



Commodity and supply chains

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The global circulation of goods connects economic processes worldwide—from extraction and production to distribution, consumption, and waste disposal. The resultant web of economic activity means that cultures and places around the world have become interdependent. People's desires in one place organise work and landscapes elsewhere; seamless flows of goods create new infrastructures; and places become united by an exchange of commodities and differentiated by the unequal distribution of profit and power. Anthropologists have traced these connections by following commodities along their international journeys, conducting fieldwork at crucial nodes like international ports. They have examined how global forces interact with local economies and vice versa. Through elaborating concepts like 'commodity chains', 'supply chains', 'global networks' or 'the social life of things', they have revealed legacies of global inequality, cultural exchange, trade infrastructures, and their impacts on environments and lives. Anthropologists have shown that global flows of goods and services are more than a simple correlation of supply and demand or a mere opportunity for economies to grow. Rather, they represent rich sites in which values of people, places, and things are negotiated, and where relationships of inequality are created, maintained, or undermined.

Introduction

The global circulation of goods weaves local [work](#) and raw materials together into the vast tapestry of the global economy. Food grown in one place may feed a stomach many kilometres away. Producers of consumer goods cater to the tastes of people they have never met. Any sudden local process—an ecological disruption, a change in state regulation, skyrocketing demand—can have effects far beyond its locality. Yet, people joined by this global exchange rarely share the same political institutions, [landscapes](#), or the power to define how profits get distributed. As geographic distance and socio-cultural differences hide actors from one another, anthropological research uncovers the interdependencies between capital, [labour](#), and consumers. It shows how the global economy creates room for unchecked accumulation, exploitation, misrepresentation, and delusion about planetary futures.

To represent these global webs, anthropologists and other social sciences have used different terms: 'commodity chains', 'supply chains', 'commodity ecumene', 'the social life of things'. Each builds on a different intellectual tradition. 'Commodity chains' describe a sequential transformation of raw materials into consumer products through the stages of extraction, refinement, distribution, consumption, and [waste](#) disposal. Such chains, once mapped onto the world, represent a regional division of labour, often derived from [colonial](#) legacies in which (former) colonies supply raw materials to the metropoles (Hopkins and Wallerstein 1986). Meanwhile, economic fluctuations—expansions or contractions—are due to the

interdependence between various locales, rather than isolated state-level reforms. 'Supply chain' in turn is a management term to describe networks of suppliers and distributors working together across distance to increase efficiency and reduce cost. Focusing on supply chains foregrounds developments in logistics such as tracking systems and legal arrangements such as contracts between business partners. They enable economies of scale. The terms 'commodity ecumene' and 'the social life of things' are anthropological concepts that emphasise the rich cultural life of economic exchanges, where value attached to things is not solely an expression of economic laws but of cultures of valuation (Appadurai 1986). Sometimes used interchangeably, all of these terms draw attention to various qualities brought by the exchange of things across distance and difference. In using any one of them, researchers might emphasise the sequential nature of commodity exchange from extraction to consumption and the unequal distribution of power and capital across the commodity chains, the [infrastructures](#) that facilitate global flows and create profits out of 'location advantage' within supply chains, or the emergence of value and meanings as objects and social practices lead their social lives.¹

Anthropologists are not the only social scientists to take interest in the circulation of goods. Other disciplines have been interested in mapping global commodity and supply chains in order to compare different forms of their governance (Bair 2005). Likewise, they asked questions about the relative importance of national policy vis-a-vis the country's position in the commodity chain (Gereffi 1996; Bair 2005; Gereffi, Humphrey and Sturgeon 2005). Compared to these approaches, anthropology's distinct method of fieldwork has allowed us to observe global exchanges as rich sites of human encounters. Anthropologists have worked in locations consequential to the global circulation of goods such as borders or ports (Chalfin 2010), places marked by global economic connections such as American towns where pigs are slaughtered to meet mass demand (Blanchette 2020) or in the Congolese rainforest where labourers search for cobalt to power electronics (Smith 2022). Anthropologists have also followed commodities like coffee or mushrooms around the world to understand how far these exchanges connect or disconnect people and places (West 2012; Tsing 2015).

Power and inequality

Classical and neoclassical economic theories consider global trade to be a driver of prosperity and the efficient allocation of resources. They foreground how trade overcomes the whims of seasons, the limitations of regional soils, and differences in talent to meet needs and desires at an unprecedented scale. Seminal economic theorists like Adam Smith and David Ricardo in the late eighteenth century, and Friedrich Hayek and Milton Friedman in the early twentieth, formulated such laudatory views of global trade during various phases of imperial and [colonial](#) expansion and yet their works paid little attention to the resource exploitation and purposeful underdevelopment of the colonies.

Contrastingly, critical perspectives in [history](#), political economy, and anthropology sought to centre the (post-)colonial experience, challenging the notion that the global marketplace is a realm of nations trading their advantages and surpluses according to free and equal exchange. These genealogies highlight the violent histories of extraction, compelled [labour](#), and [landscape](#) devastation. With key references like *The Black Jacobins* (James 1938), *Capitalism and slavery* (Williams 1944) and *The Negro in the French Revolution* (DuBois 1962), this intellectual lineage locates the origins of global capitalism not in Western Europe but in its colonies, notably the Caribbean islands—conquered and settled for cash crops and worked by slave labour. These authors focus on how profits from plantations in the Caribbean fuelled wealth in the metropoles, establishing fortunes that developed Britain's ports and factories, for example. They emphasise that development in one place and under-development in another, and the wealth of some and deprivation of others, are concurrent processes. And, moreover, the reason why they had not been viewed as such is due to [racialising](#) ideologies that see underdevelopment as a mostly inherent failure to advance rather than an exogenous effect of political intentions and structures.

One of the texts that inaugurated anthropological interest in commodity and supply chains is Sidney Mintz's *Sweetness and power: The place of sugar in modern history* (1985), a historical study of the sugar trade from the Caribbean to the European metropoles—linking ‘the Enslaved Africans who produced [sugar]’ and ‘the British labouring people who were learning to eat it’ (175). Sugar gave rise to radically different political economies and social lives—plantations and toil versus a consumer good providing a moment of sweetness at the end of a long workday. Rather than being an abstract phenomenon, Mintz shows that the sugar trade shapes bodies and tastes on both sides of the Atlantic. His study was not only a proposition about how commodities connect places whilst disconnecting economic regimes and human experience; it also suggested a new disciplinary approach. The anthropological interlocutor was no longer someone leading a remote and culturally particular life, but rather an actor from whose labour anthropologists and audiences of their work had long been profiting. Through existing commodity and supply chains, the researchers and interlocutors are already in a relationship—a relationship often premised on a fundamental inequality in which one side gets the short end of the stick.

Further inquiries sprang out of this early work. Some of them asked whether imperial and colonial divisions of the world into zones of production in the ‘peripheries’, and zones of consumption in the ‘metropoles’, still mattered. A crucial reminder of this past is that not all economic actors today have the same power to benefit from the global marketplace, possess enough capital to direct the flows of goods, or indeed even perceive the market’s actual breath and width: not least because not all people have the same power to move around the world or access basic banking services, or make use of credit. Addressing this gap, anthropologists have positioned their fieldwork at different ends of the hierarchy of economic power and profit—fleshing out the processes that create a ‘divide’ between the Global South and North (Hickel 2017). They have followed both multinational companies with international presence and influence, as well as

small-scale producers and labourers in plantations and industries who, while connected to global flows, have little power to negotiate prices or work conditions.

Some works have looked at the enduring nature of global divisions into producers and consumers, noting that people in the Global South rarely get to be considered consumers in the first place (Freidberg 2004). What's more, it is often consumers and distributors in the Global North that define the terms of producers' inclusion in global capitalism. Susanne Freidberg (2004), for example, compares Anglophone and Francophone [postcolonial](#) commodity and supply chains in green beans. She focuses on connections between Zambia and the United Kingdom on the one hand, and Burkina Faso and France, on the other. British supermarkets required their Zambian partners to follow auditing and certification standards that effectively advantage white entrepreneurs who are familiar with British norms and able to pay for audits. In comparison, French buyers were more appreciative of the skills of Burkinabe [farmers](#), yet their appreciation was not reflected in price, as Burkinabe farmers, just like their Zambian counterparts, had lower profit margins than distributors in Europe.

Typically, states positioned in the first node of commodity and supply chains—that is, specialising in natural resource extraction and agriculture—struggle to 'add value' to their production, remaining dependent on slim profit margins and [precarious](#) terms of trade. Anthropologists bring attention to the various mechanisms that maintain such a state of affairs. Following metals across commodity and supply chains, for example, highlights the importance of places like Switzerland where favourable [tax](#) regimes, lax corporate regulations, and the power of banks and investment companies enable trading companies to buy and sell commodities around the world (Dobler and Kesselring 2019). Outwardly, they connect global demand and supply, yet in doing so they also render specific places substitutable and disposable. Thus, for example, when Zambia increased electricity rates for its foreign-owned copper mines, Swiss trading companies temporarily stopped operations, substituting their quotas with copper sourced elsewhere (Kesselring 2017).

This economic inequality pokes holes in capitalist notions of economic exchange as being voluntary or equal. Markets do not only deepen colonial inequality, but rather 'they are made by that inequality' (Appel 2020, 2). US oil companies, for example, are able to make substantial profits in Equatorial Guinea, a country run by an authoritarian government where the majority of the population lives in poverty. Arrangements that sell raw materials at marked-down prices are sealed by contracts between 'states' and 'companies'— abstract concepts that '[mask] the "specific" parties who, in fact, sign the contract' (Appel 2020, 145). Symbolising legality, such contracts are invoked to halt debates about whether or not profits are shared equitably. They obfuscate that the involved parties are fundamentally different: while states answer to [citizens](#) to meet their fundamental needs, many companies work for shareholders to increase their wealth. Power differentials between underfunded states and much wealthier companies can be staggering. In such situations, government workers, though supposedly representing their citizens, can see

their job as 'making things easy' for the company in order to provide a 'better business environment' than other countries in the region (Appel 2020, 157).

Scholarship has questioned the extent to which the colonial and postcolonial structures limit entrepreneurial [agency](#). Openings for breaking free from economic constraints have been described as 'motion in the system' (Trouillot 1982). Such motion may mean the relative ability to choose business partners and negotiate prices, acquire reliable market information, and accumulate enough capital to invest into projects that shape political and social institutions. 'Motion in the system' could be found in both colonial and postcolonial circumstances. For example, *gens de couleur*, descendants of [interracial](#) couplings in the French Caribbean colony of Saint-Domingue (present-day Haiti), were able to corner the market for coffee by growing it in mountainous and inaccessible areas that white settlers shied away from (Trouillot 1982). Whilst initially a niche product, coffee grew in importance amid the eighteenth century anti-British sentiment in North America which affected sales of British-controlled tea. These climatic and geopolitical circumstances created openings for new mixed-raced entrepreneurs. In a different historical moment and geographic place, the bifurcation of the shea market in postcolonial Ghana into export and domestic markets meant that female shea producers and market women in the West African country's savannah were less beholden to exporters' expectations as they could rely on domestic demand to sell their produce (Chalfin 2003; 2004). What's more, they could off-load lower quality shea onto exporters, leaving better nuts for their local base and greater certainty in negotiating prices.

Important recent interventions in commodity and supply chains that anthropologists are following are fair trade schemes promising to improve labour conditions. Fair trade schemes principally imagine change as occurring on the level of contracts between individual producers and buyers, rather than on the level of international terms of trade, treaties, or international producer alliances (Besky 2014; West 2012). In consequence, they have been criticised for favouring established and richer producers, who have the [financial](#) and cultural capital to enter fair trade certification schemes (Besky 2014; Fischer 2022). Fair trade schemes also rely on a generalised context of [unsustainable](#) and exploitative modes of production from which fair trade participants are the honourable exception (West 2012). Sometimes, fair trade schemes even obfuscate larger socio-political structures that influence the lives of labourers. For example, Darjeeling tea plantations in India are certified as 'fair trade' based on small-scale interventions that aim to 'empower' workers through micro-loans (Besky 2014). Such interventions aim to soften the otherwise tough and unequal reality of plantation work as a largely immutable economic form, complete with impermeable social hierarchies. Plantations are here recast as a way of life, rather than a system of exploitation, and workers' identities are fetishised with romantic images of working hands obfuscating injurious conditions of bonded labour. The grinding aspects of this labour are put on display in the [photography](#) collection *Dark garden* by Md Fazla Rabbi Fatiq, for example, where the artist documents the influence of pesticides on workers' eyes and the disfigurement of hands from the work of plucking leaves.¹¹

Infrastructures of connection

The focus on commodity and supply chains may strike some readers as limiting. It tends to privilege a sequential transformation of commodities, and presumes a linear accruement of value along [postcolonial](#) economic divides. Others also critique some of the scholarship for not paying attention to the actual processes of chain-making (Caliskan 2011). Therefore, researchers have also studied international economic exchange beyond colonial and postcolonial geographies and frameworks. They have followed, for example, trade between Asia and the rest of the world and exchanges in the context of South-South [relations](#) (Dirlik 2007). They also have looked at the multitude of actors such as distributors, brokers, and exchanges that weave the global web of production, consumption, and discarding. Such new approaches build on the basic insights of the previous literature, namely that the global economy is interdependent, but they equally show that global connections are non-linear, multi-directional, actively constructed, and reconstructed.

The recent anthropological theorising along these lines has emerged from closer scrutiny of the term 'supply chain', which describes networks of suppliers and distributors working together across distances with the aim of increasing the efficiency of production while reducing its costs. Two types of supply chains are common—buyer-driven or supplier-driven—in which firms with superior capital and power organise traffic in commodities through buying components from suppliers or supplying goods and services to a range of distributors. These byzantine arrangements mean that identifying 'lead firms' and understanding the nature of relations between actors in these chains can be akin to detective work. A vivid example of this is the production of seatbelts for American cars with 'fibres manufactured in Mexico, woven and dyed in Canada to take advantage of the abundance of water, sent back to Mexico to be sewn up, and then installed somewhere at a plant in the United States' (Klein and Pettis 2020, 28).

Commodity and supply chains embody the 'bigness' of global capitalism (Tsing 2008). Through 'outsourcing' (i.e. contracting suppliers for goods and services) and 'vertical integration' (i.e. taking ownership of key stages of a supply chain), they incorporate heterogeneity. These chains are instrumental in understanding the simultaneous increase in global standardisation and the growing inequalities of contemporary capitalism. Lead firms ensure that commodities meet uniform health and safety standards enforced through auditing checks. While outsourcing is justified by economies of scale and specialisation, it often relies on differences in regulation and [labour](#) conditions to make goods cheaper. This can maintain or exacerbate inequalities between people across the difference of class, [race](#), culture, and the North-South divide. A key process here is 'salvage accumulation' (Tsing 2008); that is, profiting from skills, competences, and forces existing outside capitalist exchange, for example a company making profits from cheap labour motivated by an appeal to Christian work [ethics](#) (Tsing 2008). While primarily serving as a basis for exploitation, heterogeneity within supply chains can also function as a source of contestation. Encounters within supply chains may generate or maintain different [values](#), ideas of utility, or philosophies

of labour (Bear et al. 2015). For example, Asian refugees scavenging for mushrooms in US forests may choose such a livelihood because it provides them with a sense of freedom and a connection to nature (Tsing 2015).

Outsourcing is a crucial mechanism for extending the global economy. International companies strategically locate their factories across Asia and [Latin America](#), capitalising on cheap labour and lax regulations. The global supply chains have intensified due to trade developments, including the North American Free Trade Agreement (NAFTA) in 1994, China's accession to the World Trade Organization (WTO) in 2001, and India's economic liberalisation in the 1990s. Anthropological studies conducted in factories across India, Mexico, and East Asia illuminate the human costs associated with these regions' transformations into global hubs of cheap and flexible labour. Indian consultancies, for example, now recruit and 'bench' labour on a short-term project basis, effectively relying on workers' rural kin to sustain them during periods of unemployment (Xiang 2007). Anthropologists have also traced the psychic imprint of trade liberalisation, which cast some regions as powerhouses of efficient and just-in-time production. Malay women who are employed in factories serving the global market, for example, are trapped between patriarchal management and demanding production quotas (Ong 1987). One [ethnographic](#) study showed that in the 1980s, these women frequently suffered from spirit possessions, which could be seen as a form of [resistance](#), allowing women to channel rage and secure time off (Ong 1987). Such spirit possessions can be seen to reveal workers' contestations of oppressive outsourcing structures.

While the differentiation of labour can be grounded in outwardly racist or sexist ideologies (see Robinson 1983; Wynter 2003), contemporary managerial thought and practice tends to hold that a differentiated valuation of labour in global supply chains is the an outcome of economic policy, education, skills, and aptitude. As anthropologist Anna Tsing emphasises, 'no firm has to personally invent patriarchy, colonialism, war, racism or imprisonment, yet each of these is privileged in supply chain labour mobilisation' (2009, 151). In tune with this insight, anthropologists frequently reveal that differences between people are in fact the building blocks of profitability. Practices like 'outsourcing in place', whereby companies such as food delivery apps or hotels rely principally on migrants (Terray 1999) and 'global care chains', which stretch [care](#) work across national boundaries (Perreñas 2001), rely on [precarious](#) migrant workers to make up for the fact that in some sectors simply moving jobs abroad is not possible. The qualities of these workers—their gender, [dependence](#) on host families, having constraint options on the labour market, perceived docility, etc.—make them akin to the housewives and servants they have come to replace (see Ehrenreich and Hochchild 2004). Meanwhile, a common justification used by managers in Asian factories for underpaying female workforce is that the women are supplementary, and not primary, [household](#) earners. In this way, households are exploited for their kinship resources and their ability to provide psychological support to members (Dunaway 2001).

Anthropologists also examine the [infrastructures](#) that hold commodity and supply chains together.

Commodity and supply chains can also be seen as infrastructures in their own right, often painstakingly created to ensure a smooth circulation of goods and services. Recently, anthropologists have scrutinised their global architecture by focusing on the actual material pathways taken and created by ships, containers, ports, and technologies that track the passage of goods (Chalfin 2010; Chu et al. 2020; Leivestad and Schober 2021). Such research also looks at how this global architecture creates inflection points around the world, such as at the Suez Canal, which has an outsized influence on global trade with any risks contained by militarised infrastructure (Cowen 2014). This shifts a conversation from commodity and supply chains as markets for the satisfaction of consumer needs and desires to considerations about supply chains as linked to survival, security, and military power.

People, exchange, and value

Global exchanges are rich sites of valuation. They can be teased apart not solely on the macro scale of global processes but also the micro scale of cross-cultural encounters between individuals and communities. To explore how exchange relates to value, anthropological researchers have drawn attention to the work of brokers, distributors, tastemakers, and experts; that is, all sorts of people who do not strictly produce commodities but rather make them accessible, meaningful, and valuable to consumers. Such intermediaries impart value on the exchange because of their social and cultural capital. For example, American mineral traders are able to negotiate higher prices compared to their Mexican counterparts as their expertise is more trusted and they are able to access markets in the US from which the others are excluded (Ferry 2013).

As global markets promote standardisation of commodities to make them commensurable, that very standardisation can also increase the power of middlemen. Coffee beans from Papua New Guinea, for example, were sold for \$12.95 USD per pound in 2000s and yet the [labour](#) involved in producing them was remunerated at 0.33 USD per pound (West 2012, 16). Though there is no coffee without [farmers](#), the standardisation of beans makes coffees from around the world substitutable for each other which in turn increases the value of creating distinction through branding, including storytelling. Coffee producers compete with each other on a market in which tastemakers, marketing agencies, and designers take the greater cut. What's more, it is precisely the narrative of Papuans' poverty and assumed 'primitiveness' that casts buying Papuan coffee as an aide to its growers, implying that 'any money [the farmers] make is a vast improvement over their prior-to-capital lives' (West 2012, 248). In a similar manner, the so-called Third Wave coffee—a coffee movement that emphasises quality, sourcing beans from individual farmers, and roasting to obtain distinct flavours—rewards those growers that are capable of 'setting the terms for cultural narratives of [coffee's] worth' (Fischer 2022, 204).

Non-corporate middlemen and brokers act as agents of globalisation, connecting actors and places and exchanging across difference. Their work can be seen as enacting globalisation from 'below' as they extend

distribution or source goods in a wide variety of places outside established networks that are already controlled by corporations and their licensed business partners (Matthews, Ribeiro and Alba Vega 2012). Because of the informal nature of such nascent networks, they become grounds for innovating cultures of trust, [relations](#) of credit and [debt](#), and new technologies of pricing (Curtin 1984; Trivellato 2009). Such emerging commodity and supply chains include Chinese and Indigenous traders distributing cheap goods across [Latin America](#) (Pinheiro-Machado 2017). Here, brokers act as translators who appropriate foreign commodities for local markets, accessing places off-the-beaten [infrastructure](#) that companies may not have any proprietary market research about (Müller 2024).

These connections forge new models of creativity and partaking in the global economy. Asian manufacturing industries, for example, are contracted by African entrepreneurs to produce consumer goods responding to African tastes. In fact, much of the traditional West African wax cloth is now produced in China. Such trade connections are powered by, among others, the so-called Nanettes in Togo, a younger generation of women who hitherto lacked the capital to trade with companies located in Europe but are able to pioneer new exchanges with Asia (Sylvanus 2016). In a similar context, Igbo importers of foreign goods to Nigeria move between their home country, China, and the Middle East to source commodities and ship them to customers in West Africa. Every step of this inter-regional value chain has its own risks. Unlike multinational companies that rely on market research, established legal frameworks, or a regulated banking systems, Igbo entrepreneurs have to rely on mostly self-organised traders' associations. To minimise risk, Nigerian traders curate containers sent from Asai, filling them with a great variety of goods. Once in Nigeria, they fight to seal their distribution networks from foreign competitors—especially as the latter have market advantages, such as access to foreign low-interest credit (Lu 2022).

Distributors not only reach consumers, but they are also powerful agents in the sourcing of commodities outside formal networks or the purview of corporations. People can forge connections to the global economy in the ruins of old commodity and supply chains or under the radar of the law as is the case for all sorts of pirates. Interrogating livelihoods forged in the ruins or in 'grey zones', as anthropologists have done, is a crucial counterpoint to the tropes of capitalist promise-making or state planning. In South Africa, for example, men searching for gold inside disused mines are known as *zama zamas*. They are often migrants and considered particularly 'tough' due to a lack of other economic options (Morris 2022). They descend into the mines to search for remaining sparse gold deposits. With [death](#) underground being a perceptible threat, days can go by until a sufficient amount of the ore is gathered. Shadowy middlemen then buy these finds, paying in [cash](#), with *zama zamas* knowing as little about the buyers as their phone numbers. Here, migration, [mining](#), and international commodity and supply chains work together, to create both a vague sense of opportunity and violent actual [precarity](#).

Disembedding the environment

Similar to market economies becoming disembedded from social [relations](#) (Polyani 1944), the global circulation of goods and services arguably disembeds economic activities from local environments and [labour](#). Commodity and supply chains hide consumers and producers from one another, heightening commodity fetishism, i.e. the mistaken belief that commodities exist independently of social relations. Relocating production to other regions means that consumers and investors may not experience or appreciate how their consumption affects natural environments. Urban economies in the Global North tend to specialise in research and development, [finance](#), technology, and creative industries. Such 'third sectors' are heavily reliant on raw materials and invisibilised labour, but actors within them might see the global economy as a space of immaterial ideas, creativity, and innovation. This has psychic consequences: their ideas take shape in the material world, while they themselves do not have to attend to the material conditions and consequences of those ideas. Awareness about global commodity and supply chains corrects such anti-material bias. For example, the extraction of cobalt in the Congo is a crucial ingredient of cutting-edge electronics. Being blind to the inconvenient fact of cobalt mining's pressure on the environment risks third sector actors sliding into a 'self-congratulatory techno-utopianism' of Silicon Valley, which often casts itself as singularly responsible for technological advances whilst remaining oblivious to its ecological consequences (Smith 2021).

Ecological considerations also matter when given that global commodity and supply chains have been crucial for realising economies of scale. As such, they raise questions about the 'politics of scale', i.e. the choices needed to achieve economies of scale (Blanchette 2020) and about 'de-growth', which is a broad proposition to create economies that are mindful of nature's limits (Livingston 2019; Hickel 2021). While economies of scale have enabled cheapness, they rely on things, labour, and land that are not straightforwardly scalable. As such, economies of scale are experiments with profound environmental consequences. Producing cheap pork (as well as by-products such as pet food, methane gas, and gelatine) in a town in the US Midwest, for example, requires killing a pig every three seconds (Blanchette 2020). The companies that produce pork at scale replace individual pigs, capricious [animals](#) marked by idiosyncrasies, into 'the pig': a predictable commodity that enables calculating costs and profits. The latter requires interfering with pigs' bodies, including adjusting sows' reproductive drive and fertility through hormone therapy. Meanwhile, dealing with extraordinary events, such as a sudden [death](#) of thusly modified sows and their piglets, falls onto the shoulders of an undervalued workforce, who may find themselves needing to perform mouth-to-mouth resuscitation on dying piglets (Blanchette 2020, 153).

Economies of scale are not just corporate policy; they are also promoted by states as ways to attain economic growth. They represent a 'self-devouring' drive to produce evermore while in the long term undermining the very conditions of production, like access to clean [water](#) and fertile land (Livingston 2019). In Botswana, for example, cattle, which used to be appreciated in poetry, prayer, and ritual, are turned into a mere 'techno-economic' objects as part of mass beef production. Among the Tswana people of

Botswana, cattle used to represent the family, was only killed towards the end of its life, and the resultant beef was ritually divided between its members. Industrial beef production, on the other hand, calls for higher levels of consumption to perpetuate higher levels of production and evict questions about nature into the future.

The study of commodity and supply chains has recently been complemented by anthropologists' increased attention to more-than-human worlds. The production and consumption regimes that commodity and supply chains enable are not just violent to the environment, but also such violence can be displayed by the physical matter, such as oil palm trees, that they unleash onto the world. In villages of the Papua province of Indonesia, for example, Marind people witness how oil palms ravage biodiversity and [landscapes](#) (Chao 2022). They see their world become hostage to a quickly spreading plant that 'kills the sago, murders their kin, chokes the rivers, and bleeds their land' (Chao 2022, 11). Palm in these cosmologies has its own distinct, more-than-human [agency](#) and becomes a target of [resistance](#). Here, the plantations are contact zones between the locals' lifeworlds, based on the cultivation of sago, and agro-industrial capitalism which relies on palm as a plant suitable for economies of scale and useable across different foodstuffs.

Meanwhile, economies of scale create [waste](#) at a level that may be reaching its global 'apotheosis' (Hecht 2018). Landfills and dumpsites can be thought of as nodes in supply chains, even more so in the context of emerging circular economies that promise to recast waste as a raw material for production (O'Hare and Rams 2024). Acting as places in which waste is temporarily stored away and managed, they contribute to the status quo of overproduction (Liboiron and Lepawsky 2022). Beyond these localised waste sites, research also points to substantive movements of waste to the Global South as second-hand products. As such, consumers in these parts of the world both rely on and are inundated by waste-laden second-hand imports of electronics, clothes, cars, and other consumer products from Western countries. Such second-hand economies contribute to local environmental damage as they surpass the capacity of local waste [infrastructures](#). While second-hand markets create economic opportunities for traders and provide choices to consumers, these benefits are complicated by the way second-hand buyers may feel lesser than consumers in the Global North who can afford new goods (Burrell 2012).¹⁴

Economies of scale and their impact on the environment have met resistance. Anthropologists document the ways in which people practice opposition to what some have called 'plantationocene' or 'capitalocene', terms proposed as historically and contextually situated modifications of the term '[Anthropocene](#)' to emphasise that the responsibility for planetary damage is unevenly distributed (Haraway 2016; Sapp Moore and Arosoaie 2022). They have explored histories of [cooperative](#) farming adhering to notions of wellness and self-reliance and thus away from capitalist models that promote reliance on food produced elsewhere (Reese 2019; White 2018). Anthropologists have also focused on examples of human and more-than-human resistance to mono-crops and their scalar logic (Beilin and Suryanarayanan 2017). Such works

also document human resistance to projects of extraction in which ordinary people can be seen to disrupt extractive infrastructures such as pipes and expose their fragility (Mitchell 2013).

Conclusion

Anthropological scholarship explains some of the confusing and uneasy aspects of global commodity and supply chains: how they connect people as commodities pass from one hand to another and yet disconnect them when it comes to distributing the resultant power, profit, and hazard; how they mobilise people across difference—speaking different languages, living across economic divides, perhaps espousing different [values](#)—whilst exploiting that very difference for profit-making; and how all this worldly architecture sinks into the background, seamlessly rearranging what people come to expect as their economies get divorced from the local soils and workforce. This is a crucial effort because some of the most common ways of thinking about global trade—in economic theories or policies of international organisations—see the trade as happening between nations that are free to choose policy or specialise economies to their advantage. Anthropologists show how this economic calculus makes assumptions about the worth of other humans and cultural beliefs that reflect long and on-going legacies of global inequality. The study of global circulation allows us to interrogate the connection between growth and ecological and cultural devastation, accumulation and dispossession, and profit and exploitation.

As we look into the future, a multitude of new perspectives and potential areas for research emerge, especially when it comes to integrating global commerce within environmental limits. The integration of a circular economy could fundamentally reshape geographies of resource circulation, possibly creating new relationships between [waste](#) and production. Elsewhere, some view the advent of blockchain and other [digital](#) technologies as having promise for transforming transparency and trust within global networks whilst creating new forms of value, for example by tying the labour of [farmers](#) to carbon trading (Barbato and Strong 2023). Simultaneously, there's a growing interest in localising production and shortening commodity and supply chains, a trend that might have profound implications for global markets as it spurs new communities organised around principles of relative self-sufficiency. Such interventions could entail redesigning commodity and supply chains in dialogue with the environment. Rich existing anthropological research already draws insights from Indigenous knowledge systems about, for example, [mining](#) traditions aware of '[sharing](#)' resources with nature (D'Avignon 2023) or approaches to food that promote diversified cultivation and food access (Reese 2019). These approaches suggest multiple pathways forward for reimaging resource flows and human-environment relationships.

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^[1] For reasons of simplicity, this entry will use the term 'commodity and supply chains' throughout.

^[2] Fatiq, Md Fazla Rabbi. 2023. *Dark garden*. <https://mdfazlarabbifatiq.com/dark-garden/>

^[3] See also Kolade, Bobby, and Nikissi Serumaga. 2021. *Vintage or Violence Podcast*. <https://www.vintageorviolence.com/>