The Telescope Stand Inspiration for Marcel Duchamp’s Bicycle Wheel Readymade

Abstract

This article is the result of research following on from the author’s previous article on the same subject, ‘The Inspiration for Marcel Duchamp’s Bicycle Wheel Readymade’ written in 2007. In that article the author argued by process of deduction that Duchamp’s Bicycle Wheel was inspired by an improvised telescope stand and was not the product of the artist’s imagination as the artist claimed. This article presents new supporting evidence of a Great War period photograph of an improvised telescope stand made with a bicycle wheel and forks. This article also examines the dating of the first version and construction of the authorised versions of Bicycle Wheel and presents new evidence for the source of the forks component of the 1916 version.

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Bicycle Wheel is a three-dimensional artwork by French artist Marcel Duchamp (1887-1968). This well-known Readymade exists today in various artist-authorised versions.1 I have been fortunate to find a Great War era photograph (fig. 1) showing the inverted front forks and wheel of a bicycle being used as a universal type mounting for a telescope, an item of military equipment, exactly as I imagined in my 2007 article.2 Although this telescope stand does not employ a stool, it nonetheless offers considerable support for my original contention that Duchamp’s Bicycle Wheel was copied from an improvised telescope stand and was not the product of the artist’s imagination as he claimed. I contend that it is beyond the possibilities of coincidence for Duchamp to have created Bicycle Wheel independently without having seen a telescope stand similar to this. The photograph raises interesting issues with regard to Bicycle Wheel.
This photograph could not have been the actual image that inspired Duchamp to make his now iconic piece. It was taken in 1918. This is after the second version of *Bicycle Wheel* was photographed in Duchamp’s New York studio around 1916 and five years after the first version (now lost) was made in France according to Duchamp’s claimed date of 1913. It also seems highly improbable that an earlier photograph taken of this particular item was Duchamp’s inspiration.

Although there is no photo or exhibition record of the piece there is no reason to dispute that Duchamp made a version of *Bicycle Wheel* in France before he travelled to New York in 1915. However, this photograph prompts suspicion about the 1913 date. When I wrote my previous article, although confident in my contention, it always seemed likely that an improvised telescope stand would be used by the military and thus more likely to have been made after the start of hostilities in the Great War, rather than during the years before. This would be 1914 at the earliest and probably during the early months of the War at a time when pressing military necessity became the mother of invention. However, the established pre-war 1913 dating served to weaken my contention that *Bicycle Wheel* was based on equipment of a military nature and because of this I looked for confirming evidence for this date.

I could find no hard evidence for this date although this dating is supported by many Duchamp experts. It is supported because of the way it is perceived to fit *Bicycle Wheel* into
an artistic evolutionary timeline and also because of the artist's claim for this dating made in the 1960s. However, it was earlier than this that Duchamp seems to have indirectly claimed the 1913 date for *Bicycle Wheel*. In 1951 he approved the re-creation of the work for an exhibition at the Sidney Janis Gallery in New York. This exhibition was »Climax in 20th Century Art, 1913«. The date is part of the title. This exhibition apparently featured works with a connection to 1913. This seems to be the earliest association of the 1913 date with *Bicycle Wheel*.

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In 1950, the Sidney Janis Gallery mounted an exhibition called »Challenge and Defy«. At this exhibition Duchamp approved a replica of his *Fountain* to be displayed. Janis was a supporter of Duchamp and would naturally also have wanted the artist to be represented in his following year's »Climax« exhibition. With the »Challenge and Defy« exhibition he had established a precedent for re-creating the Readymades and repeating this exercise by re-creating *Bicycle Wheel* would offer Janis a tremendous coup for his »Climax« exhibition. It was an eye-catching piece that had never been exhibited before (I am discounting the studio photograph including *Bicycle Wheel* that was part of the *Boîte-en-Valise* 1941 version). It would also seemingly provide the important seminal Duchamp Readymade to this exhibition. The other early Readymade in the same vein, *Bottle Rack*, had already been exhibited, presumably with its 1914 date, and would probably have been ineligible for this exhibition on dating grounds. It looks suspiciously fortuitous to me that *Bicycle Wheel* happened to be dating appropriate for the »Climax« exhibition. There was incentive here to claim a false date of 1913 if necessary and because of this I don't believe that the 1913 date can be relied upon. I think the evidence of the photo indirectly points to a wartime creation for the telescope stand and a date of 1914 or 1915 as the likeliest time of creation for *Bicycle Wheel*.

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There is another reason that 1914 or 1915 is likelier. It would make sense that Duchamp would have the enthusiasm to want to re-make *Bicycle Wheel* after his arrival in New York in June 1915 if he had only recently made a version in France. The project would still be fresh in his mind. However, if the work were by then two years old this would be more surprising.

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The photo evidence also supports my contention in my previous article that Duchamp’s claim of a spinning functionality as a reason for the creation of *Bicycle Wheel* is also questionable. I noted that *Bicycle Wheel* had a rim but no tyre and suggested that this indicated inspiration from a piece of apparatus rather than from bicycles per se. The photograph of the telescope stand also shows a wheel rim without a tyre, with the telescope located in the channel of the
rim. This is exactly as I deduced a telescope might be fixed in my previous article. As is evident from the photograph, the wheel of the telescope stand was intended to turn and turn smoothly but not to spin like a bicycle wheel. This calls into question Duchamp’s claim that the purpose of the piece was to provide a form of therapeutic, inspirational movement from the spinning of the wheel. »Rather it had more to do with the idea of chance [...]«. Probably, to help your ideas come out of your head. To set the wheel turning was very soothing, very comforting, a sort of opening of avenues on other things than material life of every day.«

These observations were from an interview with Arturo Schwarz in the 1960s. Another questionable aspect of this claim is that a bicycle wheel rim does not spin particularly well because it is very light, but, if the spinning was genuinely important to him, he could easily have enhanced this feature by the simple expedient of fitting a tyre. This would add weight and momentum to the spinning wheel giving a longer, smoother spin. I have calculated the wheel size from the New York studio photos of the second version and my calculations agree with the Schwarz reproductions that the wheel was a standard 28 inch rim of the period and easy to get a tyre for. Duchamp could even have enhanced the spinning ability more by weighting the rim underneath a tyre. This would also have been easy to do. That he didn’t bother to do this suggests that spinning the wheel was not that important. I still feel, as I suggested in my previous article, that the spinning wheel story served to hide the true inspiration for the work and that it was the look of the piece that was important to him. Interestingly, had he fitted a tyre I think the work would have been even more eye catching and this would also have served to distance the piece from a telescope stand connection.

The photograph of the telescope stand with its roughly made tripod base draws attention to the stool component of Bicycle Wheel. It seems likely that such a clever improvisation as this would have been widely copied within the military community and being an improvisation made out of available disposable materials would have varied in detail. I do not believe that Duchamp contributed the stool feature. I still hold to my original contention that there is a logical practical reason for why someone would come to use a stool in this way. I feel confident that the telescope stand that inspired Duchamp would have had a stool as a tripod substitute and that this telescope stand would have looked something like my own piece illustrated in my previous article.

Also of interest is the size of the wheel shown in the photograph. A small wheel such as this works better than a large one in this application as it causes less movement of the telescope when adjusting for elevation. However, I think it unlikely that the larger wheel used on Bicycle Wheel was particular to Duchamp. A small wheel would have been harder to obtain at the
time. The larger wheel used in all the *Bicycle Wheel* versions was the common size of the early pneumatic tyre bicycles and was more likely to be used than a small one on the telescope stand with a stool base that I believe inspired Duchamp.

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Interestingly, this photograph shows British airmen using the telescope stand. This is surprising. It was the French who were well known for their improvised military equipment in the Great War, particularly in late 1914 and early 1915 when shortfalls in supply were exposed. This period in France is informally known as »La Guerre Artisanale«. French soldiers and citizens improvised such items as grenade throwers and anti-aircraft gun mountings and took pride in their ingenuity. These »home made« items were often photographed and featured in the illustrated newspapers and magazines of the period (fig. 2).

2 French illustrated magazine cover of 1915 showing an improvised anti-aircraft machine gun mounting made from a wagon wheel and barrel
The British had a bigger industrial base and their military were consequently better equipped than the French. They could be expected not to need to have to improvise items like telescope stands and yet here it is and surprisingly late on in the war. I still think it highly probable that there was a photograph in a newspaper or magazine of the Great War era that showed soldiers using a bicycle wheel telescope stand with a stool as an improvised tripod and that this inspired Duchamp. The existence of the photograph above shows that this kind of telescope stand was considered interesting enough at the time to attract the attention of photographers. It cannot be ruled out that Duchamp saw such an item «in the flesh» or even acquired such a telescope stand itself. However, the likeliest scenario is that he made the piece himself as he claimed; that he saw a news photograph of the telescope stand and made a copy of the form of the stand, probably not with the full function with the horizontal rotational capacity and of course, without including the telescope.

Even if the bicycle wheel telescope stand was an exclusively British improvisation, Duchamp could easily have seen a photo of an example in a British illustrated publication or even in one of the many French illustrated publications. There was a massive international trade in news photographs during the Great War period. Photos of British soldiers regularly appeared in French magazines and vice versa. There is also a possibility that with the contact between the military of the allied nations and the subsequent inevitable exchange of ideas the French may also have made versions of this telescope stand. Indeed, it may have originally been an invention of the French, as I argued in my previous article, or of any of the other combatant nations.

I believe that Bicycle Wheel was initially just a studio decoration. Artists and designers have always brought interesting looking bits of junk and kitsch into their studios in the modern era. When I worked for the BBC Television Design Department, the Department looked more flea market than designer interior as we brought in interesting looking graphics and salvaged props to personalise our workspaces.

Similarly, artists working at the seaside have often collected driftwood and other beachcombed items to decorate their studios. I believe Bicycle Wheel was, in effect, Duchamp’s «man-made driftwood» studio decoration. Driftwood is of interest as being an ordinary piece of wood transformed by the elements into something unusual and eye catching. I would argue that Bicycle Wheel was similarly something ordinary, a wheel and stool, but transformed by human ingenuity into something useful, a telescope stand, that was also something unusual and eye catching. Duchamp brought this piece of «man-made
driftwood into his studio as decoration, although probably having to make a copy to do this. Then, later, just as an artist might use decorative studio driftwood to inspire a sculpture or painting for exhibition, Duchamp used the memory of his lost studio decoration to inspire an artwork for exhibition when he authorised the Janis re-creation and subsequent re-creations. Before this I don’t think *Bicycle Wheel* can be regarded as a significant artwork, if it can be regarded as an artwork at all.

It is perhaps significant that Duchamp took so long to exhibit *Bicycle Wheel*. Many of the other Readymades were exhibited in the 1930s and 1940s yet he held back from exhibiting what is undoubtedly the most eye-catching work of this type. It is tempting to think that Duchamp did not exhibit *Bicycle Wheel* before 1951, alongside the other Readymades, because of the possibility that someone with wartime experience would identify a telescope stand inspiration for the work. This would not be good for his image if he were intent on claiming that the piece was his invention. Also, when he finally did exhibit the work, a similar suspicion is attracted by his decision not to sign it initially. Although he authorised the Janis re-creation in 1951 he did not sign this piece then. According to The Museum of Modern Art, who now has this version, he waited until 1959 before signing the work. Also, it seems it was not until 1961 that he claimed the construction was his own idea: »In 1913 I had the happy idea to fasten a bicycle wheel to a kitchen stool and watch it turn.« This is from his »Apropos of ›Readymades‹« lecture at MoMA. Perhaps after finally deciding to exhibit he was waiting to see if anyone would make the telescope stand connection before committing himself fully to the piece by signing it and claiming it as his own idea. It was in this year 1961 that the Janis re-creation was exhibited in »The Art of Assemblage« exhibition at MoMA and the work finally found a wide audience.

*Bicycle Wheel* should not be regarded as a significant artwork before 1951 not only because I contend that it was an unoriginal copy of a pre-existing item made initially as a decorative studio novelty, it was also never exhibited or presented as an item in itself in a graphic form to the art community. This should also mean that it cannot sensibly be categorised as a Dada artwork despite its present status as an iconic Dada work. As a Dada piece it seems to me that the only connection is the bizarre appearance and approximate dating.

*Bicycle Wheel* is a 1960s piece. It might not be typical pop art and was not created in the sixties but this is where it should be placed in the art histories and museums. It was not until the 1960s that the art world took a significant interest. In 1961 the Janis version was exhibited by MoMA and at about the same time an authorised version was made by art critic
Ulfe Linde and artist Per Olof Ultvedt. In 1963 artist Richard Hamilton made an authorised version. Then in 1964 it became a commercial proposition with the authorised Schwarz versions. It fitted in with the zany artistic spirit of the age. This was the decade of painted soup cans in art galleries, the Avengers and Monty Python on television and Frank Zappa and Sergeant Pepper in the record stores. I doubt that the majority of enthusiasts for this work in the sixties saw Bicycle Wheel as a Dada work with connections to the Great War era. I think they just thought it imaginatively bizarre and amusing.

The military photograph from 1918 (fig. 1) also draws attention to the precise form that Bicycle Wheel came to take. It shows that for the purpose of making a telescope stand many sizes of pneumatic tyre wheel rim will serve. Also, the forks would not need to be a match, just bigger than the wheel and with the rotational bearings usefully retained. It points up that a considerable amount of visual refining has gone into this piece down the years. This styling could have started with the selection of straight forks for the 1916 version (fig. 3). There is an interesting conflict here. On the one hand the straight forks do not look typical of bicycles, but on the other they give a powerful symmetry to the work. It is unlikely that the telescope stand that I contend inspired Duchamp had this feature. It would be nice to think that such a famous artist envisaged the visual impact of straight forks with this construction and even though the piece was not intended for exhibition, nonetheless went to some trouble to seek them out. There is some evidence that this is exactly what he did. Straight forks were very rare on the early pneumatic tyre bicycles from the 1890s onwards and only slightly more common on the earlier hard tyre safety bicycles. This scarcity has led to speculation that Duchamp did not source the forks as a readymade component but had them made. If this were true then the Readymade status of the piece would be compromised.

However, I believe the explanation of this puzzle is that the forks on the 1916 version were motorcycle forks, readily available at the time, and not bicycle forks. An expert on American bicycles of this period advised me that the straight forks on the 1916 version were untypical of bicycles regarding other details as well as the straightness. He noted the wide throat and near parallel blades, also the lack of taper to the blades. I have discovered however that these features are typical of a style of motorcycle construction common in the USA in the early 1910s. This style had a front suspension made from a pair of linked straight bladed bicycle type forks (fig. 4). These forks had to be wide at the throat to accommodate the wide motorcycle tyre and had little or no taper to the blades for strength. It is important to note that just because a pneumatic tyre bicycle rim was used for the 1916 Bicycle Wheel, it does not follow that the forks were contemporary, or even from a bicycle. I like to think that Duchamp
employed a little lateral thinking and used readily available motorcycle forks to get the visually satisfying symmetrical look for his piece. This also supports my view that it was the appearance that was important to Duchamp, not the spinning function.

3 Marcel Duchamp: *Bicycle Wheel*, New York 1916-1917
With the raising of the piece to the level of artwork with the Janis replica, the first version intended for exhibition (fig. 5), came a different type of artistic input. Janis obtained the forks and wheel for the 1951 version in Paris according to the information about this piece on the MoMA website. This seems a pointless trouble to take. If the idea was to replicate the original French version this is not necessary. There was no difference in the basic size and form of French bicycles compared to American ones. If the forks or wheel had French brand names or graphics then there might be some visual purpose to the exercise but they don’t. There seems to have been something psychologically rather than materially significant about this exercise that was important to either Duchamp or Janis. Perhaps it was just simple sentimentality about the history of the piece. Whatever the motivation, the conventional curved forks that were obtained are not as visually powerful as the straight forks. I suspect however, that the real reason for using these French components is that straight forks were proving difficult to obtain for a re-creation of the 1916 version. In 1951 they would be near impossible to find as a readymade item. I think that using conventional curved forks but with the added cachet that they came from France was the best alternative they could think of. In support of this reasoning it is evident that they managed to find a very good match for the stool component of the 1916 version. It does seem from the stool that in an ideal world they would have liked to re-create the straight forked 1916 version. That the later Schwarz versions have straight forks seems to confirm this.
It seems that there might have been additional styling work done to this piece after it came to MoMA. A monochrome MoMA photo view of the Duchamp gallery at »The Art of Assemblage« exhibition shows the stool looking very dark against the white walled space. The stool looks to be dark painted or dark natural wood. Today the stool is white painted (fig. 5). It might be a trick of the light but it does appear from the evidence of this photo that the stool was painted white sometime after the 1961 exhibition, or a switch was made. If this was the case it must surely have been at Duchamp’s suggestion. The stool on the lost 1916
version looks to be white from the evidence of the monochrome photographs (fig. 3). With the Janis/MoMA version being apparently subsequently changed to white also, there seems to have been a definitive style setting process at work here for the stool component.

The styling was further refined for the commercial Schwarz versions produced by the Galleria Milan in 1964 (fig. 6).

This version seems at face value to be copied from the lost 1916 version (fig. 3) but was in fact significantly modified. The straight forks, like the stool, were re-instated by the expedient of making them new but were considerably refined in the process. The forks were made much more bicycle-like. The throat was narrowed and the blades consequently diverge markedly more than on the lost 1916 version. Also the blades taper whereas the blades on the 1916 version are non tapered and crude by comparison. There was a deliberate move to make straight blade bicycle type forks to match the bicycle wheel rather than to copy the somewhat chunky motorcycle style forks of the original. This made for a much more elegant outcome. However, I think this was a mistake. Replicating the motorcycle type forks of the
1916 version would have helped this version retain the readymade spirit of the original. The forks that were made may have been a match for forks that could have been found on an old model of bicycle, forks that could have been used by Duchamp had they been available to him at the time, but they look not readymade but specially designed. The stool was copied accurately from the New York version but interestingly was scaled down. I have calculated the original stool height from the studio photographs and it was almost certainly 24" high which is a standard wooden stool height down to the present day. This detail must have been known to Schwarz and Duchamp yet they chose to reduce the size of the stool down to approximately 22". I can see two reasons to do this. It increases the visual impact of the wheel component. This was probably seen as desirable. It also brought the overall height of the piece down to approximately the same as the MoMA and Stockholm versions. This might also have seemed appropriate for the purposes of establishing consistency between the versions. These styling alterations are easy to identify if looked for.

Picture credits

Fig. 1: © Imperial War Museum, Crown Copyright.
Fig. 2: http://pagesperso-orange.fr/revues1914.1918/.
Fig. 3: © 2000 Succession Marcel Duchamp ARS, N.Y./ ADAGP, Paris.
Fig. 4: http://www.vintageamericanmotorcycles.com/v/Early/MVC-581S.jpg.html.
Fig. 5: © 2008 Artists Rights Society (ARS), New York/ ADAGP, Paris/ Estate of Marcel Duchamp.
Fig. 6: © 2000 Succession Marcel Duchamp ARS, N.Y./ ADAGP, Paris.

On the author

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Schwarz 1997 (as note 1), p. 588.


Rhonda Roland Shearer and Stephen Jay Gould: Hidden in Plain Sight. Decoding Duchamp's Art and Science, proposal presented to the Yale University Art Gallery, 1998. This proposal includes arguments that some of Duchamp’s Readymades were not produced using standard readily available components as is generally believed but using artist-made or modified components. It is argued that the forks of the 1916 version of Bicycle Wheel were fabricated by the artist. See http://www.marcelduchamp.net/paul_mellon.php.
