

INTRODUCTION

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In 1638 the city fathers of Amsterdam received Maria de' Medici (1575–1642), the former queen of France. As part of her glorious entry, she was welcomed at the Oost-Indisch Huis (East India House), the local headquarters of the Dutch East India Company (VOC). Here Maria de' Medici was given a taste of the overseas world which the VOC controlled. In the boardroom of the directors she could look at Chinese and Japanese paintings and views of the overseas territories of the VOC in Asia, hanging alongside weapons of conquered peoples. She was even given a taste of exotic foods and spices served on imported porcelain. According to Caspar Barlaeus, '[t]he eyes of Medici went astray; and she imagined herself to be a guest of Indians, Moluccans, Persians, Japanese and Chinese, when she saw this exotic and unusual banquet.' For her Amsterdam hosts the banquet was probably less exotic. They presented de' Medici with goods which were imported from the East Indies on a yearly basis.¹

For more than a century, from about 1600 until the early eighteenth century, the Dutch dominated world trade.² Via the Netherlands the far reaches of the world, both in the Atlantic and in the East, were connected. Dutch ships carried goods, but they also opened up opportunities for the exchange of knowledge. The commercial networks of the Dutch trading companies, i.e. the Dutch East India Company (Verenigde Oost-Indische Compagnie, VOC) and West India Company (West-Indische Compagnie, WIC), provided an infrastructure which was accessible to people with a scholarly interest in the exotic world. In some cases, such as in the relationship between the VOC and the Japanese, this interest developed into an almost structural

¹ Caspar Barlaeus, in Dapper O., *Historische beschryving der stadt Amsterdam* [...] (Amsterdam, Jacob van Meurs: 1663) 656, 660–1 with the quotation on 660–661. Originally in Barlaeus C., *Blyde inkomst der alldoorluchtighste koninginne, Maria de Medicis, t'Amsterdam* (Amsterdam, Johan en Cornelis Blaeu: 1639). With thanks to Elmer Kolfin for this reference and comments on an earlier version of this Introduction.

² Israel J.I., *Dutch Primacy in World Trade, 1585–1740* (Oxford: 1989).

exchange of knowledge on an exceptionally large scale. Via the Dutch trading post Deshima (1641–1859), an artificial island in the harbour of Nagasaki, employees of the VOC with an interest in the subject could collect information about Japan's geography, culture and medical practices, in particular acupuncture and moxibustion. At the same time Japanese scholars used Deshima as a window to Europe after the shoguns had closed Japan off from the rest of world (1635–1853).³ In various other places of the Dutch colonial world, both in the West and the East Indies, 'liefhebbers' (*virtuosi*; *amateurs*) collected specimens, made descriptions and drawings.⁴ Their 'immutable mobiles' were sent to Europe and became part of collections of curiosities or were further disseminated in print.⁵ They contributed substantially to the accumulation of European knowledge of the transoceanic worlds during the early modern period.

The present collection of essays brings together a number of case studies about knowledge construction which depended on the Dutch trading networks. The knowledge that is at issue in this volume has in most cases a descriptive quality. It belonged to the encyclopaedic field of knowledge production which followed the example of Pliny's *Naturalis Historia*.⁶ Harold Cook's *Matters of Exchange* has recently pointed out that this kind of descriptive knowledge was no less important for the development of science during the time of the scientific revolution than the more abstract knowledge of physics and astronomy. *Matters of Exchange* also shows that researchers from the Dutch colonial world – many born outside the Republic – made important contributions to this field.

The essays in this volume complement Cook's argument. While *Matters of Exchange* is mainly concerned with knowledge in the fields

³ Blussé L. et al. (ed.), *Bridging the Divide: 400 years The Netherlands-Japan* (Leiden: 2000).

⁴ Cf. Cook H., *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven: 2007) 72 for the Dutch 'liefhebbers'.

⁵ Latour B., *Science in Action. How to Follow Scientists and Engineers through Society* (Cambridge, MA.: 1987) 227.

⁶ Seifert A., *Cognitio historica. Die Geschichte als Namengeberin der frühneuzeitlichen Empirie*. (Berlin: 1976); Neuber W., "Zur Gattungspoetik des Reiseberichts. Skizze einer historischen Grundlegung im Horizont von Rhetorik und Topik." in: Brenner P.J. (ed.), *Der Reisebericht. Die Entwicklung einer Gattung in der deutschen Literatur* (Frankfurt am Main: 1989) 50–69.

of natural history, medicine and geography, many essays in the current volume also address knowledge production in the orbit of the humanities. Moreover, the European reception of knowledge which was collected through the Dutch trade networks receives more attention in this volume. Current research usually overlooks the dissemination of knowledge in countries outside the Netherlands – with the exception of Japan – and treats scholars such as the German naturalist Georg Rumphius, who were born and raised in other European countries, as if they were more or less native Dutchmen. Future research should pay more attention to the European dimension, discerning in various countries different degrees of reception of knowledge generated with the assistance of the Dutch trading networks and taking the intellectual background of colonial scholars and scientists in countries outside the Netherlands into account.

The Dutch Trading Companies

To provide some context, a rough sketch of the history of the Dutch trading companies is necessary. Compared to other seafaring nations the Dutch were relative latecomers to the global trade. Their traditional trading partners were located on the European Atlantic coast and in the Baltic Sea region. By the late sixteenth century the Dutch started developing commercial activities in the tropics. The scale of these overseas pursuits was greatly enhanced by the establishment of joint-stock trading companies in the seventeenth century, the VOC (1602–1799) and WIC (1621–1792).

The VOC was established in 1602 to replace previous syndicates which were dissolved at the end of each voyage and re-established for each new voyage (the so-called pre-companies – ‘Voorcompagnieën’). The fleets of these earlier companies were in competition with each other. To be able to combat superior Portuguese forces in the East, the supreme governmental body in the Dutch Republic, the States General, compelled the stakeholders in the Asian trade to establish a new entity, the United East India Company. The companies which had previously been involved in trade with Asia were reorganized into ‘chambers’. The chambers appointed delegates for the general board of directors, who were called the ‘Heren XVII’ (Gentlemen XVII). The States General gave the VOC a mandate to act as a semi-independent arm of the Dutch Republic; east of the Cape of Good Hope it could

negotiate treaties, engage in warfare and act as an almost sovereign power,⁷ financing these activities with the profits from trade.

The first major success of the VOC in the East was the capture in 1605 of the Portuguese fort on Ambon, which also became the first step in acquiring a monopoly in the trade of spices. The same year the VOC started trading with the east coast (Coromandel) of the Indian subcontinent. Attempts to trade with the west coast (Malabar) faltered at first, but from 1616 the Mogul Empire allowed the VOC to start operations in Surat. Westward the VOC established itself from 1624 in Persia and in East Asia it opened a factory in Japan in 1609. From 1624 onwards Taiwan was gradually conquered, but in 1662 Taiwan was lost to a general of the Ming dynasty, Zheng Chenggong (1624–1662), alias Coxinga, who had opposed the rise of the Qing Dynasty and was forced to flee from the Chinese mainland. The loss of Taiwan was the biggest defeat suffered by the VOC during the seventeenth century.

In 1619 the VOC conquered Jakarta on Java and built Batavia on its ruins. Batavia, the ‘Queen of the East’, named after the homeland of the semi-mythical ancestors of the modern Dutch, the Germanic Batavians, became the seat of VOC administration in Asia after the example of Portuguese Goa. Further territories were conquered both on Java and on Ambon and between 1638 and 1658 the coastal regions of Ceylon were taken over from the Portuguese. With this, the VOC could lay its hands on the most important centre for the production of cinnamon. Subsequently, the VOC managed to acquire the monopoly in the trade of cloves, nutmeg and mace in eastern Indonesia after the conquest of Macassar during the period from 1666 to 1669.⁸

After the establishment of a settlement at the Cape of Good Hope in 1652 the VOC covered an enormous area with a vast number of settlements, fortifications and trading posts from the Cape to Japan. Most of these settlements only housed a small number of Europeans, often under hazardous health conditions.⁹ An extreme example of these conditions is the fortified trading post at Delagoa Bay in

⁷ Somers J.A., *De VOC als volkenrechtelijke actor* (Gouda: 2001).

⁸ Boxer J.R., *The Dutch Seaborne Empire, 1600–1800* (London: 1965); Gaastra F.S., *Bewind en beleid bij de VOC. De financiële en commerciële politiek van de bewindhebbers, 1672–1702* (Zutphen: 1989); Gaastra F.S., *De geschiedenis van de VOC* (Zutphen: 1991); Jacobs E.M., *Koopman in Azië. De handel van de Verenigde Oost-Indische Compagnie tijdens de 18e eeuw* (Zutphen: 2000).

⁹ Oostindie G. (ed.), *Dutch Colonialism, Migration and Cultural Heritage* (Leiden: 2008).

present-day Maputo, on the east coast of Africa. The post was established in 1721 in the hope of acquiring gold – important in the trade in Asia – from the semi-mythical African ‘empire’ of Monomotapa, which existed only on European maps at that time. Life in this settlement was extremely harsh. The fort was situated in a malaria region, which turned it into one of the many graveyards of Europeans in the tropics. There were other setbacks as well. In 1722 the settlement was captured by English pirates who abducted a number of the personnel and destroyed the fort. Six years later in 1728 a mutiny broke out in which almost half of the men took part. This mutiny was put down with an iron fist. Barely a year later in 1729 a military force of the fort was massacred by inhabitants of the region. During the ten years’ existence of the settlement a large number of lives were lost; no less than 490 of the 620 men (about 80%) who were sent to the settlement over a period of ten years died, most of them from malaria. The trading post was eventually closed down in 1730.¹⁰

Culturally and numerically the Dutch presence in Asia remained limited in most settlements, even in the VOC’s administrative and shipping centre Batavia. The reason for this was the relatively small number of settlers and company personnel and the use of Malay and Portuguese as communication languages. Missionary efforts were furthermore largely confined to Ambon and Ceylon and met limited success. The only successful Dutch colonisation in the VOC area was in the Cape Colony in South Africa.

In 1652 the VOC had established a refreshment post for its ships at the Cape of Good Hope. The limited purpose of this refreshment post was to reduce the large number of deaths on board of the VOC’s ships. A small settlement was thus established at the tip of Africa with a fort that could defend the anchorage against European rivals and with gardens at the foot of Table Mountain, which were later developed into a botanical garden. In 1652 several hundred Europeans were living in this colony, subsequently supplemented with slaves. Europeans numbered around 20 000 at the end of the eighteenth century, by far the largest number of colonists in any part of the Dutch empire. In other settlements, including Batavia, the total European population

¹⁰ Sleigh D., *Die buiteposte: VOC-buiteposte onder Kaapse bestuur 1652–1795* (Pretoria: 1993); Paesie R., *Het VOC-fluitschip Stavenisse en de ontdekking van Terra Natal* (Amsterdam: 2002) 151–212; Huigen S., *Knowledge and Colonialism. Eighteenth-Century Travellers at the Cape*. (Leiden-Boston: 2009) Chapter 3.

ranged between a few hundred to 2.000 souls. If it had been solely in the VOC's hands, the Cape Colony would have remained confined to a small part of the Western Cape. The intention was to appropriate no more land than was necessary to provide the ships calling in Table Bay with food. However, after 1657 the VOC needed the help of independent colonists to achieve this goal, as the nomadic Khoikhoi did not practise agriculture and could not supply enough cattle for slaughter either. In search of grazing lands for their sheep and cattle, the colonists spread out into the interior. It was because of these colonists that in the next centuries the Dutch language (in one form or other) and culture could spread across southern Africa as far as present day Zimbabwe and Angola.¹¹

While the VOC dominated trade between Asia and Europe and within Asia itself until the middle of the eighteenth century, the situation in the Atlantic had always been different. To emulate the successes of the VOC the West-Indische Compagnie (WIC) was established in 1621. The WIC was a joint-stock company equivalent to the VOC, uniting previous enterprises, and organised according to Chambers with a similar board of directors, the 'Heren XIX' (Gentlemen XIX).¹² The Atlantic was an easier area to trade than the Indian and Pacific Oceans; journeys were much shorter and the capital layout as a result lower, which made it more difficult for the WIC to monopolize trade. Trade in the Atlantic was also much more varied than in Asia, where the spice trade remained dominant until the eighteenth century. The Triangular Trade, bartering European goods (guns and textiles) for slaves in West Africa, exporting these slaves to South America, the Caribbean Islands and North America, and taking American cargo (sugar, tobacco, salt) back to Europe, was very efficient. In terms of turnover, however, the slave trade had a share of only 13% of the total Dutch trade in West Africa with gold coming first with 75%.¹³

¹¹ Elphick R. – Giliomee H. (eds.), *The Shaping of South African Society, 1652–1840* (Cape Town: 1992); Biewenga A., *De Kaap de Goede Hoop. Een Nederlandse vestigingskolonie, 1680–1730* (Amsterdam: 1999); Shell R.C.-H., *Children of Bondage. A Social History of the Slave Society at the Cape of Good Hope, 1652–1838* (Hanover, N.H.: 1994).

¹² From 1674, after the WIC went bankrupt, they became the Gentlemen X ('Heren X').

¹³ Heijer H. den, *De geschiedenis van de WIC* (Zutphen: 1994); Heijer H. den, *Goud, ivoor en slaven: scheepvaart en handel van de Tweede Westindische Compagnie op Afrika, 1674–1740* (Zutphen: 1997); Emmer P.C., *The Dutch in the Atlantic Economy, 1580–1880: Trade, Slavery and Emancipation* (Aldershot: 1998).

The most remarkable chapter in the history of the WIC was no doubt the conquest and subsequent loss of northeastern Brazil (1630–1654). The prospects in Brazil looked particularly promising for the WIC under the governorship between 1636 and 1643 of Johan Maurits van (Johann Moritz von) Nassau-Siegen (1604–1679). Johan Maurits was not only a capable military commander who extended Dutch power in Brazil and conquered Portuguese fortresses on the African coast to secure the supply of slaves for the Brazilian sugar plantations, he also acted as patron of the arts and sciences, attracting a number of scientists such as Willem Piso (1611–1678) and Georg Marggraf (1610–1644), and the painters Frans Post (1612–1680) and Albert Eckhout (1610–1666).¹⁴

After the loss of Brazil in 1654 and of New Amsterdam in 1664 Dutch power in the Atlantic became limited to the West-African Gold Coast, the Caribbean and the adjacent Guyanas on the northern coast of South America. From 1667 Surinam developed into the most important Dutch colony in the Atlantic after the termination of British rule in that year. Because of stringent conditions placed on Surinam by the States General and for lack of funds the WIC had to enter into a venture with the city of Amsterdam and Cornelis van Aerssen van Sommelsdijck (1637–1688) as a private investor, to establish the ‘Sociëteit van Suriname’ (Society of Surinam). This society became the governing body of the colony in 1683 with Cornelis van Aerssen as its first governor.

After 1740 the Dutch Republic lost its hegemonic position in world trade because of the mercantilist policies of other European states, which affected Dutch exports negatively. The Fourth Anglo-Dutch War (1780–1784) delivered the final blow, when hundreds of Dutch merchant ships were taken by the English. As a result the once great trading companies, which were already making losses before the war, collapsed at the end of the eighteenth century: the WIC was disbanded in 1791 and the VOC in 1799. Their colonial territories were taken over by the Dutch state or conquered by the English.

¹⁴ Boogaart E. van den – Hoetink H.R. – Whitehead P.J.P. (eds.), *Johan Maurits van Nassau-Siegen, 1604–1679: a Humanist Prince in Europe and Brazil: Essays on the Occasion of the Tercentenary of his Death* (The Hague: 1979); Brunn G. (ed.), *Aufbruch in neue Welten. Johann Moritz von Nassau-Siegen (1604–1679): der Brasilianer* (Siegen: 2004).

Knowledge Networks

Some years ago, the historian of science, Klaas van Berkel, stated that the VOC as an organisation was broadly speaking not interested in stimulating research activities, a statement which has recently been affirmed by Cook.¹⁵ The VOC and WIC were primarily interested in making profit or, in the case of the Sociëteit, in governing a colony. One of the directors of the VOC, Nicolaas Witsen (1641–1717), famously complained about this lack of scholarly interest among his colleagues from the VOC when he wrote to a friend, ‘Why does your Honour ask about scholarly curiosity in India? No, Sir, it is only money and no knowledge which our people are after, which is regrettable’.¹⁶ Notwithstanding this complaint the trading companies provided an infrastructure for individuals such as Witsen to get access to sources of information about the foreign world, in his case aided by the company’s resources. Servants of the VOC helped Witsen gather information for his book on Tartary. On the other hand the trading companies seldom took the initiative for research. More often they tried to prevent research results from being published, such as was the case with the *Amboinsche Kruidboek*, a description of the flora on Ambon by Georg Rumphius (1627–1702). The Gentlemen XVII thought it prudent not to publish the manuscript, because they were afraid that competitors might use the information for their own benefit. It appeared forty years after the death of its author.¹⁷

Let me give another, less familiar example from South Africa to clarify the relationship between the trading company and the individual researcher: the researches in South Africa of Dutch army officer Robert Jacob Gordon (Doesburg, 1743–Cape Town, 1795) [Fig. 1].¹⁸

¹⁵ Berkel K. van, *Citaten uit het boek der natuur* (Amsterdam: 1998) 146; Cook, *Matters of Exchange*, 338. The VOC had a limited interest in supporting botanical and medical research, but even in these fields the Company’s policy was not consistent.

¹⁶ ‘Wat vraegt UwelEd. na de geleerde curieushey van Indiën, Neen Heer, het is alleen gelt en geen wetenschap die onse luyden soeken aldaer, ’t gunt is te beklagen’, Gebhard J.F. jr., *Het leven van Mr. Nicolaas Cornelisz Witsen (1641–1717)* (Utrecht: 1881–1882) vol. 2, 340–341 (letter 1 August 1712); also quoted in: Berkel, *Citaten uit het boek der natuur* 145.

¹⁷ Berkel, *Citaten uit het boek der natuur* 142.

¹⁸ Cullinan P., *Robert Jacob Gordon 1743–1795. The Man and his Travels at the Cape* (Cape Town: 1992). The following relies on: Huigen, *Knowledge and Colonialism*, chapter 5.



Fig. 1. Anonymous, *Portrait of Robert Jacob Gordon in the uniform of the Scots brigade*, c. 1775–1795. Oil on canvas. Cape Town, William Fehr Collection.

Gordon is relatively well known in South Africa but still quite obscure in the Netherlands and elsewhere. Gordon probably went to live in the Cape Colony out of 'curiosity', that particularly early modern passion to learn more about nature and the world in general. After a return journey from the Netherlands to the Cape in 1773–1774, combined with a trip to the interior of South Africa, of which little is known, he settled in 1777 in South Africa and became a captain in the Dutch garrison at the Cape. In the 1780s he was promoted to the rank of colonel and commander of the Cape garrison. During his first years in South Africa, between 1777 and 1786, Gordon undertook four expeditions into the interior of southern Africa, to the Eastern Cape and into Namibia, crossing what was to be named (by him) the Orange River. He travelled for months accompanied by a draughtsman and some servants and covered enormous distances. Gordon's expeditions yielded manuscripts, drawings and maps. Originally these papers formed part of a more extensive collection which also included stuffed and living animals. According to visitors, Gordon's house in Cape Town was a remarkable museum – its most impressive piece probably being a stuffed giraffe. He committed suicide after the British occupation of the Cape in 1795, after which his scientific inheritance came into private British ownership. In 1913 the Rijksprentenkabinet in Amsterdam purchased the maps and drawings, known as the Gordon Atlas. The manuscripts, known as the Gordon Papers, were acquired in 1979 by the South African mining magnate, Harry Oppenheimer, who placed them in his private library, the Brenthurst Library in Johannesburg. The drawings and manuscripts cover a wide spectrum of subjects particularly in the field of botany, zoology, meteorology, geography and ethnography. Nothing is known about the whereabouts of the mounted animals from Gordon's private museum in Cape Town.¹⁹ Nevertheless, some specimens that were sent to Europe by Gordon are still traceable. The most illustrious object was the skeleton of a giraffe, which was shipped in two boxes to Holland in 1780 and subsequently mounted in the Museum of Stadholder Willem V. After the French invasion of the Dutch Republic in 1795 the giraffe was taken to Paris.²⁰

¹⁹ Rookmaaker L.C., *The Zoological Exploration of Southern Africa 1650–1790* (Rotterdam-Brookfield: 1989) 64.

²⁰ *Ibid.*, 121.

In 2007 Gordon's giraffe was still part of the permanent exhibition of the Musée d'Histoire Naturelle (just behind the visitors' entrance).

Gordon's scholarly career in South Africa displays the typical characteristics, which the historian of science Basalla ascribes to colonial scholars during the first phase of the practice of science in colonies.²¹ Gordon was a keen collector of particulars of the foreign world, which were gratefully used and published by the subject specialists in Europe. The results of Gordon's zoological research reached the European public via the Dutch natural historians Vosmaer and Allamand. Although he was unable to publish anything arising from his work, contributions by Gordon to the field of zoology were included in the Amsterdam edition of the *Histoire Naturelle* by Georges Louis Leclerc de Buffon (1707–1788) – the 'nouvelle édition' (1766–1771) – that was edited by Allamand. Gordon supplied descriptions, which Allamand included as supplements. Nevertheless, Gordon did not see himself as inferior to researchers who did appear in print. For example, among his writings there are critical annotations to the publications of the scientific travellers La Caille and Sparrman. He also took a critical view of Buffon's more speculative theories; he calls Buffon one of the greatest minds on earth, but also one who had not seen everything with his own eyes. This was a kind way of saying that Buffon, head of the Jardin du Roi, the botanical garden of the French king in Paris, sometimes acted as an armchair scholar.

What is of particular interest to this volume is that most of Gordon's research was of little use to the Dutch East India Company. Of course the company had an interest in knowing more about the interior of southern Africa, but from archival records it is quite clear that this interest was limited to the possible existence of mineral reserves, particularly gold and copper, and the establishment of contacts with trading partners in the interior with a relatively developed technological civilization. At most Gordon provided the Company with a better picture of the geography of the interior and he established diplomatic ties with indigenous peoples in the Eastern Cape, which appeared to be useful during border conflicts in later years. But there is no trace in the VOC archives that the fascinating drawings of landscapes, plants, animals and people, or his manuscripts aroused any interest with the VOC's Council of Policy in Cape Town or the Gentlemen XVII in

²¹ Basalla G., "The Spread of Western Science", *Science* 156 (1967) 611–622.

Amsterdam. What is clear from his manuscripts is that his research was aimed at answering questions of Europe's scientific community, comparing statements in publications with his own observations, and sharing these with fellow members of the scientific community. This informal network of professional scholars and 'liefhebbers' in Europe and the colonial territories shared an empiricist epistemology and the same sort of inscription devices for producing 'immutable and combinable mobiles' (drawings, maps, specimens, descriptions)²² which at most had a limited commercial or political value for the trading companies, as Nicolaas Witsen experienced. [Fig. 2]

I would like to point out that Gordon to a large degree actually used the colonial infrastructure and his position as an army officer to further his own scientific curiosity. In fact, his move to South Africa even raised eyebrows in Holland. In a letter to an influential connection in Holland Gordon had to defend himself against accusations that he merely went to live in South Africa out of curiosity.²³ Nevertheless, scientific travellers such as Gordon were indebted to colonial authorities for the collection of data. Gordon was paid a salary as an army officer while following his inclination. In other cases the world outside Europe at least became more accessible for scientifically interested individuals as a result of the establishment of trading networks and the colonial occupation of overseas territories. Even women such as Maria Sybilla Merian (1647–1717), famous for her drawings of insects from Surinam, could visit the colonies. In most cases researchers of the extra-European world made use of the colonial infrastructure and could expand their activities by receiving some kind of support from colonial institutions and individuals. In many respects this is also true for contemporary scientists. For the French anthropologist of science, Bruno Latour, the ability of scholars and scientists to obtain support for their projects outside the domain of science is key to their success.²⁴

²² Latour, *Science in Action* 227.

²³ Nationaal Archief, The Hague (NA), Fagel-Archief, no. 2515; cf. Huigen, *Knowledge and Colonialism*, chapter 5.

²⁴ 'He who is able to translate others' interest into his own language carries the day. [...] So it is useless to look for the profit that people can reap from being interested in Pasteur's laboratory. Their interests are a consequence and not a cause of Pasteur's laboratory. Their interests are a consequence and not a cause of Pasteur's efforts to translate what they want or what he makes of them' (Latour B., "Give me a laboratory and I will raise the world", in Knorr-Cetina K.M. – Mulkay M. (eds.), *Science Observed. Perspectives on the Social Study of Science* (London: 1983) 141–170).

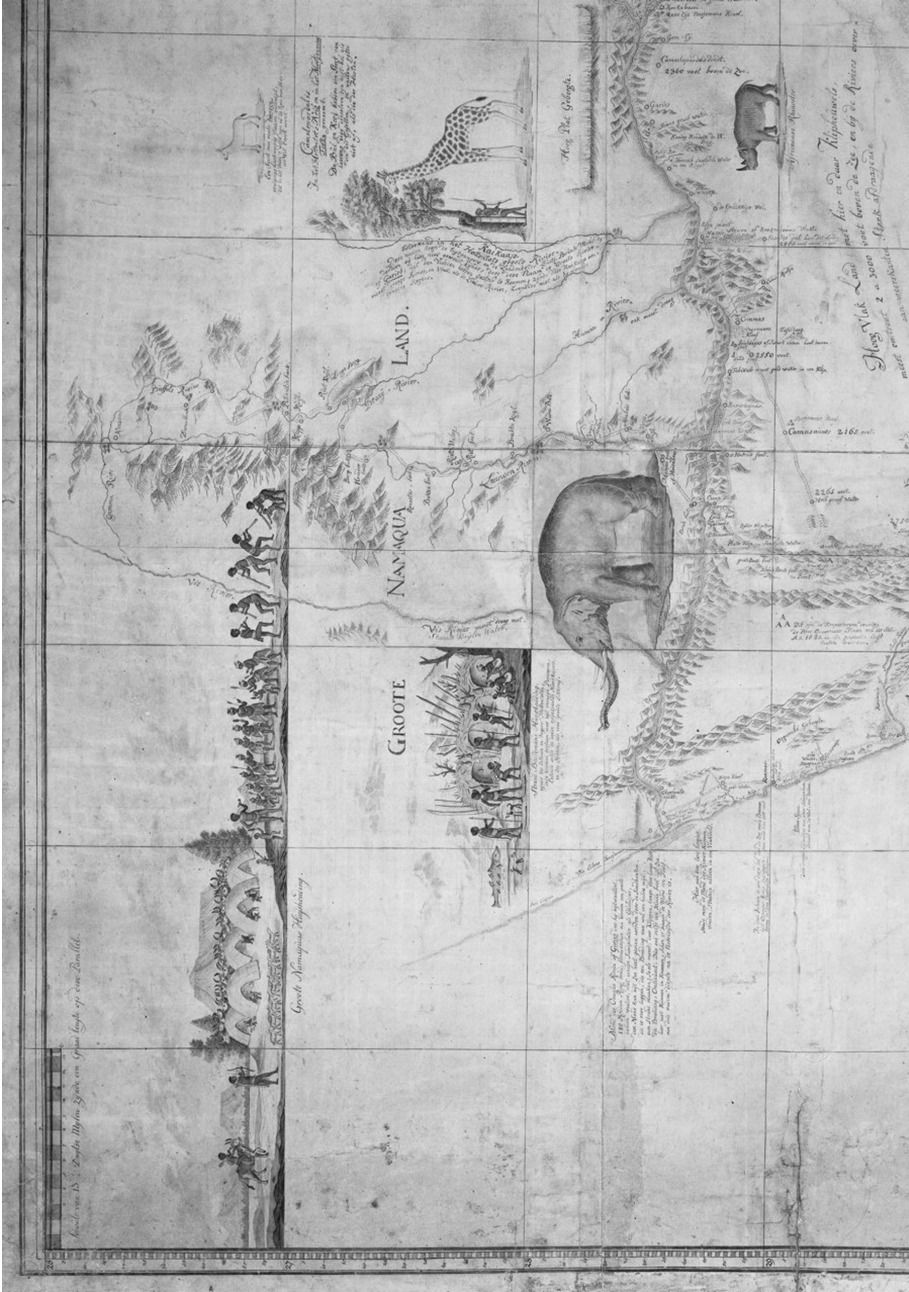


Fig. 2. Robert Jacob Gordon, *The basin of the Orange River (border between the present-day South Africa and Namibia)*, c. 1780–1795. Watercolour. Detail of the large map in the Gordon Atlas. Amsterdam, Rijksprentenkabinet.

At the site of reception the knowledge acquired through the Dutch trade networks was entered into new cycles of knowledge production.²⁵ Several essays in this volume demonstrate that knowledge produced in the Dutch colonial contact zones was distributed unevenly in the various European countries, with motivations ranging from curiosity to national economic interests. Japan was a special case. For Japanese intellectuals the VOC provided an opportunity to acquire *European* knowledge. During the latter part of the eighteenth century these intellectuals gradually moved beyond their traditional learning to develop the new discipline of 'Dutch Studies' (*Rangaku*), covering western medicine, natural philosophy, military technology, and language studies. This discipline survived the Dutch trading companies well into the nineteenth century.²⁶

²⁵ Cf. Livingstone, D.N., *Putting Science in its Place. Geographies of Scientific Knowledge* (Chicago-London 2003).

²⁶ Blussé, *Bridging the Divide*.

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