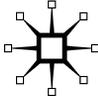


Accepting the Invisible Hand
Market-Based Approaches to
Social-Economic Problems

Edited by

Mark D. White

palgrave
macmillan



ACCEPTING THE INVISIBLE HAND
Copyright © Mark D. White, 2010.

All rights reserved.

First published in 2010 by
PALGRAVE MACMILLAN®
in the United States—a division of St. Martin's Press LLC,
175 Fifth Avenue, New York, NY 10010.

Where this book is distributed in the UK, Europe and the rest of the world,
this is by Palgrave Macmillan, a division of Macmillan Publishers Limited,
registered in England, company number 785998, of Houndmills,
Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan is the global academic imprint of the above companies
and has companies and representatives throughout the world.

Palgrave® and Macmillan® are registered trademarks in the United States,
the United Kingdom, Europe and other countries.

ISBN: 978–0–230–10249–1

Library of Congress Cataloging-in-Publication Data is available from the
Library of Congress.

A catalogue record of the book is available from the British Library.

Design by Newgen Imaging Systems (P) Ltd., Chennai, India.

First edition: xxxxx 2010

10 9 8 7 6 5 4 3 2 1

Printed in the United States of America.

Contents

<i>Preface and Acknowledgments</i>	ix
Mark D. White	
<i>Notes on the Contributors</i>	xiii
1 Markets and Dignity: The Essential Link (With an Application to Health Care) <i>Mark D. White</i>	1
2 Markets, Discovery, and Social Problems <i>John Meadowcroft</i>	23
3 Economic Freedom and Global Poverty <i>James D. Gwartney and Joseph S. Connors</i>	43
4 Don't Let the Best Be the Enemy of the Good: A Stoic Defense of the Market <i>Jennifer A. Baker</i>	69
5 Ethics in the Mayan Marketplace <i>Benjamin Blevins, Guadalupe Ramirez, and Jonathan B. Wight</i>	87
6 Philanthropy and the Invisible Hand: Hayek, Boulding, and Beyond <i>Robert F. Garnett, Jr.</i>	111
7 Life in the Market Is Good for You <i>Deirdre Nansen McCloskey</i>	139
8 Doing the Right Things: The Private Sector Response to Hurricane Katrina as a Case Study in the Bourgeois Virtues <i>Steven Horwitz</i>	169
<i>Index</i>	191

In Mark D. White, *Accepting the Invisible Hand: Market-Based Approaches to Solving Social-Economic Problems* (Palgrave Macmillan 2010).

Chapter 5

Ethics in the Mayan Marketplace

*Benjamin Blevins, Guadalupe Ramirez, and
Jonathan B. Wight*

The use of social relations to enforce moral codes governing exchange is a practice that likely goes back to the early evolutionary history of *Homo sapiens*.¹ Cooperation among individuals offers distinct advantages for biological fitness compared to self-sufficiency. A key stumbling block is the question of trust and the potential for cheaters to gain at the expense of cooperators. Charles Darwin, relying on Adam Smith, argued that mechanisms supporting cooperation can be found in moral norms arising from instincts; these instincts produce powerful emotions, such as those that generate sympathy with others.² Moral codes generally work to ensure cooperative behaviors in close relatives and reciprocators in exchange. They also generally provide for safety nets to share risks and ensure survival of the group during unexpected downturns. As human societies change and adapt to new challenges, specific moral norms evolve to fit those circumstances. Consequently, a diversity of moral norms and practices has existed throughout human history depending on time and circumstance.³

This chapter analyzes the moral codes of an indigenous community in Guatemala and how these relate to reciprocity, risk-taking, safety nets, and market developments. Indigenous Mayan cultural and social systems are based on non-Western concepts of harmony, community, natural energy, and a coexisting spirit world. Christianity coexists and is transformed by these indigenous beliefs.⁴ Likewise, Mayan market activities predate the arrival of the Spanish and serve multiple purposes in a community that go beyond the calculation of monetary profit. The Maya cosmo-vision today is a blended version of indigenous and Western ideas and is changing rapidly. This worldview, as it still exists in some highland villages, affects attitudes

to markets and the means and ends of development efforts. In particular, indigenous Mayan culture is more receptive to self-help and entrepreneurial activity than to pity and charity. At the same time, traditional Mayan culture is under assault from a variety of forces, both domestic and international.

This chapter does not attempt to present an “official” Mayan viewpoint on these topics because doing so would be both presumptuous and misleading. There is no authorized Mayan perspective; such a viewpoint, if it existed, would not be static. Instead, this chapter reflects on themes of Mayan life and markets encountered over nearly two decades of building market capacities in the highlands of Guatemala. In particular, the final section illustrates the workings of a nonprofit agency, the Highland Support Project (HSP), which builds upon indigenous practices and an appreciation for Mayan cosmo-vision, in order to create social capital necessary for sustainable market initiatives.

The following overview introduces Mayan demographic and economic trends, followed in the next section by the general concepts of Mayan cosmo-vision. The next section shows how this worldview shapes the social relationships in markets and creates moral limits on transactions. Then we explore the implications for public policy, particularly economic development theory and practice, as exemplified by the work of HSP, before providing conclusions at the end of the chapter. Throughout the chapter we call attention to Adam Smith’s notions of economic development and his theory of moral sentiments that underlies human motivation. This association with Smith supports the view that Mayan cosmology developed pragmatic ethical norms useful for solving economic problems, even if these institutions can and must evolve.

Overview of Mayan Society in Guatemala

At the time of the Spanish Conquest indigenous Mayan societies reached from southern Mexico and the Yucatan to Guatemala and western Honduras and El Salvador.⁵ Mayan culture endures today in these regions. Estimates of the Mayan population in Guatemala today vary widely, but is known to be between 40 and 60 percent of the total population of about thirteen million. Official government estimates are in the low range, but indigenous groups claim systematic underrepresentation,⁶ because many indigenous Mayans do not identify themselves as such to census takers. Vital statistics on socioeconomic characteristics are lacking or are questionable. The latest

(2009) World Bank indicators for Guatemala as a whole show an average life expectancy of sixty-six years for males and seventy-three for females.⁷ The fertility rate is high even by developing country standards at four births per woman. Women make up 31 percent of the formal labor force, but this statistic is virtually meaningless in villages since women work long unpaid hours gathering firewood, tending crops, and so on. The infant mortality rate is thirty-one per one thousand live births and essential vitamin A coverage for infants under five years is only 44 percent. Health spending per person is around \$130, with 90 percent or more of this paid for privately out-of-pocket. About 43 percent of the population is under age fifteen, and approximately two-thirds of children ages seven–fourteen are economically active. Slightly less than two-thirds of children make it through sixth grade on time. Slightly more than half of Guatemala's population is rural and rural population density is very high (four hundred and sixty-six people per square kilometer of arable land). Finally, per capita GDP based on purchasing power parity was \$4,565 in 2007.

In countries with wide income and wealth differences, average values mask large standard deviations.⁸ In particular, rural Mayan villages are isolated and poor. There are several Mayan dialects and many Mayans speak no Spanish, creating further isolation. Per capita income in highlands Mayan villages may be closer to five hundred dollars per year (less than two dollars a day). Males of working age often migrate seasonally to coastal areas to work on commodity export plantations or they may leave the country for years; worker remittances from overseas are a huge part of village income and amount to about 12 percent of Guatemala's GDP. Women and children remain behind in the village to tend crops in family gardens and labor in handicraft industries such as sewing.

Like most of Latin America since the conquest, Guatemala's land ownership patterns can be traced to the Spanish crown, the Catholic Church, and the expropriation of indigenous lands.⁹ The most fertile lands along the coast were taken over for export enclaves—large plantations of coffee, bananas, and sugar; exports account for about one-quarter of the GDP. A clique of powerful families (oligarchies) control about 70 percent of the land.¹⁰ For reasons of monopsony, migrant workers in agriculture are likely to be paid less than the value of their marginal products, leading to exploitation in the neoclassical sense. While free trade based on comparative advantage raises average living standards, some individuals can be made worse off.¹¹ Large landowners who have the monopsony power to exploit workers can reduce living standards for the poor even in the context of free trade.

The oligarchs also control significant political capital (including control over the military), which makes it difficult for workers to seek redress in unions or at the ballot box. Not surprisingly, Guatemala has a record of human rights abuses and a modern civil war that lasted thirty-six years (1960–1996).

This discussion reminds us that to be an engine of economic development, the market requires an additional and complementary institution: a reputable and fair system of justice. Adam Smith noted that justice is the “main pillar” without which society would “crumble into atoms.”¹² Society can survive without benevolence, but no society can progress without justice. Justice includes property rights and fair rules (commutative justice). After five hundred years of repression and a brutal civil war, the issue of property rights and justice for Mayans is highly problematic in Guatemala.

Without minimizing these issues, this chapter addresses a different topic: given the reality of the economic poverty in Mayan villages that will likely not be ameliorated by government action or handouts by foreign charities, how do Mayan institutions act to promote efficiency and create their own safety nets? Mayans are relearning how to be self-reliant and using the new global market to their own advantage. At the same time, there is a tension created because the Mayan concepts of corporate community conflict with notions of individualism and autonomy associated with Western markets.

Mayan Cosmo-vision

Cosmology is the study of the universe and the place of humanity within it. A cosmo-vision is a particular set of beliefs that explain these questions within a particular cultural context. Every Guatemalan guidebook discusses the quaint indigenous festivals and weekly saintly processions, and tourists flock to the colorful Tuesday and Sunday bazaar in Chichicastenango—the largest indigenous market in the western hemisphere. But few visitors—and certainly few economists—get inside the mindset of the Mayan people. To do so requires a leap outside of Cartesian concepts of space, time, and rationality. In Mayan cosmo-vision there is no separation of mind, body, spirit, and nature. In this framework, the concept “I think—therefore I am” is unbalanced and unhealthy.

Mayan civilization goes back in time more than four thousand years. At its peak (250–900 AD) it was characterized by a well-developed language and specialization of labor in agriculture, art, architecture, crafts, and building trades.¹³ Relatively high population density

was achieved in independent city-states that were supported by crop cultivation techniques such as raised beds, irrigation canals, cyclical rotations, and so on. Based on artifacts, Mayans likely maintained widespread trading networks across Mesoamerica. Mayan technology of this time was in many ways significantly advanced compared to European knowledge. Ancient Mayan mathematicians, for example, utilized the concept of zero and astronomers plotted the heavens with accuracy. Mayan calendars recorded complex cycles as well as provided a non-repeating “Long Count” calendar dating back to 3114 BCE.¹⁴ To the Maya, the past provides a means of understanding the cyclical nature of life leading to the present, and from the present one can anticipate future cycles. Unfortunately, most astronomical and other writings of the Maya were purposefully destroyed by Spanish *conquistadors*.

Mayan cosmo-vision should thus be understood not as the ramblings of a technologically primitive, culturally illiterate, and economically deprived people, but rather—for its day—the relatively sophisticated philosophy of a knowledge-advanced urban society. This point is difficult for Westerners to comprehend when viewing the modern-day poverty and illiteracy in surviving rural Mayan villages. For reasons not yet understood, several important southern Mayan city-states began to collapse during the eighth and ninth centuries AD.¹⁵ The subsequent Spanish conquest destroyed remaining Mayan city-states by the late seventeenth century. Official colonial policy (supported by the Catholic Church) was to eradicate the Mayan culture and supplant it. Hence, Catholic churches were constructed on top of Mayan religious sites and Christian rituals and functions were layered over Mayan ceremonies. The Mayan languages were forbidden in public schools. The persistent discriminatory policies of the last five hundred years, and the devastating effects of civil war that ended only in 1996, have left Mayan communities in a shambles. They are deprived of fertile lands (taken over by Spanish land grants); deprived of male wages—two hundred thousand died during the civil war in which Mayan leaders were targeted;¹⁶ deprived of identity that comes from language; and deprived of political power despite representing about half of the population in Guatemala. As a result, the Maya cosmo-vision today is a blended version of indigenous and Western ideas, and is evolving rapidly.

The central element of this surviving Mayan worldview revolves around a key idea: that humans are a physical manifestation of the mystical cosmos and that aspects of the cosmos are reflected along different metaphysical planes (e.g., in a spirit world). Each person is

part of this wider universe and should achieve harmony with it as a principal ethical precept. Becoming one with the natural universe—experiencing no separation—is at the heart of Mayan peasant religion. Harmony is regulated by “energy” flows that need to be kept in balance. Achieving balance requires the loss of ego, and a focus on observing the natural laws for personal and social behavior. In Western terms, we might say that the Mayan religion reflects the view of quantum physics, in which everything at its core is a particle of pure energy. Energy flows can be “seen” or “felt” everywhere—like halos in Medieval European portraits.

While conquering Spaniards destroyed most Mayan writings, a redacted manuscript from the early eighteenth century survives and relays a set of key mythical stories in the Mayan tradition. *The Popol Vuh: The Sacred Book of the Ancient Quiche Maya* describes a natural world in which there is no separation of the sacred from the mundane.¹⁷ Everything is endowed with a sacred element because all material objects are constructed from elements of creation. The very act of creating is sacred because it is a manifestation of the cosmic consciousness in a time-space continuum. The word for this interdependent fabric of life is “*Pop*,” or literally “mat.” Mayan organizations refer to consensus-based, horizontal organizational structures of their communities as a *Pop*.

Mayan culture is also shamanistic—concerned with communicating with a spirit world that exists in a parallel plane and is inhabited by good and bad elements:¹⁸

Shamans are specialists in ecstasy, a state of grace that allows them to move freely beyond the ordinary world—beyond death itself—to deal directly with gods, demons, ancestors, and other unseen but potent beings. Shamanic ecstasy can last moments, hours, or even days, but the amount of time spent in trance is less important than the knowledge of its existence.¹⁹

This mystical underworld is called *Xibalba* and belief in its existence plays an important role in shaping attitudes toward the physical world above. Mayan temples such as Chich'en Itza and Tikal represent devices for tapping into this spiritual power. Importantly, Mayan religion is not theistic: God is not personified, rather the cosmic intelligence is a unified and integral part of one's existence and society. No entity exists outside the system and the whole equals the sum of the parts. In contrast to much Christian theology (in which there is an orchestra conducted by God), Mayan religion makes no distinction

between the notes played and the musicians, nor does it provide for a conductor.

However, in all anthropological work we must distinguish the “high” culture of the Kings and nobles from the “low” culture of peasants. Mayan *high* culture is ritualistic, ceremonial, literal, and hierarchical; Hayden presents a view of this non-egalitarian behavior by Mayan elites in larger towns (e.g., eight hundred–nine hundred people).²⁰ Mayan *low* culture is allegorical, egalitarian, and nonhierarchical, and is typically more likely to be observed in small villages (e.g., under one hundred people). Contemporary Mayan society has elements of both tendencies but in small villages is mainly peasant-based, which is the focus of this chapter.

Schele and Friedel note the sharp distinction between Mayan and Western philosophies that makes it difficult for newcomers to comprehend:

While we live in a model of the world that vests our definitions of physical reality in science and spiritual reality in religious principles, the Maya lived in a world that defined the physical world as the material manifestation of the spiritual and the spiritual as the essence of the material . . . This manner of understanding reality is still true for many of the contemporary descendants of the ancient Maya.²¹

The Mayan cosmo-vision thus provides a set of principles for organizing individual and community life. While the forces of nature dissipate energy as in the entropy law, humans operating in the cosmos act as a countervailing force. The dominant theme is that humans are not apart from nature and others, and unlike the Cartesian divide, the human person cannot be separated into component parts whether spiritual, material, or corporeal. Life is holistically integrated, and the ideal is to achieve harmony and balance with the environment and with one’s community. This philosophy is in many respects similar to the Stoical philosophy that interested Adam Smith. In recounting the Stoic system, Smith writes:

[A wise man] does not look upon himself as a whole, separated and detached from every other part of nature, to be taken care of by itself and for itself. He regards himself in the light in which he imagines the great genius of human nature, and of the world, regards him. He enters, if I may say so, into the sentiments of that divine Being, and considers himself as an atom, a particle, of an immense and infinite system, which must and ought to be disposed of, according to the conveniency of the whole.²²

Perhaps like Stoics, Mayans use ceremonies to assist someone to tune their frequency to the rhythm of the cosmos, which has its own orderly cycle of its own. The danger is seen in focusing on *oneself*, rather than on the integrated whole of which humans are an infinitesimal part.

Ethics in a Mayan Market

To recap, the Mayan cosmo-vision places each person and each act within an integrated and seamless fabric of the universe called *Pop*. Political and economic transactions are a reflection of *Pop* and bind the participants in a web of social and spiritual relations. This is reflected in cultural behavior by redistributive justice, egalitarian price discrimination, and socially controlled local monopolies and specializations. We turn now to these issues.

Redistribution

Fiestas are one of the primary means of economic redistribution within Mayan villages and towns and represent a major form of personal expenditure.²³ The wealthiest people become the chairs of the *fiesta* committee and subsidize fellow villagers by both creating demand for their handicraft products and by providing in-kind subsidies of food and entertainment. In more urban locales there is corporate sponsorship. Mayan spirituality is experienced through ceremonies and festivals, and business leaders are expected to participate in the spiritual life of the community and keep the energy reciprocity flowing.

Low income villagers make the marimba music, fireworks, food, piñatas, and other goods and services used during the *fiestas*. Since *fiestas* are a weekly event throughout the country, the economic impact of this redistribution in poorer areas may be considerable. Social welfare is often a conscious factor in deciding which small businesses get the *fiesta* trade. If one family has sick children that need medicine, *fiesta* business is directed to that family. This is a mechanism for providing desirable and voluntary income redistribution without imposing the stigma of charity or imposing the power of government. Such considerations are expected as part of the proper and normal balancing of energies.

Cofradía is an organized brotherhood of the Catholic Church (which, as noted earlier, has rituals and functions layered on top of ancient Mayan ceremonies). In many communities *cofradías* take on the responsibility for promoting and celebrating a particular saint's feast day, including a procession, fireworks, a mass, and meals for

all attending.²⁴ *Cofradías* often incorporate pre-Columbia rituals, requiring a shaman (see later). Since the conquest these fraternities have served as de facto political and legal structures in a town; the members are often associated with the Chamber of Commerce. A businessman can elevate his status by sponsoring a *fiesta*, and thus these are often organized and run by the brotherhoods. Social capital is needed to attract clients, and a business leader who fails to sponsor a *fiesta* may be treated as an outcast. Proving one's worth to the village is an important step spiritually, economically, and politically. However, fulfilling these social obligations is a form of social "tax."²⁵

Accordingly, every Mayan has a ledger system in her head. The smaller the village, the more powerful that energy ledger system becomes. Every child starts life with a hugely negative ledger because there is a welcoming ceremony for newborns—by which babies become indebted to others at their birth. The child's identity is formed by the community that feasted her. Hence, since everyone is in debt to the village from birth, it is one's obligation to always help the village. As with the birth ceremony, such rituals of passage are repeated at various points in a Mayan's life. When a person marries they are expected to feed all those who come to the wedding (and in a village that would be everyone). There is a notion that if you feed people when you get married, you'll never have a hard time in life because others are then obligated to feed you. Such behaviors and expectations tend to reduce economic disparities and maintain a more egalitarian society. Annis provides one of the most interesting modern studies of a Mayan village. He speculates that: "Since [Mayans] could not realistically translate wealth into economic and political power in the Ladino [non-indigenous] sphere, the accumulation of wealth was morally rejected in favor of reinvestment in a kind of social currency negotiable only at the village level."²⁶

Unlike Western notions of individuality and autonomy, the Mayan cosmology does not allow people the freedom to escape group consciousness. Business and one's economic life are bound up with one's spiritual and ethical obligations to the community. Mayan villages are a socially "corporate" community—where everyone has a role in the growth and well-being of the area. One could speculate that the socialization process of debt-obligation from birth serves a vital evolutionary role in survival of the group. That is, social bonds and cultural practices provide mechanisms of redistribution that help the marginally worst-off in society, and thus raise average group fitness. As noted earlier, Darwin believed that moral practices can serve

evolutionary purposes, an idea partially derived from a careful reading of Adam Smith's *The Theory of Moral Sentiments*.

In fact, the *fiesta* redistribution system is similar to Adam Smith's "invisible hand" example in *Moral Sentiments*. In a feudal society Smith noted that a rich landlord often overplants his fields—not because he can eat the produce thereof, but because he responds to the natural instinct to create order.²⁷ While David Hume argued that beauty comes from utility, Smith proposed instead that the recognition of beauty arises from conceptions of ideal fitness, order, and perfection.²⁸ What is orderly from society's perspective is not necessarily rational or orderly from an individual perspective. It is irrational for the landlord to overplant his fields, and self-deception thus plays a part in explaining how societies progress. The landlord's eye is larger than his belly and Smith notes that "it is to no purpose" that the landlord cultivates his fields so extensively.²⁹ Yet after the harvest the landowner's belly can imbibe only a fraction of what he desires; excess food will be traded for the "baubles and trinkets" produced in nearby villages. Landlords provide, through this trickle-down economics, a living wage to the less fortunate. Thus:

[The rich] are led by an invisible hand to make nearly the same distribution of the necessaries of life, which would have been made, had the earth been divided into equal portions among all its inhabitants, and thus without intending it, without knowing it, advance the interest of the society, and afford means to the multiplication of the species.³⁰

According to this notion, a *voluntary* and *unconscious* system of redistributive justice operates to maintain balance and harmony in society through an invisible hand. Something similar to Smith's theory exists in the Mayan worldview, in which energy flows serve to balance the scales of life and maintain a safety net for the poor.

One can further speculate that such a social mechanism could arise from calculated or enlightened self-interest in an economic system subject to cyclical fluctuations. *Fiestas* are similar to African tribal wealth-sharing and to native American potlatch ceremonies that are thought to provide social insurance for bad times. Although such systems are compatible with rationally enlightened self-interest, these behaviors may originate from unconscious or instinctual drives. Adam Smith noted that sympathy, for example, did not arise from self-love but from an instinctual fellow feeling. In other words, sharing behaviors may produce long run benefits but yet not arise from the agent's long run consequentialist analysis.

From an ethical perspective Smith thought that it was important to maintain the distinction between conscious rational calculation of virtue as contrasted with instinctual virtue because the former produces conduct in the long run of a “much inferior order.”³¹ Hence to Smith it is better to act out of genuine feeling and authentic regard rather than from pure calculation of self-interest: virtue ethics requires more than narrow prudence.³² To amplify this point, when Adam Smith again uses the “invisible hand” in *The Wealth of Nations*, it occurs in conjunction with a discussion of virtuous character: “[The merchant] can know better the character and situation of the persons whom he trusts . . .”³³ A person of character is virtuous because of a love of virtue, not from the consequences that flow from being virtuous.

Amartya Sen takes a slightly different approach, in which he assigns the term “commitments” to reflect binding obligations or duties to others that impose harm or cost on oneself.³⁴ These reflect meta-preferences rather than simple preferences of the moment. The redistributive practices that produce group solidarity in Mayan villages likely arise and are sustained by some combination of enlightened self-interest, sympathy, and commitments; the working hypothesis of this chapter is that such practices generate advantages to the group that cannot be obtained by individuals acting alone. However, in times of rapid change—as is the case economically and culturally in Guatemala today—institutions can become anachronistic.³⁵ For example, the *fiesta* system may solve coordination problems by providing the working poor with redistributions, and the opportunity cost of this practice may be low when the well-off have few investment alternatives. But this practice is increasingly viewed as a quaint relic, out-of-date with the penetration of financial markets and improved communication and transportation systems that allow the middle class Mayans to bypass village life.³⁶

Pricing Behavior

In addition to redistribution through festivals, the Mayan worldview pervades price setting and leads to widespread egalitarian price discrimination based on perceptions of each person’s different situation and needs. For Mayans the marketplace is a sacred space of mutual assistance. The vendor of beans from the Highlands is dependent for survival on the oranges brought up from the tropical coast, as are the coastal people dependent on the protein from the Highland beans. From an elevated position in this simple market, it is easy to see that many Maya are locked into a sacred web of interdependent

relationships. To better understand this phenomenon, an anthropologist might record the following anecdotal behavior that provides insights into the Mayan worldview in the market:

We witness an elderly Maya vegetable vendor give thanks to God for the first sale of the day and watch as she stores that money away to be given in alms for the poor. She has a sense of duty and believes that good fortune is a blessing of the cosmos and that nothing happens by chance. The cosmos provides opportunities. We see the little shrine she erected in her stall with Saints in place to protect and assist her in feeding her family. She greets the next customer with a term that means blessing, for each customer is viewed as a blessing from the creator and their business a gift.

Energy equilibrium—not price equilibrium—is what matters in the Mayan marketplace. Energy flows require balance, and it unleashes very bad energy, for example, to cheat someone. In doing that you bring negative energy into your life and you will need to “clean” that energy.

Market pricing is thus another manifestation of *Pop*. Being honest in a market transaction, however, does not mean that everyone pays the same price for a similar product. Balancing of energy is subtle and requires that different people pay different prices. A ritualistic bargaining brings out the “just price” in every circumstance. A rich consumer is expected to be willing to pay a higher price and a poorer consumer would be expected to pay a lower one. One could say this is similar to the Golden Rule—“Do unto others as you would have them do unto you”—considering one’s circumstance. It also allows for social redistribution in a way that maintains dignity and a work ethic.

Mohammed Yunus discovered the important role that social capital can play in micro finance (e.g., the Grameen Bank).³⁷ In a similar way, social capital provides a mechanism for redistribution and pricing in a microeconomic Mayan community. However, this behavior is subject to breaking-down with the influx of tourists. An act that was considered sacred—buying and selling with a “just price”—can become corrupted when the process is made secular and impersonal.³⁸ The Mayan practices discussed here are gradually disappearing as improved roads bring in outsiders and Western habits of consequentialist thinking.

Specialization and Local Monopoly

Most village families use surplus child and elderly labor to till a small plot of corn and interwoven beans (called *milpa*). This marginal output

is used for family consumption and basic survival.³⁹ In addition, families with more land and a small bit of capital will take greater risks by growing vegetables and potatoes for sale in the market. In addition, a village economy is often cooperatively specialized in weavings, baking, and other small business ventures. Everyone has a defined role in the economy and occupations are a calling, arrived at through an intuitive, reflective, and spiritual process. One's birth sign, as well as one's abilities, influence choice. Not surprisingly, children often follow in their parent's occupations. One's occupation is thought to maintain order and the functioning of the cosmos; each does her part for the maintenance and survival of the group.

Economies of scale are not compatible with competition in villages hindered by poor transportation systems. Economics of scale thus result in natural monopolies in trades subject to high fixed costs relative to the small local demand. Without laws to enforce natural monopolies, social injunctions are used instead to prohibit competition. It is considered socially improper, for example, to open a competing bakery if the village already has one. Someone competing in this setting destroys the balance and harmony of the village and in economic terms would result in higher prices to consumers (assuming economics of scale). Likewise, it is improper for that baker to use the village monopoly to gain unfair advantage in pricing. Given the isolation of many villages caused by bad roads, this social system of regulation seeks to encourage economies of scale through specialization while also reducing deadweight losses caused by monopoly pricing. Like the Grameen Bank, social harmony can be a powerful force for marshalling resources. However, those same social forces could act as constraints on development if free riders take advantage of them.

The social nature of production is also reflected in job allocations. Weavings are purchased in bulk from the village; when a large textile order comes in, all small producers in town are expected to benefit from the contract. One shop paints and/or dyes the thread, another lays threads out for the foot loom, and so on through a number of different specializations. This is eerily similar to Adam Smith's explanation of specialization in *The Wealth of Nations*, in which he discussed the cooperative nature of production:

[T]he whole work is a peculiar trade...divided into a number of branches... One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even

a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations...⁴⁰

Smith never addressed how these operations are organized or managed, that is, how one worker is selected to straighten, how another is selected to cut, and so on. Presumably there is an overseer or entrepreneur who directs worker activities so that there is cooperation without redundancy. Mayan village production appears similar in some ways, but the organizing principles are different as explained in the following section: Mayans rely less on hierarchy and order-giving and instead are likely to use unspoken, cooperative mechanisms of management.

In addition to local specializations, Mayan villages exhibit regional specializations. Totonicapán focuses on commercial floor loom weaving done by men using a technique imported by the Spanish. The indigenous back strap loom weaving, practiced for thousands of years, is done by women in villages. Back strap looms are used to make personal items such as the *huipil* (woman's blouse), which is considered a sacred item. Chichicastenango ("Chichi") is the regional outlet for back strap loom fabric that is more elaborate, and explains why Chichi is the hub of the tourist trade. Chichi also has sewing shops.

Given these regional city specialties, remote village producers have high fixed costs for marketing their wares. For example, there is a high fixed cost in traveling long distances along poor roads to take one's weavings to the market, and then to sit for a full day at the market selling. When high fixed costs of marketing exist, it is expected that one villager will carry out marketing activities for others. If each villager acted independently by traveling separately to Chichi to sell on market days, there would be an immense opportunity cost of time. Alternatively, a cooperative solution is for one person in the village—acting as a natural monopsony—to buy the weavings of everyone in the village to take to the market. As noted earlier, the Mayan communities are socially corporate. People have unwritten rules for remuneration and a ledger system of energy balance. These issues constrict and also inform how development policy might work in the highlands of Guatemala.

Development Policy

Rodrik provides a scathing critique of development economists whom he accuses of forgetting economic fundamentals.⁴¹ He argues that

economics is essentially about means and ends—of analyzing what works as opposed to what sounds good in theory. Since the 1990s, the reform package known as the “Washington Consensus” attempted to stabilize macroeconomies, liberalize markets, and privatize state enterprises. The results for growth in Latin America have been lackluster. By contrast, countries in East Asia that followed unorthodox policies grew much faster.

The reason most Latin American economies have not taken off using neoliberal policies, Rodrik argues, is that reform efforts have not been prioritized. That is, marginal costs and marginal benefits of reform vary depending on the particular bottlenecks of a particular country at a point in time. A general reform effort targets nothing specifically and may be counterproductive in terms of second-best options: “What [countries] need,” Rodrik argues, “is not a laundry list [of reforms], but an explicitly diagnostic approach that identifies priorities based on local realities.”⁴²

By contrast, the World Bank and IMF adopted a “cookie-cutter” list of reforms in the 1990s that every country receiving support was expected to fulfill. For Rodrik, identifying priorities for reform relies extensively on local context. History, culture, politics, and path dependency limit the range of options and the methods used. Hence, while development policy might be guided by first-order principles of property rights and markets, it should be grounded and activated through specific institutions of a country. Rodrik notes:

First-order economic principles—protection of property rights, market-based competition, appropriate incentives, sound money, and so on—do not map into unique policy packages. Reformers have substantial room for creatively packaging these principles into institutional designs that are sensitive to local opportunities and constraints.⁴³

Adam Smith was well aware of the difference between ideal philosophy and policy in practice. Hence, in *The Wealth of Nations* Smith argued that it was not necessary or desirable to follow an ideological approach to development. For example, although Smith respected the mid-eighteenth century French reformers (Physiocrats) who advocated laissez faire, he did not accept the pure approach advocated by this doctrine. Smith, like Rodrik, was a pragmatist and noted:

Some speculative physicians seem to have imagined that the health of the human body could be preserved only by a certain precise regimen of diet and exercise...Mr. Quesnai [leader of the Physiocrats],

who was himself a physician, and a very speculative physician, seems to have entertained a notion of the same kind concerning the political body, and to have imagined that it would thrive and prosper only under a certain precise regimen, the exact regimen of perfect liberty and perfect justice. He seems not to have considered that, in the political body, the natural effort which every man is continually making to better his own condition, is a principle of preservation capable of preventing and correcting, in many respects, the bad effects of a political economy . . .⁴⁴

These observations provide ample reason for development economists to be humble about what can be done from the “top down,” and instead, to be more focused on supporting context-specific opportunities for people to better their own condition by their own natural efforts from the “bottom up.” In particular, economic development policy in the highlands of Guatemala needs to consider not only the geographic isolation, the political strife, and the poverty of human and physical capital, but it also needs to consider the context of Mayan institutions and worldview. We turn now to an example of such a development approach.

Highland Support Project

The Highland Support Project (HSP) is an incorporated nonprofit entity founded in 1993 and headquartered in Richmond, Virginia. HSP’s development work in Mayan villages is instructive in three ways: first, it highlights the importance of first-order principals of property rights and trade; second, it highlights Rodrik’s injunction about the importance of developing institutions and policies within a particular historical context; and third, it illustrates the use of Mayan ethical and cultural precepts as a foundation for Mayan development.

With regard to trade, HSP creates a global market for weavings and other village products by providing direct links between handicraft producers in Guatemala and consumers in the United States. Items are sold at a retail store in Virginia, via the Internet, and also via special event sales at churches. Having access to global capital, marketing, and markets frees highland workers from the monopsony power of plantation agriculture; and it fulfills Adam Smith’s vision that trade provides opportunities for specialization and increased standards of living. However, a key problem with introducing global trade is that villagers lack both the knowledge of foreign markets and the practice of dynamic innovation needed for long term survival in

a rapidly changing market. HSP attempts to counter this by involving design students from a U.S. university to help Mayan women fashion products that are the size and shapes most likely to sell; they also help identify and/or create new products that take advantage of comparative advantage. In short, it is a blend of Mayan inspiration and American marketing.⁴⁵

Another HSP initiative is to take North American tourists directly to remote Mayan villages where they buy direct. In addition to providing tourist revenue, visitors typically perform community service by tutoring in schools and by building energy- and health-enhancing concrete stoves in village homes. Because unvented open fires are a major cause of respiratory ailments, vented stoves serve to improve human capital. In addition, because the stoves are more energy efficient, they reduce the labor time in gathering firewood and improve the regeneration of forests and reduce soil erosion.

These activities raise the question of whether, through its transformation of village production and the introduction of tourists, HSP is contributing (paradoxically) to the decay of the Mayan culture and community. While economic growth changes culture and institutions, HSP's efforts are guided by working exclusively through a Guatemalan partner it created, the *Asociacion de Mujeres del Altiplano* (AMA or Highland Women's Association). AMA is run by, and for, Mayan women. It works on a number of projects that seek to revitalize Mayan culture, such as introducing the Mayan Arts Program (MAP). Most schools lack even crayons for children to draw. MAP provides art supplies and volunteer instructors to connect children with their heritage, which is a first step in creating self-confidence needed for entrepreneurial success. AMA works from the belief that Mayans are natural entrepreneurs who can lift themselves out of poverty through formal and informal businesses. Market-based activities are the foundation for maintaining and restoring Mayan culture and identity—even if markets also threaten that identity and culture in the short run.

As noted, village males often migrate in search of work. Hence, women are the backbone of village enterprises. AMA strengthens entrepreneurship through “women's circles” that meet weekly. These groups encourage participation and organization of local women to solve local problems in their communities. After the devastation of civil war, a major problem was debilitating depression and pessimism. Women's circles aid in psychological healing using trust games and other self-esteem raising activities. Social capital is enhanced when women encourage and support each other, and equally as important,

hold each other accountable. A Mayan saying provides the link, “All rise together and no one will remain behind.”

AMA also works to preserve the ethics of Mayan exchange. When AMA goes into a village to buy weavings, they follow the Mayan custom of buying from all producers, even if the quality of some sellers is lower. From experience AMA learned that not doing so disrupts harmony and sends the wrong social incentives; for example, it promotes individualism that goes against social corporatism needed for women’s circles to succeed. The consequence, of course, is that this practice lowers the average price women get from selling, and the better quality weavers end up subsidizing the lower quality weavers.⁴⁶ This is considered normal; just as some women are good at embroidery and others at day-care, energy is balanced when women distribute roles by talent and ability.

AMA also selects households for stove construction and other assistance on a self-help model that protects and reinforces the dignity of individuals. To participate, families join the local PTA, contribute to women’s circles, and do other forms of community service. Stoves and other aid are earned through the efforts of families, not simply by charity. Families play an active role in the process of selecting projects and carrying them out. While at times this may result in the appearance of “inefficiency,” the broader consequentialist goal is to help communities develop the leadership and processes for solving their own problems rather than rely on outside assistance.

These experiences suggest ways in which development practices can be improved by understanding Mayan social practices, particularly in terms of management. Mayans use nonverbal communication: people often stand around and discern the spiritual energy landscape. Self-discipline is required as each holds back from asserting control. Indigenous leadership is revealed slowly, quietly and indirectly, by example and never through giving orders. Harmony is the key goal, requiring reflection and self-command.

Western aid workers, by contrast, may have notions of efficiency and hierarchical management that can be inappropriate and counterproductive. For example, accountability and involvement are often lacking when aid workers show up to bestow unearned “bounty” on a remote village, as noted in William Easterly’s critique of the aid burden in Africa.⁴⁷ In a Mayan worldview one-sided aid produces a bad energy balance and breaks down indigenous values. Process, in addition to outcomes, matters to Mayan development. Another example of the conflict between Western aid and indigenous values can be seen when AMA brings stove materials to a village. In a Western mindset “time

is money” and North American volunteers desire to quickly organize the distribution of supplies. A self-appointed Western “leader” will take charge and assign roles, giving commands. To peasant Mayans, this assertion of hierarchy is seen as aggressive and rude and produces disharmony. In talking with local participants, AMA has learned that the efficiency gains to hierarchical leadership are lost due to the disharmony caused by social conflict and the lost opportunities for indigenous management to appear. While hurricanes and floods often mandate immediate food and shelter relief, NGOs that simply bestow aid on villagers fail to develop the key resource required for sustainability—indigenous leadership and entrepreneurship.

Conclusions

Adam Smith believed that natural instincts for sociability provide human motivations that precede and supersede markets. Smith theorized, for example, that the natural propensity to “truck, barter, and exchange”⁴⁸ arose initially not from the desire for pecuniary reward but from the social instinct to share beliefs and to persuade.⁴⁹ Social instincts may work to enhance cooperation vital for survival in a Mayan village, for example, even if the forces at work are not all—or even mainly—rational or conscious. While enlightened self-interest is a powerful force, Smith and Darwin argued that instinctual, emotional responses are often more reliable ways of producing successful cooperation and trust essential for markets. The instinct for justice, for example, provides a mechanism for punishing that keeps free-loaders in check and makes cooperation a preferable option.⁵⁰

Recent discoveries in neuroeconomics support the view that automatic mechanisms of social affiliation are at work. For example, the discovery of “mirror neurons” in the brain may be the physiological link to Smith’s “fellow feeling” model of sympathy; and the discovery that the hormone oxytocin is released during trust exchange provides evidence of a biological foundation for ethics in trade.⁵¹

In this context, many Mayan communities continue to adhere to imbedded cultural and social customs that have profound psychological and economic implications for survival. These include the practice of voluntary redistribution through *fiestas*, price discrimination in markets, natural monopolies in villages (with social injunctions against deadweight losses), corporatist community buying and selling, and other traditions that bind villagers in affective and symbiotic interdependence. Economic development policies that overlook indigenous practices by imposing other values will miss much of the natural

social capital that can create sustainable practices. In particular, philanthropic groups that turn up to distribute free goods are viewed with great suspicion in Mayan societies because these practices violate the objectivist balancing of energy flows. Charity involves unilateral transfers; hence, it is “not real” but an illusion. By contrast, social practices that promote redistribution through bilateral exchanges are viewed as sustainable when the energy balance is equalized (based on ability to pay), even if the dollar returns are different.

The rapid rise of imported evangelical Protestantism, however—promising individual salvation—is one of the forces breaking apart the social bonds exemplified by *cofradías* and other traditional forms of social obligation. Better-off villagers are increasingly reinvesting their wealth rather than using it for redistribution through *fiestas*.⁵² Individual success replaces group success, and while such economic development generates the potential for higher *average* living standards, median family incomes are buffeted by lack of land for *milpa* production and a disintegrating social network.

The process of cultural disintegration, assimilation, and transformation has occurred in other places in which indigenous groups have been colonized.⁵³ As Mayan communities continue to evolve and increasingly interact in global markets, many of the indigenous practices are thus disappearing. Traditional practices provide safety nets that ensure economic subsistence and a social structure that supports personal dignity. While economists equate increased production and global trade with a rise in efficiency, a full accounting would include the transitional and dislocating costs that go hand-in-hand with freeing up capital or labor inputs, and the potential loss of social capital. This chapter provides a glimpse into traditional village life and the moral construction of meaning through market activity.

Notes

A version of this chapter was presented at the Association for Private Enterprise Education annual meeting in Guatemala City, Guatemala, April 2009. The opinions expressed are those of the authors and not their organizations'. The authors gratefully acknowledge research assistance by Justin Weiss and John L. Fiedler and editorial contributions by Mark D. White.

1. Friedman, *Morals and Markets*.
2. Darwin, *Descent of Man*; Smith, *Theory of Moral Sentiments*.
3. Friedman, *Morals and Markets*.
4. Schuster, “Rituals of the Modern Maya.”

5. Coe, *Maya*, 11.
6. Lovell and Lutz, “Conquest and Population.”
7. Unless indicated otherwise, all data are for the years 2005–2007 and come from the WDI online.
8. Guatemala’s Gini coefficient of inequality was forty-nine in 2004, down from fifty-five in 2002. Such a rapid drop in so short a time may reveal underlying problems of measurement.
9. Franko, *Puzzle of Latin American Economic Development*.
10. Viscidi, “History of Land in Guatemala.”
11. Wight, “Does Free Trade Cause Hunger?”
12. Adam Smith, *Theory of Moral Sentiments*, 86.
13. Coe, *Maya*.
14. *Ibid.*, 63.
15. *Ibid.*, chapter 6.
16. Babington, “Clinton.”
17. Goetz and Morley, *Popol Vuh*.
18. Deuss, *Shamans, Witches, and Maya Priests*.
19. Friedel et al., *Maya Cosmos*, 33.
20. Hayden, “Big Man, Big Heart?”
21. Schele and Friedel, *Forest of Kings*, 65.
22. Adam Smith, *Theory of Moral Sentiments*, 276. (See also chapter four in this volume for more on Stoicism.)
23. Waldemar Smith, *Fiesta System and Economic Change*.
24. Deuss, *Shamans, Witches, and Maya Priests*, 27.
25. Annis, *God and Production*.
26. *Ibid.*, 61.
27. Wight, “Treatment of Smith’s Invisible Hand.”
28. Adam Smith, *Theory of Moral Sentiments*, 179–87.
29. *Ibid.*, 186.
30. *Ibid.*, 184.
31. *Ibid.*, 263.
32. See McCloskey, *Bourgeois Virtues*.
33. Adam Smith, *Wealth of Nations*, 454.
34. Sen, “Rational Fools.”
35. Biologist David Wilson notes that “ghost” institutions survive many generations, even though as the environment changes they may no longer serve any adaptive function (Wilson and Wilson, “Rethinking the Theoretical Foundations of Sociobiology”). Adam Smith also noted that institutions linger long after their purpose has passed. Primogeniture, for example, was an institution of property rights that became obsolete yet lingered for centuries (*Wealth of Nations*, 377).
36. Annis, *God and Production*.
37. Yunus, *Banker to the Poor*.
38. Sandel, “What Money Can’t Buy.”

39. Annis, *God and Production*.
40. Adam Smith, *Wealth of Nations*, 14–15.
41. Rodrik, *One Economics, Many Recipes*.
42. *Ibid.*, 5.
43. *Ibid.*, 6.
44. Adam Smith, *Wealth of Nations*, 673.
45. For a two-part video of this project, see: <http://www.vcutvhd.vcu.edu/shows/fashion/guatemala1.html> and <http://www.vcutvhd.vcu.edu/shows/fashion/guatemala2.html>.
46. In this model, trade efficiency is based on the average productivity and quality of village producers, rather than on individual productivity and quality. The “reputation effect” is communal.
47. Easterly, *White Man’s Burden*.
48. Adam Smith, *Wealth of Nations*, 25.
49. Adam Smith, *Lectures on Jurisprudence*, 493.
50. Gintis et al., *Moral Sentiments and Material Interests*.
51. Zak, “Neurobiology of Trust,” and “Values and Value”; Umilta et al., “I Know What You Are Doing.”
52. Annis, *God and Production*.
53. Champagne, “Multidimensional Theory of Colonialism.”

Bibliography

- Annis, Sheldon. *God and Production in a Guatemalan Town*. Austin, TX: University of Texas Press, 1987.
- Babington, Charles. “Clinton: Support for Guatemala was Wrong.” *Washington Post*, March 11, 1999: A1.
- Champagne, Duane. “A Multidimensional Theory of Colonialism: The Native North American Experience.” *Journal of American Studies of Turkey* 3 (1996): 3–14.
- Coe, Michael D. *The Maya*. 7th edition. London: Thames and Hudson, 2005.
- Darwin, Charles. *The Descent of Man*. New York: D. Appleton and Company, 1871.
- Deuss, Krystyna. *Shamans, Witches, and Maya Priests*. London: The Guatemala Maya Centre, 2007.
- Easterly, William. *The White Man’s Burden: Why the West’s Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. New York: Penguin, 2007.
- Franko, Patrice. *The Puzzle of Latin American Economic Development*. 3rd edition. Lanham, MD: Rowman and Littlefield, 2007.
- Freidel, David, Linda Schele, and Joy Parker. *Maya Cosmos: Three Thousand Years on the Shaman’s Path*. New York: William Morrow, 1993.
- Friedman, Daniel. *Morals and Markets: An Evolutionary Account of the Modern World*. New York: Palgrave Macmillan, 2008.

- Gintis, Herbert, Samuel Bowles, Robert T. Boyd, and Ernst Fehr, eds. *Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life*. Cambridge, MA: The MIT Press, 2005.
- Goetz, Delia, and Sylvanus G. Morley, English translators. *The Popol Vuh: The Sacred Book of the Ancient Quiche Maya*. Original Spanish translation by Adrian Recinos. Norman, OK: University Of Oklahoma Press, 1950. Accessed online at <http://www.questia.com/PM.qst?a=o&d=8116683>.
- Hayden, Brian. "Big Man, Big Heart? The Political Role of Aggrandizers in Egalitarian and Transegalitarian Societies." In *For the Greater Good of All: Perspectives on Individualism, Society, and Leadership*, edited by Donelson R. Forsyth and Chrystal L. Hoyt. New York: Palgrave Macmillan, 2011.
- Lovell, W. George, and Christopher H. Lutz. "Conquest and Population: Maya Demography in Historical Perspective." *Latin American Research Review* 29 (1994): 133–40.
- McCloskey, Deirdre N. *The Bourgeois Virtues: Ethics for an Age of Commerce*. Chicago: University of Chicago Press, 2006.
- Rodrik, Dani. *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton, NJ: Princeton University Press, 2007.
- Sandel, Michael J. "What Money Can't Buy: The Moral Limits of Markets." *The Tanner Lectures on Human Values*, Oxford University (May 1998), accessed online at <http://www.tannerlectures.utah.edu/lectures/sandel00.pdf>.
- Schele, Linda, and David Freidel. *A Forest of Kings: The Untold Story of the Ancient Maya*. New York: William Morrow and Co., 1990.
- Schuster, Angela M.H. "Rituals of the Modern Maya." *Archeology* 50 (1997), accessed at <http://www.archaeology.org/9707/etc/maya.html>.
- Sen, Amartya K. "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory." *Philosophy & Public Affairs* 6 (1977): 317–44.
- Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Glasgow edition, R.H. Campbell and A. S. Skinner, eds. Indianapolis: Liberty Press, 1981 [1776].
- . *The Theory of Moral Sentiments*. Glasgow edition, D.D. Raphael and A.L. Macfie, eds. Indianapolis: Liberty Fund, 1982 [1759].
- . *Lectures on Jurisprudence*. Glasgow edition, R.L. Meek, D.D. Raphael, and P.G. Stein, eds. Indianapolis: Liberty Fund, 1982.
- Smith, Waldemar R. *The Fiesta System and Economic Change*. New York: Columbia University Press, 1977.
- Umiltà, M.A., et al. "I Know What You Are Doing: A Neurophysiological Study." *Neuron* 31 (2001): 155–65.
- Viscidi, Lisa. "A History of Land in Guatemala: Conflict and Hope for Reform." Interhemispheric Resource Center, September 17, 2004, <http://americas.irc-online.org/pdf/focus/0409guatland.pdf>.
- Wight, Jonathan B. "Does Free Trade Cause Hunger? Hidden Implications of the Free Trade of the Americas Area." *Richmond Journal of Global Law and Business* 2 (2001): 167–81.

- Wight, Jonathan B. "The Treatment of Smith's Invisible Hand." *Journal of Economic Education* 39 (2007): 341–58.
- Wilson, David S., and Wilson, E.O. "Rethinking the Theoretical Foundations of Sociobiology." *Quarterly Review of Biology* 82 (2007): 327–48.
- World Bank. *World Development Indicators* online, accessed February 27, 2009.
- Yunus, Mohammad. *Banker to the Poor: Micro-lending and the Battle against World Poverty*. New York: Public Affairs, 2003.
- Zak, Paul J. "The Neurobiology of Trust." *Scientific American* (June 2008): 88–95.
- . "Values and Value: Moral Economics." In *Moral Markets: The Critical Role of Values in the Economy*, edited by Paul J. Zak, 259–79. Princeton, NJ: Princeton University Press, 2008.