5. Aesthesis in colonial anatomy: beaded babies

One of the most iconic preparations from the eighteenth-century Leiden anatomical collections is a supposedly black male foetus of about five months old, wearing strings of black-blue and white beads around its neck, waist, wrists, and ankles [Ill. 18].[1] It is now considered a 'top piece' from the historical collection, on permanent loan to the Leiden Museum Boerhaave, and until recently could be viewed on its website as well. It has been assigned to the collection of Leiden anatomy professor Sebald Justinus Brugmans (1763-1819), but its true origins are unclear. And this beaded baby is not alone: another nine similar preparations of human foetuses decorated with beads are housed in Leiden, and three more are found in the Utrecht University Museum, the Amsterdam Museum Vrolik, and the St. Petersburg Kunstkamera respectively [Ill. 50-52]. Apart from this preparation, several of the other foetuses have been documented in books on collections and collecting. One beaded baby has been pictured in three books in the past twenty years, in one case together with the very similar preparation from the St. Petersburg collection [Ill. 19, 52].[2] It is hard not to linger on these preparations, as they instantly evoke many questions: where are they from? How did they end up in these collections? Were they made here or abroad? Did aesthesis play a part in their creation? Were they ordered

[1] LUMC catalogue number Af0044. Race is obviously a tricky concept, rather a social construction than a biological fact and now largely obsolete in the life sciences (Malik 1996). Yet in the period that the preparations discussed in this chapter were made, 'race' was an only an emerging concept, first applied as a metaphor in matters of organic reproduction and used both for biological and biopolitical ends (Mueller-Wille & Rheinberger 2007, Mazzolini 2007). Moreover, as B. Ricardo Brown 2010, p. 10 points out: *"…the ability of science to fix – however unstable and temporary this might be - the classification of human variety has contributed mightily to the establishment of the authority of the science of life in our understanding of the truth about human nature and society."* Terms like 'black' or 'African' and 'Asian' were used by eighteenth-century natural philosophers and natural historians in attempts to create categories within the continuum of variations of human appearances. As the preparations discussed in this chapter were defined in these terms by their initial collectors, I will maintain these categories here.

[2] LUMC catalogue number Al0038, Kunstkamera Collection MAE RAS**:** № 4070-817. Fuchs & Fuchs 2000, Gould & Purcell 1992, Kemp & Wallace 2000.

or unrequested gifts? Why are preparations like these not found in other, similar collections from the same period? Why do they appeal to us so much?

In this chapter, I will try to answer these questions, and where reliable answers prove to be impossible, I will suggest plausible possibilities. Although I cherish few illusions as to the possibility of tracing the exact origin of the beaded babies, this chapter will show that there is much more to them than meets the eye, and that the aesthesis that dominated Leiden anatomy also influenced their creation and acquisition. Once again, using the materiality of these preparations as a starting point will at least partially answer the pressing questions they evoke, and provide them with a historical context that is far richer than the few lines of text currently available. First, I will put the preparations in a theoretical and historical context: the appeal they have to us, the role of aesthesis and commodification in the creation and acquisition of these kinds of objects, and the few clues we have on their origins from written sources. Subsequently, I will describe the babies and their beads and use the leads we get from that close description to trace external evidence as to their origins and histories. I will then use this information to suggest possible makers and circulations. This will finally enable me to reinterpret the meaning of these curious preparations.

Appealing objects with unclear origins: aesthesis and commodification

It is not hard to imagine why these preparations are so appealing to us – it is probably pretty much for the same reason they appealed to their eighteenth-century makers and collectors. These babies are evocative because they simultaneously represent us and the other. They remind us of ourselves, as we were all once human babies, and their wholeness, (most of them have no visible congenital defects), is much less abhorrent than the severed, often diseased limbs and organs that constitute much of the rest of anatomical collections. At the same time, the beads the babies are wearing refer to another time and place, and together with their supposed ethnic origins are somewhat uncomfortable, yet curiosity-inducing reminders of a not-so-distant colonial past. Therefore it is not surprising that it is these preparations that draw our attention and that are chosen time and again to represent these collections in exhibitions and books. However, it is slightly surprising that no attempt has been made to provide more information on them than the fairly scarce catalogue information currently available. This is especially curious as most historical museums

of human anatomy strive hard to prevent their objects becoming ingredients of a twenty-first century freak-show. Even if the silence surrounding the prominent visual presence of these preparations is born from fear of controversy and possible repatriation requests, I think it is unwise to let them linger silently any longer.

Keeping silent on potentially painful, controversial preparations like these only increases the risk that they will end up as subjects of gawping. In order to create debate and transparency, researchers and museum professionals should discuss how museums should deal with and care for this kind of collection.[3] As Appadurai pointed out, although it is formally true that things have no meanings other than those that humans and their actions endow them with, this does not illuminate the concrete, historical circulation of things. We need to study the thing-in-motion to illuminate its historical, human and social context.[4] These objects do not talk; yet neither are they mute. What they tell the average visitor is more like a Chinese whisper than a story now, more confusing than clarifying. Tracing their story will amplify what they have to tell us to an audible level. As Smith & Schmidt have pointed out, it is fairly easy to identify the end products of knowledge-making, but the active production of knowledge –however exciting- is more difficult to trace.[5] Moreover, as Roberts, Schaffer and Dear have shown in *The Mindful Hand*, the creation of both knowledge and objects are intimately related, sometimes inseparable, processes.[6]

The materiality of the beaded babies is the key to understanding their making and acquisition, as well as the knowledge they incorporate. Moreover, I will show that the creation and collecting of these foetuses was not simply rendering them stable, mobile, and combinable in order to ship them to the dominant centre of knowledge – as Latour would have it - but could also be an inquiry into and an acquisition of indigenous knowledge.[7] Yet before I can do so, I need to clarify the role of aesthesis in the commodification and exchange of naturalia in the eighteenth century, as well as shed some light on the unclear origins of these preparations.

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[3] Van Duuren et al. 2007, p. 8.
[4] Appadurai 1986, p. 5.
[5] Smith & Schmidt 2007, p. 3.
[6] Roberts et al 2007, p. xvi.
[7] Latour 1987, p. 223.

Aesthesis in commodification and exchange

So how did the beaded babies end up in Leiden, and in Amsterdam and St. Petersburg? On a conceptual level, the answer to the question of how the beaded babies ended up in the Leiden anatomical collections must be sought in the aesthesis aspects of commodification and exchange. I will return to the connection with aesthesis shortly, but first I will clarify the importance of commodification and exchange. Commodification of the dead human body - turning it into, or treating it as, a commodity that is not by nature commercial- first occurred in Western Europe in natural history collections in the seventeenth century. This is clear from the presence of human bones and dried human organs in both institutional collections such as that of Leiden University, and in private collections such as that of Ole Worm.[8] In the case of the beaded babies, the fairly recently developed technique of making wet anatomical preparations for the first time allowed learned men to effectively commodify the dead body of the exotic other, making it possible to exchange it as a material fact.[9] Moreover, I will show that decorating these bodies with beads and other accessories associated with their geographical origins, was a method of stabilizing them within the continuum of variations of human complexions.

The commodification of exotic human bodies was very significant for the development of the understanding of 'the other'. Whereas many accounts of indigenous people up to the mid-eighteenth century describe them in terms of barbarism and wild beasts, the natural philosophers who gained access to these dead bodies by the late eighteenth century were for the first time able to compare them to other human bodies. They immediately classified them as human, and started asking serious questions about the anatomy and ways of living of other people. Although it is very easy to classify these early explorations of physical variations, ethnicity, and

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[8] See i.e. *Catalogues* 1669-1753 and Worm's *Museum Wormianum*, 1655.

[9] Blankaart 1695, p. 749 states that Longinus already advocated the shipping of human bodies and body parts form different regions, and that keeping them covered in a coffin filled with lye or brine of sea salt and alum would ensure they arrived at their destination without corruption or decolouration. Yet these bodies seemed to have been intended for dissection, and probably were not suitable for ongoing preservation. This is further supported by the fact that Frederik Ruysch (1638-1731) appears to have been the first to successfully create lasting wet preparations, as has been discussed in chapters 2 and 3, but he does not explicitly list wet preparations of bead-decorated black foetuses. He only listed one foetus of unspecified origins decorated with exotic plants and animals (*Thesaurus Anat.* VI, p. 41-2, no. LXI) and one apparently undecorated black foetus (*Thesaurus Anat.* IX, p. 21, no. XXXII). In the Ruysch collections in St. Petersburg, an embalmed foetus with the remains of a flower wreath around its head remains, but the origins are unclear (MAE RAS 4070-832).

other ways of living as racist, backward, and dangerous, we should not forget that they also provided the basis for modern anthropology. Nonetheless, commodification alone was not enough to give the learned men of Europe access to these object-bodies. In order to reach Europe, they had to be exchanged, something which had been happening with exotic naturalia such as insects, plants and animals ever since colonial explorations began in the late fifteenth century.[10]

Although the Dutch colonial trade was in severe decline by the middle of the eighteenth century, there was still a considerable stream of naturalia flowing to the Netherlands, sometimes upon explicit request, as appears from numerous accounts from the period. The minutes of the senators of Leiden University for example, show that in 1751, 1752 and 1754, the university received gifts of stuffed birds and insects from the African governors Swellengrehel and Rijk Tulbagh.[11] From a 1766 letter by the latter to Arnout Vosmaer, the custodian of the Royal cabinet of naturalia, it appears that Tulbagh sent the Stadholder boxes of insects and shells, and on one occasion even a live pig.[12] Not only royalty and universities received such exotic gifts, as shows from the fact that VOC physician and directing member of the Batavian Society Jacob van der Steege (1746-1811), a former student of Petrus Camper, sent his old teacher a skeleton, four skulls, a tongue, and a penis of a Javanese rhinoceros from Batavia.[13]

Neither was the exchange of objects between colleagues in different European countries exceptional, as appears, for example, from a letter by Andreas Bonn. In 1804, he wrote to his friend Altheer that he had heard the latter had the intention to presently send some books to Johann Friedrich Blumenbach, who was the first to categorize humankind into five races. If possible, Bonn wrote, he would like to add a small chest to that mailing, which 'would not be heavy and which would contain a number of dry pieces for Professor Blumenbach's Cabinet'.[14] None of the sources cited explicitly mention the shipping of wet preparations of human anatomy, yet it is very possible these were exchanged as well – after all, they somehow ended up in Leiden by the early nineteenth century. Although the commodification and exchange

[10] For commodification and exchange of naturalia in the Dutch Republic in the seventeenth century, see Cook 2007.
[11] Suringar 1867, p. 288.
[12] Tulbagh to Vosmaer 1766, Leiden University Special Collections BPL 246.
[13] Snelders 1779 p.82, Rookmaaker & Visser 1982.
[14] Bonn MS KB 1804, recto: *"Het kistjen soude niet zeer zwaar zijn en eenige droge stukken voor het Cabinet van den Professor bevatten."*

of naturalia, including (parts of) human bodies, was nothing new, I will now argue that aesthesis did play a particular role in the commodification and exchange of the Leiden beaded babies.

As Cook already pointed out, ever since the early seventeenth century Dutch intellectuals aimed to employ reason combined with the five senses when describing and explaining nature, but the objective facts that were the result of that method could also take on attributes of taste and discernment.[15] This combination is strongly present in aesthesis, where knowledge is gained through sensory perceptions combined with reason, and where the investigator simultaneously and largely tacitly searches for beauty while also trying to eliminate the ugly and the disgusting. In the case of the beaded babies, this shows in the fact that they are, as wet anatomical preparations, products of investigation and preservation, which were equally informed by the senses, reason and a quest for beauty.

They are informed by the senses in so far as creating such a preparation involves all of them: the tactility of obtaining and handling a foetus, looking at how it is formed and how it sits in its phial, hearing the sounds of making the preparation, smelling and maybe even tasting the preservation liquid for the right consistency. They are informed by reason, as the maker must have theorized about how old the foetus was, why the beads were already on it or had to be put on it. And finally, his actions were informed by his quest for beauty in considering how he would have to make the preparation look and how to preserve it in order to make it an attractive commodity; not as something appalling, but as an object which would gain him something – be it a nice piece for his own collection, a tradable object, or an appreciated gift for an old colleague or friend. This leads us to ask when and where were these aesthesis-influenced commodities created and exchanged, were there more of them, and why did so many eventually end up in the Leiden anatomical collections?

Unclear origins

Surely there were more eighteenth-century anatomical collections that contained foetuses of black or 'African' children. For example, the 1799 sales catalogue of the Middelburg city physician Egbert Philip van Visvliet (1763-1799) mentions 'a fully

[15] Cook 2007, p. 410.

grown negro child of the female sex' and 'ditto of the female sex, of five or six months', and a 1869 catalogue of the Zeeuwsch Genootschap der Wetenschappen (Zealand Society of Sciences, est. 1769) lists a 'Foetus of a negro'.[16] In the 1779 collection catalogue of the German professor Wagler, a friend of the Leiden anatomy professor Wouter van Doeveren, an 'Embryo abortus Aethiopis' is listed.[17] In Petrus Camper's collection at Groningen University we also find a 'negro foetus'.[18] As is the case for these collections, the information on the beaded babies in the modern Leiden University Anatomical Museum is rather scarce. I will now list their first mention in the Leiden Anatomical Museum catalogues. Although these first descriptions are meagre, they at least give some kind of indication as to when these preparations first appeared in Leiden and from which private collections they originated. Five of the preparations have been traced back to Eduard Sandifort's 1793 *Museum Anatomicum I* and son Gerard Sandifort's 1835 *Museum Anatomicum III* respectively.[19] This was done by curator A.M. Luyendijk-Elshout in the 1940s and 50s, who analysed the original labels of the flasks and phials where possible.[20] One of the preparations listed in the MA III is probably 'A Foetus of a female negro, purchased from sir Voltelen in 1795', mentioned in an inventory of the anatomical theatre from 1798.[21]

Eduard Sandifort first describes Ad0030 [Ill. 20] under the 'Supellex Anatomica Doeveriana' on page 108 of *MA I*. He mentions nothing about the small string of coloured beads around the neck of the foetus, but simply describes it as 'African foetus of six months. Colour not black, but darker than European'.[22] The apparent confusion about the skin colour of the preparation can simply have been caused by the discolouring effects of the preservation liquid. As this was the only 'African' embryo in the collections there was also little to compare it to. In the Albinus collection there were some preparations of black skin of adults, but these

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[16] Visvliet 1799, p. 175: "*1. Een volwassen Negerkind van de Vrouwelyke Sexe. 2. -- dito van de Vrouwelyke Sexe, van vyf à zes maanden.*", De Man 1879, no. 150 (Zeeuws Archief 26.1.02.2.162) suggests that this preparation was donated by D. Van Cruysselbergen, a Leiden graduate, in 1778.
[17] Wagler 1779, p. 8, no. 104.
[18] E0605, Cabinet 3 (Camper collection Groningen University: http://anatomie.ub.rug.nl/index.htm).
[19] E. Sandifort 1793, vol. I: Ad0030, MA III: Af044, Ac0100, Af0103 and Ac0113.
[20] Elshout 1952. All preparations are contained in lead glass phials, a type that was in use from the late seventeenth century until the middle of the nineteenth century.
[21] A.C. 228, printed in Witkam 1968, p. 63. This is probably Floris Jacobus Voltelen (1753-1795), the son of a minister in Cape Town who was ordinary professor of medicine and chemistry at Leiden University from 1783 till 1795.
[22] Sandifort 1793, p. 108: "*CLXIV. Foetus aethiopis semestris. Color non niger, Europaeo tamen obscurior.*"

were mostly injected, whereas the embryo was not, making comparison difficult.[23] Forty years later, the collections of the Amsterdam professor Andreas Bonn (1738-1817) and the Leiden professor Sebald Justinus Brugmans, which had been acquired by Leiden University in 1822 and 1819 respectively, were described in *Museum Anatomicum III* by Sandifort's son Gerard. Suddenly, there are many more preparations of black foetuses and black skin, and in the Bonn collection they even appear to constitute a separate category.

In the Brugmans collection on pages 27 and 28 are listed Af0044 and Af0103 [Ill. 18, 27]. The first is described as 'Similar African fetus of five months', 'similar' referring to a previously-listed preparation which is described as 'male foetus of four months, very fleshy'.[24] So once again, there is no mention of beads. On the next page, Af0103 is described as 'African foetus of the same shores with part of the umbilical cord and placenta.'[25] The umbilical cord and placenta have probably been removed due to conservation reasons over time. In the section of normal (naturali) wet preparations, four Bonn preparations of 'African' babies are listed under three pieces of black skin on page 331 of *MA III*. Sandifort junior described them as follows:

"XIV. African foetus of about seven months; a few curly hairs; the colour of the skin is black; compressed nose, lips are swollen.
XV. African foetus of about six months, excellently representing the character of the nation; the colour is not very black.
XVI. Foetus of the same age as the female Hottentot; colour of the entire body very black.
XVII. African foetus of about seven months; colour of the skin is less black, but offers an example of several of the African peoples; the back is very hairy."[26]

Remarkably, all these preparations have survived until the present day, but only the first [Ill. 21] is decorated with beads.[27] Together with 'the Hottentot' it is currently on

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[23] E. Sandifort 1793, vol. I, p. 27-90.
[24] G. Sandifort 1835, vol. III, p. 27: *'CCCIX. Foetus similis aethiopis quinque mensium.'* ('similis' refers to: '*CCCVI. Foetus masculinis quadrimestris, torosus admodum.*')
[25] Ibid., p. 28: *'CCCX. Foetus aethiopis ejusdem actatis cum sune(?) umbilicali et placenta.'*
[26] Ibid., p. 331: *"XIV. Foetus Aethiopis septem fere mensium; capilli parum sunt crispi; color cutis fuscencit; nasus est compressus; labia sunt tumida. XV. Foetus sex mensium Aethiopis, characterem nationis egregie exhibens; color non valde fuscus est. XVI. Foetus ejusdem aetatis Hottentotae; color totius corporis fuscescit. XVII. Foetus septimestris Aethiopis; color cutis minus fuscus, sed caeteras characteres Aethiopum offerens; dorsum valde est pilosum."*

display in the Anatomy Museum in the historical cabinet, whereas the other two preparations have been put in storage.[28] Finally, there is one beaded baby in the Bonn collection that is also currently in storage, and which differs from the others in three respects. This is a dried preparation of a foetus with anencephaly and spina bifida, listed by Sandifort under the dried pathology preparations.[29] It has traces of dissection on the stomach, and the only beads on it are placed on the eyes.[30] Yet this preparation may not be such an oddity as it appears – I will return to this later.

Then there are the five remaining beaded babies that have never been assigned to a specific sub-collection.[31] According to Luyendijk-Elshout, three of these were also listed in the manuscript catalogue made by Teunis Zaaijer (1837-1902) in the 1860s, but this catalogue was partly lost and only a summary per cabinet from 1892 remains.[32] Zaaijer himself had a keen interest in the emerging discipline of anthropological anatomy. He gained his MD in Leiden on 30 May 1862 with a thesis on two female pelvises from the East-Indian Archipelago.[33] In 1893 he made a manuscript catalogue of the 'Racial skulls, pelvises and skeletons in the Leiden University Anatomical Cabinet'. In the preface to the listings of preparations, he warns against 'falsification' of anthropological specimens: he gives the example of a custodian who marked the skull of a man born in Leiden as 'Russian' so he could fetch a higher price for it.[34] This example shows that the commodification and exploitation of supposedly real 'exotic' dead human body parts continued well into the nineteenth century.

To make the tracing of the origins of these preparations even more complicated, I have not found any writings – books, pamphlets, letters or otherwise – by Leiden anatomists or their contacts which mention them. However, I will show

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[27] XIV, now registered as LUMC catalogue number Ac0100.
[28] XVI is current LUMC catalogue number Ac0015. Sandifort 1835, p. 331, preparation XV has record number Ac0014 in the current catalogue; XVII has number Ac0016. A. van Dam, curator of the Anatomical Museum, has suggested that the 'very dark' skin colour of the 'Hottentot' preparation might in fact gave been caused by mercury or silver salts added to the preservation liquid. This is worth investigating in the future.
[29] LUMC catalogue number Ac0113.
[30] G. Sandifort 1835, vol. III, p. 399: *'DCLXXXII. Foetus aliquot mensium acephalus cum tota spina bifida, Balsamo conditus atque exsiccatus est.*'
[31] LUMC catalogue numbers Al0037, Al0038, Al0041, Al0045 and Al0040.
[32] LUMC catalogue numbers Al0037, Al0038, Al0045. LUMC catalogue, 2011, Luyendijk-Elshout 1952, MS AM Boddaert 1892 only mentions: *"Zaal 12 - Kast 1. Rasfoetus enz. ttt1-ttt61 61 Spiritusпraeparaten (foetus van negers enz. huid van negers, haar van negers en inboorlingen uit den Oost-Indischen Archipel)".*
[33] Zaaijer 1862, Thomas 1918, p. 1499.
[34] Zaaijer MS AM 1893, p. VII.

that the fact that preparations Al0040 and Al0041 [Ill. 25, 26] cannot be traced to the *Museum Anatomicum* catalogues, and were not found in the Zaaijer manuscript catalogue by Luyendijk-Elshout, does not necessarily mean that they are indeed 'false' or younger than the other beaded baby preparations. That can only be made clear through an object-driven analysis of the preparations themselves.

The babies and their beads

The one thing that connects these ten babies is the beads and their supposed origins, but they are all in a way different from each other. The odd one out is the only dried preparation, and the only preparation with a visible birth defect.[35] The others are all wet preparations, preserved in 80% ethanol, and have no visible birth defects. In the eighteenth- and early nineteenth-century Leiden anatomical collections, they were mostly defined as 'black', 'African' or 'Hottentot', and 'Asian', although their physical ethnic features are very difficult, if not impossible, to discern. These preparations were very relevant for contemporary research. Scholars like B.S. Albinus first started wondering and seriously investigating what could explain the fact that there appears to be a wide variation in skin colours and physiognomy among people, and that these variations seemed to follow certain geographical patterns. Therefore it is justified in this context to use the words 'African' and 'Asian' with regard to these preparations, as their original keepers saw them as exemplifiers of these categories.

Of nine wet preparations, seven appear to be of African descent and two have Asian features or have been described by Leiden curators as such – one of the 'Asian' preparations has even been described in the mid-twentieth century catalogue as 'Mongolian', although it is not exactly clear whether the describer meant 'originally from Mongolia' or 'Down's syndrome'.[36] Of the seven African babies, two are male and three are female, and of two it is hard to tell the sex as their legs are folded over their genitalia. Although some of them look very similar, they are all of different ages, varying between a four-month foetus and a neonate. Neither are any of the bead strings the babies are wearing exactly identical in colouring and location. What, then, can be deduced from the way these babies look, from the beads they are wearing, and the way they were preserved? To keep things orderly, I will discuss the preparations

[35] LUMC catalogue number Ac0013.
[36] Elshout 1952.

grouped by their suspected origins, as that may provide the most feasible leads to their heritage.

The 'African' babies

The biggest 'group' of beaded babies in the Leiden anatomical collection are the supposedly African babies. Both male and female, from a four-month old foetus to a neonate, are wearing strings of beads around their neck, wrists, elbows, waist, loins, knees, and/or ankles. However, the colours and locations of the beads vary widely. The fact that the preparations are wet and still well-preserved means that they must have been made after the beginning of the eighteenth century, as the first who was able to make this kind of long-lasting wet preparations was Frederik Ruysch, who shared his secrets only with a select number of his students. Although Ruysch certainly came across black foetuses in his Amsterdam practice, it is unlikely any of these preparations are his, as he injected all his preparations – a method which applies to none of these.[37] By the early to mid-eighteenth century, more people started to learn how to make a lasting wet preparation, for example as would have some of Albinus' students. As most preparations were first mentioned in a Leiden catalogue somewhere between 1793 and 1860, they must have been made roughly somewhere between 1750 and 1850. So how did seven black babies wearing strings of beads of various colours on various body parts end up as anatomical preparations in a Leiden collection somewhere between the mid-eighteenth and early nineteenth century?

The most imprecise answer possible, based on the scarce information available, would be: they were preserved and presented or sold by someone with sufficient knowledge of making wet anatomical preparations, who also had access to aborted, miscarried, or still-born black babies (or babies that could pass as black) who were either decorated with strings of coloured beads by their bereaved mothers, or who were decorated with those beads by the person who preserved them or some reason. Who, then, would have access to those babies? Obviously, during the period in question, the second Dutch West Indian Company (1675-1792) had the monopoly on trade at the West-African Gold Coast, shipping slaves to the Caribbean, gold from

[37] To my knowledge, Ruysch did not list any uninjected, bead decorated, 'African' foetuses in his collections – only the 'head of the child of a negro woman', affected with small pox, which he decorated with injected arteries to make it less repulsive. (Ruysch 1744, p. 726)

Africa and sugar from the New World back to Europe.[38] Many of these slaves died either in the 'depots' where they were kept before and after shipping, or during the voyage.[39] Although officially forbidden, assault and rape were not uncommon aboard the slave ships, and even when pregnancies were carried full term and children born alive, their chances of survival on the ships were minimal.[40] Infanticide followed by suicide was also not uncommon among the slaves, as appears from WIC archives.[41]

Moreover, Lorna Schiebinger's 2004 book on colonial bioprospecting in the Atlantic world has convincingly shown that there is evidence that 'women in the colonies, especially slave women and women of colour, practiced abortion (…) though at what rate and for what reasons is less clear'.[42] Any European involved, therefore, in the slave trade would likely have had some kind of access to dead foetuses and newborns of slaves. Moreover, although small numbers of black people ended up in Europe, the beads with which these preparations are decorated are so-called trading beads, used as currency in the African trade, which suggests the preparations would have been made on the African west coast. The person able to do so was most likely a European medical man stationed in one of the trade centres, appointed by the Company to attend to the newly arrived slaves, whose health was, to a certain extent, of importance to their future owners.

Although these likelihoods narrow down the possible scene of action a little, this still leaves us with quite a number of putative preparation makers. Before starting to trace personal files and correspondence of all doctors and surgeons employed by the West Indian Company between 1750 and 1792, it might therefore be useful to see if the beads give any further indications of where the babies might be from. As mentioned before, the beads are so-called trading beads, used as currency in the African trade for centuries. The seventeenth-century centre of bead-production was Venice, but by the eighteenth century the beads were produced in many places, including Middelburg (until 1760), Veere, and Vlissingen.[43] As Trivellato has pointed out, establishing the origins of glass beads has therefore proven to be an arduous, if

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[38] Den Heijer 2002.
[39] Ibid.
[40] Priester 1987, p. 107-114, Eijgenraam 1990, p. 91.
[41] MS NA: *Stukken Gediend Hebbende Bij De Criminele Processen Op De Kust Van Guinee. Afschriften*. 1.05.01.02 151-152. Tweede West-Indische Compagnie (WIC).
[42] Schiebinger 2004, p. 142.
[43] Geschiedeniszeeland.nl. "Kralen". 2009. 28 June 2011. <http://www.geschiedeniszeeland.nl/themas/slavernij/handelsgoederen/kralen?lng=nl>.

not impossible task.[44] Beads like these would be widely available at Dutch trading posts, but would also be in frequent use with African people all over the continent by the late eighteenth century, giving no clues about what particular tribe would use beads in this way.[45]

In addition, variation in beadwork between ethnic groups in Africa is endless. Even within one group there are different styles and colour codes. The meaning and fashion of bead colours vary over time, but have only been mapped sporadically.[46] However, the bead decorations on the Leiden babies strongly resemble those of so-called ere ibeji, or twin statuettes, both in colours and location on the body [Ill. 53]. The bead strings around the necks, waists, wrists and ankles of these statues immediately remind us of the beaded babies in Leiden. The Yoruba people of West Africa have made statues like these at least since the late eighteenth century.[47] Whereas in the seventeenth century the Yoruba reportedly killed or abandoned twins and their mothers as they were considered the offspring of adultery and bad luck, by the late eighteenth century this had completely reversed and turned into a cult of twin-worship.[48]

The Yoruba have an exceptionally high incidence of twin births: one in every twenty-two births is a twin birth, whereas this rate is only one in eighty in most western countries. Since the eighteenth century, twins are considered the bearers of fertility and good luck, and are believed to have exceptional powers that they can also use against those they dislike. Therefore, it is of utmost importance to keep twins happy, with beautiful clothing, the best food, and social privileges. Twins are also believed to be sharing one soul between the two of them, so if one dies without having been able to lead a full life, it is very important that his or her soul is offered a shelter in which it can house and lead that life afterwards, so the soul of the remaining twin will not experience imbalance. This shelter is the ere ibeji, a person-shaped statue carved out of wood of maximum 30 cm (10 inches) height. It is carried around and nurtured either by the mother or the other twin if it is a girl old enough to do so, as if

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[44] Trivellato, 1998. p. 65.
[45] Van der Zwan 1985, p. 18, Dubin 2009, p. 119-122.
[46] Carey 1998, p. 88-89.
[47] Stoll & Stoll 1980, p.42-3.
[48] Dapper 1668, p. 488: *"Daer worden gene twelingen gevonden, doch, gelijk gelofelijk is, wel geboren; want het vermoeden is dat een van beide by de vrou-moer vermoort wort, aengezien het baren van twee kinderen t'eener drachte een vrouwe daer te lande tot grote schande strekt, alzo zy vastelyk geloven, dat een man geen vader van beide kinderen kan zyn."* Also see Vogelzang 1994, p. 5-6.

it were the infant itself. When both twins die in infancy, ere ibeji are made for both of them and the mother nurtures them and carries them with her everywhere, which also increases her social status. The ere ibeji are more often than not decorated with strings of beads around the neck, waist, ankles, and knees, and are sometimes given a string of cowry shells, which used to be used as currency, as a sign of wealth.[49]

The strings of coloured beads worn by the ere ibeji are not merely decorative; the colours have particular meanings and functions. Red and white beads honour Shango, god of thunder and lightning, blue ones Oshun, the goddess of life-bringing water and healing. White beads refer to Obatala, the creator-god, green ones to Orunmilla, the god of the oracle, a combination of black and red beads is to honour Eshu, deity of fortune, death, and travellers. A variety of colour combinations means the maker wants to honour and unify multiple deities. Especially noteworthy is that black beads around the waist – as can be seen on at least one preparation [Ill. 22]- are a protection against Abiku, restless spirits that are believed to take over the bodies of children who die before or quickly after birth, only to be born to the same parents over and over again.[50]

The Dutch stationed in West Africa in the seventeenth and eighteenth centuries may very well have seen bead decorated ere ibeji: the Yoruba then lived in an area called Dahomey and Oyo, roughly in what are now Nigeria and Benin. It is known that this area was occasionally visited by the Dutch slave traders to do business and solve conflicts with the local chiefs, for example as revealed in the letters and diary of WIC emissary Jacobus Elet from the 1730s.[51] Interestingly, a number of the tribes living in this area at the time appear to have been cannibalistic and to have used human skulls and bones for decorations.[52] However, no accounts of WIC personnel obtaining any of these decorations or other human material have been found. Another possible point of access to black foetuses was of course the slave ships. For example, a 1788-9 slave ship surgeon's journal of the Middelburg Commercial Company, a smaller trading company operating next to the VOC and WIC, lists numerous births, of which a remarkable number are multiple births.[53]

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[49] Stoll & Stoll 1980, p. 36-47, 70-71.
[50] Al0037, Vogelzang 1994, p. 18.
[51] Den Heijer, 2000.
[52] Schlothauer 2012, p. 119-122. In fact, human body parts are a sought-after commodity even today in this area. See Ololade 2011, Aransiola & Asindemade 2011, p. 762.
[53] i.e. in MS ZA MCC 1410, the 1788-89 journal of the ship's surgeon of the Middelburg Commercial Company ship ZeeMercuur 1, of the nine births described two are multiple births. We find an entry on

More reliable eighteenth-century descriptions of the people and customs of Africa are few and far between. Very often, such accounts were compiled from the writings of others by so-called fireplace travellers, endlessly recounted and copied without any verification.[54] However, there is one written source by someone who at least visited the area himself suggesting there was a fairly common tradition of decorating newborns with beads on the African west coast in the eighteenth century. In 1709, Willem Bosman, chief merchant at the fortress Elmina (currently Ghana), issued a '*Precise description of the Guianese Gold- Ivory- and Slave Coast'* in Dutch. The book would be translated into English and French, and frequent reprints appeared well into the 1730s, making the book one of the more trusted and wide-spread sources on Africa from the first half of the eighteenth century. In the book, Bosman notes that:

"Once a child is born, the priest or offering-papist, called 'Fetischeer' or 'Consoe' here, is called for, who immediately orders the child to be dressed with strings, corals and other rags around the body, neck, arms and legs, which are sacred and blessed with his normal statements, which protect the child against all diseases and other discomforts." [55]

This description of the function of bead decorations on newborns is remarkable, as the WIC personnel was generally distrustful of native medicine and religion – something which is still reflected here in the use of the demeaning terms 'offering-papist' (Bosman was a Protestant) and 'Fetischeer', derived from the Portuguese 'feitiço', magic.[56] The fact that Bosman associates the bead decorations applied to newborns with protection against disease and discomfort implies that this

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the birth of triplets of whom two are alive *("Een Vrouw Slaaf in de Kraam bevallen van drie jongedogters twee leevende een dood"*) on 29 May 1788. By June 14th, the two other girls had died too. The birth of a male twin is registered on 22 June 1789, one with a cleft palate and blind, dies straight away, his brother two days later (*"Een Vrouw: in de Kraam bevallen van twee jongesoons het eene met een hasenmond en all.bij oogen blind op daatoo overleeden*"). Three of the six single births were still births, and eventually all the babies born aboard the ship died within weeks.

[54] Adams 1962.

[55] Bosman 1709, p.118: "Zo haast een *Kind* geboren is, werd den *Priester*, of *Offer-Paap*, alhier *Fetischeer*, of *Consoe* genaamt, ontboden, dewelke aanstonds last geeft, dat men het *Kind* een gehele dragt met *Touwetjes, Couraal* en andere vodderyen om het *lijf*, *hals, armen* en *beenen* zal binden, 't geen dan door hem met zijn gewoonelijke *Beweeringe* werd *gewijd*, en *beswooren*, waar mede het als dan tegens alle *ziekte* of andere *ongemakken* is gewapend." (hyphens Bosman)

[56] For the attitudes of WIC personnel on indigenous medicine and customs, see Rutten 2000, p. 101 continued.

habit would have been of particular interest to western medical practitioners exploring the unknown.[57] Moreover, these examples strongly suggest that the bead decorations on the Leiden preparations are either original or inspired by the bead decorations of ere ibeji or West African babies. The accounts explaining why the maker of these preparations decided to decorate them in this particular way may have been already out-dated at the time of their creation, a fact of which he may also have been aware. Yet the decorations were important for the commodification aspect of aesthesis. Preserving the body itself ensured it became stable and tradable, and adding bead decorations perceived as 'African' in Western Europe was making a claim about the geographical origins of the babies, purifying and identifying them as 'African'. Without the bead decorations, it would in fact be very hard to tell they were African, but with them, they fitted nicely within the new categories coined by Blumenbach and his contemporaries.

The 'Asian' babies

Preparations Al0045 and Al0040 [Ill. 23-25, colour plates 4-6] from the Leiden anatomical collections are two female foetuses of respectively five-and-a-half and seven months old, with Asian features. One of them, Al0040 holds a twig with a berry in its right hand [Ill. 25, colour plate 6]. They have also been decorated with strings of beads in a manner similar to the African foetuses mentioned above, though this tells us little about their ancestry. As noted before, the use of trade beads in itself (also called seed or pound beads) says little about who made the decorations, or where and when: these beads were also used widely in the East Indies from the sixteenth century, and beadwork would continue to play an important role in all kinds of rituals in the area for centuries to come.[58] It is therefore very possible that the decorations were either made by natives from the East Indies, or that they were made by a medical officer of the Dutch East India Company (VOC) who was familiar with similar decorations from the African West, coast or who had seen or even made the preparations of African foetuses before. After all, the only eighteenth-century route from Western Europe to the East Indies was one with stages of stops in Africa.

[57] Recent work by Snelders (2012) illustrates that European medical men had a profound interest in materia medica and healing practices in the colonies, such as the use of talismans.
[58] Dubin, 2009, p. 238.

Moreover, there is one particularity of the bead decorations of Al0045 that confirms the idea that this preparation is from the East Indies, or at least represents the area.

In a lengthy article from 1899, Gerrit Pieter Rouffaer (1860-1928), a versatile Dutch scholar, discusses the origins of 'the mysterious moutisalahs (aggri-beads) in the Timor-group'. At the time he published his piece, Rouffaer wrote that both men and women wore certain kinds of beads of various colours, though preferably yellow or orange, as jewellery. West Timor had been Dutch territory since the Dutch drove out the Portuguese in 1640, with a short British interregnum between 1812 and 1816. Could the yellow strings of beads on Al0045 be representing Timorese moutisalahs? The beads Rouffaer describes have pierced little holes in them and are strung 'like coral', and the resulting strings are rare treasures of the rich on these islands - that is, West Timor and a number of smaller islands nearby. The beads appear to be antique; they are no longer imported from elsewhere and the material is not indigenous to Timor.[59] So where are they from? The earliest mention Rouffaer identified are two pieces by a certain W. van Hogendorp in the Proceedings of the Batavian Society for Arts and Sciences in 1779 and 1780. However, I have identified an even older source. In the 1705 posthumous edition of Georg Everhard Rumphius' *Ambon cabinet of curiosities*, he describes a strange kind of stone that is 'mostly worn on Timor, Solor, and the surrounding islands'.[60] The exact origins are unclear, so Rumphius describes how they look:

"They are grains of diverse appearance, most like slim disks, some like small cheese, other like pieces of pipes, similar to white or yellow coral, mostly red-yellow, some a bit more pink, some lighter, so they could be confused with worn corals if they would have had that shape.."[61] and *"...striped on the outside and pipe-shaped.."*[62]

That these beads were a desirable commodity appears from the fact that they were sold at half their weight in gold, and two strings of them would buy you a slave. As it was thought that the material for the beads could be found on the island of Sawo,

[59] Rouffaer 1899, p.409.
[60] Rumphius 1705, p. 245.
[61] Ibid., p. 246. On the next page he mentions that the name Mutu Labatta or Mutu Labatte is Malay for 'stone pearl', and only used by the Dutch and the 'Indians', the Timorese and Rottinese called them Va-Boa and Tzeda.
[62] Rumphius 1705, p. 247.

west-south-west of Timor, the VOC tried to acquire the mining rights to it, but lost a ship in the attempt and subsequently abandoned the idea. No curative powers appeared to be associated with the beads, and the exact location where they could be found remained unclear. Rumphius grumpily notes that it was possible the Timorese simply refused to disclose this, as 'it is a very angry Nation, that also hides other valuable crops and metals of their Land from us'.[63]

Subsequently, the next description of the yellow beads seems to be the one by Hogendorp in the late eighteenth century, quoted by Rouffaer. Willem van Hogendorp (1735-1784) was a co-founder of the Batavian Society. He had obtained a law degree in Leiden in 1754, and in 1772 left for Batavia to make up for the losses of the family fortune. After doing so, the ship he travelled back on, *Harmonia*, sank with all hands in 1784. In the same year, his two-part description of the island Timor appeared in the Transactions of the Batavian Society. In it Hogendorp wrote that 'Each kingdom has its exceptional valuables, that consist of gold and silver plates and stringed corals' and that the indigenous population of the isle of Savo, near Timor, rubbed themselves with fragrant wood oils, especially nutmeg oil, and that the women wore girdles of black or yellow beads.[64] Rouffaer also quoted numerous sources from the nineteenth century. A certain Salomon Müller in 1829 wrote:

"Apart from the arm-rings and gold plates, the necklaces are the most highly esteemed decorations of the Timorese. They consist of small gold balls and a special kind of beads of a yellow-orange colour, hard like glass, unevenly rounded and pierced with little holes. Superficially seen, one would think it is sea coral, but acid has no effect on them..."[65]

The descriptions of, and speculations on, the nature of the mysterious yellow-orange beads of the Timorese keep popping up throughout the nineteenth century, until the Berlin Professor Virchow in 1884 finally (and most likely correctly)

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[63] Rumphius 1705, p. 247.
[64] Van Hogendorp 1784: p.68: "*Elk Ryk heeft ook zyne byzondere kostbaarheden, die in gouden en zilveren plaaten, en aan elkanderen gereegen koraalsteenen bestaan." / p. 95: "Zy bestryken zich het lighaam met oliën van welriekend hout, en vooral van den noot-muscaad, waar van zy veel werks maaken (...). De vrouwen draagen eenen gordel, om het lyf, van zwarte of geele koraalen, twaalf of veertien vaemen lang.*"
[65] Rouffaer 1899, p. 412-413.

identifies the beads as made of carnelian.[66] This semi-precious stone is indeed not indigenous to Timor, but it is in India, so it is not at all unlikely carnelian beads ended up in Timor long before the arrival of the Portuguese in the early sixteenth century. The maker of Al0045 may very well have aimed to represent the yellow-orange moutisalah beads of the West-Timorese with the strings of yellow trading beads, combined with some other colours. Moreover, there is another remarkable aspect of the decorations of Al0045 that suggest a connection with the late eighteenth-century East-Indian Archipelago under Dutch rule.

Most remarkable is that Al0045 wears a beaded necklace which has been closed with a coin that has an inscription which reads "Hollandia 1778" [Ill. 24]. The coin on the necklace is by far the most vocal part of these preparations: it can be quite easily identified as a so-called VOC double wapenstuiver ('weapon penny'), coined in 1778 in the state of Holland to be shipped to and used exclusively in the East Indies.[67] These coins were made by the thousands and being not very valuable or rare, (they are nowadays quite widely available and sell for about ten euros), the coin may have been put on the necklace much later than 1778. In fact, it may have been put on the necklace at a later date with very specific intentions. By the late eighteenth century, the fourth English war (1780-1784) and its aftermath increasingly disturbed the VOC business. Shipments of money from the Netherlands did not reach Asia in time, or not at all, and return shipments with goods did not reach the homeland. In the latter days of the VOC, from 1796, the Company was therefore issuing emergency money. These 'whoppers' ('bonken') were stamped square pieces of copper, chopped-off Japanese bars of the metal.[68] The use of a 'wapenstuiver' as decoration on the necklace of the foetus could therefore well have been meant as a visual reference to the rich and glorious days of the VOC.

Moreover, a close look at Al0045 reveals that whereas the coin looks as a lock at the back of the necklace now, it was probably originally at the front, as a sort of medallion. A greyish denture on the foetus' chest certainly suggests so. This is remarkable in the context of a report by a former secretary of Timor and its subordinates. H.D. Wiggers in 1892 sent the Batavian Society of Arts and Sciences a string of moutisalahs with an account of how these were worn on Timor. In it, he

[66] Rouffaer 1899, p. 426-430.
[67] Cuhaj & Dudley (eds.) 2011, p. 1119. Many thanks to Marcel van der Beek and Ans ter Woerds, coin curator and librarian at Geldmuseum Utrecht for helping me identify this coin.
[68] Pol 1989, p. 46.

wrote:

"The most expensive kind is that of dark yellow or orange colour and of regular size. Overall, the moutisalah is light yellow in colour. Said beads are also worn by married women as a sign of unavailability, with a silver tobacco box attached to it as a medallion. If the required number of beads for a necklace is not available, the strings are commonly completed with normal Chinese or European manufactured beads."[69]

The Tropenmuseum in Amsterdam indeed has a number of eighteenth-century round silver tobacco boxes from the East Indies in its collections which could very well be used on a necklace as a medallion [Ill. 54]. With this information, Al0045 suddenly appears to be not simply a specimen of foetal development in the 'Asian race', but simultaneously an example of a Timorese woman in traditional jewellery and an explicit reference to colonial riches and power.

Then there is the twig with the berry held by Al0040, which resembles a rattle [Ill. 25].[70] If this would have been a Ruysch or Albinus preparation, the ball-shape of the berry would probably have been an allegory for the vanitas *homo bulla* - man is nothing but a bubble. However, this preparation is likely to be at least half a century younger, and the meaning of the berry-rattle therefore must be sought in its colonial background and in general iconographic themes. Although it is hard to determine a berry that has been kept in preparation liquid for about two hundred years, this specimen appears to be nutmeg [Ill. 55]. As we have seen, Hogendorp mentioned that some natives perfumed themselves with nutmeg-oil.[71] Nutmeg also played an important role in the colonial trade in the East Indies. It was not only appreciated for its culinary characteristics, but also stocked on the slave ships for other uses during the journey. Nutmeg has active hallucinogenic properties, which the slaves knew could relieve the strains of the long journeys, and the Dutch themselves recommended it for all kinds of physical ailments. However, excessive use could

[69] Rouffaer 1899 quoting Wiggers 1892, p. 443 (translation and underlining mine)
[70] Luyendijk-Elshout in 1952 identified this preparation as 'Mongolian', but her reasons for doing so are unclear.
[71] Van Hogendorp 1784, p. 95.

cause delirium and even death.[72] Naturalists and medical men, both in the colonies and the Netherlands, were therefore very interested in nutmeg.[73] Apart from the possible medical importance, the iconography of the berry as a rattle may refer to the traditional function of a rattle given to infants to scare off evil spirits [Ill. 56].[74] This would fit with the known meaning of the beaded strings as described in Bosman's travel accounts: in a way the African beads and the western 'rattle' have the same function.

Moreover, the common or fragrant nutmeg (Myristica fragrans) is native to the Banda Islands of Indonesia, which were brought under Dutch control with brute force in 1621. This meant the Dutch would dominate the nutmeg trade for almost two centuries, until the English temporarily gained control over the Banda Islands during the Napoleonic wars (1803-1815).[75] It was highly valued in Europe, and the French too went to great lengths to get hold of and cultivate nutmeg plants.[76] As nutmeg was one of the spices traded in considerable quantities by both the WIC and the VOC, it was probably chosen by the maker of this preparation -like the weapon penny on the other baby[77]- as a symbol of the (by then withering) glorious days of the Dutch East India Company. In fact, although it appears that the baby with the coin necklace was already in the Leiden collections by the 1860s whereas the lack of mention in the Zaaijer catalogues suggests the baby with the nutmeg was a later addition, there is a strong indication that these two preparations were actually made by the same person, maybe even as a pair.[78] The nutmeg 'rattle' has been tied crisscross to its hand with a piece of string; on the right hand of the other supposedly Asian preparation, we see an almost identical crisscross imprint of string too [Ill. 23, 25].[79] Although we will probably never know for sure what was in that hand, it could well have been a sprig with a berry of the sandalwood tree, native to Timor [Ill. 57]. Another possibility is that this preparation also originally held a nutmeg 'rattle', referring to Rumphius'

[72] Rumphius 1741, vol. II, p. 21-23, Rutten 2000, p. 46, Cook 2007, p. 126.
[73] On the role of Dutch medical men in collecting colonial naturalia and material medica from the seventeenth century onwards, see i.e. Swan 2005, Van Gelder 2011 and Weber 2012.
[74] De Vries & De Vries 2004, p. 246.
[75] Cook 2007, p. 186-7.
[76] On these attempts see Spary 2005.
[77] LUMC catalogue number Al0045.
[78] LUMC catalogue numbers Al0045 and Al0040 respectively.
[79] LUMC catalogue numbers Al0040 and Al0045 respectively.

mention of a belief among the local women that nutmeg could help women conceive twins.[80]

As the bead decorations, the berry 'rattle' and the 'snuff box' coin on the two Asian preparations are most likely to have been added by a European who was not only interested in human anatomy and anthropology, but who also wanted to create vivid reminders of a recent, more affluent, past. Once again, the commodification of the human body was not only a way to render it stable and tradable, by decorating it the maker also made claims about the geographical and ethnic origins of the body, and by shipping the thus stabilized and categorized body back to the dominant centre of knowledge he ensured he stayed connected to it. Because of the similarity in the bead decorations and the way they were preserved, and combined with their limited geographical spread nowadays, it appears probable that the Asian babies were preserved by the same person as the African ones; or at least by someone who was familiar with the latter. As mentioned already previously, it appears that aesthesis, and particularly the commodification aspect associated with it, played a part in the decisions to decorate preparations of human foetuses this way. In fact, I believe that aesthesis turned out to be essential in the commodification and exchange of these preparations.

Possible makers

The scarce eighteenth-century descriptions of West African and East Indian people and their customs means that the beads on these preparations tell us little more, which brings us back to the question of how they ended up mainly in Leiden. Which European medical man or men could have brought or sent these preparations back to the Netherlands? It would be helpful to know more about these people, as this could also tell us more about the commodification aspect of aesthesis. In the correspondence of the Leiden professor of anatomy Sebald Justinus Brugmans (1763-1819), a number of contacts in Africa that provided him with skulls and 'curiosities' are documented, but these all date from after 1800.[81] Nor do any of the letters specify the nature of the curiosities, so these sources do not tell us anything about the beaded babies already obliged to make deductions.

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[80] Rumphius 1741, vol. II, p. 15.
[81] Van Heiningen 2009, numbers 207, 229, 259, 551.

Where may these preparations have come from? For the African foetuses, it was most likely through someone stationed in one of the trade centres on the West African coast or the West Indies, appointed by the West Indian Company in the second half of the eighteenth century. Moreover, this person would have had access to the foetuses of African babies, he would have known collectors of anatomical preparations in the Netherlands, more specifically in Amsterdam (Bonn) and Leiden, would have valued such preparations, and would have had sufficient skill to lastingly preserve them. Trying to identify someone who fits this profile presents us with another problem: the meagre administration of the second WIC. By the second half of the eighteenth century, the trade on the West African coast had been opened up to all residents of the Dutch Republic; only the slave trade with Surinam, Essequibo, and Berbice was still exclusive to the WIC.[82]

Unlike the VOC, the WIC hardly kept track of who was employed on its ships and in its stations abroad. Surgeon-majors were likely to be experienced barber-surgeons; practically trained medical men with little or no academic education in medicine, well-versed in operations such as cutting stones and performing amputations. In general, it was hard to find qualified staff for the WIC, as the journeys to Africa and the West Indies were long and arduous. Often the death rate among the staff was higher than that of the slaves they shipped.[83] At the VOC, it appears the positions of ship's surgeon and assistants were more popular, which might have had something to do with the reputation of the company and the possible financial incentives the VOC offered.[84] Between 1770 and 1790, the VOC employed over fifty ship's surgeons.[85] This leaves us with numerous candidates indeed, many of whom left little or no material traces which can confirm or exclude them as the initial collectors of these preparations. However, the person (or persons) who made these preparations was likely to have some kind of connection to Leiden University. Lacking comprehensive evidence for these preparations' ancestry, I will give two suggestions of possible makers: Jacob Voegen van Engelen and Cornelis Terne.

[82] Den Heijer 2002, p. 169-171.
[83] Ibid., p. 156.
[84] Bruijn 2004, p. 206-207.
[85] Ibid., p.313.

Johan Voegen van Engelen (1755/6-1792?)

The son of a Baptist minister, Jacob Voegen van Engelen was enrolled at Leiden University in September 1771. His study of medicine in Leiden ended abruptly in the spring of 1776, when it appeared that his girlfriend Clara van Meurs, the daughter of one of the substitute bailiffs, was pregnant. As his father refused his permission for a wedding and made (eventually unsuccessful) attempts to have him deleted from the *Album studiosorum*, the couple fled to Den Bosch in the southern Netherlands. Jacob then went to Duisburg, where he obtained his MD degree within two weeks of his arrival, on 9 May 1777. By 1778 Jacob and Clara had apparently returned to Leiden, as their son Cornelis was buried there in a rented grave on 17 May. On 4 October 1778, the couple finally got married in the English church. In the next four years, they had three more children, none of whom reached maturity. Although Voegen van Engelen developed as a rather successful writer and publisher in the years to come, it seems that without the financial support of his father he had trouble maintaining himself and his family, as he took up jobs on the side, like assistant city physician and doctor of the Swiss students.[86]

From the few letters in his hand that remain, it appears the aging Petrus Camper, the Leiden educated professor of Anatomy based in Groningen, who was an old friend of his father, was a sort of substitute father and Maecenas to him. In his letter of 19 January 1781, Voegen van Engelen addresses Camper as 'mon cher Protecteur', and merely eleven days later, he writes to him and tells him how comforting Camper's care for their 'domestic happiness' is to him and his wife.[87] From the letters it becomes clear that Camper corrected his printing proofs and answered his questions on new publications in the field such as that by Monro on the nerves in the *Philosophical Transactions* of 1780. Voegen van Engelen, in his turn, took Camper's side in a controversy over the dissection of an orang-utan from the Royal Menagerie in 1779.[88] However, Camper's support was likely to have been mainly emotional and practical. This probably explains why, around 1785, Voegen van Engelen eventually accepted the position of lecturer in the Surinam colony.

From Surinam, Voegen van Engelen published a journal on the influence of the tropical climate on health. Entitled 'De Surinaamsche Artz' (The Surinam MD), it

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[86] Lindeboom 1981, p. X-XVI.
[87] Voegen van Engelen 1781, MS UL BPL 247/26.
[88] Voegen van Engelen 1779, MS UL BPL 885.

appeared between 1786 and 1788, but appears to have not been read widely. This is also the last sign of life of Voegen van Engelen. Did he send bead-decorated foetuses back to his alma mater from Surinam? It seems unlikely given the manner in which he left Leiden, yet the undecorated black foetus in the Camper collection could well be a gift from him to his old friend and protector. If we take the distinguishing bead and plant decorations on the Leiden foetuses as an indication that they were all preserved by the same person, a person who wanted to position himself in the Leiden aesthesis tradition, we should look for someone who spent considerable time both in Africa and the East Indies, who had an interest in foetal development and the colonies and the exotic, Cornelis Terne is a more likely candidate.

Cornelis Terne

My sieving through the WIC archives has revealed that the surgeon-majors (chirugyn-majoor) employed by the company, according to the 1792 minutes of the council of the West Indian Colony, were obliged to keep a certain set of instruments during their appointment, to which end they were given a two hundred guilder grant.[89] Together with the printed minutes that outline the instrumental requirements for the surgeon-majors in the WIC archive, I found two remarkable manuscript copies from the minutes of the council of the WIC from 22 February 1793. The first is a request to appoint a certain Cornelis Terne, 'Medicinae Doctor and man-midwife' as surgeon-major with the third battalion of the Curacao garrison. Because of his outstanding knowledge and experience, it is requested that he will be given an extra ten guilders a month during his stay in the colonies, an extra twenty-four guilders a month during his journey, (another indication of the harshness of life aboard), as well as an additional two hundred guilders one-off fee and a 'free act' of a hundred guilders. The second manuscript is a confirmation of said request, in which an even higher stipend is established, signed the next day, 23 February 1793.

These documents are remarkable because Cornelis Terne was indeed a very experienced and knowledgeable physician and man-midwife. In fact, up till that moment, Cornelis Terne had been city obstetrician (vroedmeester) in Leiden. Born in May 1747 in Amsterdam, he enlisted with the VOC in 1766, disembarked in Africa in

[89] Extract found in: MS NA *Kamer Amsterdam. Register Van Uitgaande Brieven Aan Diverse Personen En Instanties Hier Te Lande. Met Bijlagen, Met Onvolledige Tafel En Onvolledig Repertorium*. 1.05.01.02 462. Tweede West-Indische Compagnie (WIC).

1768, and by 1770 had returned to Amsterdam to marry a certain Barendje van Buuren. Apparently she died soon thereafter, as in 1771 he married Sophia Christina Grave, with whom he had four children.[90] They moved to Leiden in 1776, where Terne obtained his MD with a thesis on abortions and premature births in 1778.[91] His supervisor was F.B. Albinus, and he dedicated his thesis to him and his other teachers: G. van Doeveren, E. Sandifort, J.D. Hahn, N.G. Oosterdyk and A. Bonn. In the same year, Terne was appointed as city obstetrician, a post he would hold for almost fifteen years. Apparently, Terne was not only very learned and experienced, he had a big ego and a temper too. In a 1990 article, Van der Borg has traced the many clashes he had with the city midwives and the city medical council, which eventually led to his dismissal in 1793.[92] In the same year, he divorced his wife, and, as it now appears, he enlisted with the WIC.

So are the African foetuses in the Leiden collection Terne's work? As there are no known records to confirm this, we will probably never know for sure. However, Cornelis Terne is a very likely candidate. First, as far as we know, he was the only medicinae doctor with a Leiden degree enrolled by the WIC in the second half of the eighteenth century. This means he probably had acquired the technical skills to create this kind of long-lasting wet anatomical preparations during his Leiden training, something unlikely for a barber-surgeon. Second, Terne's Leiden training makes it very likely he was familiar with the aesthesis of the Leiden anatomists who were his teachers and masters: Albinus and Van Doeveren. Terne may well have seen Ad0030 in the collection of his teacher Van Doeveren. This very light-skinned (probably mixed-blood) foetus has only a simple string of coloured trade beads around its neck, and may have inspired Terne years later to obtain more beautiful, more perfectly African specimens of fetuses for his former teachers and their colleagues –after all, the beaded babies can first be traced to the collections of Brugmans and Bonn.[93]

The influence of aesthesis can be seen in all these preparations: they present material, tangible knowledge of 'the other' and 'the exotic' as well as knowledge of normal human anatomy, providing in a sensory manner perceivable objects which would otherwise be almost inaccessible for the eighteenth-century European

[90] For dates and archival pieces see Van der Borg 1990, except enlisting with VOC: "Voc Opvarenden". The Hague, 2008. Nationaal Archief. 26-05 2011. <http://vocopvarenden.nationaalarchief.nl/detail.aspx?ID=1270029>.
[91] Terne 1778.
[92] Van der Borg 1990.
[93] E. Sandifort 1793, vol. I, p. 27-90, 108.

anatomist. Also, the bead decorations of these apparently perfect babies fit well with the aspect of aesthesis which seeks to display beauty and elegance in the material products of one's knowledge, and thereby of averting the possible disgust dead bodies evoke. Finally, Terne's original training as an obstetrician, with primary focus on fetal development and premature births, easily explains his possible interest in these African fetuses. After his enrollment with the WIC, only one more trace is found of Cornelis Terne: in 1794 he won a gold medal for his reply to a competition issued by the Batavian Science Society, on the feeding of infants in the tropics. Curiously, he is still mentioned as 'obstetrician of Leiden' in this publication. Whether Terne indeed ended up in Batavia can only be revealed in Indonesian archives, but if he did, that might also explain the presence of Asian foetuses in the Leiden collections.

What remains a bit of a mystery though is the one beaded baby in the St. Petersburg Kunstkamera. It has been assigned to the collection of Frederik Ruysch, but as I have shown previously, it is unlikely to have been a Ruysch preparation because of the lack of injection, nor is it mentioned in the original Rusych catalogues. However, exchanges of knowledge between Russia and the Netherlands did not come to an end with the death of Peter the Great in 1725. For example, Leiden graduate and governor Johan Meerman (1753-1815) travelled extensively through northern Europe with his wife from 1779 until 1800. They spend two winters in St. Petersburg and Meerman described his visit to the Ruysch Collections in the Kunstkamera.[94] Although he mentions nothing about donating preparations to it, he was part of the extensive Leiden network and even had a cousin, L. de Sille, who was a ship's surgeon with the VOC.[95] These kinds of travels and connections were certainly not unique in the late eighteenth century; another indication of the ways aesthesis spread around the world. What unifies all these men, Johan Voegen van Engelen, Cornelis Terne and Johan Meerman, is that, as Latour would say, they wanted to domesticate the minds of others and stay connected to the dominant centre of knowledge.[96]

[94] Meerman 1804, p. 204.
[95] Bruijn 2004, p. 151, MS MMW De Sille 1802, 1804.
[96] Latour 1987, p.215-220.

Conclusion

In this chapter, I have answered a number of questions raised by ten eighteenth-century preparations of foetuses thought to be of African and Asian descent in the Leiden anatomical collections. First, the uncomfortable appeal of these preparations and the role commodification and exchange played in their creation were discussed. This made clear that commodification of the babies was an inquiry into indigenous knowledge as well as a way to stay connected to the dominant centre of knowledge. Moreover, it was a manner to fix otherwise fluent variations in human appearance into somewhat stable categories of geographically determined human race, an emerging field at the time.

Subsequently, I used the materiality of the preparations to establish that the geographical origins of these babies in the Leiden collections must be sought on the eighteenth-century West African coast and in the East Indies, and possibly also the West Indies. I have hypothesized that they were collected, decorated, and preserved by a medical man or men employed by the West Indian Company and, in the case of the Asian babies, the East Indian Company (VOC). Although there is no definitive proof of it in the Netherlands, I have shown that former Leiden city obstetrician Cornelis Terne is a very likely candidate. The uniquely high concentration of these preparations in the Leiden Anatomical Museum collections, combined with their lush decorations of beads, a coin, and a plant, is a strong indicator that they were part of the aesthesis so characteristic of eighteenth-century Leiden anatomy. However, their decorations function only partially in the same way as the decorations in the Ruysch and Albinus preparations. They also commodify the preserved body and direct the gaze of the observer to some extent, but in these preparations they are also act in such a manner as to communicate political, cultural and medical knowledge from the colonies to the centre. The occasional presence of similar individual preparations in other collections can easily be explained through the connections with Leiden networks.

The object-driven analysis in this chapter has shown three important things. First, that the materiality of the object itself is an extremely valuable source in tracing and understanding the active production of knowledge, especially when few other sources are available. Questioning the object itself shows once again that the creation of both knowledge and objects are intimately related, and mostly inseparable processes. The Leiden beaded babies do not simply represent knowledge; they are

both the result of knowledge production *and* eighteenth-century knowledge about human anatomical variety itself. Second, the analysis in this chapter shows that even though we have no written accounts of the makers or first keepers of these objects, and thus cannot even be sure that they actually *are* 'African' or ' Asian', they were certainly the product of aesthesis. They were equally informed by sensory perceptions, reason, and a quest for beauty. This 'colonial' aesthesis demanded the recording of the physiognomy and habits of largely unknown people to enable further analysis.[97] The recording itself – the making of the decorated preparations - was also a very sensory and tactile affair, which in addition required a sense of beauty, as only a perfectly preserved, well-decorated specimen would make a worthwhile commodity.

Finally, the obscured meanings of the bead decorations on the African foetuses and the anthropological significance of the beads, plant, and coin on the Asian foetuses show that the preservation, decoration, and collecting of these foetuses was not simply done to render them stable, mobile, and combinable in order to ship them to the dominant centre of knowledge but was also an inquiry into, and an acquisition of, indigenous knowledge, and a way to categorize them. Objects like these beaded babies deserve more than hollow one-line descriptions in catalogues like 'gift from faraway regions', and a different kind of attention than that provided by glossy photographs in coffee-table books. When studied closely, they reveal vivid histories of anatomy, the emergence of (physical) anthropology, the development of our ideas on race, the other, and the exotic. These histories will be uncomfortable and confronting at times, but that does not outweigh the insights they offer.

[97] I put colonial in parenthesis here because I do not want to pretend I have written a history of colonial aesthesis or anatomy. The babies are at best a tiny fraction of colonial aesthesis in anatomy – a topic that definitely deserves more scholarly attention.