Moving through the Burrabazar district along Kolkata’s Strand the immediate buzz of hustling and trade obscures the crumbling warehouses that line the thoroughfare. According to a popular saying, ‘Everything is available in Burrabazar’. This ethos of ready supply, at least for those who are prepared to haggle (and almost everyone is), comes with an infrastructural and informational layer. ‘Everyone wants to buy cheap and sell dear’, writes Clifford Geertz in a classic article on the bazaar economy from the 1970s. ‘In the bazaar information is poor, scarce, maldistributed, inefficiently communicated, and intensely valued’. What are the material conduits that support this game of information procurement and coveting and what are the historical and political conditions that have allowed it to flourish?

That the root-covered warehouses set back from the Strand look like structures straight out of Victorian England provides a clue. Planetary urbanism is a phenomenon that predates the 21st century. The origins of Kolkata in the Dutch and British ‘factories’ of the 17th century mean the city was logistical from the start. Kolkata began as a series of fortified warehouses run by company-states whose activities established both the uneven legal and commercial geographies of modern empire and the first forms of the joint stock company. This did not occur on a blank slate. That company man Robert Clive assumed a position in the Mughal hierarchy as part of the diwani that granted the British territorial or tax-collecting rights in Bengal, Bihar and Orissa in 1765 reminds us that colonialism inserted itself into established patterns of political and economic organization. Similarly, we might speculate that the logistical form of the warehouse was a colonial invention, which was only fully exported back to the metropole when the Calico Acts of 1690–1721 sought to bolster British industry by forbidding the sale of Indian cottons.
The Strand warehouses are an altogether later affair. With names like Fairley, Canning and Clive, they were built in the late 19th century. In 1870, the Calcutta Port Trust was established as an institution of the British Raj under the leadership of nine commissioners. They set about transforming the thin strip of land between Strand Road and the Hooghly River, building jetties and warehouses to accommodate the port's increasing turnover. Once a crucial juncture in the triangular trade of opium to China and then a funnel for human traffic in 'coolies', the Kolkata port was the foremost in India until the time of independence. As other contributions to this pamphlet show, declarations of the port's decline have been matched by its persistence and bounce-back. Today the port encompasses two separate dock agglomerations (at Kidderpore in the city's central west and at Haldia, 125 kilometres to the southwest of Kolkata) and is an important station within India's Act East plans as well as Chinese visions of a new silk road.

Our research in India follows on the heels of an investigation of the establishment of a concession in the Greek port of Piraeus by Cosco Pacific – a subsidiary of the Chinese state-owned enterprise Cosco Group. The staging of a research platform in Kolkata and its hinterlands offered a way of studying logistical operations at a crucial chokepoint connecting Indian transport corridors to routes that extend eastwards to China. We focused not only on the Hooghly warehouses, Kidderpore and Haldia but also on the 'floating town' of Siliguri in the north of West Bengal. Siliguri is situated just to the north of the so-called 'chicken's neck', a narrow strip of Indian territory that runs between Bangladesh and Nepal, connecting the country's northeast to its main geobody. A site of human trafficking, electronics contraband, military build-up, tea plantations, resource extraction and ecological catastrophe, the town is a crucial crossroads in the hinterlands of Kolkata port.

Logistics produces space and time according to imperatives of capital and connection. What becomes clear in the Indian case is how this production proceeds at the disjunction between software economies, material infrastructure and hard labour. We conducted an experiment by recording numbers from containers sitting in Haldia docks and feeding them into container tracking sites on the internet. For those containers that registered in the system, we found their seaward passage to and from Haldia was evident, but as soon as they travelled in Indian national space their motion
disappeared from the screen. This physical movement beyond informational inscription became apparent when we asked a manager about the port’s terminal operating system. He didn’t know. One of his offsiders eventually told us they use a Tata out-of-the-box solution, MACH (Marine Container Handling System). Then the manager showed us a port manifest, printed out but accompanied by a page scribbled with his own handwriting, to which he referred in citing the vessels that would come and go. Information is scarce and is conversely intensely valued.

In Kidderpore, as in Haldia, much of the commodity traffic is bulk rather than containerised. Workers who take on the backbreaking work of transporting goods from vessels to the docks are paid by the weight they move rather than by volume. This arrangement seemingly flouts the global dictates of the container revolution, which was based on a logic of modularization that made volume rather than weight the object of measure in the shipping and stevedoring industries. Besides the gleaming India of technology parks and software firms, these technologies of transport continue and are made possible by contract labour regimes and trade unions whose power derives from political party affiliations rather than the ability to strike.

There is something more at stake here than what Ernst Bloch called the ‘synchronicity of the nonsynchronous’ – the potentially explosive spatial coexistence in the same time-period of historically heterogeneous practices and social formations. Nor can this situation be explained by standard narratives of the jugaad economy, according to which work arounds and makeshift innovations allow a leapfrogging over industrial exploitation and a direct transition to digital capitalism. What becomes evident is the extractive element of logistical operations – their ability to generate value by organizing the exploitation of nature and social cooperation in ways not directly attributable to the fraction of capital that benefits from this extraction. It is like the financial logic of the derivative, which creates value by speculating on underlying assets that are never themselves transacted. Life and labour become the raw materials on which the logistical edifice is built, but over which this same edifice seems to float or glide – assets that are expendable or exploitable precisely because they do not register on the screens or in the processors where value comes to be measured.

The same dynamic is evident in a much more literal sense as one crosses the bridge over the Mahananda river.
on the way to Siliguri from Bagdogra airport. Massive amounts of sand have been removed by informal miners from the riverbed, creating a spectacular vista of devastation. The degradation of the ecology in cities like Delhi and Kolkata manifests in Siliguri as high levels of airborne particle mass set loose by sand and stone extraction economies. With the water retaining capacity of the river severely diminished, inhabitants are no longer able to fill wells and are displaced from modes of life and trade. The geological foundations of the city and high-rise buildings are made vulnerable as the water table drops. A conflict zone emerges not so much among the many ethnicities comingling in this cosmopolitan town of transit labour, but rather because of the uneven distribution of land ownership and rights. The construction of the Asian highway is a chief structural and economic force in this regard. Perceived as a contributing factor to the dearth of investment in public and social infrastructure in the logistical city of Siliguri, the new silk road between China and India benefits high-level investors and prompts splendid visions of political-economic futurity for government policy makers. The trickle down rewards for local populations are harder to discern.

Yet the organization of power is not reducible to such unilinear structural dynamics, even if their force is undeniable. More often a term attributed to the unequal distribution of and access to data in the global South within ICT for development discourses, we might instead consider the practice of maldistributed information as a strategy of subordinating control to the vagaries of logistical economies not always accountable within software regimes of calculation and measure. In forging a political theory within a logistical worldview, the technical serves as a base from which political struggle can ensue. This does not disqualify non-computational modes of organization such as the party or union. Clearly, in a country like India, such structures remain highly significant to the organization of labour and political life. We might also consider how the technics of governance and the circulation of things not beholden to traditional institutional forms or, for that matter, computational technologies of control signal a surplus of logistical power beyond capture.

Take our earlier reference to the port manifest at Haldia, which bears some similarity to the case we found in Piraeus port during our research in Athens. The passage of transshipment containers from the Cosco concession on Piers 2 and 3 to Pier 1, still managed in 2013–14 by the Piraeus Port Authority (OLP), was not tracked by the respective terminal
‘BUY CHEAP, SELL DEAR’
operating systems (TOS) software developed by South Korean and US companies. There we noted how the use of paperwork reintroduced a technical form of media not accountable to inspection in the ways digital event logs are in TOS. As with the paperwork at Piraeus, the scribbled page accompanying the port manifest used in Haldia reclaims a pre-digital media of governance in which the inventory of goods and productivity of labour are not beholden to real-time systems of search and calculation. It is in this sense that the technical ushers in a horizon of the political not usually acknowledged for its constitutive power. Together with colonial era infrastructural forms such as the warehouse and the materiality of labour and ecology in Siliguri’s sand mining, economies of scarcity are complemented with media and storage infrastructures whose historical cultures and technical properties refuse any straightforward translation into the spatial and temporal parameters of digital media of logistics.

The diversification of logistical media in this geographic section of global supply chains is accompanied by variegated temporal patterns: geological, social, technical, institutional, financial and cultural. One could go on. For all this multiplication, logistical systems remain operative, albeit in ways not found in the promotional literature of shipping lines, distribution centres, telecommunication and software firms, and supply chain management companies. Logistics, in other words, exceeds the formal dimensions of production and distribution. Modes of capital accumulation enter the many and diverse tributaries of informal systems of economy and labour. As a result, the ‘capitalist world system’ is composed of modes of value production that draw on seemingly pre-capitalist systems of governance and social relation. These systems are not simply forms of social or economic activity that are prior to or not yet subdued by capital. They are also continuously produced from within capital, through its prospecting initiatives and through resistance to its logic.

These hinterlands of capital accumulation register how logistics is a core driver of what we might term variegated capitalism. The transition from formal, computational governance of supply chains to informal practices off the grid also signals how the inner workings of logistical systems elude inspection. Whether human or machine, logistical knowledge evades those not immanent to the situation of operation. These forms of evasion are not fully captured by the prevalent metaphor of the black box, which describes an opaque space of knowledge into which all our paranoias and fantasies can be
projected. Nor can the immanent knowledge of logistics be collapsed into the nodes and links of a decentralised network or levelled onto the single surface of a flat ontology, which, in providing an even playing field for objects, forgets both subjects and the ways in which the social relation of capital is mediated ‘by things’.

Ultimately, the maldistribution and intense valuing of information is not a phenomenon restricted to the bazaar economy or to the economic and political spaces of the global South. We do well to remember this in the context of current hyps surrounding big data, the internet of things or predictive analytics. Hoarding and haggling are central to these phenomena and practices too, providing the contours of concealment and access that make contemporary data and logistical economies fungible and productive. Between the Strand and the Hooghly, there is a world. But not only here is the desire to ‘buy cheap and sell dear’ mediated by the extractive operations of capital. Tracing these operations from scenarios of hard physical labour through the circuits of contemporary information exchange, from vistas of anthropocenic disaster through to mundane economies of transport and trade, registers how infrastructure, software and labour make logistical worlds.

Images: Ned Rossiter