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Chapter 1

INTRODUCTION

The English East India Company has long sat at the center of debates on the relative virtues of monopoly forms of organization and free trade. The Company figures prominently in the work of Adam Smith, Thomas Mun, James Steuart, James Mill, David Ricardo, and John Stuart Mill, among others, and was a significant influence on the development of economic thought in Britain (Barber 1975, Khan 1975, Muchmore 1970: 498–503). Supporters of the Company argued that monopoly rights were necessary to create and maintain the expensive infrastructure that made long-distance trade with Asia both possible and profitable. Free trade advocates attacked the Company as a boundary to the expansion of commerce. Arguments over the efficacy of the Company's monopoly continue to this day (Carlos and Nicholas 1988, Jones and Ville 1996a, 1996b, Carlos and Nicholas 1996, Irwin 1992, Anderson and Tollison 1982). These debates have largely glossed over the fact that the Company was never a true monopoly.

The English Company had monopoly rights in England, but had always competed against other European organizations in Asia—and happily traded with them.¹ The Company was known as a monopoly because it had exclusive rights to the East Indies overseas trade in England. However, all the East India Company's respective governments granted that privilege. The European companies competed both in Asia and in the European reexport market. The companies were attempting to capture a market long dominated by numerous, successful, and well-provisioned Asian merchants, better versed in the vagaries of their local trade. In England itself, the East India Company faced competition from the Levant Company, which held a charter awarding exclusive privileges to the overland trade of Asia.

Even within its own purview, the Company ceded several of its monopoly privileges to its own employees. These employees engaged in what was called the private trade, trade upon their own account and in their own interest, while in the employ of the Company. The private trade allowances both contributed to and were a part of a larger pattern of decentralized decision making in the English Company. This book investigates

how organizational decentralization and the intertwining of private and Company interests aboard the voyages of the East Indiamen ships both encouraged exploration of new market opportunities and created a powerful internal network of communication that effectively integrated Company operations across the East. Monopoly rights were not the key to Company success; it was the partial abrogation of those rights that sustained England's commercial success in Asia.

Some idea of the importance of the private trade has been apparent since the days of the Company itself; however it has not been considered as an intrinsic component of the distinctly decentralized organizational form the Company took on early in its existence, except by those that saw that decentralization as a negative (Moreland 1923: 314, Arasaratnam 1986: 37, 329, Lawson 1993: 73). Instead, the private trade of the employees has been mainly conceptualized as a distinct alternative to the monopolistic strategy of the firm—although in practice the two worked in concert.

Contemporaries of the Company took the success of the English private trade as evidence of the superiority of free markets. Influential actors, such as David Scott (friend of Henry Dundas and chair of the East India Company from 1778 to 1800) cited their experience with private trade in the East as the source of their support for the ideal of free trade (Philips 1951: xiv). When requesting the renewal of monopoly privileges, Company officials argued that the failure of the private trade to take up more than a quarter of the tonnage offered by the Company demonstrated the efficacy of the existing system of monopoly (Hansard 1812: 47). The relationship linking the private and Company trade was ignored in increasingly polarized arguments about the merits of free markets.

In the end, the 1813 and 1833 acts rescinding the Company's monopoly privileges, first to India and next to Asia, were seen as ideological breaks from the mercantilist system of monopoly privilege that put the nation on a path toward economic rationalism and free trade practices. The English Company came to represent the evil and conservatism of the monopoly form. The decentralized, networked organizational form it had actually possessed during its years of expansion was largely ignored. The argument I make here, which builds upon the work of historians of the private trade, is that the East India Company is miscast as a simple monopoly—and the private trade is misunderstood as a version of free trade. The Company provided essential infrastructure and coordinative capacity that unaffiliated traders would have lacked. Private traders working out of that infrastructure sought out opportunities that would have been overlooked by the corporation itself. The private trade that existed within the monopoly form of the Company effectively decentralized the corporation and spurred the creation of networks of informal information exchange within the otherwise hierarchical organization. In spirit and conception, the East India Company

was meant to be a monopoly firm that accumulated profits by controlling market opportunities and restricting competition. In practice, it benefited from the then unique organizational structure produced by the combination of its hierarchical corporate form and what was often perceived as a challenge to the monopoly privileges of the firm: the private trade.

I argue that this decentralized organizational structure—constructed through the combination of private and Company trade—was the central pillar of the English East India Company's continued expansion and adaptability over nearly two centuries as a predominantly commercial operation. By fostering the use of social networks as well as a cohesive internal structure of connections between ships and ports, the decentralized structure of the firm simultaneously expanded and integrated Company operations in the East. Social networks within the Company transferred valuable information between employees, leading to the incorporation of more and new ports into the larger network of Company trade. Additional ports brought new opportunities, new markets, and new types of commodities into the Company trade. Decentralization in the form of private trade allowances encouraged employees to stay longer in the East, exploring new ports and linking existing English settlements into a tighter network of communications—feeding back into and encouraging the process of lateral information transfer that was also a product of putting significant autonomy into the hands of local agents of the Company.

The importance of this degree of decentralization, and its systematic effects on the conduct of the English Company trade, implies that the remarkable expansion and growth of the English East India Company was not a product of imperialism or the centralization of administrative forms. Instead decentralization and profit sharing within a larger organizational framework, that is, the company form, introduced an innovative capacity that was essential to the long-term success of the firm. That innovative capacity was sustained by the willingness of Asian merchants to trade with both the Company and its servants. In the end, the long-term commercial success of the Company depended upon the existence of open societies in the East just as much as its employee's private trade.

THE RISE TO COMMERCIAL PROMINENCE

The English East India Company was formed December 31, 1600. Queen Elizabeth I granted the small group of merchants a monopoly of trade to lands east of the Cape of Good Hope and west of Cape Horn. Initially, the Company was funded on a voyage-by-voyage basis. A total of £68,373 (£6,843,520 or \$10,951,685 in 2011) worth of shares sold to roughly two

hundred investors provided the initial capital for the Company's first voyage (Clough 1968: 162). These funds provided for four large ships and one small supply ship, manned by nearly five hundred men. At its peak in 1796, the Company sent out eighty-four ships in one year, by which time it also employed over 350 home office administrators (Carlos and Nicholas 1988: 403).

The Company grew to be a huge political and economic power in both England and Asia. K. N. Chaudhuri described its trajectory in the eighteenth century in glowing terms: "The East India Company went from strength to strength. Its trading capital amounting to £3.5 million was held in the form of government securities and its bonds bearing fixed-rate interest linked to the yield on the gilts were regarded as ideal short-term investment by the financiers of the City and Amsterdam. The Company continued to make huge profits on its Asia trade" (Chaudhuri 1986: 117). Throughout most of the eighteenth century the Company returned 8 percent in dividends to investors (a healthy return), falling only occasionally to 6 percent (Bowen 1989: 191).

According to K. N. Chaudhuri, the preeminent Company historian, the Company's most rapid development occurred from 1660 to 1700. In this period import and export quantities grew significantly in both absolute and relative terms (Chaudhuri 1978: 82). The number of ports included in the trade network of the English East Indiamen ships also increased most appreciably in this period. Despite this expansion, in the late seventeenth century the English Company's trade was still overshadowed by that of its largest competitor, the Dutch East India Company (Vereenigde Oost-Indische Compagnie). The Dutch Company was another powerful European overseas trade monopoly. For the first half of the seventeenth century, the Dutch Company was much larger than the English Company. The initial capitalization of the Dutch Company was 6.5 million guilders, ten times the amount of the English Company's capitalization (De Vries 1976, 130). Still the Dutch Company was dissolved more than a half century before its English counterpart and had grown stagnant long before that time.

There is moderate disagreement over the exact moment at which the English Company overtook the Dutch. In terms of the sheer number of outward-bound ships, the English Company did not come to rival the Dutch until the 1780s. In the 1600s, the Dutch Company frequently sent out more than double the number of English Company ships; however, Dutch investment in terms of ships peaked by the 1730s (Vermeulen 1996: 144). Despite this, it was still a large presence for some time to come. By 1770, the English Company was just on the verge of catching up, with 233 recorded official voyages as compared to 290 Dutch Company voyages. It was not until the 1780s that the English Company finally sprang ahead with 318 versus 297 Dutch Company ships (Bruijn and Gaastra 1993: 179).²

These numbers, however, do not capture the English country trade. The country trade was trade confined to Asia. For the Dutch, this was official Company trade (until the 1740s). For the English, beginning in the mid- to late seventeenth century, the country trade belonged to the employees. In the 1720s and 1730s, English country trade grew tremendously. In his study of Bombay and Surat, Holden Furber finds that it doubled in the period from 1724 to 1742 (Furber 1965: 44). By the 1730s it was clear from port records that the English were supplanting the Dutch (Furber 1965: 45).

Based on his evaluation of import/export growth rates in the English Company, Chaudhuri believes it came to rival the Dutch enterprise during the English Company's most rapid phase of growth, from 1660 to 1700 (Chaudhuri 1978: 82). Bal Krishna also believes that the rising fortunes of the English Company were surpassing the Dutch prior to the eighteenth century, noting that the English were investing £26,000,000 in trade, whereas the Dutch invested significantly less, £19,000,000 (Krishna 1924: 177). By 1720–31 the average annual value of the English Company's imports from Asia was exceeding the value of Dutch imports (Steensgaard 1990: 110).

In a meticulous study of the stock prices of the two firms, Larry Neal found the English Company stock valuation making large gains on the Dutch in the 1730s and 1740s. When reacting to general market conditions, both Companies' shares moved in the same direction. The gains made by the English Company stock in the 1730s and 1740s were marked by significant losses in the Dutch price, indicating that capital was moving from one firm to the other as investors realized greater growth potential in the English firm (Neal 1990: 218–20). Kristof Glamann's work corroborates this view, as he found that contemporaries of the firms were aware of the decline in the relative position of the Dutch Company by the 1730s and 1740s (Glamann 1981: 2). In fact, at this time the Dutch Company began to implement significant reform efforts, one of which was imitating the English Company by opening the country trade to its employees.

The 1720s marked the beginning of a long tumble for the stock of the Dutch Company—during which time English Company prices fared much better (Neal 1990: 198). Gaastra explained this sustained decline in terms of a series of events occurring over the eighteenth century (Gaastra 2003: 59). A definitive end to the Dutch Company came in 1799 when it was formally dissolved. The gradual pattern of decline over the 1700s indicates that, rather than suffering one definitive external shock, the Dutch firm suffered from a gradual erosion of its commercial position, leading Neal and Glamann to believe that the firm's difficulties lay in the inability to successfully adjust to increased competition and changing market conditions (Neal 1990: 220, Glamann 1981: 2). Thus any theories regarding the expansion and eventual triumph of the East India Company in the

commercial world of the East should focus at least on the period from 1660 to 1740, which begins with the rapid expansion of the English Company and ends with their supplanting the Dutch as the major European commercial power in the East.

The period of 1660 to 1740 is also a time when English East India Company employees enjoyed especially high levels of legitimate autonomy in the form of the official acceptance of the private trade. I focus my research in this book on this period, although I extend the time frame to include 1760, which marks a natural break in the organization of the East India Company in the aftermath of the Battle of Plassey and the beginning of the Company's transition to colonial rule. The analysis also includes other periods in the Company's history—in order to construct comparisons with the crucial private trading period. Since the focus here is on the means by which the English Company achieved commercial prosperity, I do not address the period after it lost its last claim on monopoly privileges and was directed to end its commercial business in 1833.

ALTERNATIVE EXPLANATIONS FOR THE SUCCESS OF THE COMPANY

Domestic Conditions

There are several existing explanations for the East India Company's rise to prominence. It is perhaps most commonly believed that the rising fortunes of England led to the success of the English East India Company. This argument suggests that organizational structure and events in the East are unimportant elements of the story—simply outcomes rather than causal factors—however it falls short of providing an adequate explanation.

There has been a great deal of controversy over exactly when real growth accelerated national economic development in Britain, but little argument that anything other than the structural preconditions were in place before the beginning of the eighteenth century. Phyllis Deane and W. A. Cole identify a turning point in British economic growth in 1745, but find that real acceleration occurred after 1780 (Deane and Cole 1967: 80). Crafts later amended this to argue that growth did not really begin a marked upward movement until after 1820 (Crafts 1985: 2), also arguing that even the gradual structural shifts leading up the change were not in evidence until the beginning of the eighteenth century (Crafts 1985: 7). R. V. Jackson has since suggested amendments to Crafts's work that push growth estimates from 1700 to 1760 downward and upward in the period from 1760 to 1800, bringing them back closer in line with Deane and

Cole's original research (Jackson 1990: 225). More recently there has been an emphasis on the existence of long-term slow growth in England as well as other areas in Europe and Asia, followed by only a very slight increase in the pace of England's development in the latter half of the eighteenth century (O'Brien 2000: 127, Goldstone 2000, 2002). This research indicates that real change occurred after 1830 (Mokyr 1999: 1). The same researchers have pointed out that although industrialization occurred in Britain prior to 1830, it was confined to a few localities that accounted for a small proportion of the total economy—reinforcing the point that the national economy did not experience a strong acceleration until after 1830 (Mokyr 2003) Although disagreements about the causes of development will undoubtedly continue into the future, they are very unlikely to challenge the view that the rapid development of the East India Company preceded the rapid development of the British economy by several decades. Indeed the fact that commerce grew significantly well before the Industrial Revolution has led many to argue that it was a cause of economic development.

In contrast, the English Civil War occurred before the expansion of the East India Company. Therefore the installation of bourgeois interests at the head of the government could have affected the future of the firm. The war's outcome did not initially seem to favor the English Company, as it had been a Crown supporter (Brenner 2003: 324). However, the Company was able to renew its charter under Oliver Cromwell and had, in fact, experienced periodic difficulties with the monarchy. For example Charles I had directly threatened the East India Company's monopoly by supporting a rival company, the Courteen Association (Furber 1976: 69).

A comparative perspective, however, makes the state-led argument less compelling. A merchant elite had dominated the Dutch government since the mid-sixteenth century (Adams 1994b: 327), so this does little to explain why the English Company would have fared better than the Dutch in the eighteenth. In addition, neither the political nor economic conditions in England can explain why the East India Company succeeded, where other British joint-stock organizations failed. The Royal African Company, formed in 1660 when it was known as the Company of Royal Adventurers Trading to Africa, had lost its monopoly by 1690 and all but failed by 1730 (Carlos and Kruse 1996: 291). Similarly, the South Seas Company has become infamous over the years for its spectacular collapse, which nearly brought the British economy down with it (Anderson and Tollison 1982: 1241). Indeed, Gary Anderson and Robert Tollison argue that Adam Smith's well-known dislike of the joint-stock form was based on the poor performance of such firms in his lifetime (Anderson and Tollison 1982: 1240). A prominent exception (not to Smith's criticism) was the East India Company.

WAR AND SEAPOWER

The first three Anglo-Dutch Wars have been cited as a cause of the decline of Dutch overseas trade (De Vries 1976: 122), and therefore should be considered a possible cause of Dutch East India Company decline. The first Anglo-Dutch War took place from 1652 to 1654, the second from 1665 to 1667, and the third from 1672 to 1674. Although domestic and international political considerations played a role in instigating these wars, the commercial aspects are most relevant, so I confine my discussion to these elements.

In the beginning of the seventeenth century, the Netherlands dominated not only the Eastern trade, but also trade throughout Europe (De Vries 1976: 116). Particularly because the Dutch also controlled the herring trade conducted off the shores of England, English merchants resented Dutch predominance. It is clear that this commercial rivalry fed into the hostilities between nations; however their impact on the fates of the East India Companies is less obvious.

There is significant evidence that the Dutch and English Companies sidestepped formal animosities in the East Indies in order to continue to pursue trade with as little interruption as possible, particularly in the second and third Anglo-Dutch Wars (Boxer 1974: 59, Pincus 1992). In addition, the outcome of the three wars did not clearly favor the English. The English seemed to gain the advantage in the first war (Boxer 1974: 19), but the second favored the Dutch. At the conclusion of the second war, the Treaty of Breda (1667) altered the Acts of Navigation in favor of the Dutch. These acts had been the central point of contention in the tensions leading up to the war, so this was a strong sign that the Dutch had gained the upper hand in the conflict. The terms of the treaty also dictated that the English Company renounce their claim to Pulo Run (while Britain gained Manhattan) (Boxer 1974: 39). The direct result for the English Company was therefore the loss of ground in the East Indies. The third Anglo-Dutch War, in which England was allied with France, was very hard on Dutch trade, but ended inconclusively. The battles between the English and Dutch were generally fought to the advantage of the Dutch and ended with the English paying out an indemnity of two million guilders (Boxer 1974: 58). Although Jan De Vries seems to disagree, Charles Boxer believed that the Dutch Republic recovered more quickly than England from the financial difficulties of the wars (Boxer 1974: 63). Jonathan Israel concluded that, although the French and English intended to end the Dutch trade supremacy in the Third War, they simply failed to do so (Israel 1998: 297). Dutch trade supremacy resumed again at the war's end, although it did mark the beginning of a long and gradual decline.

Finally, the timing of the rise and fall of the East India Companies does not support the centrality of the first three Anglo-Dutch Wars. If these conflicts had created the English Company's success through the suppression of a Dutch trade advantage in the East, there should be clearer evidence of Dutch decline after the war. Instead the Dutch Company continued to expand until at least the 1730s. Kristof Glamann discusses the 1700 to 1730 period as the culmination of the Dutch Company's power and an apparent golden age (Glamann 1981: 2).³

The English and French were also at war several times during the English Company's history. In contrast to the conflicts between the Dutch and English states, these were hostilities between the English and the French Companies and were fought in the Indian Subcontinent. These battles mark an exciting chapter of the history of the East India Company history, filled with strategic machinations, shifting alliances, complex court intrigues, and the oversized figures of Robert Clive and Joseph François Dupleix. However the timing again does not support their importance in determining the success of the English Company. The first Carnatic War was fought from 1746 to 1748, the second from 1749 to 1754, and the third from 1757 to 1763. The English were victorious in these conflicts, which played a central role in establishing Britain as a strong colonial power in the Indian Subcontinent. They also came nearly a century after the period of accelerated growth of the Company identified by Chaudhuri and well after the erosion of the Dutch position in the East. Even if the continued commercial success of the English Company was predicated on English victory in these wars, which is not entirely clear, it is very unlikely that the Company would have succeeded militarily without access to the resources which its commercial success had provided.

Over the same period the British Royal Navy was built up into a formidable force; however again there is little reason to believe that it played a direct role in the expansion of the English Company. The Royal Navy did not have a sustained advantage over the naval forces of other nations until the eighteenth century (Modelski and Thompson 1988), and it was not until the Carnatic Wars that the capacity of the Royal Navy played a direct role in the operations of the Company. In this period, both English and French companies drew upon state resources to pursue their goals. By contrast the Dutch Company was unable to successfully secure additional naval or military support from the government. Lack of naval and military support from the state made direct participation in the territorial competition between the French and English an impossibility for the Dutch and has been considered a central factor in the ultimate decline of the Vereenigde Oost-Indische Compagnie (Nierstrasz 2012). These factors, however, only came into play after the commercial ascendance of the English Company had already been established.

Prior to this period, the Royal Navy had minimal impact on trade in the East. The ships of the Royal Navy were rarely to be seen in the waters of the East Indies before the 1740s. The only brief exceptions to this rule were scattered forays pursuing European pirates in the area around Madagascar (Rodger 2004, Stern 2011: 141). Beginning in 1690 the British Royal Navy provided assistance to the Company by escorting ships through the Atlantic as a safeguard against pirates and hostile combatants in times of war (Stern 2011: 153). The convoy protection offered by the Royal Navy should be considered a potentially essential but not sufficient factor for the continued success of the Company. It was necessary, but did not provide a competitive advantage for any of the East India Companies, all of which were able to provide relatively safe passage for ships through the Atlantic waters. In any case, this date falls after the English Company had already begun its trajectory of rapid growth. It was, in fact, unlikely that the British state would have offered these protections if the English Company had not already proved itself to be a vital and expanding source of state revenue, a situation that in turn depended upon the already expanding profitability of the Company trade.

PROTECTION COSTS

A related line of research has argued that the internalization of protection costs created a competitive advantage for the European companies that ensured their success in the Eastern trade (Lane 1966, 1979, Steensgaard 1974). It is important to note that the object of explanation is different in this research than in my argument. Niels Steensgaard focused on the Company's success as a type, including both the Dutch and English Companies, whereas I am focusing on the greater relative success of the English over the long term. Still, Steensgaard's research was an important contribution to understanding the East India Companies and should be addressed.

The internalization of protection costs has at least two possible meanings. In one, a detailed accounting procedure is used to take the cost of protection rents into consideration when calculating business prospects. In the second, a commercial organization internalizes activities associated with protecting the organization from theft or violence, for example by hiring security guards. Steensgaard's argument indicates that both types both played an important role.

Steensgaard provides detailed and convincing evidence that the greatest costs to merchants traveling the overland route through the Middle East came from customs duties, bribes to local officials, and protection costs paid out to other smaller communities along the caravan trail. According

to Steensgaard, these expenses significantly overshadowed transport costs. Therefore the European companies saved a great deal by taking the Cape route, despite the higher transportation costs involved. In keeping with the protection costs argument, the savings must have been part of the decision to take the Cape route. This explanation however does not provide an answer as to why the Portuguese Estado da Índia, which also took the Cape route, was a commercial failure, particularly in comparison with the Dutch and English Companies.

It is also true that the European companies integrated protection functions into their operations. The benefit of integration assumes that there is in fact a real threat; otherwise investment in defense would simply cut profits. Somewhat problematically, many historians of the Indian Ocean assert that, in comparison with the Atlantic Ocean, it was a *Mare Liberum*, a free sea. In this case protection functions would simply be an additional and unnecessary expense. There were, however, Asian merchants who also combined military force and profit seeking into organized commercial operations. For example, the Omani state was mercantile and willing to defend territory through military action (Cole 1987: 195), and the Mappila of Malabar and Western Ceylon (now Sri Lanka) was an armed and aggressive merchant group (Subrahmanyam 1995: 769). These groups existed, but did not dominate the East, which, in itself, provides some grounds for skepticism.

The European East Indiamen, however, were armed with superior weaponry, and each of the companies engaged in at least sporadic military action. We can consider the importance of investing in armaments by comparing the Portuguese Estado da Índia, the Dutch East India Company, and the English East India Company in the seventeenth and early eighteenth centuries. The Portuguese were the most militarized, followed closely by the Dutch, who were trailed by the English, a distant third. The English Company did not have any significant armed land forces until 1660 (Bowen 1996: 351). By contrast, half of Dutch Company employees were military personnel (Knaap 2003: 116). The Portuguese Estado simply was a militarized arm of the government. They did not create a commercial apparatus, that is, a company, until 1628, and even then, the Company's existence was short-lived. In 1615 the Portuguese assault force that attacked Goa included 6,000 Indians and 2,600 Europeans (Desphande 1995: 262). In 1626, a single Dutch fleet sent to protect Amboina included 1,200 soldiers (Van Veen 2001: 88). It was not until 1740 that English forces came close to rivaling these numbers. Total English forces numbered fewer than 2,000. Only one hundred men defended Madras when French forces attacked and took the site (Parker 1991: 182). Similarly, by 1623 the Dutch had a large naval force in place in the East, with roughly sixty-six ships actively engaged in various military actions across ports (Van Veen 2001: 92).

In contrast, the Bombay Council requested three small vessels to protect coastal English trade in 1669. They received two (Deshpande 1995: 283). This requisition made for the very modest beginning of the Bombay Marine, the Company's first naval force.

These differences reflected the strategies of the three organizations. The Dutch and Portuguese actively pursued conflict as a means to acquire territory in the East (Subrahmanyam 1990a: 252–97), whereas, prior to Plassey, the English did not. The English instead pursued a largely peaceful trade, following the advice of Sir Thomas Roe, the Company's ambassador to the court of the Mughal Emperor: "Lett this bee received as a rule that if you will Profitt, seeke it at Sea, and in quiett trade; for without controversy it is an error to affect Garrisons and Land warrs in India." Roe argued specifically that war "is the beggering of the Portugall" and "hath also been the error of the Dutch" (Foster 1899: xxxiv). In contrast, Jan Pieterszoon Coen, the famous governor-general of the Dutch Company, went by the phrase, "Trade without war, and war without trade cannot be maintained" (Parthesius 2010: 38).

Philip Stern and Bruce Watson have shown that there was military buildup in the English Company related to and following Child's War with the Mughals (Watson 1980b, Stern 2011). However the Company used their fortifications to defend existing settlements—not too engage in aggressive acts. Instead they continued to avoid conflict whenever possible (Stern 2011: 122), again, unlike the Dutch and Portuguese. Of course this pattern changed after the Battle of Plassey which was also after the Company had established itself as the dominant European commercial power in the East.

If militarization was the only or most important factor in producing commercial success for European organizations in the East, we should see Portuguese and Dutch commercial ascendancy. Instead, the Portuguese were markedly less commercially successful than the Dutch or English, and the English became more commercially successful than the more militaristic Dutch. Indeed, by the eighteenth century, the Dutch seem to have regretted the high costs of their aggressions and pulled back into a more pacific mode (Winius and Vink 1994: 40). And evidence indicates that the English Company's finances suffered substantially with the onset of their post-Plassey policy of aggressive territorialization (Tripathi 1956: 3).

It is undeniable that there was an element of aggression and force to the trade of all European companies trading in the East. Even the English East Indiamen were armed. That things happened this way does not mean that it necessarily had to be so. The fact that the English Company, which was the weakest and least militaristic of the organizations, was also the most successful over the long term suggests that the internalization of protection costs was not as profitable as many have believed. In the

end, large-scale militarized organizations, that is, states and empires, were nothing new; however successful commercial firms with global reach were unique. The real innovation was the commercial side of the organization, not the incorporation of violence.

THEORIES OF THE PRIVATE TRADE

In addition to being less militaristic than the other European companies, the English firm was also more permissive of the private trade of its employees. The private trade was any trade not undertaken by one of the large chartered organizations of the early modern period. In many of the early overseas companies employees participated in the private trade while in the service of these monopolies. The degree to which the private trade was tolerated varied across the different organizations. The Muscovy Company, formed much earlier in 1555, did not allow private trade within or without the company when it was organized as a joint-stock corporation (Scott 1910: 47 and 52, Willan 1953: 405). The Hudson Bay Company, formed in 1670, outlawed employee private trade in 1672 (Carlos and Nicholas 1990: 863). The second iteration of the Royal African Company, established in 1672, did not allow private trade among employees and put considerable effort into controlling it (Carlos and Kruse 1996: 298). At roughly the same time, the English East India Company was loosening its private trade regulations to allow employees more leeway.

A similar situation prevailed among the European East India Companies. Holden Furber, who pioneered work on the private trade, summarily states, "The English East India Company placed less restrictions than any other on the private concerns of its servants" (Furber 1965: 25).6 Some researchers have portrayed the private trade in a negative light. For K. N. Chaudhuri, it was a minor source of disruption to the otherwise well-oiled logistical machinery of the Company (Chaudhuri 1978: 74-77). W. H. Moreland and Sinnappah Arasaratnam had more negative opinions, arguing that it harmed the Company trade (Moreland 1923: 314, Arasaratnam 1986: 258-63). There were certainly some negative consequences. Smuggling goods into England cut into Company profits by creating an alternative supply in England. The country trade of the employees hurt the Company in different ways. Some embezzled Company monies to fund their own trade (Furber 1965: 29). Private trade buyers were also usually in competition with the Company in Asian ports—with the private traders representing both parties. This situation usually led to higher prices and lower quality goods for the Company.

Nevertheless most historians now agree that England's fortunes in the East were closely tied to the rise of the private trade. Holden Furber has

influentially argued that the development of the English country trade (trade confined to the East) of the employees was responsible for the events leading to the creation of the British Empire in the Indian Subcontinent (Furber 1965: 69). P. J. Marshall and Ian Bruce Watson have documented the paths by which British private traders entangled the English Company—and eventually the British government—into political conflicts that led to colonial rule (Marshall 1976, 1993, Watson 1980b).7 Others have further developed some of the implications of Furber's original argument by saying that the British private trade squeezed the Dutch Company out of the country trade, leading to its downfall (Emmer and Gaastra 1996: xx), and that the failure of the French to expand their country trade led to their lack of commercial success (Lombard 1981: 186). Many of these arguments explicitly state that the private trade allowed English traders to penetrate into local markets and commercial networks, and that this penetration and partnership with Asian merchants was the foundation of British commercial success (Furber 1965: 46, 1976, Asaratnam 1995: 16, Tripathi 1956: viii).

Despite a general sense that there was a positive synergy between the private and official Company trade, the mechanisms that have been identified by researchers are negative benefits, meaning they are ways in which the Company reduced costs—not improved its trading position. Furber emphasized how private country trade helped the Company streamline its operations—in particular by removing the considerable expense of creating and maintaining a country trade fleet (Furber 1976: 201). Others have stressed the reduction in monitoring and enforcement costs (Watson 1980b: 75), closely related to the resolution of principal-agent dilemmas (Hejeebu 2005), as well as the positive, though indirect, benefit to the Company of taxes paid by private traders, their dependents, and any secondary support services created to serve the increasing population in Company held ports (Watson 1980a: 77). This advantage grew in later years as the English Company's territorial possessions expanded.

Private trade also became increasingly important as a source of capital for the Company itself. In its overseas ports, the Company frequently fell short of the necessary funds to supply return voyages and turned to its own employees for infusions of capital. The country trade of the factors served as an additional source of overseas capital that was used to cover the purchase of return goods in Asia (Cheong 1979: 9). There is also evidence that the private trade attracted employees, encouraging individuals to work for the Company and lowering the wages necessary to induce appropriate behavior (Anderson, McCormick, and Tollison 1983: 228–29). While all of these mechanisms may have played a role, they miss a crucial facet of the private trade.

When the Company acknowledged the private trade as a legitimate pursuit for its employees, it was a signal that the Company recognized and

even supported a high degree of autonomy for its employees. This was not merely a matter of allowing employees greater freedoms during their leisure time. The private trade practices affected the operations of the firm itself. In some cases, the legitimate private trading practices of factors grew so large that they helped shape the pattern of Company settlements in the East. For years overseas factors refused orders to abandon the troublesome fort at Bencoolen (now Bengkulu, Indonesia) because they found it advantageous for their own private trade (Sutton 2010: 83). And, as I discuss in more detail in chapters 4 and 5, captains regularly diverted the routes of their ships in order to pursue their own private trade in amenable ports. Thus decisions about the paths of its ships and the location of its forts devolved into the hands of lower-level employees. The private trade allowances were not just a means of accommodating employees; the legitimacy of private trade pursuits radically decentralized the firm and placed operational decisions into the purview of locally informed employees. The English East India Company in the private trading period is therefore an early example of a decentralized firm.

My central contribution to the historical literature on the private trade of the English East India Company is one that stresses the positive and systematic impact of decentralized decision making on the functions of the Company as a whole. Most studies of the private trade concentrate on one port or period. Søren Mentz explored the private trade of Madras (2005). P. J. Marshall described employee trade in Bengal (1976). Even Furber looked most intensely at Bombay (1965). The detailed nature of archival study often drives researchers to a narrow focus. The research here instead addresses the range of Company operation across all ports visited by East Indiamen through the commercial history of the firm. The broader perspective reveals systemic network effects that could not have been pieced out or observed at the level of individual ports of call.

THEORETICAL FRAMEWORK

There were two novel aspects to the English East India Company. It was one of the very first large and bureaucratic commercial organizations. In this sense, the Company was novel in that it was more centralized than previous forms of early modern commercial organization, such as partnerships or joint ventures. However, it also had extremely high levels of employee autonomy, indicating that it was more decentralized than other similar joint-stock companies. Given that the trajectory of the modern firm is understood currently as going from centralized administrative behemoths to decentralized multidivisional firms to the increasingly networked, global firms of the twenty-first century (Chandler [1962] 2003, DiMaggio 2009),

the East India Company is also novel in a contemporary sense, because of the way it incorporated decentralized elements into the larger administrative hierarchy.

Economic historians have often emphasized the importance of centralization and the joint-stock form, both in terms of an advance in the sophistication and efficiency of organizations more generally and with respect to the advantages this form conferred on the English East India Company more particularly. K. N. Chaudhuri was the Company historian arguably the most influenced by organizational theory and focused on the logistical capacity of the board of managers in explaining the Company's success. He argued "the reason for its commercial success is perhaps to be found in the creation of a system which rested on a logical application of theoretical principles to the solution of business problems" (Chaudhuri 1978: 21). Shepard Clough noted the general benefits associated with the joint-stock form for raising capital (Clough 1968: 161). Robert Ekelund and Robert Tollison argued that its efficiencies derived instead from increases in business owners' ability to easily transfer property (Ekelund and Tollison 1980: 717).8 Ann Carlos and Stephen Nicholas singled out the decrease in costs associated with vertical integration when firms are faced with high transaction costs and a large volume of transactions (Carlos and Nicholas 1996: 916). Clearly these are all important benefits linked to the organizational innovations of the jointstock form, which benefited the East India Company, but just as plainly they do not explain variation in performance across joint-stock firms. Therefore attempts to explain the specific success of the English Company have had to consider other elements of its organizational structure.

Over the past thirty years, decentralization has become increasingly recognized as a powerful means by which organizations may successfully navigate the complex and dynamic environments encountered by today's global firms (Bartlett and Ghoshal 1989, Bower and Christensen 1995, Birkinshaw 1997, Benner and Tushman 2003, Almeida and Phene 1994, O'Reilly and Tushman 2004, among many others). This research has not been ignored by historians of the English Company. Without identifying the mechanisms at work, Kenneth McPherson has suggested that the "flexible organization" of the Company and its lenience with regard to the private trade were two of the reasons for its success (McPherson 1993: 202). Søren Mentz has advanced similar views, concentrating most on the way in which private trade allowances increased the capital flow between London and Madras (2005: 275).

The importance of decentralization has been most centrally explored in investigations of the multidivisional nature of the English Company. K. N. Chaudhuri first hinted that the East India Company's success was related to its divisional organization (Chaudhuri 1981: 29–46), but the argument was fully developed by Gary Anderson, Robert McCormick, and Robert

Tollison two years later (1983). Based on the work of Alfred Chandler and Oliver Williamson, Anderson, McCormick, and Tollison persuasively argued that the English Company was indeed a multidivisional firm, which cannot be taken for granted as the M-form is commonly understood to be a twentieth-century phenomenon (Chandler [1962] 2003). It had the equivalent of a chief executive officer (the governor), board of directors (the Court of Directors), special committees, and overseas managers (factors) (Anderson, McCormick, and Tollison 1983: 224–26). They argued the advantage of this decentralized structure was twofold. Following Chandler, dividing operational and strategic decision making between managers (factors) and directors reduced the information load on directors, which allowed for an expansion of operations and subsequent gains from increases in scale and specialization. Following Williamson, the expansion made possible by decentralization reduced transaction costs (such as locating and evaluating potential exchange partners), thereby increasing the overall efficiency of the firm.10

The argument I present does not dismiss the importance of a multidivisional structure to the sustained commercial success of the Company. It adds a new dimension to understanding the viability of this complex organizational form, particularly in an era when modern methods of communication and transportation did not exist. Anderson, McCormick, and Tollison's account, while compelling, largely ignores (1) the impact of the private trade on the firm, (2) the extent of the autonomy of Company employees—which penetrated past divisional presidents to captains and factors, and (3) the social conditions within the firm that made successful decentralization possible. In my explanation of the competitive advantage held by the English Company, these three elements are closely linked.

In decentralization, the communication flow between center and periphery is reduced (the reduction of information load on the center is considered one of the advantages of decentralization). However, this implies that if the center remains the hub of an information transmission system, the information content available to others in the firm will be significantly reduced. Integration and communication remain important to firm operations, so another decentralized means of information transmission must take the place of a centralized system. Successful decentralization therefore depends upon the existence some type of horizontal communication between employees. Thus the use of social networks, by which I mean informal and decentralized relations facilitating communication, to transmit commercial information within a decentralized firm should contribute to its success. This observation has been borne out in research conducted since at least the early 1980s on social networks, demonstrating that they are a crucial component of economic organization with large positive impacts on firms (for overviews, see Powell 1990 and Brass et al. 2004).

I trace the use of social networks within the East India Company and find that the private trade is associated with the use of social networks in directing Company operations and the exploration of new commercial opportunities. Social networks linked employees to a system of communication that integrated firm operations without threatening the productive autonomy of employees. High levels of employee autonomy and cohesive networks of peer communication fed into each other, increasing the overall flow of commercially valuable information within the Company.

Thus, rather than ignoring the private trade, or treating it as a problem to be solved, I incorporate it as an element that effectively decentralized the organizational structure of the English Company beyond a multidivisional form. Decentralization, understood largely through the legitimation of the private trade, affected the flow of information between employees, the rate at which new ports were incorporated into the trade of the Company, and the pattern by which overseas operations were integrated into a larger network of communication and transportation. Previous research on the Company and the evolution of the joint-stock business form has missed how networks and employee autonomy contributed to the sustained viability and success of the English Company. Considering these positive effects of organizational decentralization suggests, in turn, a new way of looking at the early modern corporation.

NEITHER MONOPOLY NOR FREE TRADE

The English East India Company has always had vocal critics. Many of those critics have argued that the success of the private trade demonstrated that the Company's monopoly was a hindrance to trade. If interlopers could successfully engage in the Eastern trade, the Company was not shipping enough goods to satisfy the full demand of the market: consumers, who wanted to buy Eastern goods, could not buy as much as they desired. Therefore, by inhibiting new entrants to the market, who could otherwise have put goods into the hand of those consumers, the Company was standing in the way of trade expansion (Anderson and Tollison 1982: 1245–48). Thus the private trade was turned into a powerful argument in support of free trade.

Opponents of this view suggest that it overlooks costly investments in infrastructure made by the Company that were necessary to the overseas trade of the East. From this perspective, the interlopers were instead free riders illegitimately profiting from the warehouses, forts, and diplomatic accords built, maintained, and negotiated by the Company (Carlos and Nicholas 1988: 414–15, 1996: 917–18). The argument over the private trader as either free rider or free market champion does not capture the

dynamic possibilities for innovation and within-firm communication, that is, knowledge transfer, that come with increased employee autonomy.

By emphasizing the importance of networks in the English East India Company, many readers will immediately recognize an implicit debt to the work of Harrison White. White has long been a champion of networks in many different forms. In this case, I have particularly benefited from his work on the interstitial, generative nature of connections that have not yet been crystallized into hardwired institutionalized role sets (White 2008: 20–62). Readers may also be reminded of Walter Powell's related argument that the organization of the economic sphere cannot be adequately explained by the categories of market and hierarchy—and that networks and networked forms of organization constitute a distinct third type (Powell 1990). I am not, however, describing an autonomous third form in Powell's sense, such as interorganizational networks, but instead the not uncommon combination of hierarchy and networks that characterized the organizational patterns of the Company.

Reframing the English Company as a networked firm, one that combines hierarchy with horizontal network structures, links the historical importance of the Company to more recent developments in organizational theory. We can better understand its impact by drawing upon the work of White and Powell, as well as that of organizational theorists of the decentralized multinational (Bartlett and Ghoshal 1989). Embedding the English Company in organizational theory also allows its example to reflect back upon our modern conception of the essential characteristics of successful firms. In this case the organization was an instrument of change not because autonomy was suppressed within it—as might be advanced by theory following Max Weber's work on organizations—but because it embodied one of those rare moments when coordinated action by decentralized actors has taken center stage (Udy 1959).

Here the work intersects and complements research on the limitations of patrimonialism. Patrimonialism is an ideal type of political power developed by Max Weber in which ties of kinship, patronage, and personal allegiance constitute the foundation for governing power (see Charrad and Adams 2011 for a recent and fuller description). Prior to the consolidation of centralized state power in Europe, patrimonial political power was the norm. The Netherlands had risen in political and economic power in the seventeenth century in part through creating a particularly entrenched form of state patrimonialism (Adams 1994a, 2005). As Julia Adams shows, although initially the basis for Dutch efflorescence and prominence, the patrimonial networks eventually became a heavy mesh, holding Dutch society in a static pattern of traditionalism, resistant to innovation and transformation. The Dutch East India Company was firmly integrated into these patrimonial networks of power, which had a similar dampening effect

in the context of the East Indies. Indeed, patrimonial networks of control were more effective at circumscribing employees' activities in the larger, more centralized, and better-equipped firm (Adams 1996). What was initially a Dutch advantage, made private trade concessions unnecessary for the larger firm, setting the stage for the commercial stagnation evident by the early eighteenth century. Adams's work presents a negative case, in which we see how principles of exclusivity, patronage, and subordination eventually stifled the overseas expansion of the Dutch chartered company. The English Company was also a patrimonial organization; however, the private trade allowances—which reduced exclusivity and broadened privileges within the firm-introduced avenues through which agents could introduce local information encountered in the field into the larger patterns of organizational behavior. A crucial difference was the structure of principal-agent relations, where the adoption of private trade allowances in the English Company institutionalized a pattern in which agents and principals interests were independent but aligned.

By bringing network analysis to bear on the historical question of British expansion into the East, I am also contributing to a well-defined line of comparative-historical network analysis. In many instances, the goal of this research has been to show how the reconfiguration of social relations between different groups is often the basis for the creation of new and important institutions, such as a centralized state (Padgett and Ansell 1993) or commercial partnership (Padgett and McLean 2006). Historical network analysis has also shown how emergent relational patterns shaped important historical events, such as English Civil War (Bearman 1993), the Paris Commune of 1871 (Gould 1995), and the installation of a merchant oligarchy in medieval Genoa (Van Doosselaere 2009). My goal is actually more modest than this—to explain economic growth through patterns of social interaction.

Thus, though the theory and methods belong to historical network analysis, the goal and the setting bring my work into conversation with the new institutionalism of economic history. The new institutionalism in economics (which is significantly different from the new institutionalism in sociology) has been concerned with explaining economic growth through specific social institutions, such as property rights, courts of law, and impersonal exchange (North 1973, 1981, 1990, Landa 1981, Acemoglu and Johnson 2005, Acemoglu, Johnson, and Robinson 2005, Greif 2006b). This interest has also naturally led to research on the origin of these institutions (Knight and Sened 1995, Greif 2006), all of which has led to a focus on economic history. Britain in the eighteenth and nineteenth centuries has been of particular interest to economic historians because it was during that period when Britain's economy markedly diverged from more modest

growth patterns in premodern, medieval, and ancient economies, as well as development patterns in Africa and Asia. I see three points of contact between my research on the English East India Company and the new institutionalism of economics.

First, the success of the English Company was a part of the larger process whereby England experienced significant economic growth. Research on the Company is therefore research on a theoretically privileged period, which has been used to understand the roots of modern economic development. There is no question that the English East India Company was only one part of the larger process, but improving our understanding of one of the many commercial successes experienced by England in this transitional period contributes to our comprehension of the overall picture.

Second, although my goals are similar to those of the new institutionalists in economics, important differences remain. The new institutionalists explore the emergence of institutions through individual behavior via rational choice or game theory. Jack Knight describes this mode of explanation as the "'invisible hand' mechanism: social institutions are the unintended consequences of individual action" (Knight and Sened 1995: 3). I hope that my focus on the role of social networks in this large organization emphasizes the importance of *social* action in institutional formation and call attention more generally to its role (i.e., through forming and dissolving relations that spread influence and information) in economic development.

Finally, and more similarly, the networks of information and innovation that emerged within the English Company were the result of the distribution of rights and privileges across different groups—on the one hand owners/managers versus employees of the firms and on the other elites versus nonelites within the ports. In both cases, the economic growth of the firm depended upon a more equitable distribution of the right to participate in and profit from market exchange—not simply the invention and implementation of more effective coordinating mechanisms. Participation and profit do not always go hand in hand as many employees of large organizations participate in market exchange, but do not share in the profits—or receive a negligible share. Most recently Douglass North, John Wallis, and Barry Weingast (2009) have argued that open societies, which do not impose minimum restrictions on individuals' right to participate in or create organizations, experience the greatest economic growth. The distribution of rights and rewards within the organizations is not given much attention. My research on the English Company suggests that it may also be of value to consider whether open organizations, meaning those that embrace decentralization and some form of profit sharing, are also necessary components of economic growth.

ANALYTICAL SOCIOLOGY AND THE HISTORY OF THE EAST INDIA COMPANY

Throughout this book my approach is to consider the micro-level behavioral patterns and opportunity structures that allowed for the development and transformation of the English Company and, through it, larger patterns of global trade. Networks take a central role in my explanatory strategy exactly because they may be used to link individual behavior to larger macro-level social and organizational outcomes. In this sense the research is intended to contribute to a growing subfield that has embraced many of the same larger theoretical goals found in the earlier historical-comparative network research: analytical sociology (Hedström and Swedberg 1998, Hedström 2005, Hedström and Bearman 2009, Demeulenaere 2011).

The existence of analytical sociology as a well-defined approach is relatively new. Beyond an emphasis on precision, rigor, and clarity (desirable in all analysis), its most pronounced features are a focus on building links between micro and macro levels of analysis and the use of mechanisms as a central component of any explanatory strategy. The notoriously large number of definitions that have been generated to describe the idea of a social mechanism has created some uncertainty about the term, but the definition adopted within analytical sociology itself is derived from Peter Machamer, Lindley Darden, and Carl Craver's article "Thinking about Mechanisms" (2000). "Mechanisms can be said to consist of entities (with their properties) and the activities that these entities engage in, either by themselves or in concert with other entities. These activities bring about change, and the type of change brought about depends upon the properties and activities of the entities and the relations between them" (Hedström and Bearman 2009: 5). Although this definition is agnostic as to the identity of the activity-engaging entities, it is clear in analytic sociology that because the outcomes of interest are at the social or group level (as determined by the boundaries of the field of sociology), micro-level explanations should be based in or near the level of individuals. Thus the beliefs and behaviors of individuals are central to explanation in analytic sociology.

Although I am ready to admit that readers may find themselves slip-sliding around the bathtub model of micro and macro levels of analysis as they read through these chapters, there is a general, if nested and recursive, pattern to the layout of the chapters of the book and the means by which they engage the problem of linking micro and macro levels of analysis. I outline here the way in which they link individual behavior and larger social outcomes. Figure 1 presents a modified version of James Coleman's multilevel bathtub model (Coleman 1990: 8, Hedström and Swedberg

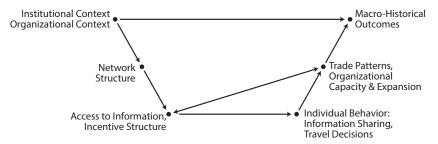


FIGURE 1. Modified model of multilevel social transformation.

1998: 22, Hedström and Bearman 2009: 34), also influenced by Karen Barkey's model of cultural and structural dynamics (Barkey 2009: 724). The modifications I have made to the diagram are intended to illustrate the argument of this book, not as a fundamental intervention or restatement of the relationship between different levels of social observation. In the paragraphs that follow I both summarize the chapters and locate them with respect to the diagram of multilevel social processes.

Chapter 2 sets out the stakes of the argument, situating the Company with respect to some of the larger processes of transition and change in the early modern period and the dawn of modernity in the nineteenth century, which means the arc of the book begins not on the left, but on the right side of the diagram. The issues addressed are large-scale macro-historical outcomes, such as economic development in the West, underdevelopment in Asia, growth in state capacity, the development of economic theory, and the emergence of new organizational forms. All are linked to and intertwine with the story of the English East India Company. The following chapters build up to the relationship between the Company and these global-historical outcomes.

Chapter 3 undertakes a comparative analysis of the organizational characteristics of the Company, highlighting the firm's record of sustained innovation through the incorporation of new markets, and the extent to which this may be explained by the degree of militarization in the Company, relations with the state, and the management of employees' private trade. Over the long term, the English Company was the most successful of the European companies. Like the Dutch Company, it was not owned by the state. Unlike the Dutch Company, the English Company legalized the private country trade of its employees at an early stage. And like many smaller European companies, it was less militaristic than the Dutch. These comparisons suggest, in keeping with the insights of previous historians, that the private trade of the English Company played an important role in English success in the East. While setting up a comparative argument for

why individual-level trading decisions (associated with the private trade) are important to understanding the differences between the English and other East India companies, this chapter also provides the organizational background necessary to understanding why employees of the English Company would engage in certain patterns of behavior—thus putting it back on the upper-left-hand corner of the diagram in figure 1.

Chapters 4 and 5 both work to capture the full relationship among organizational context, individual behavior, and group-level outcomes, with chapter 4 focusing more intensely on the process of individual decision making, bottom left, and chapter 5 devoting more attention to the structural outcomes of individual behavior, middle-right of the diagram. Chapter 4 identifies how organizational context affects individual behavior and the propensity to incorporate information from peers into important operational decisions. The identification of this relationship illuminates, in turn, the larger question of how—or the mechanisms by which decentralization contributed to the pattern of innovation found in the English Company. The analysis focuses on evaluating the relative importance of different types of information in leading captains to choose trade in one port over another, including formal orders given by the Company, a personal history of contact with ports, and information transmitted via social networks from ship to ship. The results show that social networks were an important source of information for captains when deciding which port to travel to next. However, the use of social networks varied over time. In the first century and a half of the Company's life, when private trade flourished and captains possessed considerable autonomy, social networks played an important role in determining patterns of trade. In the colonial period of the Company's history, from 1757 to its dissolution, social networks were depressed (or repressed).

The social networks were an important mediating factor in the structure of the English trade network because they kept smaller ports active in the larger network and sustained the expansion of the English trade to a growing number of ports. In other words they were central to the incorporation of innovation. When captains used these networks they anchored the Company into multiple commercial worlds, embedding it in local economies and opening up new avenues of opportunity for British trade. Thus organizational context channeled individual behavior that cumulated into new patterns of trade at the group level, eventually feeding back into individual behavior through the type of information available to actors. This feedback effect is represented by the double-arrowed line linking "trade patterns, organizational capacity and expansion" to "access to information and incentive structure."

Chapter 5 provides further analysis of organizational incentive structures, linking the behavior of individuals to the larger macro structure of

trade, which may also be seen as an intermediate step linking individual behaviors to the largest outcomes described in chapter 2. The analysis here explores the unintended consequences of the private trade allowances. The unique private trade allowances of the English Company created a perverse incentive for the captains and crew. Those who were engaged in the private trade (which was most employees) had an incentive to illegally extend their voyages in the East and seek out new commercial opportunities. Company officials condemned this practice; however it had an unexpected impact on the firm. While "losing the season" to extend their voyages, captains took the risks necessary to directly link distant markets within the Company network. Through opportunistic and malfeasant behavior, they wove the many regions and ports into one multilateral commercial network. The decentralization of control over the conduct of trade in the English Company contributed to the creation of a cohesive network of information well suited to shuttling timely information from all ports between captains and factors, and even to Company officials in Britain. Again, there is a recursive pattern here, represented by the double-arrowed line, within the larger pattern of micro-macro links as changes in network structure affect the information available to individuals traversing the network. In addition, new ports, containing new markets and goods, were discovered along these voyages and incorporated into the larger trade network.

Chapters 6 and 7 return to the upper left side of the diagram, to outline the environmental conditions outside of the organization also necessary to producing the particular pattern of behavior found in employees of the Company. A story that one-sidedly focuses on the Company at the expense of the Asian context is simply incomplete. The innovative structure of the English Company could not have materialized without the sophisticated commercial markets of the East. This is not merely to say that the allure of Eastern riches encouraged English entrepreneurialism. The continued success of the Company lay in the synergy between the Company and the activities of its employees pursing the country trade. It is however not possible to understand the importance of the relationship between the Asian commercial context and the private trade without first investigating the micro-level patterns of behavior in chapters 4 and 5.

The development of the small-scale country trade of captains and factors depended upon the commercial opportunities available in the ports of the East. In chapter 6, I begin a two-chapter argument that the English Company was most successful in ports with a large local merchant class already adept at overseas trade. The captains were able to engage in trade because of preexisting financial and commercial networks that were willing and able to accommodate a large influx of small-scale commercial actors (factors, captains, officers, and seamen), as well as the larger interests of the

Company itself. Overviews of foreign trade institutions, regulations, and practices at eight different ports of call—Batticaloa, Madras, New Guinea, Madagascar, Bantam (Banten), Whampoa (Huangpu, port of Guangzhou), Goa, and Batavia (Jakarta)—demonstrate this point. Each presents a window into the complex social and political structures of eighteenth-century Asian trading ports. These longer port descriptions ground the analysis of ships' data presented in the following chapter.

Chapter 7 presents systematic evidence that decentralized, commercially sophisticated ports were preferred by the English Company. The data on Company trading voyages show that they spent more time in and had longer trading partnerships with ports that were already set up to accommodate the commercial interests of both the Company and employees. These data also cast doubt upon theories that English trade patterns in Asia were driven by the presence of other Europeans. The central finding, however, is that Asian merchants and the commercial institutions they had created before the arrival of the British played a vital role in the expansion of England into the East through their support of decentralized market exchange. Thus the institutional context of the organization in the societies with which it came into contact must also be considered in order to understand the full range of options for individual-level actions.

Because they address different components of the relationship between micro and macro layers of analysis, these chapters are meant to be read in relation to each other, not as separate arguments about different components of the English Company trade. The comparison across firms presented in chapter 3 is merely suggestive without the identification of specific mechanisms that could have improved firm operations, presented in chapters 4 and 5. Similarly the mechanisms outlined in chapters 4 and 5 are meant to relate to the commercial success of the firm documented in chapter 1—they can only indirectly be considered one of several contributing factors for large issues at stake in the history of the Company, outlined in chapter 2. Chapters 6 and 7 are inextricably linked to chapters 4 and 5, since the beneficial mechanisms of information transmission and innovation described in the earlier chapters rest upon decentralization and private trade, which in turn depended upon open, cosmopolitan, and heavily commercialized ports.

As a whole, the research presented in this book investigates the dramatic progress of commercial expansion in the seventeenth and eighteenth centuries by examining how the English Company successfully negotiated complex and dynamic market environments through networks: decentralized patterns of interaction and communication. The East India Company was not simply a monopoly and the private trade was not simply a version of free trade. The Company was a network form of organization created by difficult conditions, inadequate control, and simple opportunism.

NETWORKS AND ANALYTICAL SOCIOLOGY

A central unifying theme that runs throughout this book is the importance of networks to understanding the trajectory of the Company. Indeed, networks serve more than one function in the analysis and the diagram represented in figure 1. It is the position of analytical sociology that the micro layer of individual behavior is not the cause of macro-level patterns, but instead both are instantiations of each other—a relationship of supervenience (Hedström and Bearman 2009: 11). Actors' behaviors do not cause organizational behavior because they are organizational behavior—what else is an organization other than a group of individuals engaging in routinized patterns of behavior? Thus any causal effects should be understood as traveling from the right to the left of the diagram, not from the top to bottom or bottom to top.

It has frequently been emphasized that this position implies that causal processes work only at the bottom, micro level. I would instead like to draw attention to the implications it has for our perception of the social world as researchers. The relationship of supervenience between micro and macro levels of social existence might also suggest that micro and macro levels of behavior are in effect the same phenomenon, viewed in different ways. This understanding of the relation could further imply that causal processes do run across the macro level, from one macro property to another—it is just that the causal process is being described at different level, as for example one refers to a table stopping the movement of a plate without referring to its molecular properties. The problem, however, is that, although referring to the solidity of a table is more than adequate for most of our purposes, our perception of macro-level social properties is not sufficiently granular to perceive real differences that occur at the micro level. These differences—which are not immediately apparent at the group, organizational, or institutional level—are often important enough to create dissimilar outcomes for individuals and groups. Since different micro-level properties, which produce different social outcomes, are often perceived as similar organizational or institutional forms, adequate social explanations really have to reach down to the micro layer.

This brief excursus helps to explain the dual role of networks in this work. Networks function both as a causal mechanism and also as an aid to the interpretability of the social world. Because of their complexity in aggregate, it is very difficult to observe all the micro-level behaviors, patterns, and links that are instantiated in macro-social processes. Networks help us to make sense of aggregate patterns of behavior at the individual level and to thereby see the link between micro and macro levels. They are an intermediate level of observation that allows the analyst, researcher, or

reader to see the relationship between individual and group behavior more clearly—an analytic tool used for understanding and knowledge building. In this book, they serve this purpose most clearly in chapter 5, where structural analysis reveals the connectivity patterns that facilitate information transfer at the organizational level.

Figure 1 also contains a diagonal line running between trade patterns and access to information and incentive structures, indicating networks have an effect at the micro level. This line indicates the second role networks play in this book, which is as a central mechanism of information diffusion operating within the larger narrative of institutional transformation. This aspect of how networks function in the larger argument is most pronounced in chapter 4, where the analysis captures how social interactions between peers affect the behavior of individuals under favorable institutional conditions. In this latter sense, however, networks are only one of a number of mechanisms operating to link the left and right sides of the diagram.

As Diego Gambetta has noted, most satisfactory explanations are composed of concatenations of smaller, simpler mechanisms (Gambetta 1998). Understanding how the employees of the East India Company used social networks involves not only mechanisms of information transfer, but also preference and belief formation (Freese 2009, Rydgren 2009): Do captains prefer riskier or safer commercial opportunities? How do they come to believe that travel to certain port offers a significant investment opportunity? Certainly, these processes have to do with rational imitation (Hedström 1998), where individuals intentionally mimic the behavior of others (in this case past behavior) when faced with uncertainty (lack of direct knowledge about commercial opportunities) in order to make more effective decisions. The timing of individuals' movements across the trade network, or the scheduling of ships, determines rates of information transfer as interactions can take place only when ships come into contact with each other, that is, if they are in the same place at the same time (Winship 2009). Lack of organizational control led individuals to introduce random perturbations into network structure when profit maximizing in a market environment. The randomness introduced into the larger system created a small-world effect (Watts 1999), increasing information flow across ships and within the firm. And all of these individual-level behaviors were based on the opportunities (Petersen 2009) created for individual trade by a subset of commercially open ports of the Indian and Eastern Seas.

Thus the shape of my argument is strongly aligned with the principles laid out in analytical sociology through the incorporation of mechanisms and the analysis of the links between micro and macro levels of social action. Also these mechanisms inevitably have some link to individual actors, whether through shaping their perceptions, providing opportunities

for certain types of behavior, or simply influencing them to take a certain course of action. It is this last point where I believe that combining comparative historical work with analytical sociology can contribute to the larger analytical project and illuminate some of the obscured strengths of the perspective.

ANALYTICAL AND COMPARATIVE HISTORICAL SOCIOLOGY

The two most pervasive criticisms of analytical sociology to date have been that it does not present a sufficiently developed model of social action (Gross 2009, Little 2012, Edling 2012) and that it does not orient researchers to investigate and take into account the context in which actors take action (Little 2012, Sewell 2012, Reed 2012). On the one hand these concerns are tied to lingering fears that analytical sociology is simply rational choice theory dressed in new clothes. I believe this fear is unjustified and the commitment to more complex models of cognition (i.e., beyond rationality) is made clear in the *Oxford Handbook of Analytical Sociology* (Hedström and Bearman 2009). However it is also clear that these criticisms point to an avenue of development, not a finished product.

The problem of culture, understood as a symbolic sign system, has yet to be directly addressed within the framework of analytical sociology. It is a difficult problem because culture has largely been theorized as a collective product that exists outside of individuals and has a logic and dynamism in and unto itself. This book is not the place to dive into this large issue, but it should be clear that for analytical sociology to successfully incorporate a developed conception of culture more research on cognitive models will be necessary to understand how culture is instantiated at the micro level. Exciting progress has been made along these lines within and without analytical sociology (McLean 2007, Mische 2008, Sperber 2011, Martin 2011).

What historical work does is make it perfectly clear that convincingly identifying micro-level mechanisms requires a deep attention to the culture in which individuals operate. The process of trying to understand the motivations, actions, preferences, and opportunities of the individuals—reaching down to the micro layer of social processes in order to identify mechanisms driving social and organizational change—requires nothing so much as thinking very seriously about the social, cultural, and material circumstances of the actors themselves. In historical circumstances, these simply cannot be taken for granted.

Two crucial examples from this work that should serve to illustrate this point include, one, the values placed on the private trade and, two,

assumptions about the prevalence of market mentalities. The findings in chapters 4 and 5 are largely driven by the private trade practices of employees, which encouraged both informal mechanisms of information flow and exploratory behavior. The private trade, or the idea of combining the conditions of employment and self-employment into one position, is not commonly found in twenty-first-century labor practices. Even in the early modern world this amalgamation occupied an ambiguous position. The Company simultaneously accepted and rejected the practice (when it could). Cultural factors that contributed to its partial acceptance within the Company were based in both the different value placed on venality and corruption in the early modern world—where such practices were often the means by which the world worked—and the beginnings of the emergence of an appreciation of commercially based self-interest that has become so pronounced in our own time (Hirschman 1997).

Similarly where rational choice theorists might assume all actors are profit maximizers, that is, take as given a certain type of market mentality, chapters 6 and 7 argue that British agents of the Company were channeled into market participation by institutional circumstances. The development of the idea of a right held by individuals to engage in self-interested, long-distance trade outside of a corporate body, that is, a private trade, was facilitated by macro-institutional arrangements found in Asia. Thus, rational profit-maximizing market behavior is far from a baseline assumption in the book. Indeed, I would hope this research makes a small contribution to the much larger problem of understanding the process whereby self-interested commercial behavior became a central component of the emerging capitalist system, whether via the Company's influence on the development of economic theory, discussed in chapter 2, or through the example of its thriving private trade.

To return to the larger point, focusing on micro-level description in historical contexts requires a consideration of the environment of the social actors because their perceptions and interpretations of the world they inhabit are central to understanding their desires, beliefs, and motivations. Thus the orientation of analytical sociology to micro-level mechanistic explanation is, if anything, an invitation for further development of theories relating the actor to their cultural, social, and material contexts—particularly as historical work is one of the few ways by which researchers can compare across radically different cultural systems to draw lessons about potentially generalizable cultural processes. If analytical sociology uses historical contexts to explore how experiences, practices, and events contribute to the larger process of organizational, institutional, and even cultural transformation, it will inevitably enrich our theories of culture.