

# MUSINGS ON A MANUMOTIVE TRICYCLE

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In the early 1990s, the National Cycle Museum of Great Britain, based at Llandrindod Wells in Powys, was loaned the eclectic cycle collection of a bicycle shop owner, George Kerrison (known to everyone as “Dodger”) from Norwich. This loan has recently been converted by his family into a permanent donation.

“Dodger” Kerrison had collected cycles throughout his working life and, when he died, the whole collection came to the museum. Like all “magpie” collections, it contained some gems, a large number of other machines, some we were pleased to have while others were of no great significance, and there was also the inevitable residue of junk. There were many 19th-century and early 20th-century machines, together with some surprising “one-off” items.

Among these was the wreckage of a solid-tyred, manumotive tricycle. We know nothing of its origins since Dodger kept no written records of where and when he acquired the machines in his personal collection. The tricycle has no nameplates or other obvious identification and we have not found it, or anything like it, in catalogues or publicity material from the time when we estimate that it was manufactured around the year 1880.

The machine has a horseshoe-shaped open frame of tubular steel with two 100 cm diameter

driven solid-tyred wheels (one of which is in an advanced state of collapse) and a 60 cm diameter front steered wheel. The rider sat on a seat or saddle (which is missing) and operated a manual crank which was connected to drive both rear wheels through inch pitch driving chains (also missing). Steering was by a single fore-and-aft handle on the right hand, while there was a brake lever (incomplete) on the left side which activated two spoon brakes on the surface of the driving-wheel tyres. There are the remains of a wooden “tray” in front of and below the seat position with angled slots for a foot board. There was also a front mudguard, of which only the support stays have survived. There are two stabilizer arms at the rear of the machine with small diameter jockey wheels to prevent the machine from tipping over backwards. These also suggest that the seat or saddle stem was cranked backward from the socket on the cross member.

If we examine the ergonomics of this tricycle, we find that an adult rider, with a seat positioned

to give reasonable access to the hand cranks, would have had very, very short legs, even with the foot board at its furthest position. This machine was constructed for a disabled rider who had short legs, either through amputation, injury or through a birth defect. The actual distance from the supposed position of the seat to the supposed footboard in its farthest slot is a maximum of about 50 cm. It was an early form of manually operated tricycle for the disabled. “One-off” machines of this type have been known for centuries and there is a long history in Europe of manually operated tricycles having been constructed by or for the disabled, war victims or other amputees, going back to the 16th century or possibly even earlier.

We have the wreck of a specially constructed, one-off machine from around 1880, of which we do not know the origins or provenance and with a significant proportion of key components missing. And we have very little to guide us regarding the nature of those missing parts—no records, no pictures or any technical or historical information of any sort. It has even been suggested that the origins of this machine might lie in a conventional open-fronted tricycle which was later cannibalized to construct this special machine though, if this was the case, the conversion was done with a very high

level of engineering skill. But, of the parts which we do have, quite a number are in a very poor state and would require major reconstruction, even to put the tricycle back into “rolling” condition.

What, therefore, should be our course of action? We do not have the facilities to carry out the sort of major restoration work that would be required in this case. We do not have the technical or workshop staff, we do not have the researchers and, most importantly, we do not have the money to take on a project of this magnitude, even if we decided that this was what we wanted to do.

But, if we did restore it, we would then have a machine which did not meet the standard of “museum-worthiness” which is current today. Parts of it would have to be remade from scratch, while other major components would have to be “invented” according to the educated guess of, we hope, technically knowledgeable people. So the eventual machine would be part original, part restoration and part invention. We would have a “comprehensible” machine, but it would not be an original or authentic machine; it would be a “re-creation.”

Should the trustees and curators of a designated National Collection display reproductions? This is a difficult question for a cycle museum. Certain iconic machines of the history of the bicycle no

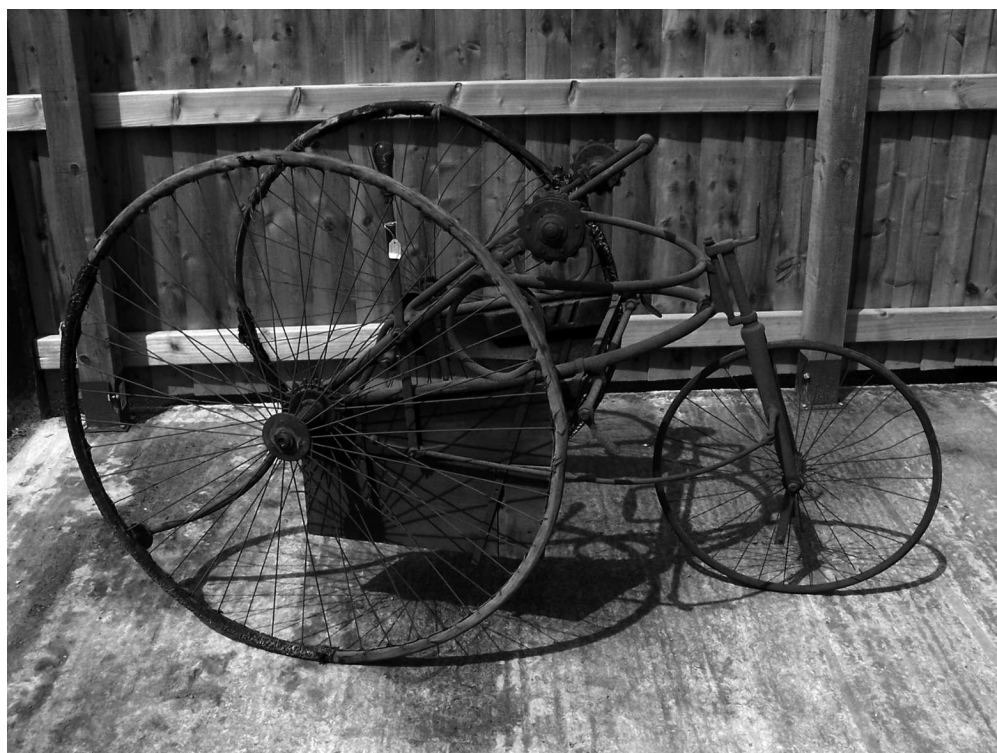


Fig. 11.1. Overview photo of the manumotive tricycle at the National Cycle Museum of Great Britain in Llandrindod Wells, Powys County, Wales.

longer exist at all. Every collection has its reproduction MacMillan treadle bicycle and there are other cases where the display of an overtly reproduction machine can be justified on the grounds that it is a key element in the story of the development of the cycle. The National Cycle Museum has a number of reproduction machines on display for this purpose. In the case, for instance, of the Peyton and Peyton lever-driven velocipede, this can be justified on the grounds that no original machine is now known to exist.

We even have some machines which, although in poor condition, retain certain elements which make them unique. For instance, we have a Crypto Bantam which still has its original, primitive pneumatic tyres, but they are completely perished and are no longer inflatable. We certainly could not discard these and replace them by modern “working” tyres. And what of the ruin of a cheap Hercules bicycle donated to us recently by the eminent astronomer, Sir Patrick Moore? He bought it as a boy and rode it until the police in the village where he still lives in Sussex asked him not to do so as he was a danger to both to himself and anyone else who got in the way! The machine carries in its wreckage the whole history of the life of its famous owner, and for his long-running television series “The Sky at Night,” this is the bicycle on which he would ride around the studio to demonstrate the orbit of the planets. It must remain a romantic ruin with “associations.”

While we seek authenticity and “genuineness,” we do exhibit some reproduction machines and, where necessary have fitted appropriate components of suitable age and make in order to complete otherwise genuine machines. But this presents its specific problems as well. For instance, we have on the manumotive tricycle parts of the original tyres. If we replaced the rim of the left hand rear wheel, we would have to fit a modern tyre to it. Or should we have a modern tyre made and then “distress” it so that it then matched the other two? Here we are here straying beyond the realm of reproduction and into the realm of recreation—or even of forgery.

There is an elegant solution to the replacement of parts on exhibited machines which can be seen

at the Italian Cycle Museum at San Remo where newly manufactured replacement components have been added on to a 19th century machine, but these parts have been painted a clearly identifiable and recognisable colour; in this case a dull red. However, I am afraid that in the case of our manumotive tricycle there would be rather too much red paint in evidence if we pursued that policy.

We do not claim to offer solutions to the problem of the authentic machine. As it stands, the manumotive tricycle cannot be considered as being of museum quality. If we restore it to the point where it is reasonably complete and “exhibitable,” then it would be far removed from the original genuine machine. I do not think that we should go down the path of total restoration although it can be claimed that a machine in “as-new” condition does at least show the museum visitor how such a cycle looked when it was brand new in the 1880s. In some ways, restoration is more acceptable in the case of a manufactured object than, for instance, in a work of art. Since cycles were mass-produced, there is no reason why we could not simply make another one. We have the techniques and the know-how available, although the cost of doing this might not be worth the candle. But you also have to beware of the descent into obliteration of the original and final arrival at the pastiche or, at worst, the forgery.

The position of the museum, as distinct from the private collection where the owner can do what he likes with his personal property, is a delicate one, to which there is no complete and final answer. The problem is exemplified by this manumotive tricycle, a unique, one-off machine, but so far deteriorated as to be only recoverable by compromising its authenticity. That is where we find ourselves today and I cannot offer a neat and ready solution to this dilemma. Being here today in an international gathering of experts, I will leave it as a topic for discussion and debate but, like another eminent British astronomer, the late Doctor John Ebdon, I feel that we may “come to no very definite conclusion.”