Book Excerpt · Chapter 28 · Audhumbla Remembers

Chapter 28: Holstein — The Super Breed That (Almost) Came From the Netherlands

Introduction: A Name, an Irony, a Cow in Ginnungagap

Here in Ginnungagap, where I feel all my lives at once, I moo with amusement. My official name is "Holstein-Friesian", but most call me simply "Holstein" or "Holstein cow". Which, as it turns out, is a rather complicated name.

For the irony of history is this: most "Holstein" cattle have their roots in a vast genetic muddle along the entire North Sea coast — from Denmark across Holstein and Oldenburg into the Netherlands.

There was no single place of origin.

There was only a great, chaotic, centuries-long back-and-forth of cattle, sold, exchanged or bought after disasters. Cattle plague? Import Danish cows. Storm tide? Fetch Holstein cattle. War? Buy from the neighbours. That went on for centuries, and nobody kept pedigrees.

The genetic roots of this story probably reach back to the Romans. When Tacitus wrote around 65 BC about the Germanic tribes in northern Europe, he remarked of the Frisians and Batavians: "Their cattle are not handsome, but numerous." Which in the Roman context probably meant: they were no elegant Mediterranean cattle, but tough enough and productive enough to justify large herds.

The Batavians — a Germanic tribe probably from the Hesse / southern Lower Saxony region who had moved into the Rhine Delta — probably kept darker cattle. The Frisians, who had lived on the coast for

longer, had their own animals. Whether the Batavian cattle were black, the Frisian white, or whether everything was much more mingled — we do not know precisely. The Batavians sadly left us no cave paintings. They lived in solid timber houses, which was civilised but, for historians, regrettably impractical.

What we do know: until about 1750 most cattle in this region were single-coloured red. Then something changed. Black-and-white cattle appeared in growing numbers — imported from Jutland, from northern Germany, from Holstein. After the devastating cattle plague of 1769 the Dutch bought in cattle in great numbers: Danish, Holstein, small German cattle from Oldenburg, Münster, Hanover. The colour grew more varied, the genetics more diverse.

Phew, when I think about it — here in this timeless space, where no time passes and yet all time is simultaneous — I waggle my ears. That my genetic roots lie not in a precise breeding programme but in a centuries-long, chaotic cattle trade between neighbours who helped one another out when plague came or when the dykes broke — that is somehow reassuring. We Holsteins are no designer breed from a laboratory. We are the result of pragmatism, catastrophes and neighbourly aid.

The transatlantic story of my breed is one of the most successful rebranding campaigns in agricultural history. And nobody seems to mind that the name "Holstein" tells only part of the story. A part of the cattle that went to America did indeed come from Holstein. Another part from East Friesland. Others again from the Netherlands. But "Holstein-East-Friesian-Dutch-Danish-Oldenburg Lowland Cow" would have been an impractical name.

It is rather like calling Champagne "Burgundy" because a few wine bottles once travelled through Burgundy. But at least the name is shorter than my ear-tag number.

I am Audhumbla, who wanders through the millennia. And this time I tell you the story of how, out of a north-German-Dutch-Danish mixture, a "global monoculture" was born.

28.1: The Colour Changes — Red Becomes Black (1500–1800)

In Ginnungagap I remember cows that were red, before they became black-and-white.

That sounds odd, but it is true. Until well into the eighteenth century, most cattle in the north German-Dutch coastal region were single-coloured red or red-and-white pied. The paintings of the time show this. Art historians have analysed the colours of cattle in landscape paintings by famous Dutch painters — and the figures are unambiguous:

From 1500 to 1600: 22 cattle painted. Of those, 8 red, 6 beige, 1 yellow, 3 dark, 4 other colours. Not a single black-and-white.

From 1600 to 1750: 163 cattle painted. Of those, 96 red, 50 beige, 6 yellow, 4 dark (perhaps with black markings), 7 other colours. Not a single black-and-white.

Figure 138: Paulus Potter, 1646 — black-and-white cow or only very dark brown? CC BY-SA 3.0

After 1750: 35 cattle recorded in 20 paintings, many black-and-white.

What happened?

The black-and-white colour increasingly took over from about 1750 — not by chance, but through trade, selection and genetics. The explanation lies in several factors:

First: the black-and-white cattle came originally from the coastal regions of northern Germany, Friesland, the Netherlands and Denmark. Their spread was forced by targeted trade, by livestock purchases after wars, natural disasters and after epidemics (such as the cattle plague).

Second: black-and-white cows did particularly well in the marshlands, because they generally showed higher milk yields and better adaptation to wet soils. In Holland and Friesland, performance-oriented breeding selection was already practised in the seventeenth and eighteenth centuries. These animals were imported into Germany after stock losses.

Third: the gene for black-and-white colouring is dominant over red. When black-and-white and red-and-white animals are crossed, the next generation is predominantly black-and-white. So genetics worked in favour of black-and-white.

Fourth: with the founding of herdbooks and selection on milk yield, the black-and-white colour became a breeding goal. Whoever wanted milk chose black-and-white.

I remember a red cow in Friesland, 1720. She was uniformly red, like her mother and her grandmother. The red cows gave less milk than the new black-and-white neighbours imported from Jutland. Her farmer, Pieter, saw the figures. He bought a black-and-white bull. The daughters of the red cow were black-and-white. Their genes remained — but their colour vanished.

Figure 139: Paulus Potter, "De Stier", 1647

Figure 140: Henry Schouten (1857–1927), "Zomerlandschap met Koeien", CC BY-SA 3.0

Hans-Peter Dürr would say: "Selection is relationship. The environment chooses what works." Jeremy England would nod: "Information condenses. Black-and-white information was more productive." Paul Davies would add: "A bio-friendly universe permits variability — but markets do not."

28.2: The Cattle Plague and the Reconstruction (Eighteenth Century)

The story of the Black-and-Whites is also a story of catastrophes and reconstruction.

Natural disasters — particularly on the North Sea coast: storm tides, dyke breaks — and epidemics, above all the cattle plague, repeatedly decimated the cattle stocks in northern Germany and the Netherlands. In the province of Friesland alone over three hundred thousand cattle died from the plague in 1713/14. Between 1744 and 1756 two thirds of the cattle kept there died. Equally high losses are reported for other north-west European provinces.

After the cattle plague outbreak of 1769 the Dutch had to buy in Danish, Holstein, and small German cows from Oldenburg, Münster and Hanover to replenish the herds.

Into this period falls the striking change in colour of the cattle kept on the Dutch-German North Sea coast. While until about 1750 single-coloured red cattle predominated, the number of black-and-whites rose from 1750 onwards. They are traced to imports, especially from the Danish peninsula of Jutland and from northern Germany, particularly after 1750.

I remember a herd in Friesland, 1770. The cattle plague had decimated this herd. Of thirty cows, five survived. The herd's farmer, Jakob, travelled to Jutland and bought twelve new cows. All black-and-white. Big, sturdy animals with impressive udders. They gave more milk than the red survivors. Within two generations the entire herd was black-and-white.

Friedrich Hayek would say: "Decentralised knowledge spreads through trade. Every farmer knew which cows were better. No state had to tell him." James C. Scott would add: "Catastrophes create opportunities for change. The cattle plague erased the old order. The new order was black-and-white."

28.3: Dutch Cows Conquer America (1625–1885)

Here in Ginnungagap, where I feel simultaneously all the lives of my fellow kind, I see something remarkable: while I myself lived in German byres, chewed the cud and was milked, thousands of my Dutch sisters set out on the journey across the Atlantic. I was not among them — my lives played out in East Friesland, Lower Saxony and Holstein — but I feel their memories, their fear on the ships, their bewilderment in the New World.

Let me tell you what happened while I chewed hay in Germany.

The Forgotten First Wave — Dutch Cows in New Amsterdam (1625–1850)

Figure 141: Aelbert Cuyp, Dordrecht — Cows on the pasture near Rijnsburg, ca. 1650, CC BY-SA 3.0

It begins early, very early. In the year 1625 — when I was just then, as a Frisian cow, grazing on a pasture near Amsterdam, suspecting nothing of any of this — the Dutch West India Company loaded a handful of my sisters onto a ship. Destination: New Amsterdam, the small Dutch settlement on the Hudson River that would later be called New York.

The crossing was hell. Six to eight weeks on a rolling wooden ship, pressed into the hold among barrels and goods. Seasickness. Thirst. Panic. Some cows did not survive. But some arrived.

In Ginnungagap I feel one of these cows — I call her Maritje, since she had no documented name. She was unloaded in New Amsterdam in 1626, wobbly on her legs, emaciated, but alive. A Dutch settler named Pieter received her. He built her a barn from rough boards, fed her with whatever he could find — grass from the Hudson banks, hay from marshes, in winter straw and roots.

Maritje gave milk. Not much, perhaps 2,000 kilograms a year, but it was enough. Pieter made cheese, sold butter to neighbours, drank the milk himself. Maritje had calves — by a Dutch bull that had likewise been imported. Her descendants stayed in New Amsterdam.

But nobody wrote down Maritje's name. Nobody kept records of her daughters. Nobody cared that she came from a long line of Frisian dairy cows. She was simply a cow. A useful one, yes — but not a breed.

Over the next two hundred years, Dutch cows kept coming to North America. The Dutch West India Company brought them, and later other traders too. Many went to New York, some to Pennsylvania, New Jersey, Connecticut. They crossed with English cattle, with local landraces, with everything available.

The result: the Dutch genes did not vanish — they flowed invisibly into the general dairy farming of the Middle States. The cows there became better, more productive, milkier — but no one knew exactly why.

It was genetic influence without documentation.

Here in Ginnungagap I see the paradox: I was everywhere — every cow in New York carried a piece of me — but at the same time I was nowhere. No identity, no name, no breed. Only milk.

The Decisive Turn — A Man Named Chenery (1852)

Then, in 1852, everything changed.

A gentleman farmer from Massachusetts, Winthrop W. Chenery, had a problem: his cows gave too little milk. He had heard that in the Netherlands there were cows that produced extraordinary quantities of milk — black-and-white cattle from the marshes along the North Sea.

Chenery was no ordinary farmer. He was wealthy, educated, methodical. He decided to travel personally to the Netherlands to find the best dairy cows.

In Ginnungagap I feel a cow named Agatha — born 1849 in North Holland, on a farm near Alkmaar. She gave 4,500 kilograms of milk a year — extraordinary for the time. Chenery saw her, examined her udder, questioned the farmer about her ancestry. He bought her. He also bought her bull calf, another cow, and a young bull.

The crossing was still gruesome. Agatha spent seven weeks in the ship's hold, chained, seasick, full of fear. But she survived. In autumn 1852 she arrived in Boston.

Chenery set up a barn for her, fed her on the best hay, milked her daily. Agatha gave more milk than any other cow in Massachusetts. Chenery invited neighbours to see his "Dutch wonders". The news spread.

That was the turning point. Not the Dutch cows themselves — they had been in America since 1625. But the attention. Chenery made the breed visible. He began to breed systematically, document yields, note ancestries.

Jeremy England would say: "Information is the catalyst. Chenery turned undocumented genetic resources into a managed, optimisable breed."

James C. Scott would add: "He created a category. And categories are power."