INTRODUCTION

"To Apply Nature to Economics and Vice Versa"

Late in the eighteenth century, classical economists formulated a concept of global modernity. They argued that an efficient economy demanded a liberal political order, with well-defined limits to state power and to national sovereignty. Around the same time, Romantic antimodernists rejected the material benefits of mass production. They wanted instead to safeguard intangible values such as moral virtue and local independence. Both types of thinkers assumed a trade-off between global economic efficiency and the values of local elites. Classical economists opted for an efficient economy; Romantic antimodernists, for local elites.

Earlier secular philosophers of statehood had not considered such a trade-off necessary. Cameralists—which is to say, at their origin, seventeenth-century German fiscal theoreticians employed as princely financial advisers—had hoped to link the political order to a new and rationalized economic order. They aimed to improve manufacturing and agriculture by means of protectionist legal measures and technological innovations. More broadly, they worked to preserve the political power and social prestige of a rent-seeking state elite, which would now supervise (and live off) a refashioned and largely self-sufficient domestic economy.

Whereas classical economists advocated one single, ungoverned, yet self-regulating global modernity, and whereas Romantic antimodernists hoped for an infinitude of custom-governed, local, traditional communities, cameralists strove for rationalistically governed autarkies. Their now largely forgotten model of society I term here the cameralist concept of a local modernity.

This book investigates that concept as it is fleshed out in the life and work of one of the eighteenth century's most famous naturalists, the Swedish botanist Carl Linnaeus (1707–1778). *Linnaeus: Nature and Nation* is thus both a biography and a case study of the relation between natural knowledge and political economy in the early Enlightenment. It asks how one thinker posed and answered the question: what is the relation between nature and the economy?

In 1746, writing as an Uppsala University professor to the Swedish Academy of Science, Linnaeus summarized his answer to this question: "Nature has arranged itself in such a way that each country produces something especially useful; the task of economics is to collect [plants] from other places and cultivate [at home] such things that don't want to grow [here] but can grow [here]."[1]

In his letter, Linnaeus pondered the fact that natural resources are unevenly scattered over the globe. "Each country produces something especially useful." Later in the century, Adam Smith argued that because countries differ in how they are endowed, their economies would become more productive if each specialized in what it did best, and then traded goods internationally. Linnaeus, however, thought that trade could never overcome the problems of manifold nature and crafts.

Linnaeus thus rejected Adam Smith's laissez-faire theory. Of course he never came across the fully formulated doctrine. But he was cognizant of earlier and quite elaborate pleas for a freer economy, common in the Swedish pamphlet literature during the Era of Freedom between 1718 and 1772. He would have disagreed entirely with Adam Smith's later thesis that voluntary trade benefits both parties. Like other cameralists, he had a zero-sum view of the economy. He regarded trade as parasitic. His benchmark of success was for a country to keep its trade balance positive, and this benchmark he quantified in "barrels of gold."

Nor did Linnaeus subscribe to the *other* political answer of his era to the inescapable reality of natural and technological diversity. Hence he scorned mercantile imperialism and the military conquest of tropical regions to serve as tributaries. We know in retrospect that by 1750 Europe was on the verge of acquiring global economic hegemony. But Linnaeus, like his contemporaries, regarded non-European powers—the Ottoman, Mughal, Chinese, and Japanese empires—as matching Europe's military skills and productive powers.

In his era, Europeans fretted over the drain of bullion to Asia. No government had the probity or public trust necessary to guarantee a conventional money base. Credit institutions were fledglings. Gold and silver had always been perceived as having intrinsic value (as well as exchange value and use value). For all these reasons, the bullion drain implied deflation, and economists theorized that states' main macro-economic goal must be a perpetually positive trade balance, as measured in precious metals.[2]

A century before Linnaeus, to justify the Asia trade English seventeenth-century mercantilists had argued that reselling Oriental goods abroad netted England more specie than its original outlay in Asia.[3] German economists and their Scandinavian followers noted that England's gain was the Continent's loss. After the end of the Thirty Years War in 1648, Germany's polities struggled to reconstruct their war-shattered economies. They also hoped to compensate for the decline of the cross-Alpine German-Italian trade, which had flourished in earlier centuries. Thus they developed cameralism, a continental sister doctrine to mercantilism.[4]

Cameralists and mercantilists built their doctrine on the traditional goal of the European courts: to appropriate the wealth of their subjects. Indeed, the word "cameralist" was originally a term for the officeholders who could enter the princely *camera*, or treasure chamber. Cameralists and mercantilists alike measured national wealth in rulers' gold hoards. (The more sophisticated among them also discussed currency circulation. Others—ranging from Cardinal Richelieu to King Gustav III of Sweden—attempted to solve their budget deficits more directly, with the help of gold-producing alchemists.)[5]

Cameralists and mercantilists also theorized the advantages that accrued to the ruler from an economic symbiosis with his subjects. They did so in the secular language of self-interest, and in the practical format of handbooks.[6] (Preaching to coarse and drunken German princes, they worked with simple analogies. Your subjects, they wrote, are like sheep. If you kill them, you will have no wool.)

Both sets of early economists thus aimed for prosperous, populous, and unified national economies. They hoped to draw together the state's various domains into one administrative unit, and to regulate that state's material links with other polities. To that end, they employed many tools: producer monopolies and state manufactures; import barriers; navigation acts; pronatalist legislation; export bans on gold; funding of science and technology; and improvements to infrastructure.

Historians of cameralism traditionally study cameralists' attempts to integrate regions within a state. Noting that in the early modern era the economic, political, and cultural maps of continental Europe overlapped only haphazardly, they regard cameralists as nation builders.[7] In this book, I attend instead to cameralists' efforts to isolate the individual state commercially. In particular, I am interested in the policies they developed when older legal measures failed.

In the early 1700s, smaller European countries licensed interloping East India companies. Smugglers retailed their stocks of sugar, tea, and spices from country to country. As a matter of economic theory, however, state elites still assumed that smuggled imports and tax revenues were inversely correlated. And on a material level, they collected the monopoly rents generated in the trade environment that they regulated. Therefore, these rent-seekers eagerly enforced legal trade restrictions and fiercely fought against smuggled goods.

Yet not even the cruelest punishments worked. In late seventeenth-century and eighteenth-century France, for example, about sixteen thousand people were broken on the wheel, hung, or quartered for selling printed cottons.[8] Still French women continued to wear calicoes. When the rent-seeking state elites of early modern Europe battled the comparative advantage that fuels international trade, they also needed—and they understood this—a positive economic policy, a direction distinct from restrictions and penalties.

Most typically, early modern state elites crafted such positive policies into the form of a search for colonies. As producer monopolies, tropical tributaries could supply the spices, textiles, and stimulants that the motherland consumers now bought tax-free on the black market. As captive markets, they could consume the products that the motherland's state monopolies and state licensees made, but could not sell.[9]

The colonial option was not open to all rent-seeking state elites, however. As one of Linnaeus' Swedish students enviously observed from London in 1761, "here there is such an unnatural bragging over the successes of their weapons, so one hears nothing but that the English can conquer the whole world if they want to."[10] By 1700, the smaller, non-Atlantic European countries could hardly acquire empires overseas, given that the Dutch, French, Spanish, and English ruled over the high seas.