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INDIGENOUS AGENCY: TRADE, COMMODITIES, AND ECOLOGY

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Early-Modern Globalization and the Extent of Indigenous Agency: Trade, Commodities, and Ecology*

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Abstract

This paper examines the responses of Indigenous nations and European companies to new trading opportunities: Cree nations and the Hudson's Bay Company (HBC), and Khoe nations and the Dutch East India Company (VOC). This case study is important because of the disparate outcomes: within a few decades the Cree standard of living had increased, and Khoe had lost land and cattle. Standard histories begin with the establishment of trading posts but this elides the decades of prior intermittent contact which played an important role in the disparate outcomes in the two regions. The paper emphasizes the significance of Indigenous agency in trade.

Keywords: Indigenous economics; trade; ecology; cross-continental comparison.

JEL Classification: N30; N70; N71; N77; J15; Q57.

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The Great Voyages of Discovery by Cabot, Hudson, Magellan, Columbus, Da Gama and others, in the late 15th century, fundamentally changed contact between continents. The ‘discovery’ of the Americas and of a sea route around Africa to India and Asia created new opportunities but brought different cultures and economies into contact for the first time. While the arrival of Europeans ultimately challenged the livelihoods of Indigenous communities, it also introduced the possibility of gains from trade and exchange for both Indigenous populations and the newcomers.

In this paper we examine the responses of Indigenous nations and Europeans in two different environments to these new opportunities: the Cree nations of Hudson Bay and the Hudson’s Bay Company (HBC) and the Khoe nations of the Cape of Good Hope and the Dutch East India Company (Verenigde Oostindische Compagnie or VOC). This case study is of particular interest because of the disparate outcomes after roughly seventy years of a permanent European establishment. Formal interaction between the Khoe/VOC is dated from the building of a refreshment station at the Cape in 1652. By 1700, the Khoe had fought two frontier conflicts with the Dutch: the first 1659–1660, the second 1673–1677. The result was a loss of land and cattle and Dutch control of the southwestern Cape.¹ In contrast, by the 1740s, 70 years after the first permanent HBC structure in 1670, the Cree not only had lost no land but also are estimated to have had incomes on par with London wage workers, themselves the best off in Europe.²

Standard histories of Indigenous/European interactions start when a company obtained a charter and established a physical presence in the form of a trading post or factory. But, Indigenous/European interactions rarely began with the founding of a permanent settlement or post. Indeed, beginning with a permanent post erases decades of prior intermittent contact;

¹ Marks, ‘Khoisan resistance’; Dye and La Croix ‘Institutions for the taking’.

² Allen, ‘Great divergence’; Carlos and Lewis *Commerce by a frozen sea*. In the 1690s the French captured some of the Bay posts and trade was fractured for twenty years.

contact that came, in our situations, with earlier European voyages around the Cape of Good Hope or through fishermen, explorers, and French fur traders in the regions to the east and south of Hudson Bay. These decades of intermittent contact are salient because they formed the basis for learning by both sides about the other's culture, region, and opportunities. It was not the case that African or Native American communities quickly became dependent on European commodities, which is how the trade is often portrayed; such arguments are both simplistic and denigrating of Indigenous technologies, tastes, preferences and reality.

Using a trade theoretic approach to understand how the period of intermittent contact framed the events subsequent to the establishment of the trading posts, we analyze the interactions between Indigenous nations and Europeans - and their consequences - through the lens of the bargaining power each party brought to the trade. Bargaining power was a function of local ecology, market conditions, learning by the parties, and the conflict and tension among and between nations. As we contend in the following sections, learning during decades of intermittent contact were fundamental to the structure of interactions in the aftermath of permanent settlement and framed the subsequent trajectories of Cree/HBC and Khoe/VOC relations. Our concept of learning encompasses not just knowing about types of goods but also incorporates knowledge about, and understanding of, the rules and social norms that surround all trade interactions and the language through which trade will be conducted. Additionally, these interactions did not take place on a homogenous plane but in particular locations. The local ecology, meaning the relationship between animals, humans and the physical environment, is important in understanding the structure, conduct and hence outcome of trade following permanent settlements at Hudson Bay and the Cape. The physical environment was not deterministic for the outcomes, rather it allowed for a differing range of actions in the two locations.

This paper makes a number of contributions. First, it expands the literature on early modern trade between Indigenous and European nations in arguing that intermittent contact in the decades before continuous contact is fundamental to understanding Indigenous agency and subsequent outcomes. We argue that treating the establishment of European colonies as an exogenous event in which the agency of Indigenous people played no part or only a negligible role, as much of the recent economic literature does, provides a biased and incomplete view of European communities' overseas post establishment.³ In both our case studies, the interaction between Europeans and Indigenous peoples is better characterised as a process that evolved over time and with deep roots. We also contribute to a literature that examines when an Indigenous community chooses to trade or raid or walk away.⁴

Second, we focus on the role played by ecology and the ways in which it mediated interactions through its impact on the perceived options of each party. Condensing ecology to health risks to Europeans captures only one aspect of ecological relationships in a region.⁵ Ecology is important because learning occurred not in isolation but in a particular space; it affected the supply curve of goods by Indigenous communities and the perception of that supply curve by Europeans. For example, one can think of perception by Europeans as determining how cheaply they could purchase the required trade items relative to producing them themselves.

Our third contribution is to use the trade liberalization literature to frame how the opening of trade enhanced productivity growth in Indigenous communities.⁶ Finally, the paper contributes to a small but growing literature on cross-continental comparisons relating to Indigenous and settler outcomes in the seventeenth and eighteenth centuries.⁷ We are not the

³ See Acemoglu et al 'Reversal of fortune'; Engerman and Sokoloff 'Factor endowments'; Putterman and Weil, 'Post-1500 Population'; Easterly and Levine 'European origins'.

⁴ Anderson and McChesney, 'Raid or trade'.

⁵ Acemoglu et al. 'Reversal of fortune'

⁶ Mendoza, 'Trade-induced learning'

⁷ Dowd, 'Indigenous self-vanishing', Fourie and Garmon, 'Settlers' fortunes'.

first to argue for the value of cross-continent comparisons.⁸ Indeed, we follow the principles of reciprocal comparison, treating both our cases as deviations when seen from the expectation of the other rather than treating one of the cases as always the norm. In short, it is through the lens of the history of Hudson Bay that we can better understand the interaction of Europeans and Khoe at the Cape and equally through the lens of trade at the Cape, we better understand developments at Hudson Bay.

The paper is organized as follows. Section I lays out the conceptual framework. Sections II and III focus respectively on the Cree and Europeans at Hudson Bay and the Khoe and Europeans at the Cape of Good Hope. For each, we describe the physical environment and the nations that lived there, followed by a discussion of the intermittent phase of Indigenous/European contact, and then the period of permanent contact. In both case studies we evaluate the role of ecology, learning, knowledge, and market power in determining the agency and bargaining outcomes in trade between the parties. In section IV, we relate these differences to the divergence in outcomes experienced by the Cree and Khoe. This is followed by concluding remarks and suggestions for future research.

I. Conceptual framework

The arrival of European companies in the Americas, Africa and Asia provided opportunities for trade and thus the potential for gains from trade for Indigenous communities and for Europeans. Of course, the actual gains depended on the bargaining power of each party. To understand the interactions between Indigenous and Europeans, we elucidate four factors that we argue affected the bargaining power of parties and thus the consequences of interactions between those parties. In subsequent sections we provide both qualitative and, where feasible, quantitative evidence showing how these factors influenced outcomes.

⁸ Dye and La Croix, 'Political economy'; Pomeranz, *Great divergence*; Austin, 'Reciprocal comparison'

In our bargaining environments, the **underlying supply and demand conditions** are core to outcomes and a function of the local **ecology**. Trade provided opportunities for Indigenous nations to acquire European goods in exchange for domestically produced agricultural goods. The costs of producing those agricultural goods and the perceived benefits of the European goods were proximate determinants of ‘willingness to pay’. Similarly, for Europeans, the cost of trade goods and the value of the agricultural goods were key elements in determining reservation prices.

Supply and demand factors do not operate in a vacuum. Trade takes place within a particular **market structure**. Does one side have a monopoly/monopsony or is the environment better characterized by duopoly or monopolistically competitive? Were there one or more groups of buyers and/or sellers? The extent to which there was more than one buyer gave an advantage to the selling agent and similarly, if there is only one buyer but many sellers, any one seller has little market power; essentially having to take the price offered.

In our context, **political economy** influenced market structure. The sixteenth and seventeenth centuries saw European nations seek overseas markets in America, Africa and Asia, often through the aegises of government monopolies or trading companies. In some regions, market access was contested between companies, and in others not; access was also sometimes the outcome of inter-European conflicts. Indigenous conflicts or unity also played a key role; did Indigenous nations stand unified against the European presence or did a European presence exacerbate local tensions?

Finally, **learning** was fundamental for the evolution of the trade. Both sides had to learn about the other. We argue that during the decades of intermittent contact or indirect contact, parties determined their tastes and preferences and learned the demands and potential supply of the counter party. Relevant learning in our context encompassed not just knowing about types of goods, but incorporated knowledge about and understanding of the rules and social

norms that surround all trade interactions or trading protocols, as well as the language through which trade is conducted.

II The Cree and Europeans at Hudson Bay

The environment of Hudson Bay

Hudson Bay, along with James Bay and Foxe Basin, forms a massive inland sea; one with only a narrow opening to the Atlantic Ocean through Hudson Strait (see Figure 1). Its drainage basin stretches west to the Rocky Mountains and east towards the Atlantic. It includes many of Canada's major rivers – north and south Saskatchewan, Nelson, Churchill, Red and Assiniboine, Missanabi, and Eastmain, among others. Ice age glaciation made this a region of rivers and lakes with low heights of land, allowing goods and people to move easily between river systems or indeed drainage basins.⁹ Although Hudson Bay does not freeze until mid-December, Hudson Strait freezes earlier in the fall/winter, not thawing until late June or July. As a result, there is, perhaps, only a six to eight-week window during which ships can get through the Strait, discharge cargo, take on a new cargo, and leave for Europe.

⁹ The Great Lakes drainage basin flows into the St. Lawrence. The Mackenzie River is the major drainage basin into the Arctic Ocean.



Figure 1: Hudson Bay and its Drainage Basin: Source: Déry et al. ‘Hudson Bay streamflow’ (with author’s permission)

The land area immediately adjacent to the Bay is predominantly a swampy permafrost lowland of marshes and peat plateaus, with stunted tamarack, black spruce and bushes. The Bay itself supports a large and differentiated fish population and beluga whales. While polar bears can be found along the coast, there is no other resident population of large mammals. Caribou, historically in herds of many hundreds, migrated annually to the Bay where they birthed their calves, returning in the autumn to the boreal forest or the barren ground/arctic regions. Large migrations of birds, geese and ducks come through the region twice yearly as they fly to their nesting grounds further north and return south in the late summer.

Beyond the lowlands lies boreal forest (or uplands) which stretch across the continent.¹⁰ This region experiences bitterly cold winters though somewhat warmer summers than the arctic

¹⁰ Boreal forest also stretches across northern Europe and Asia. In Canada, its density thins out as it moves into the Hudson Bay Lowlands. south to the great plains and north to the Arctic zone. For a detailed description of Canadian ecological regions in 1500 see *Historical Atlas of Canada*, Vol 1 Plate 17.

region to the north. The boreal forest extending across North America (see Figure 2a) is a habitat for a range of animals: large mammals such as woodland caribou, moose, elk, bears, and woodland bison, some more solitary, others moving in herds according to available resources; smaller mammals include rabbits, hares, marten, beaver, fox, lynx, squirrels, muskrat, wolverines and wolves. The rivers and lakes have plentiful fish and are home to seasonal bird populations that survive the harsh winter by migrating. Mammals, large and small, survive by growing thick dense coats to protect them from the cold.¹¹ Thus, the more northerly the region, the harsher the climate, and the thicker the animal pelts.¹²

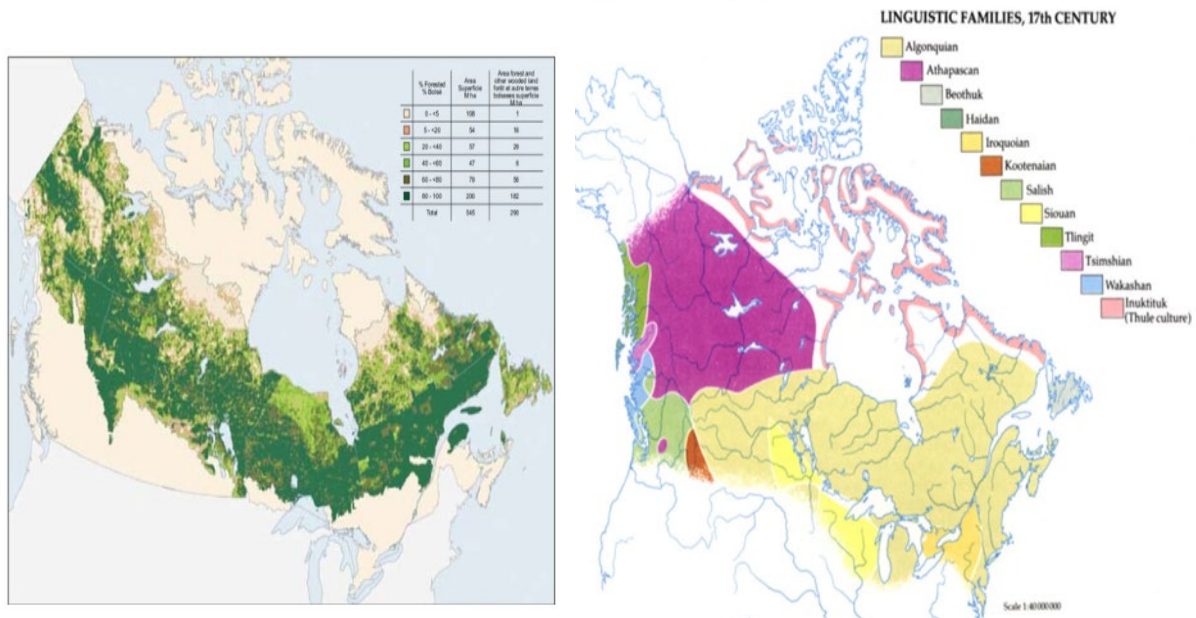


Figure 2a: Boreal Forest. Source: Bogdanski, 'Boreal forest'. Figure 2b: Language Groups Source: Harris, *Historical Atlas of Canada* Vol 1 Plate 18

¹¹

<https://albertawilderness.ca/issues/wildlands/forests/boreal-forest/#:~:text=Common%20species%20found%20in%20the,woodland%20caribou%20and%20wood%20bison.>

¹² It was these winter pelts that were prized by Europeans for the fur and felting industries.

Indigenous communities in the Hudson Bay Drainage Basin

Information about Indigenous communities comes from oral histories and the survival of archaeological sites.¹³ Indigenous nations populated the plains, boreal forest and arctic lowlands of North America for thousands of years. Communities were never static; there was movement and migration and occasional splintering or merging amongst groups.¹⁴ Indeed, the location of communities in the immediate contact period may represent recent relocations.

Algonquian-speaking people, one of the most widespread North American language groups, include the Cree who form one of the largest of Canada's First Nations. Although all Algonquian speaking (see figure 2b), they comprise many different polities/communities/nations with defined territories.¹⁵ At the northern end of Hudson Bay are Athabaskan speakers; one of the larger Athabaskan speaking groups being the Chipewyan. Innu speaking communities live furthest north inhabiting the arctic littoral.¹⁶

Hunting and gathering dominated economic activity with communities moving to different parts of their territory depending on resources and season.¹⁷ The harsh climate in the boreal forest precluded settled agriculture. But these economies were neither autarkic nor self-sufficient. Trade played an important role. Native goods emanating from the Canadian shield, such as furs, native copper, dried berries, moose skins, antlers and fish, were traded intra-regionally and inter-regionally and with agricultural communities in more temperate regions for tobacco, corn, gourds, fishnets, wampum, raccoon and squirrel skins.¹⁸ Evidence of a trade

¹³ Sites located along rivers or on the coast could be washed away in spring run offs, excessive ice, or changes in the river itself. More problematic is the fact that until very recently, regions, especially the Hudson Bay lowlands were considered uninhabited, so no one looked for evidence of habitation. Lytwyn, *Muskegowuck Athinuwick* and Carlos, 'The country they built'.

¹⁴ The Thule Panuk migration in the twelfth century is a good example. The Thule moved along the Arctic Coast from Siberia, reaching Greenland by the middle of the thirteenth century. Previously resident populations either moved away or were absorbed. Carlos, *idem*.

¹⁵ See Lytwyn, *idem.*, ch. 4 for an extensive discussion of groups in the Hudson Bay region.

¹⁶ See <https://storymaps.arcgis.com/stories/a036c04ff1c6440796721b9c68faba41> for breakdown of Indigenous Languages of Canada.

¹⁷ Carlos and Lewis, *Commerce*.

¹⁸ Harris, *Historical atlas* Plate 35.

in pottery has been found in some Cree sites.¹⁹ Trade and exchange were long-established before the arrival of Europeans.

For most of the year, resources were abundant, with large mammals, fish, birds, eggs, and greens, roots and berries.²⁰ Smaller mammals were trapped throughout the year. Birds and their eggs, and wild greens along with other foraged plants and berries, also formed an important part of the diet. However, just as resources became more difficult to hunt, the same harsh winter climate increased human caloric requirements to well over 4000 calories a day, with the result that winter could often be a lean time and, in bad years, starvation a real threat.²¹ Due, perhaps in part to the risk of starvation, reciprocal sharing and generosity were strong social norms, often described in the literature as a *Good Samaritan* constraint or an Ethic of Generosity.²² Visitors were treated to food and gifts and would expect reciprocity when they in turn were the visitors.²³ The reciprocal nature of sharing would carry over into Cree expectations of Europeans.

Intermittent Contact between Cree and Europeans

Contact between Europeans and Indigenous communities in Eastern North America dates to Viking settlements in the 10th century in Newfoundland and perhaps along the coast of Labrador.²⁴ While those settlements ultimately disappeared, a more sustained, albeit intermittent contact started with European fishing boats on the Grand Banks. Notionally discovered by Cabot in 1497, but undoubtedly being fished earlier, these fisheries became a major and cheap protein source for western Europe. English, Dutch, French, Spanish and

¹⁹ Lytwyn, *Muskegowuck*.

²⁰ Caribou and bison were hunted in late fall when fat reserves could be many inches thick along the back. Caribou meat would be dried, pounded and mixed with berries to make pemmican which could be stored for long periods and were easy to transport and highly nutritious. Lytwyn, *idem.*, p.103.

²¹ Carlos and Lewis, *Commerce*.

²² McManus 'Indian behaviour'

²³ Carlos and Lewis 'Marketing'.

²⁴ L'Anse aux Meadows on the northern tip of Newfoundland and was only discovered in 1960.

Portuguese fished along the coasts of Newfoundland, Labrador, Nova Scotia, Maine, down into New England. With a shift to drying fish on land before sailing home, interactions between Indigenous coastal nations and Europeans increased with Indigenous peoples trading some furs and pelts for European commodities.²⁵

More sustained contact between Indigenous communities and Europeans came with permanent French settlements in the Gaspé Bay and along the St. Lawrence, (in addition to settlements by the Dutch in New York, the English in Newfoundland, Nova Scotia, and down the New England coast, and Spanish settlements in Florida). The settlement of Europeans on the eastern seaboard changed the power dynamics and relationships between communities and regions. One example is territorial expansion of the Haudenosaunee (Iroquois) whose lands lay to the south of the St Lawrence. In 1650, they began to raid north. This territorial expansion eventually pushed other communities around the Great Lakes region north and west, forcing relocation of nations who had never met a European.²⁶ Though small, each of these settlements generated a trade in beaver pelts, creating a steady supply of pelts for the European fur and felting markets, and of European goods such as knives, awls, pots, blankets, tobacco, and textiles for Indigenous communities.

As French settlement expanded, so too did the fur trade.²⁷ Because this was a trade comprising many small independent buyers and sellers we have little written documentation from these agents. However, the observations of French explorers and missionaries were recorded in widely published journals. Following Jacques Cartier, the first European to formally explore the Gulf of St Lawrence in the 1530s and 1540s, Samuel de Champlain ‘founded’ Quebec in 1608 bringing a permanent French presence to that region. De Champlain’s detailed accounts of his journeys are meticulous, not merely describing the

²⁵ Innis, *Fur trade*. Both sides thought they were getting the better of the trade. Europeans received valuable pelts for what they called mere trinkets, while Indigenous were amazed that Europeans wanted their old pelts.

²⁶ Lytwyn *Muskegowuck*, pp.74-79; Ray, *Indians in the fur trade*.

²⁷ Rich, *Hudson’s Bay Company*; Innis, *Fur trade*.

physical environment but his interactions with many different indigenous communities.²⁸ The many volumes of the Jesuit Relations similarly describe decades of Jesuit travels and residence with Indigenous nations.

With the founding of Quebec City, a fur trade moved up the St. Lawrence, Saguenay and Ottawa river systems although direct contact between Europeans and Indigenous was limited. The Huron acted as middlemen from 1611 until 1648 when they were crushingly defeated and dispersed by the Iroquois. The Huron had protected their position by obstructing French exploration and by restricting passage of other Indigenous nations. After 1648, French fur traders, known as *coureurs de bois*, began to move into the interior to trade around the Great Lakes. It was in this environment of an expanding French presence that the Hudson's Bay Company was formed in 1670.²⁹

Contact between Indigenous nations and Europeans in New France also had a religious component. In broad and overly sweeping terms, *Recollets* monks, the first religious order brought to Quebec, sought to convert the Huron by having them move close to French settlements.³⁰ They failed and were sent back to France and an invitation extended to the Jesuit order.³¹ By contrast, individual Jesuits went out to live among Indigenous communities with a hope to convert them to Christianity. Conversion required conversation; Jesuits compiled dictionaries that were printed, published and distributed. Through their actions, Jesuits taught Indigenous and other Europeans that transactions could be conducted through the local Indigenous language. Not all would have been linguistically adept but speaking Cree was to some extent expected. Indeed, as we discuss in the next section, from its inception in 1670, the Hudson's Bay Company directors understood this.³²

²⁸ Grant, *Voyages*

²⁹ Innis, *Fur trade*, Lytwyn *Muskegowuck*.

³⁰ A Franciscan order.

³¹ Rich, *Hudson's Bay Company*; Innis, *Fur trade*.

³² Carlos and Lewis *Commerce*; Rich, *Hudson's Bay Company*, pp.: 161-162.

A further source of contact between Indigenous and European nations were the European explorers who sought to chart and understand the ‘newly discovered’ continent.³³ Their diaries, many widely available at the time, provide detailed descriptions not just of place but of interactions with Indigenous communities . For example, the diaries of de Champlain were not only published and distributed in France but also translated into English, Dutch, Portuguese and Spanish. Even though de Champlain referred to the Indigenous people he met as ‘*Les Sauvages*’, he did not dismiss them, rather he recorded their information and advice, hired them to navigate along rivers and bays, and to interact/translate when meeting other Indigenous communities.

Whether voyages of exploration, religious proselytizing, or trading, contact allowed learning both of people and place incrementally and over time. de Champlain wrote of his first winter: “It would be very difficult to ascertain the character of this region without spending a winter in it.”³⁴ More importantly, his diaries sketch, even if not fully understanding, Indigenous social norms. In March of that same winter, he wrote that “some savages came and gave us a portion of their game in exchange for bread and other things we gave them. This is the mode of life in winter of these people”³⁵ That mode of life was one of reciprocal relationships. In describing another meeting, de Champlain noted that while he was ready to ‘do business’ the “chief bid us sit and smoke with his companions and presented us with venison and game”.³⁶ It was only after some singing and dancing would they trade “for a certain number of beaver”.³⁷

The importance of time spent socializing and of the giving of presents is also noted in the *Jesuit Relations*. Father Vimont wrote that “presents among these peoples dispatch all the

³³ Henry Hudson (1610-1611), Thomas Button (1612-1613) and Jens Munk (1619-1620) explored the Hudson Bay region, while French traders moved up the river system to the south of James Bay. Promislow, ‘Thou wilt not die’, footnote 36.

³⁴ Grant ed. *Voyages* image 57.

³⁵ Idem.

³⁶ Idem., image 51.

³⁷ Idem., image 52.

affairs of the country. They dry up tears; they appease anger; they open the doors of foreign countries ... one hardly ever speaks or answers, except by presents.”³⁸ There was a form and a ritual element before business. Any bargaining was preceded by ceremony involving gift exchange, smoking a pipe, and enjoying the social interaction. Socializing is incredibly important; it is how communities learn about one another and gain knowledge and trust.

Even as direct contact between French *coureurs de bois* and Indigenous traders moved up river systems from the St. Lawrence, European exploration of the continent also continued. Pierre-Esprit Radisson and Médard Chouart, Sieur des Grosseilliers explored the upper reaches of the Mississippi and Missouri and north into the boreal forest in the 1660s. Although probably the first Europeans to meet many of the Indigenous nations in this region, they saw evidence of a movement of goods and furs through wholly Indigenous networks from and to New France. Experiencing sub-arctic winters with its harsh cold and short rations, they observed how that same harsh cold produced rich winter pelts. Thus, they brought back to Europe not just descriptions of their travels but encapsulated their knowledge in reports of the feasibility of a beaver trade north of the Great Lakes. Grosseilliers and Radisson tried to interest the French in Montreal, the Court in Paris, and the merchants in Boston, in a trade out of Hudson Bay before sailing to London in 1668. There, their reports culminated in the chartering of the Hudson’s Bay Company (HBC) in 1670.³⁹

Permanent Contact

The HBC charter gave it a monopoly of English trade within the drainage basin of the Bay, an area, which, as shown in figure 1 is extensive.⁴⁰ The first post was Fort Charles in James Bay, replaced in 1672, by Moose Factory on the Moose River and then Fort Albany, completed in

³⁸ Quoted in Promislow, ‘Thou wilt not die’, p 109, fn 39.

³⁹ Rich, *Hudson’s Bay Company*

⁴⁰ This section uses the extensive qualitative and quantitative records of the Hudson’s Bay Company.

1679, 150 kilometers west.⁴¹ Through just these two river systems, the posts served a hinterland of roughly 600,000 square kilometers, south into present day Quebec and east into Manitoba. In 1682, a small post was built at Hayes River on the western side of Hudson Bay and, in 1690, the more substantial York Factory, on the Nelson River, which has a catchment area of 1 million square kilometers. In 1687, the company built Fort Churchill on the Churchill River. Together, Moose, Albany and York served Western Woodland Cree and *Muskegowuk* (Lowland Cree) communities, while Fort Churchill served Chipewyan communities.⁴² These permanent posts each had a complement of 30-50 men, many of whom spent multiple years at the Bay, and were serviced by the one or two ships that arrived from England annually.

The HBC was a new company but a late entrant into the fur trade.⁴³ Although Cree communities in the more northern boreal forest had no direct connection to *coureurs de bois* and the French trade, they were indirectly connected through a trade in second-hand trade goods. Thus, for the *Muskegowuck* and Woodland Cree, the arrival of the Hudson's Bay Company posts at the mouths of major rivers meant direct access to trade goods. While direct access was new, Cree tastes and preferences had been formed through the decades of indirect access. Indeed, these tastes and preferences determined what goods the HBC sold at the posts. Moreover, given its location, the HBC had an advantage over French traders, who had to paddle up river, in that it could provide commodities that were heavy relative to their fur trade value.

Knowing what goods were most likely to sell did not immediately translate into an understanding of how to sell those goods. In their orders, the London Directors specified the prices for goods relative to furs allowing their post managers no leeway.⁴⁴ Operationally, this meant post managers had no permission to give gifts. As post managers quickly learned, gift

⁴¹ See Rich idem., Ray, *Fur trade*, Ray and Freeman, *Give us good measure* and Carlos and Lewis, *Commerce* for the history of the Cree/HBC trade. Physical buildings were needed for wintering over.

⁴² Fort Churchill was built because of tensions when Cree and Chipewyan came together at York Factory.

⁴³ The material in the following sections extensively draws on Carlos and Lewis, *Commerce*.

⁴⁴ The policy was intended to reduce agency on the part of post factors. Carlos and Nicholas, 'Agency problems'

giving was essential and if trade was not preceded by a gift exchange and a pipe, there would be no lasting trade. The result was that HBC trading policy was changed to meet Indigenous trading expectations.⁴⁵ Although the London Directors had not initially allowed for the ceremonial aspects of the trade, they did recognize that a knowledge of Cree would facilitate exchange. Because none of the factors came to the Bay fluent in Cree, the London Directors directed post managers to hire local interpreters and then subsequently sent out apprentices with a facility for languages, so that they could learn Cree both to trade directly with those who came to the posts and for inland travel. As with the Jesuits, some factors created dictionaries and phrase books which the Company printed and sent back to the posts as learning materials.

Cree knew what they wanted and would not purchase just any commodities offered. Post factors regularly shipped unsold goods back to London with a notation that ‘the Indians did not want them’. These letters to the head office also made it clear when goods did not meet tastes or rigorous specifications. To give just one example, Indigenous traders would not purchase iron goods with any firing blemishes telling the factors they were substandard. Iron in the 18th century was frangible.⁴⁶ While not problematic in a temperate climate, in the sub-zero winters of northern North America, any blemish could lead to frost wedging and shattering upon impact or blowing up when fired. It became the Company’s responsibility to change suppliers or buy higher quality goods to meet Indigenous requirements. From the Indigenous perspective, there was no point in trading for an iron product that failed.

The Hudson’s Bay Company’s entrance into the fur trade fundamentally changed the underlying market structure to the advantage of the Cree both for those who traded directly and indirectly with the French. Before 1670, trade occurred between Indigenous on one side and French on the other with potentially rotating buyers and sellers in any given year. Now there

⁴⁵ This resulted in the introduction of the Comparative Standard. The difference between the Official and Comparative Standards was termed the Overplus and managers had to keep a strict accounting of all gifts exchanges away from the Absolute Standard.

⁴⁶ See Ray and Freeman, *Give us good measure*, and Carlos and Lewis, ‘Marketing’ and *Commerce*.

was a choice - sell furs to French or English traders, the European side had become a duopsony. Ray and Freeman were the first to document how Indigenous traders, even if there were many such traders, used the opportunity to bargain English and French off against one another telling each about the quality/quantity of goods supplied by the other. The quantitative data suggests that about one third of beaver pelts were carried to the HBC posts and two thirds to French traders with communities deciding on a proportion in each trading season and threaten reduced supplies in subsequent seasons as necessary.⁴⁷ Although we know many different Cree communities or nations were involved in the trade, in essence, Cree communities acted as a single supplier which gave them market power in negotiations with the French or the Hudson's Bay Company.

The ability of the Cree to extract rent from this bargaining situation is evident in the prices received for pelts. Based on the highly detailed Company post records, Carlos and Lewis estimate a fur price index for much of the eighteenth century.⁴⁸ Initially traders received an index price of 70. However, with the expansion of French traders north and west into the York Factory catchment area that fur price index rose eventually reaching 110, shown on the right-hand scale in figure 3. Shown also is the proportion of luxury items purchased by Indigenous traders. As Indigenous traders used competition to increase the price of pelts, or equivalently to increase the wage rate associated with trapping, they spent more of that higher income on luxury goods such as lace, handkerchiefs, textiles, mirrors, a little alcohol (but only about a couple of drinks per person per year) and Brazilian roll tobacco.⁴⁹ In total, traders were purchasing sixty or seventy different goods.

⁴⁷ Ray and Freeman, *idem*.

⁴⁸ This paragraph draws from Carlos and Lewis, 'Marketing' and *Commerce*,

⁴⁹ Despite the tropes about alcohol, very little was consumed the drainage basin of Hudson Bay. In Carlos and Lewis, *Commerce*, they estimate about two glasses of alcohol per person per year, significantly less than colonial settlers in North America.

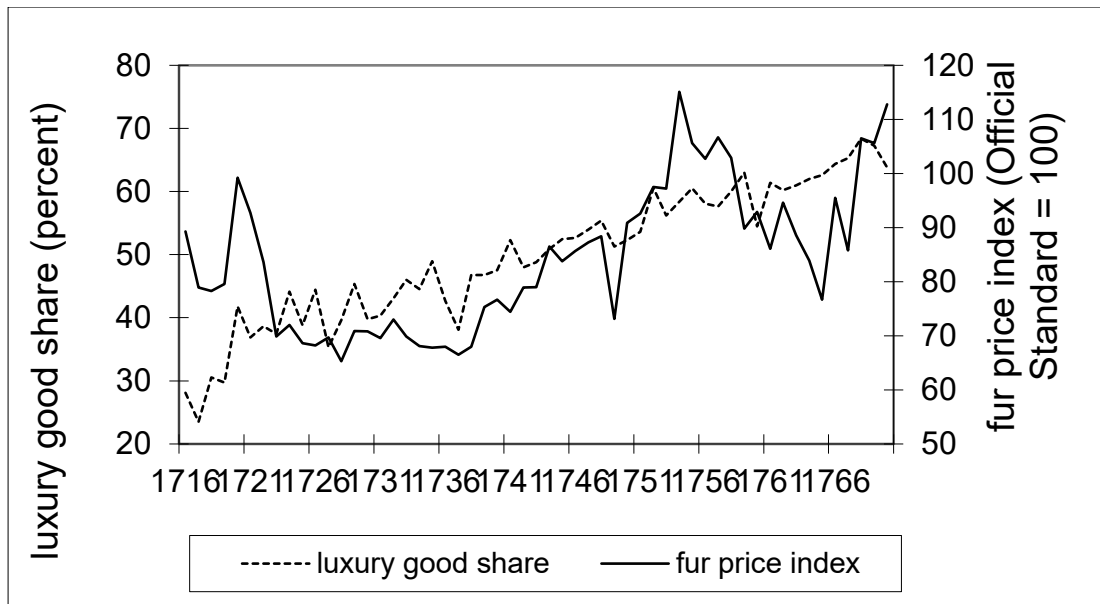


Figure 3: Fur prices paid to Cree Traders and Cree Expenditures on Luxury Goods. Source: Carlos and Lewis 2002 and 2010:146.

The ‘discovery of the Americas’ can be thought of as, albeit an extreme form of, trade liberalization. In his recent paper, Mendoza models and synthesizes the empirical evidence regarding the extent of trade-induced learning and industrial catch-up, finding that technology transfer can induce productivity growth in the recently opened economy.⁵⁰ Trade between the Cree and the HBC provided such an opportunity for local Indigenous nations. Cree purchased a wide range of goods: producer, household, luxury and consumer goods. Producer and household goods had the potential to be productivity enhancing.⁵¹

Producer goods included a range of metal goods such as awls, knives, hatchets but also commodities such as twine and netting. Guns were perhaps useful in hunting but were not used to trap and kill beaver which were generally netted or trapped below water or their lodge broken into. Twine, netting and hatchets made the process both easier and more reliable. Productivity at the household level with the acquisition of iron pots, needles, awls and scrapers would have

⁵⁰ Mendoza ‘Trade induced learning’

⁵¹ See Carlos and Lewis ‘Trade, Consumption’ and idem., *Commerce* for a list of all goods traded.

reduced the time necessary for household tasks and increased productivity in preparing beaver skins for trade. The increase in the capital stock enabled increases on the extensive margin with more communities involved in trade and on the intensive margin with a greater number of beaver being traded by individual communities.

Trapping and killing beaver is not a high-skill activity. European/American trappers in the Rocky Mountains trapped beaver for trade, however, Europeans did not trap beaver in sub-arctic Canada. It is perhaps too easy to say that this was due to the extreme winter climate. The winter climate was harsh but HBC employees chose to live at HBC posts for years and French *coureurs de bois* wintered over and set up families with Indigenous women, but they too did not commercially trap beaver. In other words, Europeans could have trapped and traded beaver and cut out Indigenous trappers, or worked alongside Indigenous trappers; they chose not to do so. It is possible they were discouraged. Violence was rare, but in 1737 and 1756 two groups of HBC men were killed because they had seriously offended local community norms.⁵² In 1776, however, the building of Cumberland House, the first of many inland posts, generated no violence, presumably condoned by the Indigenous communities who benefitted from reduced travel time to a trading location and because HBC traders continued not to trap.

What transpired in the Hudson's Bay Company trade was specialization and a division of labor, with one side trapping and trading pelts for commodities and the other side trading commodities for pelts and transporting those pelts to England or to France. The success of the trade reflected, we argue, learning about Indigenous language, customs, and practices from pre-existing contacts on the part of the new company and the Cree having learned about trading opportunities from second-hand contact with trade goods and communities along the St. Lawrence. The knowledge generated through decades of separate prior contacts allowed for a successful trade for both parties which continued through the nineteenth century.

⁵² Promislow, "Thou Wilt Not Die"

III Khoe and Europeans at the Cape of Good Hope

Table Bay (location of Cape Town) lies approximately 200 km north-west of Cape Agulhas, the most southern point in Africa (see figure 4). Its location at the northern end of the long narrow and mountainous Cape peninsula is dominated by the 1100m high Table Mountain on the coast and visible at sea from many miles away. To the north and east are coastal flats bounded by ranges of mountains. Although, the region has cool wet winters and dry hot summers, it is also semi-arid with an annual rainfall of less than 18 inches (464mm) per year, making water a scarce resource. Additionally, the hot dry summers caused frequent summer fires exacerbated by the strong prevailing winds; the ‘south-easters’ were particularly damaging in the Table Bay area, though weaker behind Table Mountain.⁵³ Fire, of course, played a crucial role in the local ecology, clearing biomass on the ground surface and facilitating vegetation rejuvenation.

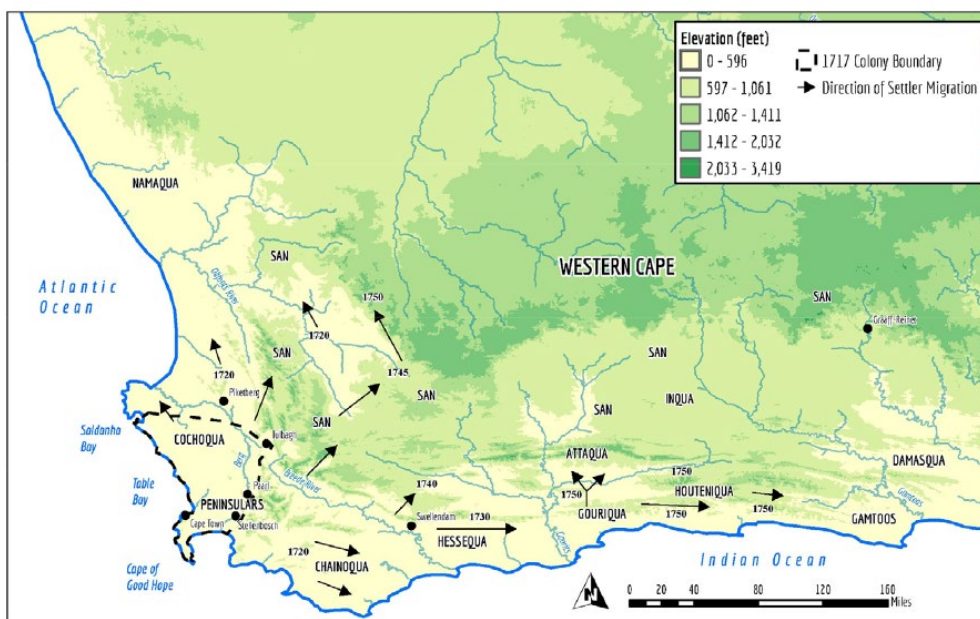


Figure 4: Cape of Good Hope Region and Communities *Source: Dye and La Croix (2020:36)*
 With authors' permission. *Note:* Peninsulars comprise the Gorachouqua, Goringhaiqua, and Goringhaikona (Strandlopers)

⁵³ Van Wilgen et al., ‘Fire management’.

Perhaps to visiting ships land adjacent to the coast looked verdant and fertile, but it is in fact characterized by nutrient-poor sandstone deposits unsuitable for sustained crop cultivation. The slopes on the back of Table Mountain and the mountains forming the Cape belt, however, are relatively more fertile and, while the coast was also relatively infertile, the sea provided a rich diversity of fish and mollusks, seals, penguins and whales.

Indigenous communities at the Cape

Similar to the Cree, the Khoe comprised different nations or communities with a deep history in the region. The Gorachouqua and Goringhaiqua lived and pastured their cattle and sheep on the Cape peninsula itself. The Goringhaikona, a less organized group (sometimes identified as Strandlopers), did not own cattle rather had a marine diet. The three groups together were known by the Dutch as ‘Peninsulars’. North of Table Bay were the Cochoqua, while east of the Bay were the Chainouqua. The Hessequa resided further east beyond the Cape Belt mountains and the Nama had territory to the north of the Olifants river (see figure 4).

There are no estimates of the Khoe population before European contact.⁵⁴ Indeed, the earliest available estimates come from the journals of Jan Van Riebeeck, the first Commander of the Refreshment Station (1652-1662), and provide orders of magnitude at best. Van Riebeeck estimated that there were roughly 300 Goringhaiqua men and 600-700 Gorachouqua men, while the Goringhaikona had less than 100 men. On the basis of these numbers, Elphick judged the total number of Peninsulars (men, women and children) to lie between 4,000 and 8,000.⁵⁵ The Cochoqua and Chainouqua were both more numerous and, from estimates of their cattle stocks, wealthier. The most recent analysis by La Croix proposes a total Khoe population across the Western cape of at least 50,000 in 1652.⁵⁶

⁵⁴ Knowledge is limited due to scant archaeological/anthropological evidence.

⁵⁵ Elphick *Khoikhoi*, p. 92.

⁵⁶ La Croix ‘Khoikhoi’, p. 22.

The Khoe were transhumance pastoralists managing herds of sheep and cows for centuries before the arrival of Europeans.⁵⁷ Because of the semi-arid environment and seasonal variation of rainfall, the Khoe moved herds between summer and winter water sources and coastal and interior regions in a pattern that respected territorial boundaries and water sources.⁵⁸ Such movement allowed for the seasonal regeneration of vegetation in the ‘fallow’ region enabling a herd size larger than could be maintained in permanent settlement, where the lowest seasonal rainfall would define the number of animals. Cattle were herded during the day and corralled at night to be less vulnerable to depredation from lions, leopards and hyenas, or raiding from other groups.

Cattle were primarily prized by the Khoe not for their meat but as a store of wealth, meaning herd size gave a public indicator of status. Animals were used to pay bride price, to settle debts and only occasionally for trade. Khoe diet was varied comprising wild game, shell fish, fish and a wide variety of plants and roots in addition to meat from sheep and milk from cattle. Climatic shocks such as poor rainfall, drought or wildfires could lead to loss of habitat and animal stock, and potentially conflict over water resources or territorial boundaries and, thus, a change in the territorial equilibrium between communities.

Intermittent contact between Khoe and Europeans

Following the voyage of Bartolmeu Dias in 1488 around what became known as the Cape of Good Hope, ships travelling to and from Europe and South Asia could break the journey along the coast of the Cape Peninsula, beginning a 164-year period of intermittent contact between Khoe and Europeans. As in our discussion of intermittent contact between the Cree and Hudson’s Bay Company, we are interested in evaluating the role of ecology, learning,

⁵⁷ Sheep reached southern Africa roughly two to four thousand years ago followed centuries later by cattle. Fauvelle-Aymar and Sadr, ‘Visibility and invisibility’.

⁵⁸ Smith, ‘Pastoral Origins’. Oxen have to be trained to pull, carry or respond to whistles from a young age; Raven-Hart, *Before Van Riebeeck*, p 121.

knowledge, market power, and agency for both Khoe and European during this period of intermittent contact.

We begin by quantifying the extent of contact between Khoe and Europeans. From 1488 to 1660 a total of 2,403 ships made the outbound journey. For the first century, primarily Portuguese ships voyaged to Asia: De Vries (2003) documents that in the next century, Dutch, English, French and Danish ships left Europe, with the majority being Dutch. ⁵⁹ The voyage from Europe to India and south east Asia was lengthy: for Dutch ships, an average of about 250 days on the outbound journey and 224 days on the return.⁶⁰ In 1610, Hendrik Brouwer discovered the eponymous Brouwer route by which ships sailed South from the Cape to catch the prevailing Westerly winds, making the Cape an efficient stopping point. In 1616 the *Heeren* ordered that all VOC ships stop there.⁶¹

In their compilation Bruijn et al. detail all outward and homebound Dutch East India voyages. 764 ships departed the Netherlands for South Asia between 1595 and 1652. Of these only thirty-five explicitly record stopovers. Since many outbound vessels stayed in South Asia, only 405 homebound voyages did not stop ('no call') at the Cape. For some others, we have the exact dates of a stopover. However, for the majority there is limited or no information on recorded. Of these, only six explicitly state 'no call'. For the remaining 399, we have arrival and departure dates at the Cape for a further 147 voyages, with little or no information on dates of stopovers for others. (see Table 1). In Figure 5, we chart the increasing number of ships for which we have some or complete information. These Dutch data provide a lower bound measure of contact between Khoe communities and all Europeans and highlight that trade opportunities varied over time; a volatility that continued throughout the century.

⁵⁹ See de Zwart, 'Globalization' Figure 1 for a graphical representation of the data.

⁶⁰ Bruijn et al. *Dutch Asiatic shipping*, I p.74 and p 89.

⁶¹ Parthesius, *Dutch ships in tropical waters*, p. 114.

Table 1: VOC voyages 1595-1652 and stops at the Cape.

	Outbound from the Netherlands	Homeward bound
Total voyages	764	405
No Call	35	6
Complete data	106	147
Some data	70	37
No Information	553	215

Source: Authors' calculations from Bruijn et al. *Dutch Asiatic shipping*

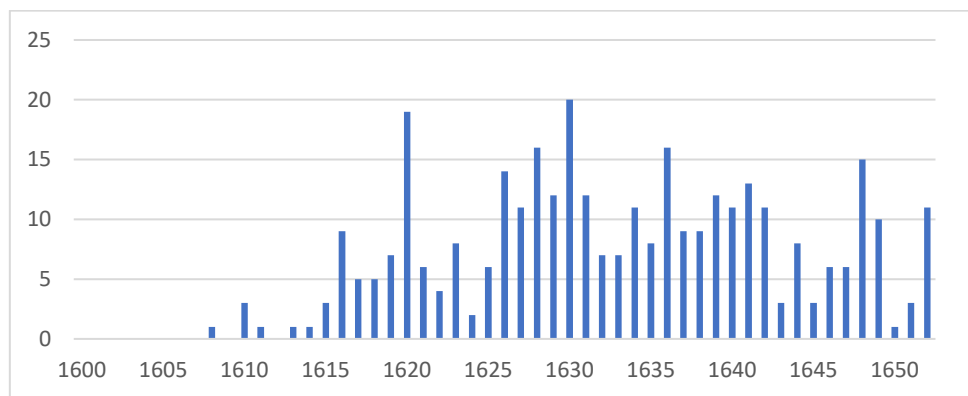


Figure 5: Number of outbound and home bound VOC ships by year stopping at the Cape 1653-1700 for which we have some information: 1600-1652. Source: Bruijn et al. *Dutch Asiatic shipping*.

For those voyages with sufficient information, we calculate the duration of stopovers. The mean number of days spent at the Cape was 13.7: 16.3 days on the outward-bound trip and 12.2 days on the homebound journey, although, as shown in Figure 6, there is variation in length of stay. In years with many ships stopping, some for many days, the total demand on resources was high.

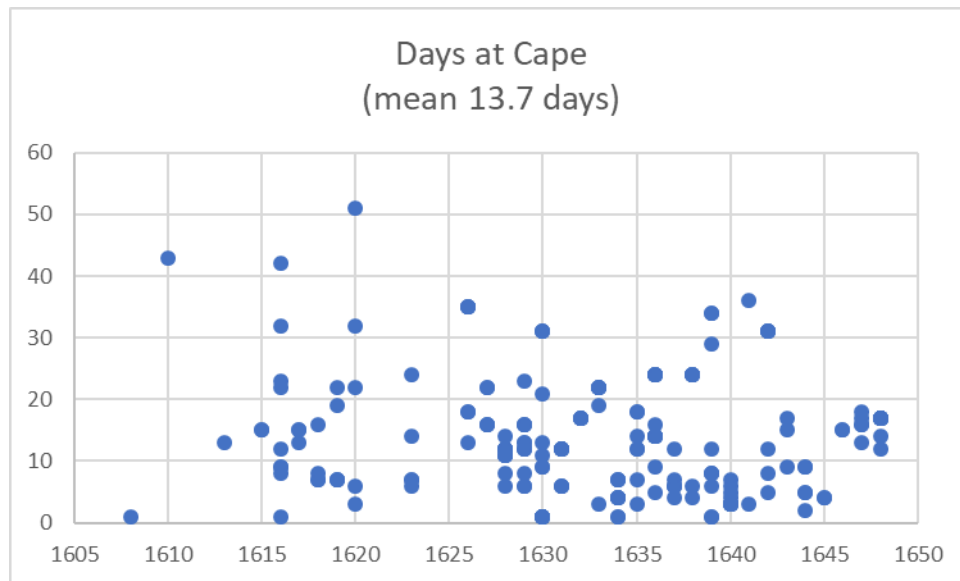


Figure 6: Duration of Stopovers by VOC ships 1595-1652 where information is available.

Authors' calculations. *Source: Bruijn et al. Dutch Asiatic shipping*

The length of the journey, both outbound and inbound, combined with the slowness of Dutch vessels, magnified the threat of scurvy and illness aboard ship and motivated the need for a stopping place. In 1595, Cornelis de Houtman wrote that “there were fully 50 sick, all suffering from scurvy.”⁶² Ten years later, Sir Henry Middleton was more descriptive: “...many of our men fell sick of scurvy, calenture [fever], bloody flux [dysentery] and worms”⁶³ Thus, a stop somewhere for water, recuperation, and fresh provisions could be the difference between a successful or failed voyage.⁶⁴ At the Cape, Europeans found a wide range of fresh provisions. There was an abundance of fish, seals, penguins and wild antelope. But given a choice, European sailors consistently preferred meat from cattle and sheep, which had to be acquired in trade from the Khoe.

⁶² Raven-Hart *Before Van Riebeeck*, p 19.

⁶³ *Idem.*, pp.29p- 30.

⁶⁴ Parethesius gives examples of two voyages that, contrary to protocol, did not stop: *Wapen van Delft* 183 deaths, *Nieuw Delft* 165 deaths. Parethesius, *Dutch ships* p. 99.

We complement the quantitative evidence of increasing contact, with qualitative evidence drawn from Raven-Hart's collection of all extant ships' logs of voyages that stopped at the Cape (1488-1652).⁶⁵ The logs document activities during the stopover, describing European perceptions of the Indigenous communities and of the ecology at the Cape, and help us understand learning and trade between the parties.

Da Gama's logs from 1497 provide the first detailed description of the region. In it he reports that he found "the land is very healthy and temperate, and has good herbage" with herded cattle and sheep, dogs, and gazelle. He further commented on the similarity of the bird life to that of Portugal – sea-ravens (white-chinned petrels), gulls, turtle-doves, larks.⁶⁶ This analogy of the Cape ecology with that of Europe would be repeated in logs over the next century and a half.

Da Gama also captured the possibilities for trade: "On Saturday there arrived about two hundred blacks, large and small, bringing with them about twelve cattle, oxen and cows, and four or five sheep. We went ashore at once." He went on to recount how the Khoe began to play on some flutes, harmonizing together and, in response, the Captain ordered trumpets to be played and there was dancing on the boats. They then "bartered a black ox for three bracelets. We dined off this on Sunday; and it was very fat, and the flesh was as savoury as that of Portugal".⁶⁷ A decade later, in 1510, the Portuguese captain Almeida stopping at the Cape for supplies on his homebound voyage had a different experience which resulted in the death of he and his crew. Reports of willingness and unwillingness to trade would be repeated many times over the next century.⁶⁸

⁶⁵ Raven-Hart found only 20 ships logs prior to 1595, but 133 from 1595 to the building of the Refreshment Station in 1652. *Before Van Riebeeck*.

⁶⁶ Raven-Hart, *Before Van Riebeeck*, p.3.

⁶⁷ *Idem.*, p. 6. This description of a social gathering before trade mirrors that among Cree and Europeans.

⁶⁸ Indeed, even reports of Diaz' visit offer alternative views about the availability of cattle and the willingness of Khoe to trade cattle. Barros, whom Raven-Hart (*idem.* p.186) described as "the outstanding Portuguese historian", though one who embroiders accounts and inserts imaginary conversations, reported that "of cattle we could never have even one head because they so greatly esteem them." Raven-Hart, *idem.*, p.6.

In 1601, the English captain James Lancaster reported buying a thousand sheep and 42 cattle and “might have bought more if we would”⁶⁹, while in 1609, Captain Keeling purchased 450 sheep and 46 cows again for iron pieces.⁷⁰ Yet, the following year Nicholas Downton found the Khoe less willing to trade:

Saldinea [Khoe] having been in former times comfortable to all our nation travelling this way, ... , yielding them abundance of flesh, as sheep and cattle, brought down by the Savage inhabitants, and sold for trifles, as a beef for an iron hoop of 14 inches long and a sheep for a lesser piece, whereby weak sick men ... have been easily recovered, and made strong. ... whither the cattle in former times so abundantly brought down, were prey taken by war from one another, or other differences which might make them greedy of Iron, to make heads for their Lances or Darts, which now by peace or reconciliation they have little need of; but the true cause, for Want of understanding in their language, I know not. But well I found that all the devises we could use by bribes or otherwise to them, which daily came down to our tents in faire weather, would procure nothing from them for our sick men’s relief, and the 4 Cows which we did buy were so old and so lean that there was but little goodness in the flesh for which they would take no Iron but thin pieces of copper”.⁷¹

Downton’s report highlights a number of important points: he knew that previous ships had been able to trade for cattle and that the sick men had recovered; he noted the possible role of war and cattle raiding as influences on the Khoe willingness to trade livestock; and a shift in

⁶⁹ Idem., p. 23.

⁷⁰ Idem., p. 34.

⁷¹ Idem., pp. 47-48.

Khoe preference from iron to copper. A few years later, as European traders adapted to copper, the Khoe altered their requests to include brass.⁷²

The market structure at the Cape in this period of intermittent contact can be characterized as atomistic, with multiple buyers (ships from different European nations) and multiple Khoe suppliers. Given the transhumance nature of Khoe agriculture, different communities or families might be along the coast at different times. Of course, in any particular interaction, the European buyer had a strong demand for fresh meat, while the Khoe supply of cattle or sheep depended on whether there were any excess animals for sale. Khoe demand for European goods was limited reflecting the fact that none of the goods offered in trade enhanced pastoral productivity.⁷³ The atomistic nature of trade at the Cape with multiple Khoe communities, some of whom were willing to trade, and some not, meant that an arriving ship could not depend on being able to acquire the preferred fresh provisions, though there was always a sufficiency of fish, seals and bird life.

The logs make clear that some information about the Cape was shared amongst Europeans. Da Gama noted, when visiting Mossel Bay, that this was where Diaz had stopped for water and that the Khoe had defended their watering-place by throwing stones down from a hill above.⁷⁴ Similarly, when, in 1512, the Portuguese traveller, de Brito, stopped at the Cape for water he knew that this was where Almeida and his crew had been killed. Most famously, ships captains created “Post Offices” where letters were left to both to share information between captains and with the home office.

Despite this sharing of information, the logs show limited knowledge or limited learning about Khoe society and economy. Indeed, Europeans appeared to view the Khoe

⁷² Downton (1615) writes that while the Saldanians used to accept copper “now that comoditie plentiful amongst them, theie altogether desired brasse”. Idem., p. 64.

⁷³ While Mendoza states that trade may enhance productivity, and we find that it did for the Cree, major enhancements in livestock productivity did not occur until the innovations of the early twentieth century. Olmstead and Rhode, *Creating abundance*.

⁷⁴ Raven-Hart, Idem., p.5.

reluctance to trade as the result of character or cultural flaws. The logs consistently portrayed the Khoe as 'brutish,' 'thievish', 'unpredictable,' 'impolite,' and 'uncivilized', or even as 'cannibals.' Captains excused themselves from having to learn the language, writing that it was too hard to learn: "Their speech is wholly uttered through the throate ... that in seven weeks which wee remained here ... the sharpest wit among us could not learne one word of their language; and yet the people would soone understand any signe we made to them"⁷⁵ Captains and crews changed frequently: during our period, only 3 Captains undertook 4 voyages, and 22 others made 2 or 3 voyages but the vast majority only undertook a single voyage, so that time spent on learning the language would not have had a high payoff.⁷⁶

Although general knowledge of Khoe culture and customs remained superficial, the importance of the provisions spurred a few attempts to improve communication. In 1613 'Coree', along with another Khoe who died on board, were taken to London to learn English in hopes he would act as an interpreter or intermediary.⁷⁷ Returning in 1614, Coree does not appear to have become an enthusiastic supporter of a trade in cattle. Although as an interpreter Coree eliminated some informational asymmetries, evidence from Raven-Hart suggests his impact on Euro-Khoe relationships was more complex. An English Captain wrote that Coree might have made his people aware of how trivial iron items were for Europeans, making trade more difficult and expensive.⁷⁸ He may also have exacerbated local conflict or tensions; conspiring with some groups and against others at times, again making trade more difficult. Ten years later, Autshumato, a leader of the Goringhaikona, (called 'Harry' by the English and 'Herry' by the Dutch) was taken or went to Bantam, again with the goal of training as an interpreter. Like Coree, Autshumato sometimes facilitated trade and sometimes hindered it. He

⁷⁵ Idem., p. 23

⁷⁶ Authors' calculation from de Bruijn et al.

⁷⁷ 'Brought' is euphemistic. Reports vary between 'kidnapped' and 'sailed to London' while Coree was on the boat. Idem., p. 64. Elphick, *Khoikhoi* p.80 suggests that Coree was likely Gorachouqua.

⁷⁸ Idem., p. 70.

would, however, come to resist Dutch demands in the aftermath of the building of the Refreshment Station, discussed more fully in the next section.

The actions of Coree and Autshumato and the seemingly conflicted responses to the varying trade opportunities, argue that Khoe communities did not hold a uniform position on trade with ships and later the Post. In fact, referring to Khoe as a collective is wrong and hides important diversity, something Europeans failed to appreciate. The fact that Coree and Autshumato provided both support and opposition to European trade meant that Europeans had co-operation from some Khoe groups, conflict with others. Additionally, the number of European ships arriving fluctuated, reflecting European conflicts, domestic and international, and volatility in trading conditions. Similar factors may have affected the willingness of Khoe to trade. The overall increasing number of stopovers, however, and consequent pressure on local resources, could explain the growing unwillingness to trade by some communities, while being seen as an opportunity by others. Crucially, the Khoe would also have learned that these vessels departed the Cape after brief sojourns. Contact during this century and a half did not threaten Khoe lifeways, nor engender major cultural, social, or economic transformations within Khoe societies.⁷⁹ However, although the evidence from the qualitative and quantitative data implies that the Khoe did not need trade with the Europeans, those trade opportunities may have affected power relations between communities, discussed below.

Permanent contact Between Khoe and Dutch East India Company

The Dutch East India Company (VOC) was established in 1602 to reduce rivalry between various Dutch companies trading to Asia and attenuate expenses (similar factors had led to the establishment of the English East India Company in 1600). The Company was managed by an executive council, the ‘*Heeren XVII*’ with representatives from constituent

⁷⁹ Elphick *Khoikhoi*, p. 164ff.

companies.⁸⁰ As with the Hudson's Bay Company, the distance between the Head Office and overseas factories, meant that communication was paramount and both Companies stressed the importance of correspondence and post record-keeping. Thus, for this permanent contact period, in addition to data on the number of voyages, we draw on journals of the Refreshment Station Commander (particularly Van Riebeeck's journal (henceforth VRJ)) and the correspondence between the Station and the *Heeren*.⁸¹

Despite requiring its vessels to stop at the Cape, the VOC resisted establishing a formal station for decades. Then in March 1647, the Dutch ship *Nieuwe Haarlem* was shipwrecked in Table Bay. Although many of the crew returned to Holland on ships later in the year, several remained to guard remaining cargo, amongst whom was a merchant named Leendert Janszen. On his eventual return to the Netherlands, Janszen argued that it would be strategically advantageous for the VOC to establish a permanent post on the Cape Peninsula; such a post would allow the company to regulate and monopolize trade with the Khoes to provide a more consistent meat supply. In 1650, the *Heeren XVII* endorsed the recommendation and in 1651, they instructed Van Riebeeck to build a 'Lodge' at Table Bay close to the Fresh River, so that passing ships would have "the means of procuring herbs, flesh, water and other needful refreshments – and by this means restore the health of their sick".⁸² Ironically, the post's establishment increased the demand for cattle – for meat as well as for oxen for plowing and transportation of construction materials - in a market in which the supply of cattle was limited both by the constraints of natural reproduction and by Khoes reluctance to trade.⁸³

⁸⁰ Bruijn et al. Dutch Asiatic shipping ch.1.

⁸¹ Moodie *The Record* provides a translation of "Official Papers"; Liebrandt, *Precis*, provides a translation of the VOC journal.

⁸² Moodie, *The Record*, p. 7.

⁸³ Green, *Creating the cape colony*.

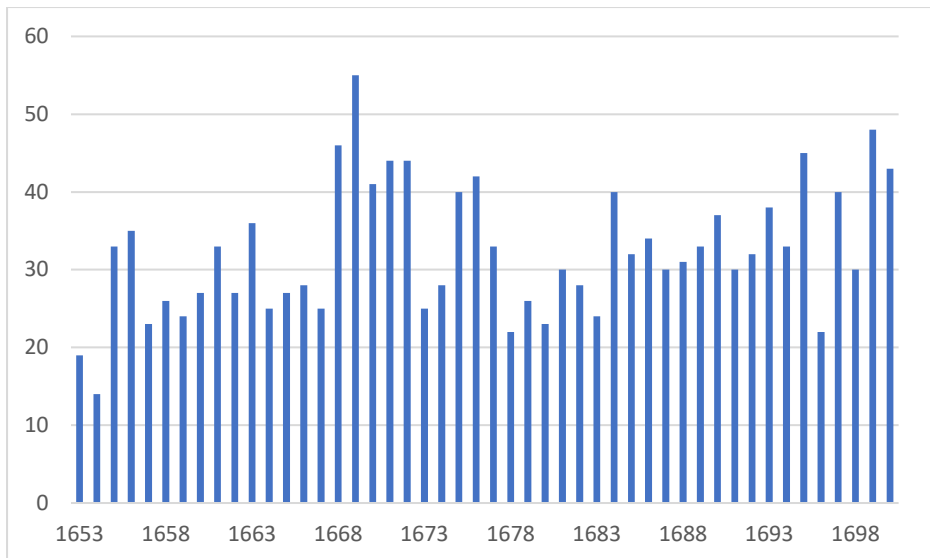


Figure 7 Number of outbound and home bound VOC ships by year stopping at the Cape 1653-1700 for which we have some information: Source: Bruijn et al. *Dutch Asiatic shipping*.

In the two decades prior to the Refreshment Station, fewer than 10 ships stopped at the Cape annually. After 1653, the average rose to 32 and was almost always more than 20. Drawing on Company ledgers, Elphick shows that the Khoe did trade significant quantities of livestock after the opening of the post to 1669.⁸⁴ Over this period, the post traded for 4,656 cattle and 18,683 sheep; roughly 273 cattle per year. Table 2 shows the significance of both ship provisioning and provisioning those at the Post, healthy and sick. But as seen in Figure 7, the number of ships stopping was highly variable and yet the VOC expected that the post would provision all arriving ships. Expecting immediate supply responses to these demand fluctuations, however, showed a lack of understanding of Khoe pastoralism culture.

⁸⁴ Elphick, *Khoikhoi* p. 153

Table 2: Stock acquisition and distribution, 1652-1669.

	Cattle	Sheep
Total acquired	4,656	18,683
Disbursed:		
Ships	2,997	10,120
Dutch (at post and farms)	901	3,247
Hospital	111	3,020
Losses (robbery /death)	536	1,660
Other (incl. sales to Company servants and to foreign ships)	111	636

Source: Elphick, *Khoikhoi* p. 153.

When the Post demand for cattle and sheep exceeded the number that the Khoe were willing to supply, the post governor had to decide how to handle the situation. He could continue to trade at the existing level and supplement livestock provisions with freely available fish; resort to theft; venture deeper into the interior to establish trade connections with additional Khoe groups; subjugate the Khoe through enslavement and confiscate their cattle; or establish Dutch farms. The VOC citing concerns over the considerable costs, issued a directive forbidding the men at the Cape from enslaving the Khoe.⁸⁵ While theft did occur, this was never a significant source of cattle. Van Riebeeck, opted to trade with communities deeper in the interior and sought permission from the *Heeren* to allow some company servants to farm on their own account. Both strategies brought him in conflict with the Peninsular Khoe.

As imagined in Holland, the Refreshment Station would have gardens, growing vegetables for itself and ships. On arrival, Van Riebeeck immediately tried to establish gardens but within 5 years it was clear that the Post could not produce enough food from either trade

⁸⁵ The VOC imported enslaved persons from Asia who were mainly fed on fish.

or farming to satisfy expectations. So in 1657, the *Heeren* XVII approved the creation of a class of independent farmers: nine servants were each allocated 28 acres on the Liebeeck river behind Table Mountain, a water source that the Khoes used seasonally for their herds.

Given their location, Peninsular Khoes had acted as middlemen to groups such as the Cochoqua and Chainoqua with larger cattle herds. But, as the VOC set up farms, it also began trading directly with the Cochoqua. Elphick attributes this shift to the influence of Kratoa (known as Eva by the Dutch), a Cochoqua woman who stayed at the Fort and had become fluent in Dutch.⁸⁶ When Autshumato left the fort in 1653 Kratoa appears to have taken over his role as interpreter/intermediary.⁸⁷ Ten years later, in an attempt to improve communication, a Khoes vocabulary was compiled at the Post but on receiving it the *Heeren* responded that “The natives should learn our language, rather than we theirs”.⁸⁸

Khoes saw the settlements along the Liesbeeck as theft of grazing lands and access to water. The resulting skirmishes are known as the First Khoes Dutch war, though war is perhaps too strong a term. Led by another interpreter Nommoa/Doman, the Peninsular Khoes attacked the settlers forcing them back to the Station. Skirmishes continued through 1659 with neither side gaining an upper hand: settlers were restricted to the Station, which the Khoes did not attack. In 1660, the Goringhaiqua and Gorachouqua and VOC signed a treaty that allowed the Khoes to keep captured cattle and the settlers to keep farming.⁸⁹ In response to the Treaty, Van Riebeeck laid out a boundary along the Liesbeeck denoting settler lands and Khoes access to pastures and water supplies on the peninsula. Despite the treaty, Van Riebeeck wrote, some Khoes continued to see the farms as theft; citing one leader as saying:

⁸⁶ Elphick, *Khoikhoi* p. 111.

⁸⁷ We know her name from the records but many details of her life and role are unclear.

⁸⁸ Wilson, *Oxford History of South Africa*, p. 66

⁸⁹ Van Riebeeck, April 4, 1660, writes that Autshumato and Gogosa, Chief of the Goringhaiqua, came to the fort with ‘all the principal men and elders’ and concluded the peace, followed by gifts of copper and beads and feasting.

*It would be of little consequence if you people stay here at the fort, but you come right into the interior and select the best land for yourselves, without even asking whether we mind or whether it will cause us any inconvenience...As for your claim that the land is not big enough for us both, who should in justice rather give way, the rightful owner or the foreign intruder?*⁹⁰

Elphick argues that the outcome reflected the studied neutrality of the Cochoqua, who saw potential benefits in the diminution of a competitor in the livestock trade.

In the decade of the 1660s, while the Post continued to buy small numbers of cattle and sheep from the Peninsulars, but now most came from the Cochoqua. Initially the Cochoqua came to the Fort, but then rather than taking their time to go there, they sent messengers asking the Company to come to their kraal. Company servants did so, and from there ventured on longer trips to obtain cattle from Hessequa and Chainouqua. But, even as they did so, they resented the ‘costly expeditions’ that replaced the ‘far more economical arrangement’ of having Khoe come to the castle.⁹¹

Prices paid by the Dutch for cattle capture the dynamic interplay of supply and demand.⁹² Through to the early 1660s, prices gradually increased as rising Dutch demand for cattle was not met by an increasing supply by the Cochoqua. In response, as Dutch expeditions obtained cattle from further afield, prices declined in the second half of the 1660s. This pattern mirrors the pattern of behavior observed during the intermittent contact period: at first, enough cattle were supplied and then they became more scarce and prices rose. Similarly, immediately after the establishment of the post, as Dutch demand rose, prices to acquire cattle from the Peninsulars rose; but prices fell as the VOC began acquiring cattle directly from the Cochoqua.

⁹⁰ Idem., 5 and 6 April 1660, vol 3 p. 195,

⁹¹ Liebrandt, *Precis*, p. 279.

⁹² Elphick, *Khoikhoi*, p. 162.

At the margin, Khoe communities were willing to trade some amount of cattle but it appears that the reservation price grew as their stocks of (durable) trade goods rose.

In the 1670s the growing numbers of Europeans at the Post increased the need for provisions recreating the pressure for expansion and the company again followed the dual strategy of expanding settlement and trading further inland. The company now created settlements in Saldanha Bay in 1670, and in Hottentots Holland in 1672.⁹³ The Cochoqua were increasingly resentful of the competition for trade and Gonnema, the Cochoqua chief, expressed concerns about “the gradual encroachment of whites on his preserves”⁹⁴. From 1674 to 1677, there were repeated skirmishes between the Cochoqua and the VOC, known as the second Khoe Dutch war. Elphick notes that a number of Khoi tribes allied with the Dutch citing one expedition comprised of 100 Europeans and 400 Khoe.⁹⁵ Thus, the second ‘Khoe-Dutch’ war, like the first, can be seen equally as an interaction in which Khoe groups were using one another and the Dutch, to achieve their own political and territorial goals. The war concluded with a peace agreement in June 1677, signed by representatives of the Cochoqua and of the VOC, in which the Cochoqua agreed to provide 30 head of cattle per year to the VOC “as tribute” and settlers lost no land.⁹⁶

In 1679, a new Commander, Simon Van der Stel, arrived with instructions to expand wheat farming. He created the districts of Stellenbosch in that year and Drakenstein in 1687, allotting 80 to 160 acres to potential farmers. The growing European farming population and consequent reduced reliance on Khoe supplies meant that after 1700, although conflict over

⁹³ Liebrandt, *Precis*, p. 331 et passim. Green, *Creating the Cape colony* states that until the end of the 17th century, the VOC was mostly in control of settler expansion, in contrast to the 18th century when settlers pushed beyond where the VOC would have wanted. See also Dye and La Croix ‘Institutions.

⁹⁴ Marks; ‘Khoisan’, p. 66.

⁹⁵ Elphick, *Khoikhoi*, p.130.

⁹⁶ Moodie, *The Record*, p.352.

land would continue with deaths on both sides, “the colony as a whole was no longer threatened”.⁹⁷

IV Divergent Trajectories

Contact between different groups is not just fraught with anxiety, stress, and possibly danger but also with curiosity and opportunity. When Europeans stopped at points along the coasts of the Americas and Africa, parties were meeting the other for the first time. Although, the Khoe might have heard about Europe and Europeans through trade routes before 1500, this was less so the case for Indigenous communities in the Americas; essentially, these were first contact situations. Neither side knew the language, customs or norms, or the ecological environment of the other. Both sides no doubt saw the other as different in language, dress, manner, means of transportation, and commodities. If the meeting was not hostile, gestures, presents, offerings of food would help breach the distance. Repeated contacts between the same groups would presumably increase information but information did not necessarily lead to intercultural understanding.

A shift from autarky carries with it potential for gains. If there is a double coincidence of wants, an economy will shift some resources into producing more of its potential tradable/export good but the extent of the gains depends on the particular circumstances. The arrival of Europeans did not necessarily imply the existence of gains from trade and Indigenous responses to the trade opportunities in our two environments, both before and after the posts were constructed, reflected their understanding of this.

The building of a HBC post on the shores of Hudson Bay represented the formalization of trading activities. By building a post the Company showed its determination to enter the trade in beaver pelts. Even if not self-actualized by the Company, the trade was structured

⁹⁷ Marks, ‘Khoisan resistance’ p.69. See also Dye and La Croix, ‘Institutions’ for an extended discussion of these conflicts.

around the needs and cultural practices of the *Cree*, from the goods they would purchase, to the ways in which the exchange had to happen, to the language in which the trade was conducted. The Cree set the parameters - parameters gleaned from decades of intermittent and arms-length interactions with second-hand trade goods and social interactions with communities in direct contact with French traders and Jesuits - and the HBC adopted those parameters.

Beaver pelts lay at the center of the trade for the Cree who increased beaver trapping and sold pelts to acquire goods that they could not produce themselves - including some which were productivity-enhancing. The *Mushkegowuk* (Lowland Cree) also supplied country provisions aiding the survival of the posts in winter after winter, and reduced incentives for factors to move inland in search of either food or beaver. Indeed, each element of the trade supported Cree welfare, ensuring the long-term survival of the posts and access to trade goods. By 1740, the Cree had a standard of living as high or higher than English wage workers as noted above.

With the building of a permanent refreshment station, the VOC formalized its relationship with the Cape. Rather than each ship having to try and acquire food, water, or timber on its arrival at the Cape, a post would acquire stores and stand ready to supply the ships, thus reducing uncertainty about provisions. Yet while a manned refreshment station made sense for the VOC in the context of their increasing voyages to East Asia, it ignored the history of Khoe interactions over the prior decades. Indeed, and perhaps because each voyage was a single voyage, captains and crew never came to understand Khoe lifeways. The Europeans' primary demand was for meat - sheep and cattle - which the Khoe would trade only in small numbers. Khoe communities showed little interest in continuous acquisition of the goods offered in trade - copper, pieces of iron, brass, beads, blankets - none of which enhanced pastoral productivity. For the Khoe, the gains from trade appeared limited; there were

no goods offered by Europeans that the Khoe wanted as much as their livestock. The Europeans had a demand and a desire to trade, but trade requires a *double* coincidence of wants and the Khoe saw little they wanted and used their agency to walk away.

With the construction of its Refreshment Station, the VOC head office initially expected that the post would raise some livestock and grow wheat. These attempts were unsuccessful due to the dry and windy climate. In 1657 the head office gave permission for Van Riebeeck to allocate land to some company servants to farm. The Khoe pushed back in a series of conflicts, but ultimately they failed to dislodge the Europeans and within five decades, for many, their traditional lifeways in the southwestern Cape had disappeared.

It is perhaps easy to say that the ecology at the Cape facilitated European settlement and that the ecology at the Bay made settlement more difficult. However, neither the HBC nor the VOC head offices initially wanted settlements, they wanted trade goods and provisions, and, in particular for the VOC, fresh meat. Settlements were costly but for the VOC the relative costs of settlement changed as the posts grew unable to supply the increase in Asian shipping. Facing an inelastic supply of cattle by Khoe, and unwilling to accept substitute provisions, such as easily available fish, the VOC chose to encourage settlement on Khoe land.⁹⁸

V Concluding Remarks

The consequences for Indigenous communities of European expansion have been severe with land dispossession and little access to resources, education, or financial markets. However, the trajectories of individual communities to this nineteenth and twentieth-century outcome were not the same. In this paper we explain how divergence in outcomes for the Cree and Khoe fifty years after the establishment of permanent posts were structured by the decades of prior intermittent contact. The Cree and the Khoe both encountered Europeans in the 16th century.

⁹⁸ Dye and La Croix, 'Institutions for the taking'.

The forces of learning, political economy, supply and demand, and ecology are all reflected in the trade outcomes chosen by the Cree and by the Khoe.

Within seventy years of formal interaction between the Cree and the Hudson's Bay Company (HBC) and the Khoe and the Verenigde Oostindische Compagnie (VOC), the Cree and Khoe were on quite divergent trajectories, with the Cree reaping gains from trade and the Khoe facing dispossession of their land and few, if any, gains from trade. Cree actions and agency supported the trade for their own benefit. Khoe actions and agency rejected trade for their own benefit. Unfortunately, that agency, demonstrated through skirmishes and the violence that followed, failed to push back the Europeans who gained through land acquisition what was not possible through trade. Our analysis highlights the implications of using a reciprocal comparison and suggests many counterfactuals: What if the Khoe had presented a single face against the VOC? What if the Lowland Cree had tried to use the HBC against other Cree nations or had walked away from trade? What if the VOC had tried harder to find trade goods or other wealth assets to persuade the Khoe to sell more cattle?

Although, ultimately, by the end of the nineteenth century, both Cree and Khoe faced dispossession and poverty, to view the seventeenth- and eighteenth-century interactions through the lens of the twentieth is to deny Indigenous communities any active role in their history and to erase decades or centuries of a quite different narrative. In erasing the early history, we erase Indigenous agency and Indigenous communities' organization and management of their interaction with the newcomers.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2002). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution. *The Quarterly Journal of Economics*, 117(4), 1231–1294.
- Allen, R. C. (2001). The Great Divergence in European Wages and Prices from the Middle Ages to the First World War. *Explorations in Economic History*, 38(4), 411–447.
- Anderson, T. L., and F.S McChesney (1994). Raid or Trade? An Economic Model of Indian-White Relations. *The Journal of Law and Economics*, 37(1), 39–74.
- Austin, G. (2007) ‘Reciprocal comparison and African history: tackling conceptual Eurocentrism in the study of Africa’s past.’ *African Studies Review*, 50(3) 1-28.
- Bogdanski, Bryan E.C, (2008) ‘Canada’s Boreal Forest Economy: economic and socioeconomic issues and research opportunities.’ Information Report BC-X-414, Natural Resources Canada.
- Bruijn, J. R., Gaastra, F. S., Schöffers, I., Vermeulen, T., & van Eyck van Heslinga, E. S.. (1979). *Dutch-Asiatic shipping in the 17th and 18th centuries*. M. Nijhoff.
- Carlos, A. M. (2023) ‘The Country They Built: Dynamic and Complex Indigenous Economies in North America before 1492.’ *The Journal of Economic History*, 83(2), 319–358.
- Carlos, A. M., & Lewis, F. D. (2002). Marketing in the Land of Hudson Bay: Indian Consumers and the Hudson’s Bay Company, 1670–1770. *Enterprise and Society*, 3(2), 285–317.
- Carlos, A. M., & Lewis, F. D. (2010). *Commerce by a frozen sea: Native Americans and the European fur trade*. University of Pennsylvania Press.
- Carlos, A. M., & Nicholas, S. (1990). Agency problems in early chartered companies: The case of the Hudson’s Bay Company. *The Journal of Economic History*, 50(4), 853–875.

- De Vries, Jan. (2003) Connecting Europe and Asia: A quantitative analysis of the Cape-route trade, 1497-1795. In *Global Connections and Monetary History, 1470-1800*, edited by D. O. Flynn, A. Giraldez, and R. von Glahn, Ashgate.
- de Zwart, Pim. (2016). Globalization in the early modern era: New evidence from the Dutch-Asiatic trade, c. 1600-1800. *The Journal of Economic History*, 76(2), 520-558.
- Déry, S. J., Mlynowski, T. J., Hernández-Henríquez, M. A., & Straneo, F. (2011). Interannual variability and interdecadal trends in Hudson Bay streamflow. *Journal of Marine Systems*, 88(3), 341–351.
- Dowd, G. E. (2022). Indigenous Self-Vanishing? Relating the North American “Iroquois Wars” and the Southern African *Mfecane*. *The William and Mary Quarterly*, 79(3), 393–424.
- Dye, A., & La Croix, S. (2013). The political economy of land privatization in Argentina and Australia, 1810-1850; a puzzle. *The Journal of Economic History*, 73(4), 906-936.
- Dye, A., & La Croix, S. (2020). Institutions for the taking: Property rights and the settlement of the Cape Colony, 1652–1750. *The Economic History Review*, 73(1), 33–58.
- Easterly, W., & Levine, R. (2016). The European origins of economic development. *Journal of Economic Growth*, 21(3), 225–257.
- Elphick, R. (1985). *Khoikhoi and the founding of white South Africa*. Ravan press.
- Elphick, R., & Malherbe, V.C., V. C. (1989). The Khoesan to 1828. In Elphick, R. & Gilomee, H. (Eds.), *The Shaping of South African Society, 1652–1840* (2nd ed., pp. 3–65). Wesleyan University Press.
- Engerman, S. L., & Sokoloff, K. L. (2002). *Factor endowments, inequality, and paths of development among new world economics*. National Bureau of Economic Research Cambridge, Mass., USA.

- Farrington, A. J., Lubker, S., Radok, U., & Woodruff, S. (1998). South Atlantic winds and weather during and following the little ice age? A pilot study of English East India Company (EEIC) ship logs. *Meteorology and Atmospheric Physics*, 67(1–4), 253–257.
- Fauvelle-Aymar, F.-X., Sadr, K., Bon, F., & Gronenborn, D. (2006). The visibility and invisibility of herders' kraals in Southern Africa, with reference to a possible early contact period KhoeKhoe Kraal at KFS 5, Western Cape. *Journal of African Archaeology*, 4(2), 253–271.
- Fourie, J., & Garmon, F. (2023). The settlers' fortunes: Comparing tax censuses in the Cape Colony and early American republic. *The Economic History Review*, 76(2), 525–550.
- Friesen, T. M., & Arnold, C. D. (2008). The timing of the Thule migration: New dates from the western Canadian Arctic. *American Antiquity*, 73(3), 527–538.
- Friesen, T. M., & Mason, O. K. (Eds.). (2016). *The Oxford handbook of the prehistoric Arctic*. Oxford University Press.
- Garcia-Chapeau, M., (2016) *Le refuge huguenot du cap de Bonne-Espérance - genèse, assimilation, heritage* Paris : Honoré Champion.
- Grant, W.L. (1907). *Voyages of Samuel de Champlain 1604-1618*. Charles Scribner's Sons.
- Green, E. (2022). *Creating the Cape Colony: The political economy of settler colonization*. Bloomsbury Academic.
- Harris, R. C., Matthews, G. J., Gentilcore, R. L., Measner, D., Kerr, D. G. G., & Walder, R. H. (1987). *Historical Atlas of Canada: The land transformed, 1800-1891*. University of Toronto Press.
- Innis, H. A. (1930). *The fur trade in Canada* Yale University press.
- La Croix, S. (2018). The Khoikhoi Population, 1652-1780: A Review of the Evidence and Two New Estimates. *Studies in Economics and Econometrics*, 42(2), 15–34.

- Liebrandt, H. C. V. (Ed.). (1901). *Precis of the archives of the Cape of Good Hope: Journal, 1662-1670*. Richards, Government Printers.
- Lytwyn, V. P. (2002). *Muskegowuck Athinuwick: Original people of the great swampy land*. University of Manitoba Press.
- Marks, S. (1972). Khoisan resistance to the Dutch in the seventeenth and eighteenth centuries. *The Journal of African History*, 13(1), 55–80.
- McManus, J. C. (1972). An Economic Analysis of Indian Behavior in the North American Fur Trade. *The Journal of Economic History*, 32(1), 36–53
- Mendoza, Robert U. (2010). Trade-Induced Learning and Industrial Catch-Up. *The Economic Journal*, 120 (August) F313–F350.
- Moodie, Donald. (1838). *The Record: Or Official Papers relative to the Condition and Treatment of the Native Tribes of South Africa*. A.S. Robertson.
- Olmstead, Alan L. and Rhode, Paul W. (2008). *Creating Abundance: Biological Innovation and American Development*. Cambridge University Press.
- Parnthesius, R. (2010). *Dutch Ships in Tropical Waters: The development of the Dutch East India Company (VOC) Shipping Network in Asia 1595-1660*. Amsterdam University Press.
- Pomeranz, K. (2000). *The Great Divergence: China, Europe, and the Making of the Modern World Economy*. Princeton University Press.
- Promislow, J. (2010). “Thou Wilt Not Die of Hunger ... For I Bring Thee Merchandise”: Consent, Intersocietal Normativity, and the Exchange of Food at York Factory, 1682-1763. In Webber, J. & MacLeod, Colin M. (Eds.), *Between Consenting Peoples: Political Community and the Meaning of Consent* (pp. 77–114). University of British Columbia Press.

- Putterman, L. and D. Weil (2010) 'Post-1500 population flows and the long-run determinants of economic growth and inequality' *Quarterly Journal of Economics* 125(4) 1627-1682.
- Raven-Hart, R. (1967). *Before Van Riebeeck: Callers at South Africa from 1488-1652*. C. Struik.
- Ray, A., & Freeman, D. B. (1978). *Give Us Good Measure: An economic analysis of relations between the Indians and the Hudson's Bay Company before 1763*. University of Toronto Press.
- Ray, A. J. (1976). *Indians in the fur trade: Their role as trappers, hunters and middlemen in the lands southwest of Hudson Bay, 1660 - 1870*. Univ. Press.
- Rich, E. E. (1958). *The History of the Hudson's Bay Company, 1670-1870*. By E.E. Rich, Etc. [With Plates.]. Toronto.
- Shutte, G. (1989). Company and Colonists at the Cape'. In Elphick, R. & V. C. Malherbe, (Eds.), *The Shaping of South African Society, 1652-1840* (pp. 283–323). Wesleyan University Press.
- Smith, A. B. (2008). Pastoral origins at the Cape, South Africa: Influences and arguments. *Southern African Humanities*, 20(1), 49–60.
- Solar, P. M., & De Zwart, P. (2017). Why were Dutch East Indiamen so slow? *International Journal of Maritime History*, 29(4), 738–751.
- Van der Merwe, P. J. (1995). *The migrant farmer in the history of the Cape colony, 1657-1842* (R. B. Beck, Trans.). Ohio University Press.
- van Riebeeck, J., & Thom, H. B. (1952). *Journal of Jan Van Riebeeck: Edited and with an Introduction* Van Riebeeck Society.

Van Wilgen, BW GG Forsyth, H De Klerk, S Das, S Khuluse, P Schmitz, (2010) 'Fire management in Mediterranean-climate shrublands: a case study from the Cape fynbos, South Africa' *Journal of Applied Ecology* 47(3) 631-638.

Webber, J., & Macleod, C. M. (Eds.). (2010). *Between consenting peoples: Political community and the meaning of consent*. University of British Columbia Press.

Wilson, Monica, & Thompson, Leonard (Eds.). (1969). *The Oxford History of South Africa*. Oxford University Press.