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Red Heels – The Symbol of a Power Shift in 17th-Century Copenhagen?

Introduction

Many people are aware of the massive popularity of the French designer Christian Louboutin's stilettos with their distinctive red heel and sole. They are the ultimate desirable item for fashion-conscious women (Semmelhack 2008, 66; 2011, 245). Some consumers even imitate the look by buying an ordinary pair of black stilettos and a can of red paint in pursuit of the admiration and cache so closely linked to this label of footwear (*The Telegraph* 2012). To protect the brand and its exclusivity, Louboutin has even trademarked his design, so that it is now controlled by law in the US (Milligan 2015). Today, this designer legally stands as the inventor of the red sole and heel design, enabling him, along with a high price tag, to secure the brand's exclusivity on the market and guaranteeing quality and originality for customers.



Fig. 1. Detail of bright red colour on stacked heel (Photo: Vivi Lena Andersen).

However, many are not aware that red heels and soles were also highly fashionable in Europe from the 17th century onwards, and a similar restrictive process took place at this early point. King Louis XIV of France often wore shoes with red heels and soles, and by regulation made them the preserve of the nobility, thereby making them into signifiers of authority, power, political privilege and wealth (Mansel 2005; Frisch 2013, 41). Their prestige was also linked to the high cost of red dyes at the time (Davidson 2011, 273). Evidence from portrait paintings of the time suggests that the social restriction concerning red heels and soles on shoes did not apply outside France (Swann 2001, 126-127), and recent excavations in Copenhagen reveal that the popularity of the red heels and soles was likely much greater than previously believed and could be found in a variety of social classes.

Finds from Copenhagen

The Museum of Copenhagen in Denmark has in recent years carried out a number of large-scale archaeological investigations in Copenhagen's city centre. Many of the finds from the excavations were retrieved from the city's old moat, part of which was filled in around 1670 when the city walls were expanded and reinforced (Lyne and Dahlström 2015, 21). The favourable preservation conditions for organic material on these sites have resulted in a large number of organic finds, including shoes. As such, the finds have contributed substantially to the museum's collection of shoes and shoe parts in leather, wood and textile, the majority of which date to the 17th century (Andersen 2013, 9).

A close examination of a selection of footwear and fragments of footwear found at Rådhuspladsen in 2011 and 2012 have revealed a surprisingly high percentage of footwear with various shades of red colour on the



heels and/or soles (Fig. 1). Twenty-six of 46 stacked leather heels and 19 out of 43 soles in a sample analysis showed traces of red colouring (Terkelsen 2014, 4). The subsequent analysis of all footwear from Rådhuspladsen confirmed this unexpected high number of footwear with red colouring and showed that 20 percent of the finds containing stacked leather heels and soles have traces of red colour (Andersen 2015, 28). All in all 548 heels and parts of heels from shoes were registered from the Rådhuspladsen site. 483 of them were stacked heels while 65 heels were the type of heels that had a wooden core covered with leather. None of the wooden heels with leather covers showed any traces of red colouring. Therefore the following observations are based on footwear finds consisting of stacked leather heels.

Processing the finds

The registration of the footwear was based on principles defined by June Swann and modified by Vivi Lena Andersen for the Museum of Copenhagen (Swann 2001, 312; Andersen 2013, 14). All shoes and parts of shoes were measured and all heels and soles examined for traces of red colour. The description of the footwear included notes on dating, the gender of the wearer (based on length of sole, shape of toe and shape of heel), the age of the wearer (based on length of sole) and the use of the footwear, including traces of repair.

Identifying male or female shoes can be difficult, but there are some features that can be used as indicators of the wearer's gender. These are visible in contemporary art. A sturdy, square heel is most often seen on men's footwear during this period, while a slim heel and a more pointed toe is likely to be from a woman's shoe. Also, men's shoes are in general longer than women's shoes, although it can be difficult to distinguish between shoes worn by older boys and women. The examination showed that red colouring was more often, but not exclusively, seen on men's footwear, but also appeared on women's and children's shoes (Terkelsen 2014, 23). When looking at the material from Rådhuspladsen in its entirety, fewer assessments regarding the gender of the wearer could be made, but in general it can be seen that footwear with red heels and soles were worn by both genders, and by adults as well as children (Andersen 2015, 28-29) (Fig. 2 and Fig. 3).

Use wear analysis of the selected footwear further showed a notable difference between items with and without red colouring. Red coloured shoes had been repaired more often than shoes without red colour. In 19 of 25 heels with traces of red colouring, additional wooden pegs had been hammered into the heel after it was first constructed, indicating that the heel had been repaired one or more times. The same phenomenon was seen in only eight of 20 heels without red colouring. Another indication of repair



Fig. 2. A woman's mule with red heel. The shoe is worn out, has holes and traces of repeated repair indicating that this red-heeled shoe was worn by someone in humble circumstances before it was finally discarded (Photo: Mia Toftdal).



more common in shoes with red colouring was the presence of large metal nails. These were present in 12 of 27 heels with red colouring and in no more than seven of 20 heels without red colouring. The nails were hammered into the heel from the top and, in cases where both sole and heel were present, the nail had been hammered through both parts, which is a clear indication that the nail was part of a repair rather than of the original construction. The larger number of wooden pegs and metal nails both suggest that repairs were more common in footwear with red colouring than in footwear without (Terkelsen 2014, 15). This observation was later supported when the entire collection of heels from the Rådhuspladsen excavation was examined.

A treasured object

When considering all the features examined one can imagine a typical 17th-century Copenhagener wearing red heels and/or soled shoes. This person was most likely a man and he often passed other men, and perhaps women and children, wearing the same type of shoes. But he may also have been in pain from treading on the large metal nails that were hammered into the back of his shoes in a last attempt to hold them together. Whether he was rich or poor is more difficult to assess. The quality of the leather and the craftsmanship of the shoes could be an indicator of the wearer's wealth, but so far it has not been possible

to make any definite quality distinctions between footwear with red colouring compared to footwear without (Terkelsen 2014, 24).¹

The one factor that may give an indication as to the wealth of the wearer is the repeated repairs. Most likely this feature is to be found in footwear belonging to less wealthy citizens like craftsmen, servants or perhaps the king's soldiers, but who appreciated the red soles and so took them to the cobbler more often than they otherwise would have done, or even made their own repairs before discarding them. It is also possible that this type of footwear had a much more complicated life cycle with more than one owner. No matter who wore the shoes with red heels, the many repairs can be seen as a sign that the last wearer did more to preserve them than the owner of footwear without this feature.

XRF analysis

In order to determine the components of the red colouring, 14 pieces of footwear with visible red colouring were selected for X-ray fluorescence analysis (XRF) at the Department for Conservation and Restoration at the National Museum of Denmark (Tauber 2014; Terkelsen 2014, 24) (Table 1). XRF analysis enables conservation specialists to detect if inorganic pigments are present as well as the concentration/composition of such pigments.

The analysis showed that all samples contained iron (Fe) as well as small amounts of calcium (Ca) and

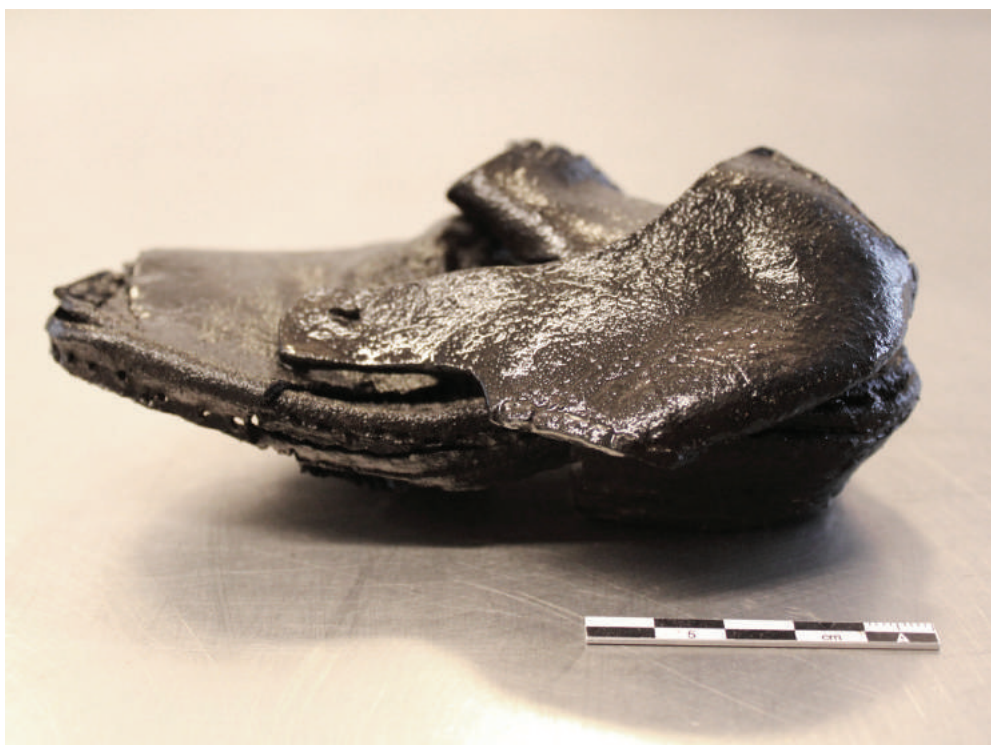


Fig. 3. Child's shoe with red heel. Footwear with red heels were worn by adults as well as children (Photo: Mia Toftdal).



object number	analysis location	summary of results (elements with higher peaks)
FO238544	side	<u>Fe</u> , Cu
	sole	same
FO238813	side	<u>Fe</u>
	sole	same
FO238857	side	<u>Fe</u> , Cu, (Pb)
	sole	<u>Fe</u> , Cu, <u>Pb</u>
	rivet	iron
FO239788	side	<u>Fe</u>
	sole	<u>Fe</u> , <u>Pb</u>
FO241466	thread	<u>Fe</u> , Pb
FO241467	side	<u>Fe</u>
	sole	same
FO241468	side	Fe
	sole	same
FO241469	side	<u>Fe</u>
	red spot	<u>Fe</u> , Cu, Pb
FO241470	side	<u>Fe</u>
	sole	<u>Fe</u> , Pb
FO241471	side	<u>Fe</u>
	red spot	<u>Fe</u> , Pb
FO241472	side	<u>Fe</u> , (Pb)
	top	same
FO241473	side	<u>Fe</u> , (Pb)
	sole	<u>Fe</u> , Pb
FO241474	side	<u>Fe</u> , (Pb)
	sole	<u>Fe</u> , <u>Hg</u> , Pb
FO241475	side	Fe, (Pb)
	sole	same with a tiny bit more lead

Table 1. List of the XRF results of the 14 leather shoes. If the element symbol is underlined (e.g. Fe), a large amount was found. If only a small amount was present, the element symbol is shown in parentheses: (Pb).

Tests undertaken by Michelle Tauber at the department for Conservation and Restoration at the National Museum, Denmark.

strontium (Sr). The presence of calcium and strontium likely stems from the wet soil in which the footwear was found. The iron could have the same origin, but could also stem from the metal nails hammered into some of the heels or an iron oxide colouring. These components are thus not indicative of the red pigment colouring only.

Ten pieces of footwear were found to contain lead (Pb) (Fig. 4). Lead is a component in the toxic red pigment called 'red lead'. The presence of lead could, however, also indicate the use of lead in glue or of a substance containing lead and oil that was applied to the heels and soles in order to make them waterproof. This component may thus be part of, but is not exclusive to, the red colouring.

One shoe also contained traces of mercury, a component used in the production of vermilion, an exotic and expensive red pigment (Lozier 2012, 129) (Fig. 5). The possible presence of both red lead and vermilion indicates that the red colour found on 17th-century footwear came from more than one kind of paint and that one of these was far more expensive than the other. In addition there is the possibility that a mixture of vermilion and red lead was used, a method of making the expensive vermilion go further or less likely to fade (Spring and Grout 2002, 57; Vadstrup 2006). An early example of how the two pigments differed in status can be found in the early Renaissance book *Il libro dell'arte*. Here the Italian painter Cennino Cennini warns his readers about buying ground vermilion as there is a risk of it having been replaced or mixed with red lead or ground brick (Cennini et al. 1942, 40).

New Luxury in a New Era

The second half of the 17th century was a period characterised by major political, social and economic upheaval in Denmark. The city of Copenhagen grew rapidly from about 30,000 inhabitants in 1650 to about 60,000 in 1710 (Feldbæk 1993, 81). In 1660, King Frederik III, with the backing of wealthy citizens and the clergy, was proclaimed absolute monarch. The nobility saw its power and privilege undermined while the citizens were able to gain influence and economic prosperity under the new rule. The old system of allowing privilege based on birth was breaking down, and ordinary citizens had a hitherto unknown chance to move up socially in this new absolutist society (Olden-Jørgensen 2011, 35).

During the 17th century a new type of luxury appeared in Europe, one that was available to a larger part of the population. The American

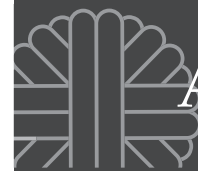


Fig. 4. XRF analysis showed that the colour on this heel contains lead. Lead is a component in the red pigment 'red lead' (Photo: Signe Groot Terkelsen).



Fig. 5. The red colour on this shoe contains traces of mercury, used in the production of vermilion (Photo: Signe Groot Terkelsen).



historian Jan de Vries calls it 'new luxury', as opposed to the nobility's 'old luxury', and describes a number of characteristics that define it: unlike 'old luxury' it is not unique, but produced in different qualities and price ranges; it is often made locally, imitates foreign and more expensive luxury goods, and is typically aimed at the domestic sphere and personal wellbeing (de Vries 2003, 51-52). De Vries describes this phenomenon in early 17th-century Netherlands and ties it to a booming economy in the increasingly powerful urban centres of Europe. Similar conditions were present in Copenhagen in the second half of the 17th century, and we believe it is possible that 'new luxury' could have emerged here too.

During the 16th and 17th centuries, a number of laws aimed at regulating the public appearance and behaviour of citizens were introduced in Denmark. The so-called 'luxury laws' dictated among other things what one should wear, how many guests one could invite to a wedding, christening or funeral, the splendour with which a church should be decorated and how many times the bells should toll for the dead – all depending on one's position in society. The aim of these laws was to solidify the existing social hierarchy and reinforce the differences between high- and low-ranking members of society (Jespersen 1997, 180). The luxury laws regulated what de Vries would call the 'old luxury', one that enabled the old aristocracy



to display its wealth and power and set it apart from others (de Vries 2003, 41). 'New luxury', on the other hand, emerged in the urban centres and was available to a much larger number of people, who used it to communicate new and more dynamic relations rather than maintain old hierarchies. The emergence of 'new luxury' thus enlarged the risk of social confusion and confronted established hierarchies (de Vries 2003, 43). Might shoes and boots with red heels have been part of this 'new luxury'? An argument in favour of this interpretation is the fact that coloured footwear is far from rare. It is seen in 20 percent of finds containing stacked leather heels and soles from the Rådhuspladsen excavation. Further, it seems that this type of footwear was more frequently repaired than other footwear, indicating that the wearers were more preoccupied with preserving the footwear with coloured heels than other footwear. The XRF analysis also suggests that this fashion was available to more people than just the very rich. One heel had been painted with vermilion, while the others were more likely painted with red lead and/or iron oxide – different kinds of red colour that came at very different prices. Finally, the shoes and boots analysed are likely to have been locally-made products (Andersen 2015, 50) and one can easily imagine how it would disturb social codes when men and children from all social classes walked the increasingly crowded streets of Copenhagen in footwear otherwise associated with the most powerful monarch in Europe, the Sun King of France. The use of red heels in 17th-century Copenhagen presented here is different from what is seen in collections and findings in other countries, where red-heeled footwear was a part of local footwear history. Therefore, it would be interesting to see the study of these shoes unfold further by comparing the finds with material from, say, England and Ireland where other strong political and social agendas were at play. This would add to our growing understanding that in this context, red colour was much more than a simple pigment.

Notes

1. As an experiment, a number of shoes and parts of shoes were also examined by master shoemaker Kenneth Elsgaard from Copenhagen, who found no difference in the way footwear with and without red colouring was produced and no noticeable differences in the quality of the leather. The work done by Kenneth Elsgaard is described in detail in Terkelsen 2014.

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