CHAPTER TWO

From National Borders to Global Seams

The Rise of Supply Chain Security

The diagram in Figure 10 appeared as part of a 2006 New York Times article on the growing challenge of securing global supply chains (Fattah and Lipton 2006). Assembled using data from the RAND Corporation, U.S. Customs and Border Protection (CBP), the Government Accountability Office, and AMR Research, “Securing the Flow of Goods” illustrates the transnational journey of an imaginary shipping container from source to destination. The diagram highlights the myriad sites along the route where “security concerns” arise: opportunities for tampering with the contents of containers, sites where inspection technologies are outdated or inadequate, and places where physical security (gates, fences, locks, cameras) around ports and other transshipment facilities is lacking. The diagram also showcases a variety of security initiatives that have been designed in response to these perceived risks, but in stark contrast to typical national security initiatives, the border does not serve as the “geographical pivot” here. The national border has not vanished, but it requires some effort to determine its exact whereabouts. The border can be found, presumably, between the zones labeled “at sea” and “United States”—the site where CBP does one of its many marked screenings and inspections. A literal move away from borders, and away from territorial models of security on which they rely, is characteristic of broader attempts to secure the transnational material and informational networks of global trade. This diagram helps mark the rise of a new paradigm of security—supply chain security—that is increasingly challenging geopolitical forms organized by nation-state territoriality.

At least two other things are notable about this graphic representation of security in the global supply chain. First, it is striking how closely this
### Securing the Flow of Goods

About 25,000 shipping containers, each the size of a small home, enter the nation’s 361 ports each day. From a warehouse overseas to one here, each container changes hands multiple times. U.S. Customs and the U.S. Coast Guard enforce security at the ports.

#### Movement of Containers

<table>
<thead>
<tr>
<th>MANUFACTURER OR EXPORTER</th>
<th>TRUCK OR RAIL CARRIER</th>
<th>PORT TERMINAL OPERATOR</th>
<th>SHIPPING CARRIER</th>
<th>PORT TERMINAL OPERATOR</th>
<th>TRUCKING COMPANY</th>
<th>IMPORTER WAREHOUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loads containers and seals them.</td>
<td>Carries containers to the port.</td>
<td>Stores and loads containers onto ships.</td>
<td>Transports containers.</td>
<td>Unloads and stores containers.</td>
<td>Carries the containers to the importer’s distribution center.</td>
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#### Securing the Supply

**An incentive program encourages importers and terminal operators to enhance security in each step of the supply chain, starting with factories overseas.**

- **Customs inspections**
  - U.S. officials conduct gamma screening or manual inspection of containers that are designated high-risk.
  - This covers only 5.6 percent of all imported containers. Many of the devices cannot screen certain dense material, like frozen foods.

- **A 2002 security initiative has placed U.S. officials at 42 foreign ports to monitor screening of high-risk containers.**
  - These ports cover 80 percent of U.S.-bound cargo.
  - Sometimes high-risk containers are loaded onto the ship before inspections can occur. Native port officials have also refused inspection requests.

- **The agencies screen and inspect high-risk containers before unloading.**
  - Many ports have not completed security improvements at terminals (like fencing and cameras), required to fully comply with Coast Guard standards.

- **Coast Guard and U.S. Customs make further risk assessments, based on another manifest sent 96 hours before the arrival of the containers.**
  - Audits show that the manifests are often incomplete, making risk assessment difficult.

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**Document trail**

- Exporters submit an electronic manifest to U.S. Customs 24 hours before the ship is loaded, including description of items shipped and tracking numbers. Customs analyzes the information for containers that may pose threats.
- About 37 percent of trucks or rail cars leaving U.S. ports drive through radiation portals to check for nuclear material. The portals have difficulty detecting shielded, highly enriched uranium — the key ingredient in a nuclear bomb.

**Figure 10.** “Securing the Flow of Goods.” Source: Fattah and Lipton 2006. Copyright 2006 *New York Times*. All rights reserved.
diagram resembles the one that opened the previous chapter. “Alternative Orientation to Integrated Distribution Management” rendered the conceptual shift of the revolution in logistics immediately visible; the formerly separate fields associated with managing materials through the production process and distributing them afterward were folded into the new umbrella field of business logistics and a new vision of the supply chain as a system. “Securing the Flow of Goods” assumes that same systems context. It maps the same activities in the same formation, starting with the manufacturing process and working through distribution to the buyer. “Securing the Flow of Goods” takes the same series of movements as the diagram from chapter 1 but stretches them around the world and across national borders.

This takes us to one final feature of the diagram that demands scrutiny. While these diagrams are similar, a clear difference is the focus on security here. If the diagram from chapter 1 rendered the revolution in logistics visible, then this one clearly marks the securitization of globalized and revolutionized logistics. The demand for security has become ubiquitous in the early years of the twenty-first century. From states’ claims to national security in the face of terror, to the demands of nongovernmental organizations for human security to protect civilians against casualty, to claims to income security by activists in search of a living wage, to the growing demand for local food security from social movements, security is high on the political agenda. Yet despite this contemporary common sense, the supply chain is much more than just another site of securitization. In a neoliberal context wherein economy has become policy, the protection of the material flows of trade is paramount. The stretching of logistics systems across borders into “pipelines of trade” means that supply chain security recasts not only the object of security but its logics and spatial forms as well. This diagram prompts us to explore these shifts and ask, when did national governments, supranational governing bodies, transnational shipping and logistics corporations, and retailers begin to devote extensive efforts to “secure the supply chain”? What are the implications of the rise of supply chain security for politics, space, and citizenship?

“Securing the Flow of Goods” thus provokes questions about a series of profound shifts in the relationships between security, space, and economy that animate the following investigation. This chapter traces efforts on the part of national states, supranational governing bodies, and transnational corporations to actualize the promise of the revolution in logistics—to make logistics systems “seamless.” It is one thing to conceive of logistics as a system, however, and another to enact the
regulatory reform, extend the physical infrastructure, and enhance the speed of circulation in that system. This latter labor was initiated with the rise of intermodalism and the deregulation of the transport sector, addressed in chapter 1 (Allen 1997; Levinson 2006; Rodrigue and Notteboom 2008), yet by the 1990s these efforts took shape on a whole new scale. Transnational trade agreements were both a sign of the growth of cargo flows and an important element in amplifying them. The capacity for countries to participate in the physical circulation of global trade became itself a measure of development, and by the turn of the century the World Bank was producing global indexes of national competitiveness based entirely on the speed and reliability of logistics systems. This growing emphasis on global logistics has not simply expanded the scale of economy—for instance, from a national to continental or even global space. Rather, it provoked a newfound emphasis on the infrastructural networks of trade and renewed interest in “corridors and gateways,” both anchored in enormous logistics infrastructure projects led by states acting with or like corporations (cf. Cowen and Smith 2009). But if states and corporations have invested heavily in infrastructure and regulation to enhance seamless cargo circulation, they have also invested in the creation of supply chain security to protect that circulation. Indeed, a system built on the speedy circulation of cargo through smooth space entails new forms of vulnerability. As the Organisation for Economic Co-operation and Development asserts, world trade is fundamentally dependent on a system of maritime transport that has been made “as frictionless as possible,” which renders that system fundamentally vulnerable, as “any important breakdown in the maritime transport system would fundamentally cripple the world economy” (2003, 2). Disruption is the Achilles heel of global logistics systems.

If the revolution in logistics allowed for the disaggregation and redistribution of what had previously been defined, separately, as production and distribution, then the globalization of logistics followed directly from that shift and redistributed component parts of the supply chain across the globe. Because of its reliance on the speed of supply chains, business logistics has provoked tremendous experimentation with the protection of these globalized networks. This experimentation has given rise to “network” or “systems” models of security, wherein borders are reconstituted and governed differently. Indeed, while these models of security prioritize flow, they are organized through new forms of containment—new kinds of borders and security zones. The rise of business logistics directly challenges geopolitical calculation and the national and territorial forms of security that historically gave it form.
Globalizing Logistics

In the wake of the revolution in logistics, global trade went through a period of phenomenal growth. In 1970, the total volume of international seaborne goods slightly exceeded 2,500 tons; by 2008, that figure reached 8.2 billion tons (IMO 2012, 6). The United Nations Environment Programme (UNEP) reports that in 2006 world shipping constituted 90 percent of global trade volume and documents the same phenomenal expansion of international trade using dollar figures; imports jumped from under a billion dollars in 1973 to an excess of twelve billion in 2006 (Vidal 2008). The World Shipping Council, an industry lobby group, reports the remarkable speed of expansion in global container traffic that took place in the years following the first Atlantic crossing by a container ship in 1966. In 1973, U.S., European, and Asian containership operators transported 4 million twenty-foot equivalent units (TEUs), but only a decade later in 1983, the figure jumped to 12 million TEUs, and container technology had circulated to the Middle East, the Indian subcontinent, and East and West Africa. The *Journal of Commerce* reports that by 2010 global container traffic hit the remarkable figure of 560 million TEUs (Barnard 2011).

**Figure 11.** The boom in shipping trade. Source: UNEP/GRID-Arendal 2009.
That there are connections between logistics and the globalization of trade is increasingly clear to a broad public beyond the walls of management schools (Dicken 2003; Makillie 2006). Yet the transformations marked by the revolution in logistics and the ways in which these underpin rather than simply correspond with the globalization of production and trade remain hidden in plain view. It is significant that the world’s largest company, Wal-Mart, is frequently described as a logistics company disguised as a retailer (Lecavalier 2010). Wal-Mart imports more tonnage into the United States than any other company, has the largest private satellite system in the world devoted to managing inventory movement, and creates global standards in the field—for instance, with the implementation of the bar code two decades ago (Bonacich and Wilson 2008, 9). Edna Bonacich and Jake Wilson (2008, 3) are right to point out that a “flurry of textbooks” have been published on the topic over the last decade, in addition to a proliferation of professional programs and trade journals devoted to logistics. However, they miss the mark when they suggest that this bout of activity indicates that the revolution in logistics itself is a recent event. As chapter 1 demonstrates, the most significant conceptual and calculative shifts underpinning the logistics revolution took place in the 1960s, while the elevation of logistics to an executive level within large corporations and the work of building professional organizations, lobbying for deregulation, and investing in intermodal infrastructure was already well under way in the 1970s. It is indeed recently that we have seen the popularization and generalization of logistics across the corporate sector. Today it is not only the large industry leaders that take the field seriously but companies of all kinds and sizes that are looking to logistics and competing on the basis of entire supply chains. Think tanks are also jumping into action, declaring that logistics is vital to national competitiveness. The Brookings Institute (Robins and Strauss-Wieder 2006, 8) queries, “Because the ability to compete and thrive in the emerging global economy now depends on the strengths of a nation’s freight system, this dynamic situation generates one crucial question: Can U.S. infrastructure handle the volumes and adequately extract economic value from goods movement?” A series of popular advertising campaigns have made logistics accessible if not intriguing to a broader public. With ads on television and YouTube, DHL explains that they are “passionate” about logistics, while the United Parcel Service (UPS) declares, “We love logistics”—affective corporate performances that I return to in the concluding chapter. Indeed, there is a growing common sense that the competitiveness of firms, nations, and supranational regions is contingent on their capacity to mobilize “seamless” supply chains, to circulate stuff in a timely and reliable way.
Notable in this flurry of attention to logistics is the growing interest of government, particularly entrepreneurial nation-states and supranational bodies like the World Bank and United Nations. The World Bank has become one of the most serious advocates of the science, calling logistics the “backbone of international trade.” Their aggressive call for export-led growth strategies imposed through structural adjustment programs since the 1970s makes it almost surprising that their take-up of logistics didn’t occur sooner. The consensus on the pivotal role of logistics to global trade is now established and frequently reiterated. In a review of Indian logistics infrastructure, global consulting firm Deloitte (2011, 3) suggests that while there are many factors that facilitate export-oriented growth, “the most important enabler is the improvement in transportation infrastructure (mainly ports, roads, airports and railways), telecommunications and power.”

It wasn’t until 2007 that the World Bank issued their first Logistics Performance Index (LPI), titled “Connecting to Compete: Trade Logistics in the Global Economy” (Arvis et al. 2007). The authors explain the vital role of logistics for development in the opening pages of the report, emphasizing that the capacity to “connect to what has been referred to as the ‘physical internet’ is fast becoming a key determinant of a country’s competitiveness.” The “physical internet,” a term used by the Economist to describe the networked nature of global logistics systems, is said to bring “access to vast new markets; but for those whose links to the global logistics web are weak, the costs of exclusion are large and growing” (Arvis et al. 2007, 3). This global ranking of the competitiveness of national logistics systems has had a significant impact in drawing more attention to logistics infrastructure from governments, particularly in the global south. Praising their own efforts in the field, the World Bank authors report that their first LPI prompted several countries to launch programs to improve their logistics performance, cultivated greater cooperation between public and private sectors in the logistics field, and prompted demand for a second LPI, released in 2010 and to be updated every two years. The map in Figure 12 is a graphic representation of the LPI rankings drawn from the 2010 report. With the darker colors representing higher performance scores, the stark unevenness of global logistics systems shadows the stark unevenness of global political economy. The LPI is centrally concerned with the “logistics gap” between high- and low-income countries, particularly given that the World Bank locates its concern for logistics performance in a broader project of “poverty alleviation.” The report highlights “the importance of trade logistics for developing country competitiveness and the ways in which the sector can help countries reap the benefits of globalization and fight poverty” (Arvis et al. 2010, 12).
The critiques of the World Bank’s export-led development models are extensive and come from all corners of the world (Sparr 1994; Plehwe, Walpen, and Neunhöffer 2006; Potter 2007). These will not be rehearsed here, but it is worth highlighting the extension of these models and in fact the deepening of the logic through the focus on the logistics of trade. The World Bank is increasingly taking aim at logistics systems and their infrastructural components and financing public–private infrastructure partnerships. By way of example, the World Bank is currently financing a massive logistics plan in Vietnam. The plan took shape at the behest of Nike, which employed two hundred thousand workers and produced ninety-four million pairs of shoes in the country in 2010. The company began lobbying the government to invest in infrastructure in order to strengthen their supply chain. USAID’s Vietnam Competitive Initiative (VNCl) is facilitating private investment and privatization of the infrastructure—in their own words, “assisting the Ministry of Planning and Investment (MPI) to improve public procurement to attract private investment.” The VNCl, in coordination with Nike and shipping giants Maersk and APL, coordinated and sponsored a “study mission” for Vietnamese officials to learn “about new models for PPP in ports and logistics infrastructure.” One of the goals of these infrastructure investments is to

**Figure 12.** Map of global logistics performance index. Source: Arvis et al. 2010.
increase the capacity of the ports around Ho Chi Minh City in order to increase the speed of goods circulation from the 2007 level of three million TEUs to thirteen million TEUs in 2013. The study mission also visited Singapore and met with the Singapore Economic Development Board, Ministry of Industry and Trade, Ministry of Finance, and Marine Port Authorities, as well as stakeholders responsible for infrastructure and export development, financing, project development, and project management such as PricewaterhouseCoopers, Lovells Lee and Lee, Fitch Ratings, and other key exporters and logistics providers. VNCI also worked with the Asian Development Bank to train sixty government officials in “PPP methods” and will support “a new PPP administrative unit that will be created in MPI for more efficient competitive procurement of PPP infrastructure projects” (ADB 2012).

In sum, American and global organizations are financing large-scale infrastructure investments in Vietnam to satisfy transnational production companies like Nike in their needs for enhanced logistics capabilities but so too to support the expansion of logistics companies like Maersk and APL. This project reveals a range of dynamics at play in contemporary logistics projects: the leadership of foreign investors in defining priorities for public investment, private ownership and financing of infrastructure, and public–private partnerships created to plan and govern projects. These are all familiar if not defining features of neoliberal government. The unwavering commitment to the promise of global capitalism to distribute social goods, a general faith in the efficiency of markets, and more broadly the elevation of market rationalities as unquestioned organizing principles of government are all hallmarks. Yet while neoliberalism has entailed a dramatic privatization of government, this has clearly not meant the emaciation of the state, another theme reflected here. Indeed, as Thomas Lemke (2001, 201) reminds us, “neo-liberal forms of government do not simply lead to . . . a reduction in state or its limitation to some basic functions”; rather, the state in the neoliberal model not only retains its traditional functions but also takes on new tasks and functions. While the role of the state within classic liberalism is tethered to the security of national and individual property (Cowen 2006), the neoliberal state takes on crucial new roles in making markets; in Lemke’s words (2001, 197), “Government itself becomes a sort of enterprise whose task it is to universalize competition and invent market-shaped systems of action for individuals, groups and institutions,” as we see with the Vietnamese project. The United Nations (UN Industrial Development Organization 2009, xv) captures elements of this role for the state in the context of
public–private logistics partnerships when they assert, “Logistics can be disrupted by government-created delays or speeded by government-supplied infrastructure.” Jeremy Plant (2002, 29) lobbies for more of this public supply for private gain, suggesting that “intermodalism needs policy advocates who argue an essentially Hamiltonian message, the need to increase the infrastructure by public means for the use of private operators in the achievement of community goals.”

Alongside the shifting role of the state, investment in global logistics projects is also clearly contributing to the rescaling of government from national space to supranational regions. This enlarging of “free trade” zones to capture new markets and exploit new resources or labor forces has been cast as a constitutive feature of neoliberalism (Brenner and Theodore 2002; Peck and Tickell 2002; Sparke, Roberts, and Secor 2003). The free trade agreement between the United States and Vietnam (“Agreement” 2000) notes that Vietnam is “taking steps to integrate into the regional and world economy by, inter alia, joining the Association of Southeast Asian Nations (ASEAN), the ASEAN Free Trade Area (AFTA), and the Asia Pacific Economic Cooperation forum (APEC), and working toward membership in the World Trade Organization (WTO),” subsequently achieved in 2007. Accordingly, the United States and Vietnam extended “national treatment” to each other’s products and producers.

These general observations about the neoliberal nature of globalized logistics are not without merit, but they also avoid the more nuanced shifts that are under way and attention to their effects. A more careful investigation of the globalization of logistics reveals something much more precise emerging—a new cartography of the political. This is not just about enlarging the zone of free trade in order to capture new markets, resources, or labor forces but about the creation of corridors, networks, or “pipelines” for the circulation of stuff. The significance of this network geography becomes clear when we investigate the very practical efforts that have emerged to protect these circulation systems and the radical implications they have for citizenship and security.

**Gateway and Corridor Cartographies**

Perhaps ironically, it took a business school professor to describe this emerging map of the North American space economy. Rather than territorial blocks of land regrouped into megaregions, Stephen Blank (2006) suggests that a transnational network of corridors and gateways offers a more apt visual rendering. The irony stems from the fact that it was
geographers who were debating (and mapping) corridors and gateways four decades ago in a disciplinary conversation that has largely disappeared since. In the late 1960s and early 1970s, the role of gateways and corridors in the geography of economic activity formed an important pillar of the “urban systems” debates (Burghardt 1971; Whebell 1969). The decline of these debates in academic geography precisely at a time when supply chains were experiencing radical transformation and scrutiny in the corporate world is no coincidence but one of the uninterrogated effects of the revolution in logistics. As “distribution geography” was folded into logistics management, a split occurred between applied research that aimed to improve the efficiency of corporate circulation (Allen 1997; Ballou 2006; LaLonde, Grabner, and Robeson 1970; Pettit, Fiksel, and Croxton 2010) and a more critical trajectory of radical analyses emerging in geography committed to transforming rather than enhancing global capitalism (Dalby 1999; Elden 2007; Gibson-Graham 1996; Harvey 1989; Mitchell 2005). The study of transportation still occurs within geography departments, though it stands far from the cutting edge of the field. Professional logistics programs are typically located in business schools, and as Lawrence Busch (2007, 441) suggests, supply chain management programs are at times replacing traditional economics departments.

In a review of current “gateway and corridor” logistics initiatives, Trevor Heaver (2007, 1) explains, “The term ‘gateway’ was once used mainly by geographers to capture the image of a port serving a hinterland. Now, it has become popular in business and politics to capture the critical role that numerous activities on and beyond port terminals play in the flow of goods to and from hinterlands through the port communities.” Heaver is right to suggest that the gateway concept has expanded in important ways in recent years. As David Gillen et al. (2007, 11) note, today gateways and corridors are “not just about transshipment of goods across the region” but about “creating value added services and the development of a significant logistics industry that among other things reduces the cost of the border to shippers.” However, the key role of transportation infrastructure has remained constant. Writing in 1971, Andrew Burghardt describes a gateway as “an entrance into (and necessarily an exit out of) some area . . . located on a site of considerable transportational significance, i.e. either at a bulk-breaking point or at a node of transport” (269). Burghardt contrasts this model to that of the “central place” because of the prominence of central place theory at that time. He notes, “The central place . . . was not thought of in terms of a site of particular transportational significance” (270).
This is not to suggest that scholars have avoided interrogation of the shifting geographies of globalization. On the contrary, there are vast debates in this area. However, the gateway and corridor cartography that is at the core of globalized logistics has hardly featured in critical scholarly work. This cartography furthermore represents much more than simply a geography of trade routes. While the business school professor is right to suggest that a corridor cartography offers the best map of economic integration, it also offers a powerful mapping of forms of mobility and security that are actively reworking the geopolitical state. This network geography bounds the emerging political space of logistics.

Dynamic debates on the rescaling of the state and the “new regionalism” have explored these themes, but they have largely focused on the enlarging of political territories—the rescaling of the region, for instance—rather than the reconfiguration of the relationship between space, politics, and economy. Recent work on “geo-economics” has come closest to this question of gateway and corridor cartographies in that scholars are exploring a different logic of spatiality than that which underpins geopolitical thought and practice. If geopolitics is concerned primarily with the exercise of power and questions of sovereignty and authority within a territorially demarcated system of national states, then “geo-economics” emphasizes the recalibration of international space by globalized market logics and transnational actors (Cowen and Smith 2009). As Matthew Sparke (2000, 6) suggests, geo-economics entails “new forms of describing and inscribing territory that are increasingly common in the context of globalization—forms of description and inscription that treat spatial relations with the same top-down, view-from-nowhere, visual preoccupations of classical geopolitics but that are also characterized by a wholly different, non-state-centric identification with the border-crossing cartographies and deregulatory dynamics of today’s transnationalized economies.” Sparke has emphasized cross-border regional integration as a “distinct geographical component” of geo-economics in his work on the “remapping” of regions—particularly “Cascadia” straddling the Western U.S.–Canadian border underpinned by the North American Free Trade Agreement’s (NAFTA’s) continental integration—and his work examines a series of surpranational trade maps that he argues “rescale” the region.

International trade agreements like NAFTA were crafted in response to already expanding integration but have also been pivotal in enhancing the volume of cross-border trade. The growth in cross-border flows was not in itself a surprise for the North American Free Trade Agreement’s architects, but the dramatic rise of cross-border goods movement within
companies that occurred in the wake of its implementation was. This “deep” or “structural integration” has come to define North America’s “complex cross-border supply chains” (Blank, Golob, and Stanley 2006, 5). NAFTA is a late chapter in the long history of state-led transportation policy in North America. Canadian and U.S. transport policies were both initially oriented toward building a national system of east–west movement for colonial settlement, but today they are increasingly oriented toward a continental system of north–south flows. While NAFTA did not provide any direct financial commitments to transportation infrastructure (Brooks 2001), it did establish thirty working groups and committees that have addressed a wide range of regulatory standards in the areas of labor, hazardous materials, and technology. Large-scale lobby groups have emerged to demand more federal action, such as the Coalition for America’s Gateways and Trade Corridors. There are substantial efforts to map and build North American logistics corridors led largely by private-sector coalitions working in conjunction with state and local governments, though often with federal funds. The most significant is North America’s SuperCorridor Coalition (NASCO), also known as the Mid-Continent Corridor, but colloquially referred to by critics as the “NAFTA superhighway.” CANA-MEX is another significant North American corridor initiative that crosses the Cascadia region (see Figure 13). The emerging maps craft a different spatial imaginary than blocks of transnational territory, as Blank argues, and they represent much more than the simple mapping of supply lines. In addition to physical infrastructure enhancement, these corridor projects take a sustained focus on “soft infrastructure” such as the integration, standardization, and synchronization of customs and trade regulations, not to mention the entire realm of efforts to secure the actual space of these logistics corridors, which will be addressed shortly.

Logistics corridor projects and their visual rendering in technical and popular cartography are popping up all over the world. Projects are under way across Africa, where USAID has commissioned logistics diagnostics studies as part of their work in “trade facilitation.” The Maputo Corridor Logistics Initiative (MCLI) is one of several major logistics corridor projects currently under way on the continent in which USAID has played a key role (others include the East Africa Corridor, West Africa Transport Logistics corridor, and the Trans-Kalahari Corridor). MCLI is a coalition of private and public shareholders from the rail, port, and roads sectors that connects Johannesburg to the port city of Maputo, Mozambique. The MCLI’s lobbying efforts have been successful in transforming infrastructure as well as the management of the Mozambique–South Africa
border. Most significant in this regard was the creation of a “one stop border post” in 2010 for logistics (implemented later in the same year for passenger travel), which allows a common processing site for the two countries. Underpinning their “Seamless and Integrated Asia” initiative, the Asian Development Bank has been active in facilitating logistics corridor projects (ADB 2009, 2010). The bank conjures the legacy of the Silk

**FIGURE 13.** North American trade corridors.
Road to mark the defining role that transnational trade routes have played historically in the region in their report on “Asian connectivity.” One of the many major projects they are helping to finance is the Mekong corridor, sometimes referred to as the ASEAN logistics corridor, which crosses Myanmar, China, Laos, and Vietnam (see Figure 14). Agreements between these countries allow for the creation of a single stop for joint inspections of customs, quality inspection departments, and border control.

It is hardly surprising to learn that China has been a leader in corridor and gateway projects. Often imagined as a factory for the world, China is producing an extraordinary share of the world’s exports—as much as one quarter of the global total (UNCTAD 2010). However, the lessons of the logistics revolution were not lost on China; rather than world factory, China might be better conceptualized as a logistics empire. China boasts the world’s largest container and crane manufacturers, is now the third-largest ship-owning country after Germany and the second-largest shipbuilding country after Japan, and has surpassed India as the largest ship-recycling country (UNCTAD 2010, xvi). China has been actively assembling its own gateways to extend logistics corridors into other

**Figure 14.** Greater Mekong Corridor Project, stretching from Mawlamyaing, Myanmar, to the Vietnamese coast, with border crossings. Source: ADB 2008.
regions of the world. In the highly publicized bid for control of Greece’s largest port just outside of Athens, the port of Piraeus, China acquired not only “a gateway into Europe” but also a gateway into “the highly promising market of Southeast Europe and the Black Sea” (Faiola 2010). This bold entry of China into Greece saw the Chinese shipping giant China Ocean Shipping Company (COSCO) assume full control of container operations for thirty-five years at a cost of $5 billion.

This logistics gateway not only brings Chinese goods into Europe and the Black Sea region but also extends Chinese labor practices and management methods into Greece. Standing at the Piraeus container terminal, dockworker John Makrydimitris pointed toward his feet and said, “There is Greece,” and then pointed to a metal fence just yards away and added with a laugh, “and there is China.” Indeed, the Union of Dockworkers of Piraeus sees the deal as “importing the Chinese labor model to Greece.” At the COSCO terminals there is no union recognition; industry standards in everything from wages, to training, to working hours have been completely undermined (Morris 2011). But the Chinese gateway is reshaping labor relations beyond the borders of the COSCO terminals as well, says Nick Georgiou, president of the Dockworkers’ Union: “The result is that companies not run by the Chinese are being influenced by what the Chinese are doing in lowering the labor costs and reducing workers’ rights” (quoted in Lim 2011). COSCO chairman Wei Jiafu agrees; in 2010, he told a gathering of the World Economic Forum, “By going global, we are also transferring our culture to the rest of the world” (quoted in Lim 2011). Greek Minister of State Haris Pamboukis asserts that Piraeus provides a model for future agreements. China’s influence over Greek politics grows alongside Chinese investment, a direct result of Greek leaders’ hope that China could save Greece from total financial collapse. Yet Pamboukis defensively insists, “Piraeus is not a colony” (quoted in Lim 2011).

The Asia Pacific Gateway and Corridor Initiative

Among all the transnational corridor and gateway projects that are being assembled in the world today, the Asia Pacific Gateway and Corridor Initiative (APGCI) offers perhaps the best glimpse at the stakes involved in the building of logistics space. The APGCI is officially a project of the Canadian federal government (Woo 2011), but this radically underdescribes the authority at play. Like the logistics project in Vietnam, the APGCI was first initiated by a small group of transnational corporations who are also directly involved in governing the large-scale public
investment and who are furthermore the beneficiaries of the megaproject. Like the Chinese “gateway into Europe,” the APGCI facilitates the circulation of wholly different labor regimes across the territories it spans. As we will see in chapter 3, the APGCI has been the vehicle for a coalition of maritime employers (composed of many of the same corporations that initiated the APGCI) to attempt to import the “Dubai model” of unfree labor into the Canadian logistics sector. The APGCI also provides a window into the shifting logics and techniques of imperial rule. Efforts to “secure” gateways and corridors from disruption throw the politics of protecting the circulation of globalized goods into direct conflict with ongoing anticolonial struggles over lands and livelihoods. The APGCI’s experiments with the old and new politics of securing trade networks collide directly with indigenous sovereignty struggles. Perhaps most striking, the APGCI tells the story of the reorganization of state sovereignty and national security to fit the form and function of transnational logistics space. Rather than territorial borders at the edge of national space guaranteeing the sovereignty of nation-state, a new cartography of security aims to protect global networks of circulation. As the conceptual map in Figure 15 shows, borders do not disappear in the APGCI but are superseded by transnational networks, flows, and urban nodes.

The APGCI is a major public/private initiative that aims to increase the capacity, productivity, speed, and reliability of cargo flow between Asia and North America, and according to a provincial policy director I interviewed, $15 billion in infrastructure investment has already been committed to the project from federal and provincial governments and the private sector (see also Moore 2008). The APGCI provoked a complete reorganization of Canada’s federal transportation ministry away from a provincial territorial model over the last decade. Transport Canada (TC) has undergone a process of internal transformation in order to accommodate this network model into their organizational structure and operations. TC is now organized around three major gateways (Asia Pacific, Atlantic, Continental), of which the West Coast APGCI is the most significant. The initiative emerged out of conversations and then a more formal alliance of shippers, terminal operators, and other logistics companies in Vancouver. With most of the world’s thirty-largest companies working in British Columbia’s ports, this was clearly a local meeting of global capital. In 1994, Maersk, COSCO, DP World, Hanjin, TSI, Maher Terminals, Hapag-Lloyd, K-Line, and fifty-three others represented by the British Columbia Maritime Employers Association (BCMEA) met with the Port of Vancouver, Fraser Port, CN and CP Rail, International
Longshore and Warehouse Union, Western Economic Diversification, and the Asia Pacific Foundation and established the Greater Vancouver Gateway Council (GVGC). The GVGC’s mission was to provide “seamless logistical services” within the local vicinity of Vancouver (Gow 2009).

A few years later, after undertaking “probably a million dollars” worth of research to look at the opportunities and to identify what was needed, the GVGC “then turned around and came to the provincial and federal government and said, ‘you really need to get onside this; you really need to take this on as your own initiative. You need to start investing in what’s needed—both from a policy and legislative perspective, but also from an infrastructure perspective’” (Gow 2009). The GVGC research culminated in a 2001 plan for $7 billion in capital investment over twenty years. Just five years later, the government of British Columbia announced a $3 billion investment and released a Pacific Gateway Strategy Action Plan, while the federal government formally announced the APGCI and over the next two years committed an unprecedented level of funds for national infrastructure

**Figure 15.** Asia-Pacific Gateway and Corridor Initiative conceptual map. Source: Asia Pacific Gateway and Corridor Initiative 2009.
projects: $33 billion in 2006 and 2007 alone. These public funds are crucial to enabling private gain in the corridor, yet government has played an even more critical role in ensuring planning and strategy on the scale of the system. Lisa Gow, executive director of the BC Pacific Gateway Branch, states that a key role of the government is to plan for “operational system efficiency, as opposed to operator efficiency.” She insists that “the operators have done a really, really good job about improving their own efficiency, but there’s no incentive for them to look at the broader system efficiency.” One of the tangible outcomes of the early alliance was the scrutiny applied to the system and its growing visibility. The APGCI “mapped the entire container trucking system in the Lower Mainland” to find problem areas for improvement, “some of them in the trucking system, some of them in the ports, and a whole bunch of opportunities for eliminating a lot of the duplication of activity that’s happening” (Gow 2009).

Corporate partners remain central in governing the APGCI through the Gateway Executive Council. The council is made up “only of executives” and meets quarterly to plan collaboratively. “It’s very—it’s formal. It’s a formal structure,” Gow reports. “All of the decision-making is collaborative; it’s consensus based. So it is as open as you can be with direct competitors sitting in the room with each other. They have been surprisingly forthright with the amount of information that they’re prepared to share with each other. It doesn’t always come easily, but it does work.” The Executive Council is also the international face of the Gateway, and members travel together on “missions.” “We’ve actually been doing what we call missions, which is we actually go out into Asia. We go into the U.S. Midwest . . . missions are a big one for us,” Gow explains. Missions provide the opportunity for corporations and government to work with common “comprehensive marketing and communications.” They are “both strategy and tactical, a plan that’s been developed for all the partners. We have developed an agreed-on common logo, common branding. We have common positioning statements that all of the partners use in their outreach. So we all are ‘Canada’s Pacific Gateway.’ We use that; the feds use that; the private sector uses that.” One 2008 Asian mission took the APGCI Executive Council to Dubai, which Gow described as “like Disneyland. It was very interesting—very interesting.” With Dubai Ports as a member of the APGCI Executive Council and thus treated as “part of the overall family,” the travel abroad was also a trip “home.” The mission provided the opportunity for the APGCI to market itself, while it also allowed government representatives to see dramatically different labor and legal regimes for port and transport regulation.
Dubai has some really interesting approaches. Obviously it’s a wholly different governing structure from what we’re dealing with here, but they are thinking huge. I mean, talk about comprehensive planning. It’s an entity that, when they do things, they think of everything. They hire the best in the world; they get advice, people to come in. And they don’t just develop a port. They develop a system—it’s infrastructure, and ports, and it’s free trade zones, and it’s accommodation, and it’s transportation of people, and it’s energy—and the whole bit gets thought about as they do it. So it’s really quite comprehensive.

Dubai may well be a “Disneyland” for capital, with its radical social order where workers and citizens are separate classes of people. An extreme attempt to remove workers from the realm of citizenship and so too the economy from the political, with a labor force that is 90 percent noncitizen, Dubai ensures a “love it or leave it” approach for elite professionals and pitiful conditions of work and wages for the rest. If the factory has been stretched across supply chains and distributed around the world, then the radically different labor regimes are already “inside” the factory, and as we will see in chapter 3, corporate members of the APGCI see themselves as simply standardizing the supply chain in their efforts to bring the Dubai model to North America.

The vision for the APGCI, articulated first by logistics corporations, then by the GVGC, and finally by government, is to enhance and expand trade between Asia and North America. The Canadian government asserts that the country is “geographically positioned to prosper as the crossroads between North America and growing Asian economies.” The language here is significant—Canada is not positioned at the crossroads but as the crossroads. This is important precisely because it is the activity of goods movement that is coveted, regardless of the final destination of the goods. With the revolution in logistics, the disaggregation of the categories of production and distribution and their reassembly into component parts of supply chains that can then be redistributed across space, the circulation of goods is no longer simply a matter of transportation. Logistics—the management of supply chains—is a booming industry in itself with value added and spin-off economic activity. An early consultants’ report on the APGCI illustrates the importance of both the geographic position of the initiative between two empires and the value of the “traffic” between them. “Situated between Asia and the U.S.,” they explain, “our ports and airports on the west coast are also ideally situated to capture a portion of the growing traffic between these major trading partners” (InterVISTAS 2007, 2). The goal of the APGCI is not simply to increase
and enhance trade but also to siphon off some of the immense volume of goods bound for the United States and circulate it through Canadian logistics systems. Indeed, the Canadian government frames their discussion of the rationale for public investment under the banner “The Shanghai to Chicago Opportunity.”

By any measure, the volume and value of trade between China and its largest trading partner, the United States, is vast and growing. During the first decade of the twenty-first century, the total value of trade between the countries expanded fourfold from $121 billion in 2001 to $456 billion in 2010 (U.S.-China Business Council n.d.). If Canada has a history as handmaiden to the British Empire and then to the American one, the APGCI suggests another major shift in this story. Yet despite the widely noted warming of the Canadian government in its relations to China, this shift is not simply away from American Empire toward the Chinese. Rather, the Canadian state is actively orientating itself toward the geo-economic logics of logistics.

Nowhere is this attempt to orient national investment and infrastructure toward the Chinese–American circuit more stark than with the “Chicago Express.” This northern corridor of the APGCI runs from Prince Rupert, British Columbia, to the American rail hub of Chicago, and its nickname reveals the intentions that fueled its construction. According to Gow (2009), “The intent was it was going to be about 94 percent, 95 percent U.S.-driven”:

Essentially the idea is to come in, offload goods, move them direct to rail (the majority of their product comes in and out on rail), put it onto rail, haul it down to Chicago as quickly as you possibly can, make a couple of stops along the way—so they’ll make a stop in Winnipeg; they’ll make a stop in Chicago, Memphis—and then on the way back, fill the containers with exports from those various jurisdictions—so they’ll pick up paper and other products out of Memphis and Chicago; they’ll stop in Edmonton for agricultural and other products like that; and then they’ll make a stop in Prince George, pick up lumber products for export—and then put it back on the ship. So very much an express service. I think they commit to five- or six-day delivery in Memphis.

As Figure 16 shows, the “Chicago Express” extends well beyond the Canadian border on both ends. It promises to reduce transport time by as much as two to three days for containers journeying from Asia to the United States, in part achieved from the geographic proximity of northern British Columbia to East Asia, but also because of the lower levels
of congestion in Prince Rupert compared to others ports on the coast. However, the “Chicago Express” can only promise this time savings if the border cooperates, and so the border has been a major focus of APGCI planning from the get go. Like in the APGCI concept map, the national border is represented here, but only with the faintest line, as if receding into the background. This is in contrast to the bold golden ray that broadly follows transportation infrastructure and crosses from the Pacific Ocean through the Port of Prince Rupert and across the Canadian West before dropping down to Chicago, Memphis, and finally New Orleans. This visual representation captures something more than just the corporate fantasy of transnational goods flow. Efforts to actualize this image—to make the border fade into the background as a means of strengthening logistics space—are having serious impact. CBP agents are now stationed at the Port of Prince Rupert and carry out their inspections alongside their Canadian counterparts when containers reach the North American shore. As Pacific Regional Director General for Transport Canada Mike Henderson explained to me,³
A good example are the trains, the container trains now that come out of Rupert down into Chicago . . . and they cross the border at Fort Frances–Ranier in northwestern Ontario. I’ve been down there a few times to watch them, and those trains, when they leave Rupert, they almost don’t stop. They only thing they really see are moose. They get to Winnipeg, they stop briefly, then they continue on. When they cross the border, the train doesn’t stop. It slows down, rolls through, and then continues right down to Chicago. The biggest selling point of that service is that they can get containers from Prince Rupert to Chicago in less than 100 hours—much faster, for example, than we’ve moved containers from Seattle to Chicago or L.A./Long Beach to Chicago. So they’ve gone through all the gymnastics with U.S. Border Patrol, border security. Before those containers arrive at the border, the U.S. knows everything that’s in them, where they’ve come from, who packed them.

Concerns about security have animated APGCI planning from the get go, in part because of the timing of its development in the wake of 9/11. Responding to popular concerns about the security of cross-border movements has been one key consideration. Yet it is concerns about the security of the logistics system itself and not the impact of cross-border cargo movement on the people or places they travel to that has taken precedence. Concern for the security of cargo movement is clearly articulated in the 2007 consultants’ assessment of the gateway, which insists that government must consider the following:

- Aggressively pursuing opportunities to implement new approaches to minimize or eliminate dual clearance processes
- Taking a lead role in encouraging harmonization and mutual recognition of transport and border security policies in the Asia Pacific region
- Aggressively pursuing perimeter clearance with the U.S.

(InterVISTAS 2007, 3)

In response, the APGCI formed a “Security Sub-sector Roundtable,” which hired consultants to study supply chain security in the gateway in 2009. This report suggested that much like the broader role of government in the gateway—to coordinate individual firm approaches into an overall systems approach—the government’s role in security was also to create a common vision and plan for the myriad stakeholders who would actually carry it out. The report suggests, “Security within the Gateway is currently planned and delivered largely by individual facility or supply chain components,” whereas “the concept of a network or holistic
approach to supply chain security is fundamental” to a gateway strategy (APGST 2009, 6). They warn that the “the lack of a comprehensive, network approach to security increases the risk within the Gateway, leaving the supply chain only as secure as the weakest link.”

What is clear in the work of the APGCI and in broader discussions about the security of global trade is that the very nature of the system, and the benefits it conveys to corporations, is rooted in the speed of circulation, which produces a new kind of vulnerability. Global logistics has an Achilles heel—a vulnerability that derives precisely from its reliance on fast flows. Indeed, in the words of one of the key actors in the APGCI, “it’s that whole concept of the seamless movement of goods . . . Every time you get a connection, there’s a possibility of something to happen” (Gow 2009).

Securing “Seamless” Systems: Supply Chain Security

Back in fall 2002, it was still meaningful for the Economist to assert, “There is a tension between the needs of international security and those of global trade” (“Moving Story”). This tension, acute at the national border, lay specifically in the conflicting imperatives of the control of territory and the speed of supply chains. In other words, this tension is fundamentally between geopolitical and logistical models of spatial calculation. The timing of this assertion was meaningful; it was precisely at a moment of heightened conflict between open and closed borders, just as the claim was on the cusp of redundancy. Those at the heart of the global logistics industry repeatedly flagged this apparent conflict between global trade and national security, concerned for the impacts of the latter on the former. Some speculated about the end of just-in-time production systems in the context of post-9/11 securitization. In 2003, Brian Parkinson (UNECE 2003, xlii) of the International Chamber of Shipping exclaimed, “The measures developed to combat terrorism, in addition to terrorism itself, may threaten trade, which is an engine of growth and offers the best chance of steady progress for both developed and developing economies.”

This tension was certainly not new, as Mark Salter (2004, 72) suggests: “The problem of borders” has long been “a result of two powerful governmental desires: security and mobility.” Scholars had furthermore already begun to point out that in an era of mobility, “security” could no longer operate through a paradigm of “blockading borders” but instead would serve to “channel and monitor flows” (Bigo 2001). And yet, it was not until later in the first decade of the twenty-first century that a
fundamentally different kind of security—a security devoted to the protection of trade flows—would emerge in earnest and put the *Economist* equation into question. The design of a model of security devoted to the protection of supply chains undermines any simple juxtaposition of international security and global trade. Rather than a competing force, the material flows of the economy and the transportation and communication infrastructures that underpin them are increasingly the object of security. Indeed, after just a decade of experiments with “supply chain security,” the game had changed. In the introduction to the U.S. National Strategy for Global Supply Chain Security (DHS 2012), President Obama explains, “We reject the false choice between security and efficiency and firmly believe that we can promote economic growth while protecting our core values as a nation and as a people.”

The seeds of supply chain security were planted with the revolution in logistics; more stuff moving longer distances, mixed with the accelerated speeds of just-in-time production techniques, prompted growing pressure at the border. A systems approach to supply chains furthermore put the whole network of production and distribution (now stretched across the planet) into the spotlight, as we saw with the *New York Times* diagram that opened this chapter. However, a more precise genealogy would locate the emergence of supply chain security in the first decade of the twenty-first century. It was at this time that supply chain security was named as such and that the first textbooks, articles, and experts in the field emerged (Thomas 2010). The mounting pressure at the border, the *Economist*’s “tension” between trade and security, became an outright impasse in North America in September 2001.

Yet it was not the events of September 11—the loss of life, the destruction of urban infrastructure, or even the trespass of state sovereignty—that were definitive in the birth of this paradigm of security. Rather, it was the events of September 12, 13, 14, and after—the closure of the American border, the collapse of cargo flow, and the deep impact on trade, particularly in the cross-border auto industry (cf. CRS 2005; Flynn 2003, 115)—that marked the crisis and prompted response. The deep integration of the North American economy facilitated by NAFTA that stretched just-in-time supply chains across the continent was suddenly at risk. The immediate costs of the delays were calculated at the scale of the individual truck, by port, by gateway, by sector, and for the economy as a whole (CRS 2002; Globerman and Storer 2009; RAND 2004). But in addition to the direct costs of disruption from border closure, there was mounting concern for the longer-term costs associated with post-9/11 border
tightening. For a system based not simply on connectivity but the speed of connectivity, border security can itself be a source of insecurity for the supply chain. In the world of logistics and supply chain management, trade disruption (not the twin towers) was the key casualty of 2001. In response, national governments, international governing bodies, logistics companies, transnational retailers, private security companies, and polyglot think tanks embarked on an almost feverish experimentation with policies, standards, practices, and technologies to preempt disruption and recover circulation in its wake.

What is supply chain security (SCS)? The World Bank defines it as “the concept which encompasses the programs, systems, procedures, technologies and solutions applied to address threats to the supply chain and the consequent threats to the economic, social and physical well-being of citizens and organized society” (IBRD 2009, 8). While opaque, this definition is nevertheless useful in that it exposes a key assumption and maneuver at the core of this emergent paradigm: that the security of global trade is directly connected to the security of citizens and society. In fact, SCS goes beyond positing a connection between the protection of trade flows and national security. SCS specialists now conceptualize the security of supply chains as fundamental to national security, deeply entwined if not actually interchangeable (Haveman and Shatz 2006), while governments articulate visions of security that emphasize the protection of trade flows. One of the four key objectives of Canada’s 2001 Anti-Terrorism Plan, Bill C-36, is “to keep the Canada–U.S. border secure and open to legitimate trade.” Meanwhile, the aptly named Security and Prosperity Partnership (SPP) of North America was “premised on our security and our economic prosperity being mutually reinforcing” (CRS 2009). The SPP was replaced in 2011 by the U.S.–Canadian Beyond the Border Action Plan—a “shared vision for perimeter security and economic competitiveness.” This entwining of the economic and the political raises questions about supply chain security as a paradigmatically neoliberal form.

Supply chain security takes the protection of commodity flows, and the transportation and communication networks of infrastructure that support them, as its central concern. Initiatives target shipping containers, seaports, and the integrity of intermodal transportation systems. SCS takes shape through national and supranational programs that aim to govern events and forces that have the potential to disrupt trade flows. Because it is oriented toward threats that may be impossible to predict like volcanic eruptions or terrorist attacks, SCS mobilizes preemption techniques to mitigate vulnerability (see Cooper 2006; Amoore and De
Goede 2008) and preparedness measures to build resilience and recover circulation in the wake of disruption (see Collier and Lakoff 2007; Pettit, Fiskel, and Croxton 2010). Supply chain security relies on risk management to identify dangerous goods and disruptive people and keep them away from circulatory systems, alternately targeting high-risk containers, shippers, and workers. But as we will see in chapter 4, military deployment is also part of the paradigm; naval forces policing trade routes in the Gulf of Aden are a key link in the chain of trade security. The mix of military and civilian security is a feature of the transnational geography of supply chains. Indeed, as the diagram that opened this chapter suggests, what unites supply chain security initiatives is the space of the circulatory system that extends “from the factory gate in a foreign country to the final destination of the product” (Haveman and Shatz 2006, 1).

**From the Borderline to “Seam” Space**

Implementation of the first-ever global architecture for supply chain security began in 2002 with a quick succession of national and international policies and standards that targeted shipping containers, seaports, and the integrity of intermodal transportation systems. Since 2002, the United States has enacted eleven plans to specifically address supply chain security in addition to a series of programs that target particular sites within transport and trade networks. These national initiatives were followed by mandatory global standards for supply chain security issued by the International Maritime Organization in 2004, the International Standards Organization in 2005, and the World Customs Organization in 2005, all at the direct behest of the U.S. government (IMO 2004). This global vision for supply chain security is represented in Figure 17, a map of risk zones, chokepoints, and gateways of trade. Notable in both the visual rendering and the accompanying text is the wide range of supply chain disruptions that are collapsed under the lens of “security.” This is a key feature of the broader logic of SCS; myriad events, actors, and forces that have the capacity to disrupt the flow of goods are all interchangeably addressed under the rubric of security, be they labor actions, volcanic eruptions, terrorist attacks, piracy, indigenous land claim standoffs, and even national border delays. Explaining the scale of the global risks represented in their map, PricewaterhouseCoopers (PwC) reports in “Securing the Supply Chain” (2011, 16),

> Attacks on supply chains are often looking for a big return on a small investment. Because they’re so vital to trade flow, logistics hubs like
airports or ports offer the ideal target. The possible consequences of disrupting a logistics hub, for example, can be seen by taking a look at the port strike in 2002, where 29 ports on the US West Coast were locked out due to a labor strike of 10,500 dockworkers. The strike had a massive impact on the US economy. Approximately US$ 1 billion was lost per day and it took more than 6 months to recover.

The use of labor disruptions as a means to quantify “attacks” on the supply chain follows directly from the prior move of positing global trade as vital to national security. It allows for the exchangeability of radically different acts and actors, which have in common only the threat they pose to smooth circulation. A legal act asserting workplace democracy, when viewed through the lens of SCS, is not just like an attack—it is an attack on the integrity of flows. Indeed, this same group of port workers has been the focus of a sustained social war, and they have at times been explicitly deemed “terrorists” for disruptions to key nodes in the global supply chain. We return to the particular stakes for this group of workers and for workers and labor more broadly in the context of supply chain security in chapter 3. For now it is worth investigating what

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**Figure 17.** Supply chain risk map—maritime sea routes and chokepoints. Darker shades on the map signify more significant risk. Solid points mark “gateways,” and hollow points mark chokepoints in global supply chains. Source: PwC 2011.
is perhaps the most startling “threat” to SCS: the national border. The enormous financial, political, technological, and affective investments in security under the rubric of the “War on Terror” have generated enormous interest in the topic of border “thickening” and “tightening” with a particular eye to delays for trade. Indeed, the border is flagged as one of the most significant obstacles to trade movement, such that in the context of expanding inspections and regulations, border security poses a threat to supply chain security.

And yet, after a decade of active experimentation, supply chain security is actively reconfiguring the geographic space of border security, as well as the legal and social technologies for governing border space. New security programs seek to govern integrated global economic space while at the same time retaining politically differentiated sovereign territories. Efforts to recalibrate security around the network space of supranational supply chains challenge longstanding territorial notions of state sovereignty by extending the zone of border management outward into the ports of foreign states, inward along domestic transport networks, into the space of “logistics cities” (Cowen 2009), and through the creation of exceptional zones—“secure areas”—around ports where normal laws and rights are either mediated or suspended (Cowen 2007).

For years now, military and civilian agencies have been actively rethinking security in order to respond to changing notions of threat. Specifically, the territorial paradigm of security that literally gave shape to modern nation-states is undergoing radical transformation. Within the territorial model of security, the border defined the legal, spatial, and ontological limits of national sovereignty. The very distinction between police and military, war and peace, crime and terror took shape in the division of inside/outside state space (Giddens 1985, 192; Foucault [1997] 2003, 49). With sovereignty and formal citizenship both ordered by the borderline, the “inside/outside” distinction was a core ideology of the geopolitical state (Cowen and Smith 2009). The border as territorial limit was the official basis for the division between police and military force and between crime and terror, while it also forged “domestic” legal space. Yet despite the formative nature of this territorial division, the same states were forged through its trespass, most starkly through colonial expansion when “outside” became “inside” and when the military was often interchangeable with police forces (cf. Badiou 2002; Mignolo and Tlostanova 2006; Asad 2007). The geopolitical state relied simultaneously on the sovereign territoriality of the borderline and on the trespass of the distinctions it created. But even as the division of authority and violence organized by the
distinction of inside/outside was a sovereign fantasy as much as the everyday reality of the geopolitical state, it nevertheless had actual effects. The border was never managed in the definitive manner that the distinction of inside/outside would suggest and was never merely a line in absolute space (Agnew 1999; Newman 2006), but we can nevertheless trace important shifts in both models and practices of sovereign space. SCS raises profound questions about the changing meaning of security as well as the transformation of its social and spatial practice.

For the security of systems, the territorial border can be a problem rather than a solution. Military and civilian security experts insist that old categories are creating problems for law enforcement and international security work, and it is precisely the blurring of tactics and technologies of police and military that is needed in response to insecurity today. As U.S. Army Lieutenant Colonel Ralph Peters (1995, 12) argues, “We are constrained by a past century’s model of what armies do, what police do, and what governments legally can do. Our opponents have none of this baggage, whether they are druglords or warlords.” A decade later, in 2006, U.S. Army Lieutenant Colonel Thomas Goss called this new border space “the seam”: a liminal zone between inside and outside space, where old divisions no longer hold. In “the seam,” the border between police and military authority

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**Figure 18. Homeland security threats spectrum. Source: Goss 2006.**
is blurred, and so too is the line between crime and terror. Thomas Goss offers as a test case Figure 18, which notably uses the maritime border.

The maritime border is the paradigmatic space for experimentation and reform precisely because of the magnitude of the challenge of “opening and closing” access to trade flows. With 90 percent of all global trade and 95 percent of U.S.-bound cargo moving by ship, the challenge of securing maritime supply chains is profound. Indeed, all the eleven plans cited in a recent Department of Homeland Security (DHS) report that were developed after September 2001 to support supply chain security target maritime and port security (DHS 2007). No doubt, there has been tremendous experimentation in securing the movement of people since 2001 (Balibar 2002; Salter 2004; Sparke 2004; Walters 2004). These efforts have unleashed a variety of highly racialized programs that introduce new forms of biometric surveillance. Yet concern for the security of stuff (for commodities and supply chains) has been the subject of more and more national and supranational policy action.

Institutions like the Organisation for Economic Co-operation and Development (OECD) and RAND circulate a strikingly similar diagram to Goss’s (see Figure 19). Here again, what was historically a border-line bifurcating two distinct spaces and their attendant norms and laws is transformed into a space unto itself that fits neither side of the old divide. In this model, the maritime border is not simply an example of the problematized space; rather, in this second diagram the port exists as the space in between national territories. In both cases, the maritime border becomes a space of transition: a zone subject to specialized government.

This experimentation with border space does not aim to dismantle border security per se, but it acknowledges the limits of a territorial model while attempting to rework its meaning and practice to support systems

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that span national space. DHS (2007, 2012) has adopted a three-pronged strategy of risk management, cost-benefit analysis, and layered security with the aim of keeping dangerous cargo out, addressing infiltration from within, and securing infrastructure.

In the immediate aftermath of September 2001, U.S. officials began quickly and quietly designing new security plans for ports that would reshape not only domestic space but global security practices. The Container Security Initiative (CSI), a program defined and administered by American authorities, posts CBP agents in dozens of foreign ports to inspect U.S.-bound cargo. The CSI aims to “extend [the U.S.] zone of security outward so that American borders are the last line of defense, not the first” (DHS 2009). According to Deputy Commissioner of the U.S. Customs Service Douglas Browning (2003), with the CSI, customs officers “identify and pre-screen high-risk cargo containers that pose a risk of containing terrorists or terrorist weapons before they are shipped to the U.S. This simple concept represents a major revolution in standard practice. Currently, most customs services around the world—including the U.S. Customs Service—target and inspect high-risk containers as they sit in the port of entry.” While their name never appears on the promotional literature, the Logistics Management Institute (LMI) took a lead role in the design of the CSI. In fact, the Container Security Initiative, a cornerstone of American SCS, is a perfect example of the new collaborative approach to security across the state and the corporate sector. As the LMI’s vice president of operational logistics, Ray Schaible, explained to me, “We were working with APL, American Presidential Lines, on that, because they had the large container company and everything, and we worked through MARAD, the Maritime Administration, and then with Transport Security Administration. So it was kind of a consortium, but we were the lead on it, to develop that whole concept of pushing the borders out.” Schaible pointed to the importance of targeting high-risk containers before they even begin their journeys to U.S. soil: “A container—once it gets on a ship, and it’s a suspect container, it’s very difficult to deal with.” The desire to intercept “suspect containers” prompted the design of the CSI and “caused the Coast Guard and other inspectors to be placed at overseas ports.” Schaible highlighted the key challenge of increasing control over the flow of cargo without reducing its speed: “When we went into the CSI, the commercial companies were very concerned with slowing down the movement of items through their supply chain, because it costs them money when they slow down the inventory. And so you can’t inspect 100 percent of the containers, for example, coming through. So
you have to have a way of selecting which containers you want to look at.” The means of selecting containers, of deciphering high and low risk, centered entirely on financial documentation. Companies with a steady level of trade, that act in predictable ways, receive a low risk score, while those that have less predictable behavior are targeted for scrutiny. Schaible explained, “It caused us to look at the documentation, and try to identify bad-acting actors through documentation that was flowing through the system. And the financial world, in particular, financial documentation. So if you saw an outlier there, or something didn’t look right—you know, if you had a lone container coming from a place you’ve never heard about before—you might want to take a look at that. And that was . . . a risk analysis type thing.” The CSI is now active in fifty-eight ports, which account for 85 percent of all containers arriving in the United States.5

Another extraterritorial security program that extends the border outward, the Customs-Trade Partnership against Terrorism (C-TPAT), was initiated in April 2002 and offers expedited processing of cargo for firms that comply with requirements for securing their entire supply chain. “Under C-TPAT, companies follow CBP guidelines for securing their supply chains going back to the origin of the cargo. Customs validates the security of the operations. C-TPAT now has 7,200 member companies. Being a member of the program is one of the criteria Customs uses to designate a company as a ‘trusted partner,’ a status that normally results in fewer cargo inspections and expedited treatment of shipments”

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**Figure 20.** Ports participating in U.S. Container Security Initiative. Source: DHS 2007. Adapted and used with permission.
(Mongelluzzo 2012). C-TPAT participants include importers, carriers, customs brokers, and freight forwarders and cover “every part of the logistics chain from manufacture to final distribution” (Browning 2003, 172). They are subject to fewer cargo inspections because they receive a lower risk score in the CBP Automated Targeting System. Security is privatized as agents are made responsible for the security of the nation; participants in the C-TPAT sign an agreement that commits them to conduct a self-assessment of security in the logistics chain (CRS 2005, 10–11). Browning (2003, 171–72) explains, “The fact remains that most of the supply chain we hope to secure is managed by private-sector concerns so, while CSI allows us to work with other governments to look for potential security risks, C-TPAT opens the dialogue with the trade community so that it can mobilize its resources to enhance security in parts of the logistics chain where the ability of customs administrations to intervene is limited.”

C-TPAT is part of a broader shift toward the privatization of security. Privatization is hardly a novel feature of neoliberal government (Burchell 1996, 29), but the privatization of national security enacted through SCS is unprecedented. Private companies not only are involved in managing programs, designing or manufacturing technologies, and supplying tools but are partners in the very design of policy and the identification of the problems to solve. This is particularly noteworthy in the field of national security. For classic liberalism, national security was an exceptional realm of state action in a political landscape of individualism. According to classic liberal political theorists, national security was one of the exceptional domains where the state should command a monopoly. In fact, security was the core rationale for the liberal state and treated as a prerequisite for individual freedom. Even the eminent neoliberal Milton Friedman supported the collective organization of security, arguing that “I cannot get the amount of national defense I want and you, a different amount” (Friedman 2002, 23). However, while states still play a central role in planning and coordinating security, in the context of SCS they take their cues directly from private sector actors, who are invited to advise on the design of programs and participate in the governance of public–private security partnerships.

The privatization of security is also part of its international harmonization. In 2008, the C-TPAT was harmonized with the Canadian Partnership in Protection (PIP) program following a mutual recognition agreement between Canada and the United States. PIP was first developed in 1995 to promote international trade compliance with customs regulation but
was renovated more recently to focus explicitly on security. “After the events of 9/11, the PIP program’s focus shifted to place a greater emphasis on trade chain security,” the Canada Border Services Agency website explains. In 2002, PIP membership became a prerequisite for participation in the Free and Secure Trade (FAST) program, which facilitates expedited border clearances into Canada for preapproved (low-risk) importers, carriers, and drivers, thus linking the program to a broader infrastructure of security and significantly elevating its importance. Since the 2009 harmonization, a single application can be used to apply to both C-TPAT and PIP, which entails, in effect, the standardization of two formerly national programs to govern international space. The harmonized C-TPAT and PIP also entails the deep integration of information-sharing security across the two states. Mutual recognition arrangements have since extended the reach of the programs to include Japan and the European Union (both formalized in 2012), Korea, and Singapore. In fact, the *Journal of Commerce* (Mongelluzzo 2012) describes the C-TPAT as “probably the most-duplicated security program of the past decade . . . Canada, Jordan, Mexico, New Zealand, Singapore, Japan, Korea and, most recently, the European Union, have developed similar programs.”

This privatization certainly crosses borders. Like the PIP, which allows firms to apply for “trusted trader” status that expedites their border crossings, the Canadian government has implemented the Security Emergency Management System (SEMS) to regulate the security of facilities and operators within national space. Similar to the PIP, the SEMS promotes the reduction of inspections for stakeholders deemed low risk. Under the program, companies develop their own security plans and occasionally report on their compliance to government. “It’s a lot easier for business,” one senior manager from Transport Canada’s Security and Emergency Preparedness division explained to me. “We have some facilities that are fantastic: they take that security environment, the security attitude, very serious . . . So what we’re doing is we’re saying if this stakeholder has no infractions or incidents or deficiencies in the last three or four years, maybe what we do is we risk manage that facility and we say, ‘You know what? We’re not going to inspect you this year.’” These programs are key elements in the retooling of the state in the field of security. In place of the old “enforcement attitude,” TC is oriented toward “voluntary compliance,” where the private sector becomes “the owner of their program, rather than us walking in with a checklist and saying, ‘Okay, is your fence up? Is your marine facility access controlled?’ . . . That is our ultimate goal.”

Whereas the national border (the privileged spatial boundary within
a territorial model of security) was governed directly by the geopolitical state, the security of the corridor cartography of the supply chain is delegated to the components of the system. This is in part a feature of the geography of the system itself—the potentially endless number of sites and spaces that require attention if the goal is to secure trade networks. Yet it is also a feature of the introduction of risk analysis into the domain of security. Working with the assumption that there will inevitably be security incidents, risk analysis asks, what is the most effective way to target limited resources to have the greatest impact? In the senior manager’s words,

Are we going to put a Transport Canada inspector at every bridgehead, at every canal, at every facility, 24 hours a day? Is that going to stop actions? Is that going to stop terrorism? At what point does it become cost-effective? At what point do you say it’s not cost-effective? So a lot of the things that we’re doing are what’s called risk-based management.

A Global Architecture of Supply Chain Security?

In addition to these efforts at extending U.S. border practices outward—scanning cargo at the point where a container enters the international supply chain and delegating responsibility to the private sector—American officials pressured supranational governing bodies to develop new policies where the noncompliance of member nations results in their isolation from global trade. Indeed, the key pillars in the emerging global architecture of SCS all emerge directly or indirectly from the United States, provoking many accusations that this global system is plainly oriented to U.S. national interests (Boske 2006, 16). The UN International Maritime Organization administers the International Ship and Port Facility Security (ISPS) code. The ISPS code offers an alternative to direct U.S. presence and control abroad, even as it was crafted at the direct behest of the United States. The ISPS code defines basic standards of security to which international ports and ships must comply. In 2004, the code came into effect globally. It was adopted by 152 nations and requires the compliance of 55,000 ships and 20,000 ports. Among other things, the code calls for strict standards for accessing and handling cargo, although it leaves the details of policy design to signing member states. Nevertheless, authorities in a number of countries have designed remarkably similar programs, following direct conversations that bring the models of border space explored in the last section into practice. These programs aim to engineer secure “seam space” by targeting “high risk” workers in these critical
nodes in global logistics networks. Security programs for port workers in the United States, Australia, and Canada were passed into law in January 2007, September 2006, and November 2006, respectively. In each case, this followed several years of struggle between federal authorities, maritime employers, and labor over the fate of the programs in question, as well as information sharing between these three states around policy design. All three programs create special security zones around ports—in effect, exceptional spaces of government—where normal civil and labor law can be suspended (Cowen 2007, 2009). The details of these programs will be explored further in chapter 4, but for now it is worth emphasizing that these zones function like the in-between spaces in Goss’s and the OECD’s models—not quite inside or outside law. They also inch toward the kind of control of disruption that SCS promises when it equates the risk of labor actions and terrorism.

A focus on security crises as moments of profound political experimentation responds not only to the current profusion of policy action but also to the growing scholarly interest in the role of crises like war in the development of political forms. At times of perceived crisis, state claims for the protection of the nation and its people can expedite dramatic reform of rights and entitlements (Titmuss 1958; Rose 1989; Tilly 1990; De Landa 1991; Foucault [1997] 2003; Cowen 2005, 2008; Cowen and Gilbert 2008). The revolution in logistics follows suit. Gradual reforms during the past four decades, fueled by the revolution in logistics, were piecemeal and now culminate in sweeping and centralized change enacted in response to the security crisis of 2001. While reform of government and citizenship at times of crises is hardly novel, the nature of reform under way with supply chain security is nevertheless groundbreaking. Rather than working directly to secure states or populations, this model of security works to protect international trade, which its proponents presume to be vital to the security of states and populations. Supply chain security is seeing older territorial forms of security challenged and reworked from within the state’s military and civilian agencies.

What began as the piecemeal efforts of different strategies at various sites by a wide range of actors is becoming an integrated national and international architecture of risk-based, layered, and networked security, focusing particularly on container movement. If we return to the diagram that opened this chapter, we can see that the growing emphasis on global logistics systems through the construction of gateways and corridors has created a new challenge for security. This logic was in fact introduced with the birth of business logistics and the emphasis on the efficiency of the system rather than the performance of its component parts. What we
have seen in this chapter is the extension of the logic of the revolution of logistics over the course of the 1990s and into the twenty-first century, first through the expansion and enhancement of the system itself through global logistics corridor and gateway initiatives. Efforts to build a “seamless” system of circulation are just that—efforts. The complex transnational networks of people, places, and infrastructures that constitute that system cannot ever be fully controlled; the seamless global circulation of stuff is a project, not a reality, but it is nevertheless a project with definite effects. We have already seen a massive reorganization of where the border works, how, and for whom. In the realm of supply chain security, the border has been reshaped, molded to fit transnational networks of circulation, perhaps best conceptualized as a “pipeline.” The management of the security of this pipeline has been internationalized, digitized, and largely privatized. As we will explore further in chapter 3, the territorial border is increasingly managed as an exceptional zone that is neither inside nor outside national space, subject to the authority of both police and military with acts potentially classified as crime or terror. In the chapters that follow we will delve deeper into particular spaces of the supply chain where particular actors are challenging the global logistics paradigm and where SCS experts are experimenting with new social and legal technologies.