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Mr. Flower Power: Celebrating Linnaeus in 2007

In 2007, Sweden and in particular, the University of Uppsala, celebrated the tercentenary of the birth of the natural philosopher Linnaeus with a massive calendar of events. The Linnaeus Tercentenary had two objectives: 1) to increase interest for science among young people, and 2) to present a full-faceted image of Linnaeus for visitors to Sweden. This essay concerns the second objective and the question of how we choose to promote and to remember, national historical figures of science in contemporary culture.

Linnaeus was born on May 23, 1707. His father was a Lutheran minister in rural southern Sweden and assumed his son would become the same. Linnaeus, however, showed no academic abilities at school and eventually his parents gave in and allowed Linnaeus to study medicine -- not a prestigious career choice in the 18th century.[1] At the University of Uppsala Linnaeus showed an aptitude for materia medica (botany) – then part of medical training – and was given a teaching post as a botanic demonstrator in the ill-maintained university gardens. In 1732, the Royal Swedish Society of Science financed Linnaeus' trip to Lapland to hunt for useful plants, animals, and minerals. Sweden's economy was poor in the 18th century and the crown was eager to find and develop natural resources. Linnaeus returned to Uppsala to find that his teaching post had been given to another, and in 1734 he drifted north to Dalarna and secured work in the town of Falun as an unqualified doctor.[2] Wearing his Laplander outfit, Linnaeus courted and eventually became engaged to Sara Lisa, daughter of the town's physician. Sara's father was unimpressed by his future son-in-law's lack of a medical degree and in 1735 Linnaeus left for the Netherlands to complete his MD.

It was in the Netherlands that Linnaeus published the first edition of the work that would make him the most famous naturalist of the Enlightenment – *Systema Naturae*. In a brief eleven pages, Linnaeus proposed a new classification system for plants using their sexual parts – the stamens and the pistils. Essentially all someone had to do to classify a plant using the Linnaean system was to count its sexual parts. This meant women, and even the semi-literate, could practice botany. By the time *Systema Naturae* reached its 10th edition in 1758, Linnaeus had classified 7,700 species of plants and 4,400 species of animals using his sexual system. Human beings or *Homo sapiens* were placed in the new class of *mammals*. (Linnaeus invented both of these terms.)

In 1738, after three years in the Netherlands, Linnaeus returned to Sweden, married Sara Lisa, and briefly practiced as a physician to the Swedish Navy, specializing in syphilis. But his true love was botany, and in 1742 he was appointed Professor of Botany at the University of Uppsala. Linnaeus was a gifted teacher who attracted hundreds of students to attend him on long 40-kilometer hikes around the countryside where they shot specimens to classify using the Linnaean sexual system. In 1748 the Rector of the University finally put an end to these noisy and somewhat drunken events with the famous words: "We Swedes are a serious and slow-witted people; we cannot, like others, unite successfully the pleasurable and the fun."[3]

In the University's botanical garden, Linnaeus arranged the plants according to his system of classification; he then made three more expeditions to various parts of Sweden to find new things to classify. His students, whom he referred to as disciples or apostles, were encouraged to travel around the world – to North America, Iceland, Palestine, Japan, China, South Africa, Java, and Sri Lanka – to collect and send back new specimens to Linnaeus. Meanwhile the teacher sat in his garden at Hammarby writing their dissertations for them. Most of his disciples did not make it back to Sweden due to accidents, diseases, and suicides.

Linnaeus collapsed whilst giving a lecture at his summer home in Hammarby in 1774. He died four years later, following a cerebral haemorrhage, and was buried with great fanfare by his colleagues in Uppsala Cathedral. To support herself and her five living children (four daughters and one son), his widow sold all of Linnaeus' collections to an English doctor. They still form the main collection of the Linnaean Society of London.

So how was Linnaeus remembered and celebrated before the recent tercentenary in 2007?

His legacy has not been constant throughout history. In 1778, when he died, Linnaeus was exalted locally, but nationally and internationally, his peers ignored him. His classification system was indeed widely accepted, although a new generation of naturalists had modified it. Linnaeus was old hat, literally. The French-speaking Swedish court had initially found Linnaeus thrilling for his uncouth manners, dusty old clothing, unwashed and unshaven state, and greasy green hat. But by 1778 neither Linnaeus's manners nor his hygiene fit the image of a rational Enlightenment figure. Even his students had largely abandoned him during the 1770s.

The first biography of Linnaeus appeared a few months after his death. Written by his brother Samuel, a Lutheran minister, it described Linnaeus' life as the unfolding of a destiny. Samuel cited a series of auspicious signs – a cradle decorated with flowers, Linnaeus always carrying a bunch of flowers around as a toddler – as proof of his older brother's ultimate legacy. These mythical stories appealed greatly to the Romantics of the early 19th century. Goethe said that along with Shakespeare and Spinoza, Linnaeus was the greatest genius who ever lived. The first publication of Linnaeus' four autobiographies in 1824 did much to solidify this narrative of the romantic naturalist.

As evidenced in mid-19th century science and history textbooks used in Swedish schools during the full development of Nordic National Romanticism, Linnaeus' biography had come to follow a certain storyline. Born into poverty, in the middle of nowhere, Linnaeus' genius for botanizing was tragically not recognized by his teachers. But he persevered against these tremendous odds and eventually became a brilliant physician and naturalist. In Uppsala, jealous professors tried to destroy his success but failed and Linnaeus became a hero to his students, to the Swedish crown, and to scientists around the world for the development of a new and revolutionary classification system.

In 1889 the notebook that Linnaeus kept on his journey to Lapland was rediscovered and published in Sweden. His vivid provincial prose and naïve drawings caught the imagination of readers and drew attention to the literary dimensions of his scientific work.[4] With his new exalted status, Linnaeus came to be associated with the sophisticated little luxuries of life -- cream cakes, liqueurs, and chocolates were all named after him. The conservative government embraced him, and May 23, Linnaeus' birthday, was made a national holiday in 1892. On Linnaeus Day, flags were flown, schools closed, and bad poetry encouraged. Of course proclaiming May 23 a holiday also effectively squashed any chance of May 1 becoming a socialist holiday.

The bicentennial of Linnaeus's birth in 1907 was the zenith of the conservative and nationalist Linnaeus cult. He was celebrated with parades, speeches, processions, and publications throughout Sweden but most particularly with a great Linnéfest in Uppsala, where he was proclaimed the *King of Flowers* and the man who put Sweden in first place regarding natural history for a major part of the eighteenth century. To counter the depression of having lost Norway in 1905, the government at the time was strongly encouraging nostalgia for a glorious Swedish past, including that of Linnaeus.

By 1907 Linnaeus had not only changed from a rustic boor to a literary sophisticate, he had also changed his appearance. Linnaeus was now blonde where he had been a brunette. He now had blue eyes rather than brown, and was now tall instead of short.[5] He became the darling of the Conservative party and the emerging eugenics movement; however, with the coming to power of the Social Democrats in 1926 (they would be in power for the next fifty years) Linnaeus was marginalized and subsequently discarded as an icon of Swedish genius.

Very little occurred at his 250th Jubilee in 1957, except for some academics lamenting that schoolchildren no longer recognized Linnaeus' name nor knew of his contributions to science. However, this was not the impression shared by academics outside of Sweden and several works were published lamenting that only the Swedes remembered Linnaeus. The key work was Wilfred Blunt's 1971 biography, *The Compleat Naturalist, A Life of Linnaeus*, which remains in print today. Blunt blithely wrote that: "To the Swedes, Linnaeus appears as a benign old naturalist, married to a commonplace and domineering wife, for ever walking through flowery meadows with a band of devoted pupils at his side, with larks singing and the sun ever shining."[6]

Intriguingly, while Linnaeus's legacy had seen its ups and downs, Sara Lisa's legacy had not changed in over 200 years. In the 1750s, Linnaeus's students had agreed that she was a crude, tiresome, and emasculating woman. Fabricius described her as a large, bouncing woman, "domineering, selfish, and quite without culture; she often spoiled our parties." Beckman claimed that: "The lady of LINNAEUS was a good housewife, but in no respect a pattern of a sweet and mild mother, or of a tender spouse. Her only son lived under the most slavish restraint and in continual fear of her. Even when he had attained the age of manhood, and bore an academical dignity, she compelled him to SWEEP HIS OWN ROOM."[7] At the 1907 Linnéfest in Uppsala, Sara Lisa was alluded to as the burden that Linnaeus patiently bore. Wilfrid Blunt concluded that Sara Lisa "seems to have been a typical Hausfrau, a thrifty provider but fond in her early married life of frivolous pleasures and the social round . . . Linnaeus, his mind on higher things, did not interfere; he could almost have been described as bigamously married, his other wife and true helpmeet being Dame Nature."[8]

By the late 20th century, historians were struggling to find ways in which to deal with the sheer messiness of the cultural memory and the scientific legacy of Linnaeus. Perhaps the problem was that Linnaeus was just too Swedish for any outsider to grasp. Tore Frängsmyer, a renowned professor of the history of science at Uppsala University, wrote in the introduction to a series of highly praised essays on Linnaeus in 1983 (re-published in 1994), “Whether seen from an international or a national viewpoint, Linnaeus is in many ways a very Swedish figure. Abroad he is one of the few really well-known Swedes.”[9] If Linnaeus was to be resurrected from the obscurity of the past sixty years, Frängsmyr added: “perhaps only a Swede, steeped in the cultural climate of Sweden”[10] could provide the analysis needed. In a real sense the tercentenary celebration of 2007 was an attempt to do this. By that year several negative scholarly works had appeared that showcased Linnaeus as a fraud and a racist. In reality, he did not actually spend more than a few days in Lapland on his several months’ journey, his attempts to improve the Swedish economy by growing tea and coconuts in Uppsala failed miserably, and his classification of primates and mammals reinforced the gendering and racial stereotyping of African men as female great apes.[11]

In the Uppsala University Hall, on May 23, 2007, Linnaeus’ birthday, 1800 people were welcomed by the Vice-Chancellor with these words: “It is the hope of the University that the Linnaeus Tercentenary of 2007 will broaden, enlighten, and enrich the picture of Linnaeus. We can look beyond the Flower King and instead highlight the scientist.” Frängsmyr delivered an official address in which the key theme was that Linnaeus was a man of paradoxes – scientist and humanist, national and international: “A researcher in the time of Linnaeus saw no razor sharp distinction between rationality and mysticism. We simply have to accept this contradiction about Linnaeus. We must not make him more unmuddled than he was.”[12] Clearly there were concerns about how to present an attractive and intelligible image of the eighteenth-century naturalist to a modern audience.

Using information gleaned during a month spent in Sweden in 2007 and from the official website for the tercentenary, I would now like to analyze what facets of Linnaeus were emphasized to foreign visitors (if you remember one of the two objectives of the celebration was to produce a full-faceted image of Linnaeus) before coming to a conclusion on the relationship of cultural memory to scientific legacy.

First is Linnaeus as innovator. It was repeatedly emphasized that Swedish inventions reflected Linnaeus's particular brand of innovation. From him sprung values that shaped the nation. The Managing Director of the Swedish Travel & Tourism Council proclaimed: "It's time to promote our heroes more vigorously than we have done up until now . . . Carl Linnaeus was an innovator, he was bold and crossed boundaries. He embodies positive aspects that we possess today, aspects that we should emphasise more . . .What is important for us is to create an image of Sweden, since there are many countries where people do not have a clear image of us. Linnaeus can become a good symbol in the same way as Swedish design was, when the Swedish Travel and Tourism Council marketed Sweden effectively in the Milan region."[13] Asked to list Swedish inventions and practices that obtained their inspiration from Linnaeus, the Director volunteered the Nordic mobile telephone system, Functionalism, and paternity leave.

Second is Linnaeus as a great traveler and explorer. "Linne was here" signs appeared throughout Sweden wherever Linnaeus visited. The peripatetic exhibition was designed to entice visitors to undertake their own explorations, following in the footsteps and spirit of Linne. 21st-century travelers, by following the carefully placed signs, could stand where Linnaeus once stood and compare the modern landscape with his descriptions

Third is Linnaeus as a secular gardener. Journalist and author Karin Berglund asserts that for Linnaeus it was Nature that was God. Nature replaced religion for Linnaeus, something she also noted in Sweden's contemporary secular society.[2]

Fourth is Linnaeus as romantic. This is evident in Maria Bergström's graphic novel, *The Early Adventures of Carl Linnaeus*.[3] The book describes Linnaeus's trip to Dalarna, his wedding to Sara Lisa, and his love of the countryside. Sara Lisa appears with Linnaeus on the book's cover, one of her rare appearances in 2007. She is essentially absent for everything post-marriage in the tercentenary celebrations, having become the disappearing wife.

Fifth is Linnaeus as ecologist. Carl-Olof Jacobson, Professor emeritus in zoology and chairman of the Swedish Linnaean Society, asserts that "Linnaeus was indeed modern and innovative. He was the world's first ecologist, long before the concept even existed. He could easily have arrived at the theory of evolution . . . The thought of how far Linnaeus was ahead of his time wakens the question of what he would have been capable of today? He would certainly have been involved in flora and fauna projects in tropical countries, and he would have nurtured biological diversity. And he would have loved the internet!"[4]

Finally what conclusions about the relationship of cultural memory to scientific legacy can we draw, based on this history of Linnaeus? In the nineteenth century Linnaeus was revived as a romantic nationalist hero. In the early twentieth century he became the ultimate Swede, but then was largely forgotten until the 1970s when a flurry of works sought to put him back together again, only to question the very qualities that had ensured his legacy in the first place. In 2007 Linnaeus was marketed as a postmodern figure, carrying the values of his society, particularly the environmental and ecological ones. Linnaeus was equipped with a laptop and reached out in cyberspace with a blog to his disciples -- us.

Yet if we analyze the facets of Linnaeus presented in 2007, his story has not really changed since his brother Samuel published the first biography in 1778. His story still fits the classic mold of the kind of heroism associated with practitioners of science. Linnaeus rejects the subjectivity of the church for the objectivity of science (the secular gardener). He is largely self-taught and comes to discoveries on his own (the innovator). He is a romantic genius who courts Sara Lisa in a Laplander costume and marries her before she and his family fade into the background. Finally, he is a rebel (Mr. Flower Power) who trudges up and down the country engaged in documenting and preserving nature (the explorer and the ecologist).

I would like to suggest that there seems to be only a limited vocabulary of facets and images that are routinely used to endow a scientist with heroic qualities. The devices may be flexible. In the case of Linnaeus they were designed to meet the needs of the times and to express some of the unique characteristics of his life and science. Nevertheless we still end up with the same story of the hero-scientist: a man battling alone against the forces of ignorance, the misunderstood genius who triumphs, and in Linnaeus's case, the victor who brings order to the world for 300 years.

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[1] For details of Linnaeus's life, see Wilfrid Blunt, *The Compleat Naturalist, A Life of Linnaeus* (London: Francis Lincoln, 1971) and Lisbet Koerner, *Linnaeus: Nature and Nation*, Cambridge, MA: Harvard University Press, 2001).

[2] Falun was famous for its massive copper mine. Respiratory and skin problems were rife in the town.

[3] www.Linnaeus2007.se

[4] *Iter Lapponicum* or Lapland Journey.

[5] Koerner's final chapter discusses Linnaeus' makeover.

[6] Blunt, 10.

[7] Ibid., 170, 175.

[8] Ibid., 174.

[9] Tore Frängsmyr, *Linnaeus: The Man and his Work* (Uppsala: Uppsala University Press, 1984), xii.

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[10] Ibid., xiii.

[11] See Koerner and also Londa Schiebinger, *Nature's Body: Gender in the Making of Modern Science* (Piscataway, NJ: Rutgers University Press, 2004).

[12] info.uu.se/press.nsf/linnemedaljer

[13] www.Linnaeus2007.se

[2] http://www.linnaeus.se/engelsk/download/18.44d172dc10f76d2e37e800010123/News_Nr3_PDF.pdf

[3] Maria Bergstöm, *The Early Adventures of Carl Linnaeus*, translated by Rupert Tansley, illustrations by Niklas Jönsson (Falun: Sensus Studieförbund and KulturPoolen, 2007).

[4] www.linnaeus.se/engelsk/download/18.44d172dc10f76d2e37e80009193/ Newsletter_Nr5_PDF.pdf