to a stranger. In their words,

The greater the risk in a transaction—the greater the advantages that information asymmetry and asset specificity bestow on sellers and the greater the seller's inclination to exploit those advantages—the greater the likelihood that buyers will prefer dealing with people to whom they have social ties outside the transaction itself' (634).

Because these observations are premised on the existence of monetized markets – real estate, automotive, and so on, they do not offer direct proof of the present thesis. But they are quite consistent with the proposed trust requirements in exchange, being formulated from the buyer's standpoint. The buyer bears all responsibility for assessing the asymmetry of the exchange and the seller's "inclination to exploit," which are not precisely known in practice. The possibility of a buyer cheating, on the other hand, is substantially reduced through monetization, at least if the monetary system has well-established checks against counterfeit and such. It is no accident that *caveat emptor* is a widespread Latin idiom while *caveat venditor* (seller beware) is seldom heard.

It is this asymmetry of shifting burdens that makes monetization a social change that affects the supply (seller) side of economic formulations more than the demand (buyer) side. To

further illustrate the shifts that monetization is predicted to bring about, I now return to the matter of agricultural labor. As explained earlier, additional labor is often required in Northeast Thailand, even by smallholders, in order to harvest the rice from a household's land in a reasonable period of time. To begin with the simplest scenario, assume that there are four possible practices for a rice-growing household to engage in. A household can offer its labor to others, utilize the labor of other households, do both, or do neither. For clarity, these possibilities are summarized in Table 1. Complicating this scenario is the fact that not all households grow rice, nor do all have labor to share. If a household does not grow rice itself, its options are constrained to the second column of Table 1 (labor seller or no interaction), and if a household has no labor to share, its options are constrained to the second row (labor buyer or no interaction). Thus a household that neither grows rice nor has any labor to share is limited to the "no interaction" cell. Note that the terms "buyer" and "seller" are applied equally to monetized and non-monetized exchange alike.

In a non-monetized exchange environment, buying, selling, and exchanging households all share similar *caveat mutator* burdens. These households are commonly embedded in social networks which can at times display substantial multiplexity, or overlapping sets of ties and obligations – sibling networks, temple networks, labor-sharing networks, and so on. Entwisle et al. (2007) demonstrate, however, that considerable variability exists in network structure between villages in Nang Rong, Thailand. Moreover, the common notion of universally high levels of multiplexity among rural villages is not generally supported in the Nang Rong context (1511). This finding should be interpreted with caution however, as the measure of multiplexity used compared just two major types of ties between households—siblings and help with the rice harvest. An expanded measure of multiplexity reflecting more of the classes of social tie that

may link households in Thai villages or using two entirely different social ties may produce different estimates of the degree of overlapping social obligations.

Multiple network ties or not, a greater density of ties within local social networks ought to ensure that in a non-monetized context, households will exhibit a preference for exchanging labor with well-known associates. If the ties permit the flow of such information, work habits, reliability, and general trustworthiness will be better verified through personal experience and word-of-mouth. Whether or not household decision-makers might actually prefer to employ associates with whom they share no close connections is not relevant in practice because the *caveat mutator* burden of employing such strangers is usually too great. Only when local labor sources are exhausted might we expect to see households employing those more distant and unknown to them.

The picture changes as monetization occurs. As noted above, one major effect of monetization that is hypothesized here is the shifting burden of obtaining information in labor transactions. It is expected that those households who only sell their labor, along with those who formerly exchanged labor for labor, will find an advantage to monetized exchanges. In labor-for-labor exchange transactions, unlike commodity-for-commodity and other types of non-monetized exchange, there is always an additional level of uncertainty attendant: someone must go first. These exchanges can be thought us as seller-seller or buyer-buyer, and carry an especially high risk for the party who "sells" first, as payment is deferred until the buyer can repay with an equivalent amount of labor. For the party that formerly had to "ante up" first under direct exchange, money transactions have an immediate, readily apparent advantage over other types of exchange. These actors need have fewer worries that they will be cheated or swindled by an exchange partner who fails to follow through with the promise of future labor, because the

money is at least metaphorically, if not literally, in the bank. Labor transactions thus present an especially poignant and appropriate site of social and economic exchange to examine the impact of monetization owing to the heightened stakes and the magnitude of the hypothesized shift in trust burdens that accompany a shift to money.

The buyers of labor, as well as those exchangers who accept labor as payment still have the burden of assessing as many characteristics of the service being rendered as they did before, and should initially express little preference for money over non-money transactions. These actors still have some incentive to deal with better-known exchange partners, who may be better or more efficient workers, and who will not request more than the agreed-upon wage at the end of a day's labor or cause other conflicts. These buyers, all else being equal, might be expected to show a clear preference for hiring only laborers whom they trust to a high degree, just as they did in a non-monetized institutional environment.

V. Monetization and Social Networks

Implicit in the foregoing discussion is the idea that a relationship exists between monetization and what can be called social distance. Gaining currency in the early 20th Century (Simmel 1909; Salmon 1912; Sorokin 1929), the concept of social distance was already under fire within the first decades of its use for being far too general and "vague" (Poole 1927). Around this time, Bogardus (1926) developed a widely-used scale to determine the degree of comfort expressed by individuals about relationships placing them at different social distances from others of a different race. This operationalization focused on race while simultaneously incorporating a more structural and network meaning. Since Bogardus, the concept has broadened to include salient difference between two actors in terms of race and ethnicity, sex,

religion, income or wealth, spatial distance, social capital or other variables (Reardon and Firebaugh 2002). At the same time, the advent of social network analysis has provided a methodology enabling the more careful specification and measurement of social distance in explicit network terms (Burt 1976).

Sociology is not the only discipline to have incorporated the concept of social distance into the main corpus of its theory and terminology. In anthropology, social distance has been incorporated extensively by Sahlins (1965), who has the concept as a key variable in his familiar three-class typology of exchange reciprocity. In this typology, Sahlins identifies three general patterns of reciprocity in exchange relationships: 1.) generalized reciprocity which takes place in instances in which social distance is least; longitudinal exchange relations that have an enduring and highly embedded character 2.) balanced reciprocity which takes place among those who are at an intermediate degree of social distance, neighbors and associates with whom one has great incentive to maintain a good reputation, and 3.) negative reciprocity which takes place among those at the greatest social distance from one another, as with strangers or sojourners with whom one might never even interact again. Dowling (1979: 292) has pointed out that one need not imagine three separate sets of rules governing each of Sahlin's ideal types, but rather one general motivation of "enlightened self-interest" which is "naked and blatent" concerning strangers, but is "increasingly clothed and disguised as social distance decreases" (1979: 298). At the root of such interest is the basic observation that explicitly rational or not, humans do not enjoy being cheated and taken advantage of in exchange relationships. A complex web of institutional arrangements and social structural networks are created and used to reduce the chances of this occurring. But what happens when a key institutional change like monetization occurs?

Monetization is thought to be a major disruptive force capable of rapidly transforming exchange networks in a short span of time. Of course, any actor who moves too quickly to shift allegiance or adopt new exchange partners may experience the anger of former trade partners. It surely requires tact. The asymmetrical impact of monetization based upon ones' position in an exchange network implies that the need for trust in labor exchange relations for the "sellers" of labor ought to diminish with monetization, while the need for trust among the "buyers" of labor remains relatively constant. The condition of high labor demand stated much earlier now takes on its full import. In an exchange environment in which labor is not particularly scarce or valuable, the sellers of labor ought to have considerably less power in pursuing their interest in monetizing the transaction through negotiation because they lack sufficient bargaining power. If they press their demands too greatly, the exchange partner may deem it more convenient to seek labor from another actor who is more amenable to the terms offered. But under conditions of labor scarcity, the balance of power flows to these labor sellers, it becomes a "sellers' market." Combined with the theorized incentive that sellers have to monetize labor exchanges, a testable prediction (in principle) emerges: in contexts with high labor demand, monetization of labor exchange will proceed rapidly through pressure from sellers, while in contexts of low labor demand it will proceed more slowly. I say more slowly because of the possibility that buyers and sellers may experience additional incentives to monetize transactions beyond those of a reduced *caveat mutator* burden discussed here. Testing such a hypothesis would require comparative data from multiple labor markets, however, a difficult hurdle to clear.

VI. Empirical Predictions

In the present study, an attempt was made to collect complete sets of in-ties (labor acquired) for all sample households. If Nang Rong District were a closed system, in which all households used only other Nang Rong households for labor, and if the data were a complete census of this population, both sets of ties would be complete. In reality, however, neither of these propositions holds. Nang Rong households utilize labor from not only other districts but in some cases even other provinces in Thailand (the next largest political division). Although the Nang Rong data can be said to be a census of the 51 study villages included in the first wave and revisited in subsequent waves, those 51 villages are spread throughout the district and interspersed with several hundred more non-study villages, all of whom may provide labor to study-village households. We thus have a complete census of certain forms of exchange relation, but only partial knowledge of others. Despite these limitations, the potential for these data to advance our understanding of the relationship between social networks and monetization is great.

The general argument put forth in this paper is summarized in Figure 1. Monetization, as a process of social change that impacts the institution of exchange, is thought to have implications for the structure of social networks. Many of these networks exist primarily to facilitate exchange, and a shift in the major informational requirements surrounding exchange is predicted to lead to a patterned shit in the structure of those networks. More specifically, monetization should act as an accelerant of long-distance social interaction, where "distance" may be physical or social, much like gasoline accelerates the spread of a fire. This relationship is summarized by the long dashed line. The intermediate logical steps in this process are illustrated through the chain of boxes in the lower half. The challenge for the remainder of this paper is that

described in the introduction: finding innovative ways to support the existence of such a set of relationships despite the limitations imposed by imperfect data.

To this end, if such a process is at work, a number of empirical predictions follow:

- Monetized social exchange relations should become more common with increasing social distance. Under conditions of negative reciprocity (greater social distance), labor "sellers" will have the greatest incentive to reduce/modify their *caveat mutator* burden. This tendency should be equally observable in network data based on the "buyer", such as that used here.
- 2. Monetization will generally tend to increase over time, and will enable greater social distances to be spanned, on average. This prediction stems from the considerable investment that is needed to make a shift to monetized exchange, both societal and at the level of actors. For a society, monetization requires the implementation of a complex institutional framework, initial technological investments in production of money, distribution, and other costly outlays. For individuals, any number of psychological and sociological barriers may exist initially to monetizing some exchange relation. Once accomplished, monetization is not irreversible, but is a robust social institution that will tend to persist unless the population experiences widespread failures of the monetary institution itself such as a currency crisis.
- 3. Among strangers, if an exchange relation is initiated, it is highly likely to be monetized, following from the first proposition. Among close friends and family, few exchanges ought to be monetized. But in the intermediate range, considerable variation in social distances may prevail, with corresponding greater variation in strategies to be seen. Thus, at the village level, greater variation in exchange strategies will exist at intermediate social distances.
- 4. Monetized exchange should be observed at a higher frequency among less densely embedded households, as measured using multiplexity.

- 5. As time passes, monetization should enable exchange to take place among less multiplexic partners who previously showed little interaction. At the same time, the most closely interconnected actors should show the least motivation to monetize. The ability of money to function as a *de facto* substitute for actual knowledge of an exchange partner gained through multiple social ties in alleviating the *caveat mututor* burden suggests that the multiplexity of a social network will be highly associated with monetization, but not in a simple way.
- 6. The number of inter-village ties will increase with monetization. Monetization enables exchanges to occur between persons at greater social distance by reducing the caveat mutator burden. Finding support for this proposition is strong support for the link between social network change and monetization. It implies that preferences for workers of different social distances are not equivalent. Harvesting rice in Northeast Thailand is difficult work, often carried out under conditions of oppressive heat (Rajadhon 1955: 12, 31-32). For this reason, the fact that most of this work is done by close associates and family may disguise the fact that, trust and other aspects of potential laborers being equal, households might in fact show a distinct favoritism toward employing those they know less well. If so, such preferences will increasingly reveal themselves as "all things being equal" becomes more of a reality through monetization. Even without such preferences, however, the general scarcity of labor will drive household to look farther from home once risk is reduced.

VII. Data

The data to be used in this analysis come from the Nang Rong Projects, a series of three waves of household interview data collected in 1984, 1994, and 2000. Data are of two distinct types. In 1984, information was collected on all households living in each of 51 villages, and

during each subsequent wave, interviewers returned to these same locations to conduct follow-up interviews. For each of these 51 villages, social network variables have been constructed from both true village-level measures and from aggregated household-level data. Household-level analyses of social-network variables will also be used. The analyses of both household- and village-level measures of monetization require very different procedures. Recall that the theoretical conceptualization of monetization presented here and elsewhere suggests that it is a discrete phenomenon at the level of the individual exchange, while at higher levels of aggregation, the process can be characterized using a range of values. This distinction means that most exchange-level measures will be dichotomous, while most village-level measures will be continuous.

Using aggregate data from the household-level surveys limits the analysis to at most 51 villages in 3 time periods, and 2 periods in many cases, as many key variables were not measured during the initial wave in 1984. This limitation can be remedied in some cases by the use of a restricted set of measures collected for all villages in Nang Rong District, including the original sample of 51. Numbering more than 300, the data on these villages includes measures of basic social and economic networks, especially on the sharing of expensive assets such as tractors and social and cultural cooperation such as the sharing of a religious temple or a school located in another village. This expanded data set is available for both 1994 and 2000, though in exchange for greater statistical power and possibly improved external validity, the range and precision of measures may be reduced.

These three basic data sources, identified henceforth as the "intensive-village," "intensive-household," and "all-village" data sets, will be used in combination to test the propositions stated in the last section. In some cases, it will be possible to use more than one data

source to test a given proposition. In assessing the prevalence of monetized transactions, I will not be concerned with every potential dyad in the system. Instead, at this stage of the investigation, I will focus on those labor-exchange dyads that actually occurred. With each data source, the primary focus will be on predicting general patterns of association. Verifying the first four propositions empirically is a straightforward descriptive task.

VIII. Preliminary Analysis

Propositions 1, 2, and 3, all descriptive in nature, are supported in Figures 2a and 2b. In these figures, box plots of the proportion of all transactions in a village that are monetized are shown for 3 different sources of labor: former and returning members of the household, individuals from the same village, and individuals from another village. In both 1994 (2A) and 2000 (2B), we find strong support for Proposition 1: the share of exchanges that are monetized increases with social distance. In accordance with Proposition 2, the average proportion of monetized transactions increases for all three labor sources from 1994 to 2000, while the variation among laborers from the same and other villages decreases. These two figures also illustrate that, as predicted by Proposition 3, variability appears to be greatest at intermediate social distances, among those persons from the same village (presumed to be semi-well known) who are most likely to be paid in some villages and not paid in others.

IX. Plan for Further Analyses

Propositions 4 and 5 call for measures of multiplexity. As a starting point, the same measure used by Entwisle *et al.* (2007) that was discussed above is already available. As their paper demonstrates, variation exists in such social network measures, and considerable

variability similarly exists in the monetization measures used here. The next logical step will be to add the sharing of different forms of equipment between households into the measure. As noted in Proposition 5, it should be possible to detect the direction of any relationship between multiplexity and monetization over time, however this relationship may be attenuated somewhat by the contradictory phenomena. It may be helpful to refer back to Table 1 to better understand this prediction. On the one hand, monetization has the potential to allow households that formerly were poorly or not at all connected to engage in exchanges. But on the other, among those households that have already established exchange relationships, the tendency will be for those most tenuously connected to pursue monetization more aggressively.

Testing Proposition 6 will be very closely patterned after the procedure used for Proposition 6, described above. They key issue at stake is whether villages behave, in a sense like households where monetization is concerned. That is, will we observe the same pattern of monetized exchange being most beneficial in the remotest, least well-connected villages? And over time, will the same prediction of a complex relationship between connectedness and monetization emerge? In place of household-level measures of centrality, path length, and so forth, existing village-level measures of centralization (the degree to which the entire network exhibits centrality) and average path length will be used.

 TABLE 1: Potential Rice-Harvest Activities that a Nang Rong Household Can Engage in and the Terminology Applied to Each in this Paper

		Household Accepts Labor During Harvest	
		Yes	No
Household Offers Labor	Yes	Exchangers	Sellers
During Harvest	No	Buyers	No Interaction

FIGURE 1: Schematic Conceptual Diagram of Core Argument (From Seller-Side)







(1) two outliers removed – both villages in the west of Nang Rong with virtually no rice agriculture in 1994

FIGURE 2B: Box Plot of Proportion of All Village Rice Harvest Laborers that were Paid in 2000, By Source of Laborers (N=50 villages¹)



(1) one outlier removed – a village that used virtually no non-village labor in 2000

References

- Baker, Wayne E. 1987. "What is Money? A Social Structural Interpretation." Pp. 109-144 in <u>Intercorporate Relations: The Structural Analysis of Business</u> (Mark S. Mizruchi and Michael Schwartz, eds.). Cambridge: Cambridge University Press.
- Banpasirichote, Chantana. 1993. <u>Community Integration into regional industrial development: a</u> <u>case study of Klong Ban Pho, Chachoengsao</u>. Bangkok: Thai Development Research Institute.
- Barker, D.A. 1913. The Theory of Money. Cambridge, MA: Cambridge University Press.
- Bogardus, Emory S. 1926. "Social Distance in the City." <u>Proceedings and Publications of the</u> <u>American Sociological Society</u> 20: 40-46.
- Bollen, Kenneth and J Scott Long. 1993. <u>Testing Structural Equation Models</u>. Newbury Park, CA: Sage.
- Bradford, Frederick A. 1928. Money. New York: Longmans, Green, and Co.
- Canadian International Development Agency (CIDA). 2006. "Community Based Integrated Rural Development—Phase II (Thailand)." Accessed on 2008 March 15 from <u>http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-218132235-PLQ</u>.
- Chamratrithirong, Apichat, S. Phillip Morgan, and Ronald R. Rindfuss. 1988. "Living Arrangements and Family Formation." <u>Social Forces</u> 66(4): 926-950.
- Chamratrithirong, Apichat, K. Archanavinitkul, K. Richter, P. Guest, V. Thongthai, W. Boonchalaksi, N. Piriyathamwong, and P. Cong-Ek. 2005. <u>National Migration Survey of Thailand</u>. Bangkok: Institute for Population and Social Research.
- Cooley, Charles H. 1913a. "The Institutional Character of Pecuniary Valuation." <u>American</u> <u>Journal of Sociology</u> 18(4): 543-555.
- Cooley, Charles H. 1913b. "The Sphere of Pecuniary Valuation." <u>American Journal of Sociology</u> 19(2): 188-203.
- David, Henry P., and Mechai Viravaidya. "Community Development and Fertility Management in Rural Thailand." <u>International Family Planning Perspectives</u> 12(1): 8-11.
- DeJong, Gordon F., A.G. Johnson, and K. Richter. 1996. "Determinants of Migration Values and Expectations in Rural Thailand." <u>Asian and Pacific Migration Journal</u> 5(5): 399-416.
- DiMaggio, Paul and Hugh Louch. 1998. "Socially Embedded Consumer Transactions: For What Kinds of Purchases Do People Most Often use Networks?" <u>American Sociological</u> <u>Review</u> 63(5): 619-637.

Dobeck, Mark F. and Euel Elliot. 2007. Money. Westport, CT: Greenwood Press.

- Dohrs, Larry S. 1988. "Commercial Agriculture and Equitable Development in Thailand: Success or Failure?" In <u>Southeast Asian Business Papers, Number 5</u>. Ann Arbor, Michigan: Center for South and Southeast Asian Studies.
- Dowling, John H. 1979. "The Goodfellows vs. the Dalton Gang: The Assumptions of Economic Anthropology." Journal of Anthropological Research, 35(3): 292-308.
- Emerson, Richard M. 1976. "Social Exchange Theory." <u>Annual Review of Sociology</u> 2: 335-362.
- Entwisle, Barbara. 2007. "Putting People into Place." Demography 44(4): 687-704.
- Entwisle, Barbara, Katherine Faust, Ronald R. Rindfuss, and Toshiko Kaneda. 2007. "Networks and Contexts: Variation in the Structure of Social Ties." <u>American Journal of Sociology</u> 112(5): 1495-1533..
- Entwisle, Barbara, *et al.* 2004. "Village Settlement, Deforestation, and the Expansion of Agriculture in a Frontier Region: Nang Rong, Thailand," *Agriculture, Ecosystems and Environment*, Under review.
- Entwisle, Barbara, Stephen J. Walsh, Ronald R. Rindfuss, and Apichat Chamratrithirong. 1998. "Land-Use/Land-Cover and Population Dynamics, Nang Rong, Thailand." In <u>People and</u> <u>Pixels: Linking Remote Sensing and Social Science</u>. Washinton, DC: National Academies Press.
- Fukui, H. 1993. <u>Food and Population in a Northeast Thai Village</u>, translated by Peter Hawkes. Honolulu: University of Hawaii Press.
- Gartrell, John W. 1981. "Inequality Within Rural Communities of India," <u>American Sociological</u> <u>Review</u>, 46(6): 768-782.
- Grandstaff, Terry B. 1992. "The Human Environment: Variation and Uncertainty," <u>Pacific Viewpoint</u>, 334: 135-144.
- Guest, Phillip. 1996. "Assessing the Consequences of Internal Migration: Methodological Issues and a Case Study on Thailand Based Longitudinal Household Survey Data." Pp. 275-318 in <u>Migration, Urbanization, and Development: New Directions and Issues. Proceedings</u> on the Symposium on Internal Migration and Urbanization in Developing Countries, January 22-24, 1996, New York. (Richard E. Bilsborrow, ed.). New York: United Nations Population Fund and Kluwer Academic Publishers.

Guest, Philip, Apichat Chamratrithirong, Kritaya Archavanitkul, Nittaya Piriyathamwong, and

Kerry Richter. 1994. "Internal Migration in Thailand." <u>Asian and Pacific Migration</u> Journal, 3(4): 531-545.

- Homans, George C. 1964. "Bringing Men Back In." <u>American Sociological Review</u> 29(6): 809-818.
- Hull, James R. 2008a. "Migration, remittances, and monetization of farm labor in subsistence sending areas." <u>Asian and Pacific Migration Journal</u> 16(4): 451-484.
- Hull, James R. 2008b. "The Meaning of Money and Monetization." Dissertation Proposal Chapter 1. University of North Carolina at Chapel Hill, Department of Sociology.
- Hugo, Graeme J. 1982. "Evaluation of the Impact of Migration on Individuals, Households and Communities." In <u>National Migration Surveys: X. Guidelines for Analysis</u>. New York: United Nations.
- Ingham, Geoffrey. 1998. "On the Underdevelopment of the 'Sociology of Money." <u>Acta</u> <u>Sociologica</u> 41: 3-18.
- Ingham, Geoffrey. 2000. "'Babylonian Madness': on the Historical and Sociological Origins of Money." Pp.17-41 in <u>What is Money?</u> (John Smithin, ed.) London: Routledge.
- Kemmerer, Edwin W. 1935. <u>Money: The Principles of Money and Their Exemplification</u> <u>in Outstanding Chapters of Monetary History</u>. New York: MacMillan.
- Korinek, Kim, Entwisle, Barbara, and Aree Jampaklay. 2005. "Through Thick and Thin: Layers of Social Ties and Urban Settlement among Thai Migrants." <u>American Sociological Review</u> 70(5): 779-800.
- Marx, Karl. 1978a [1932]. "Economic and Philosophic Manuscripts of 1844" Pp.66-125 in <u>The</u> <u>Marx-Engels Reader</u> (Robert C. Tucker, ed.).New York: W.W. Norton and Co.
- Marx, Karl 1978b [1887]. "Capital, Volume I." Pp. 295-438 in <u>The Marx-Engels Reader</u> (Robert C. Tucker, ed.).New York: W.W. Norton and Co.
- Novicow Jacques. 1917. "The Mechanism and Limits of Human Association: The Foundations of a Sociology of Peace." (Sophia Hersch Otis and Charles A. Ellwood, trans.). <u>The American Journal of Sociology</u> 23(3): 289-349.
- Parnwell, M.J.G. 1988. "Rural Poverty, Development, and the Environment: The Case of North-East Thailand," Journal of Biogeography, 15(1): 199-208.
- Phongphit, Seri, and Kevin Hewison. 2001. <u>Village Life: Culture and Transition in Thailand's</u> <u>Northeast</u>. Bangkok, Thailand: White Lotus.

Piotrowski, Martin. 2007. "Migrant Remittances and Household Division: the case of Nang

Rong, Thailand." Under review.

- Plattner, Stuart. 1989. "Markets and Marketplaces; Economic Behavior in Markets." Pp. 171-221 in <u>Economic Anthropology</u> (Stuart Plattner, ed.). Stanford, CA: Stanford University Press.
- Poole, Willard C. Jr. 1927. "Distance in Sociology." <u>American Journal of Sociology</u> 33(1): 99-104.
- Rigg, Jonathan D. 2003. <u>Southeast Asia</u>, 2nd Edition: The human landscape of modernization and <u>development</u>. London: Routledge.
- Sahlins, Marshall. 1968. Tribesmen. Englewood Cliffs: Prentice-Hall.

Sahlins, Marshall. 1972. Stone Age Economics. Chicago: Aldine.

Salmon, Lucy M. 1912. "Democracy in the Household." <u>American Journal of Sociology</u> 17(4): 437-457.

Shapiro, Edward. 1975. Understanding Money. New York: Harcourt, Brace, Jovanovich.

- Simmel, Georg. 1900. "A Chapter in the Philosophy of Value." <u>American Journal of Sociology</u> 5(5): 577-603.
- Simmel, Georg. 1909. "The Problem of Sociology." <u>American Journal of Sociology</u> 15(3): 289-320.

Smithin, John. 2000. "Introduction." in What is Money? (John Smithin, ed.) London: Routledge.

- Sorokin, Pitirim. 1926. "Monarchs and Rulers: A Comparative Statistical Study." <u>Social Forces</u> 4(3): 1926.
- Stoeckel, John, et al. 1986. "Maintaining Family Planning Acceptance Levels through Development Incentives in Northeastern Thailand." <u>Studies in Family Planning</u> 17(1): 36-43.
- Weber, Max. 1978. <u>Economy and Society</u>, 2 vols. (G. Roth and C. Wittich). Berkeley: University of California Press.
- Weber, Max. 1997. <u>The Theory of Social and Economic Organization</u> (Talcott Parsons, ed.). New York: Free Press.

Zelizer, Viviana A. 1996. "Payments and Social Ties," Sociological Forum, 11(3): 481-495.