

Bernd Rohrmann

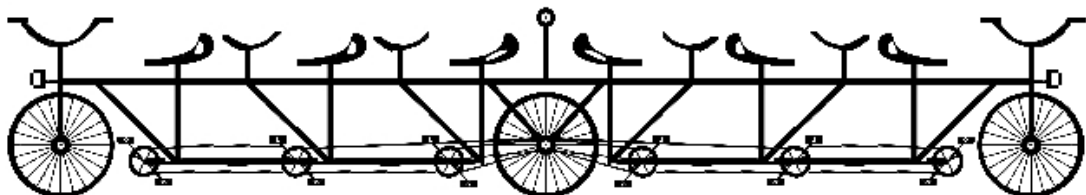
Essay about bicycles

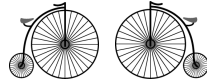
History ~~ Utility ~~ Scenery



December 2016

~ Bicycle ~ Fahrrad ~ Velo ~





HISTORY OF BICYCLES

Bicycles: Precursors



Well, the very first question is of course - when was the bicycle, one of the most-known devices all over the world, actually invented? While wheels and wagons with wheels exist for thousands of years, bicycles do not - this started just 200 years ago.

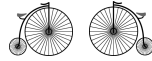
Actually the bicycle as we know it had precursors. The crucial one was the German Karl Friedrich Christian Ludwig Freiherr Drais von Sauerbronn (1785-1851), employed in forest services yet also a stunning inventor. If ignoring his nobility he is simply named Kart Drais.



From 1811 onwards, he focussed completely on inventions. His crucial idea was to use a device with two wheels as transport tool for humans. After several attempts in 1817 he presented the "Laufmaschine" ~ running machine, shown below.



The conception is to sit on it and walk it forward. The front wheel can be used for steering the running machine. If the traveller is physically fit, and wears proper shoes, a good pace can be achieved.



On June 12 in 1817 Drais made a famous trip from Mannheim to Schwetzingen and back (13 km) in less than an hour - and this made clear that his invention was not just a funny idea, it did work.

Personal note: I lived for quite some time in Mannheim, and therefore I know for long about Drais' striking creations.

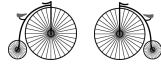
Historians agree that this invention was the crucial precursor, and thus Drais is praised as the 'father' of the bicycle. The "Laufmaschine" got soon known in other countries, e.g., France and England, where it was called draisine or velocipede (which means: fast foot). In 1818, the english engineer Denis Johnson improved the design of the velocipede.



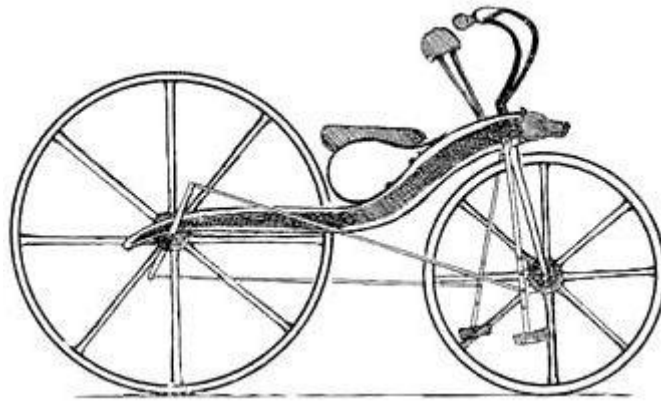
Bicycles: Invention of the 'real' one



Things went on, slowly perhaps, given that this issue appeared somehow strange?

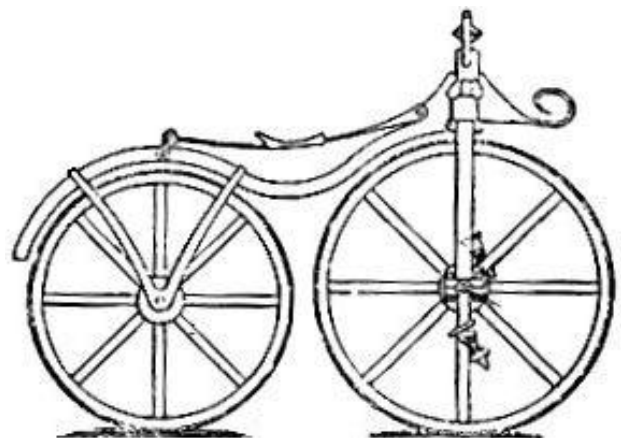


Over the following 70 years, the velocipede was step by step modified and enriched with new concepts, and finally the 'real' bicycle resulted. Unfortunately, historians do not fully agree about pertinent allocations.

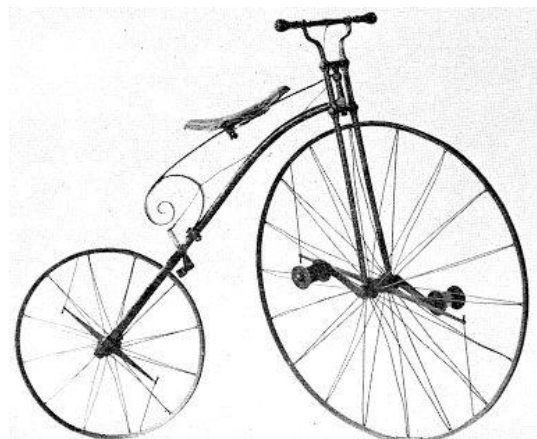


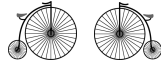
This is the 'almost-bicycle', created 1839 by the blacksmith Kirkpatrick MacMillan in Scotland, moved with pedals.

Pedals for the *frontwheel* of a velocipede were invented by the German Philipp Moritz Fischer in 1853.

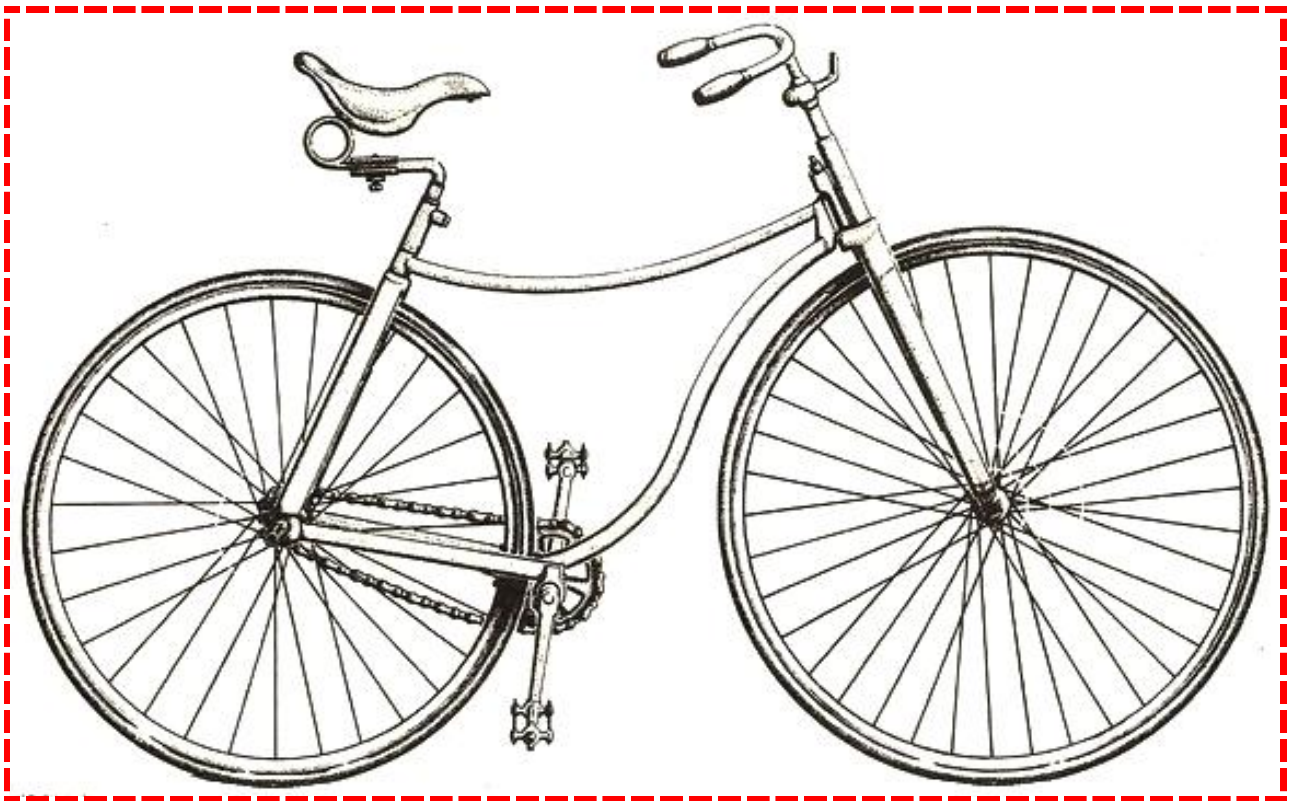


And about ten years later two mechanics created devices with pedals on the frontwheel, Ernest Michaux and Pierre Lallement, both in France (left and right pic above). The allocated years are 1865 and 1866, with later years for improved models. Soon further similar appliances were crafted, mostly with large frontwheels. Most authors rank *Michaux* as the crucial inventor.



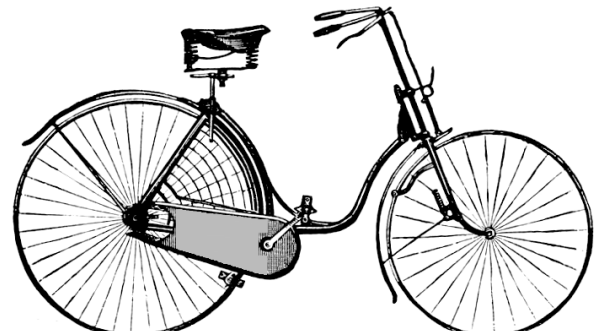
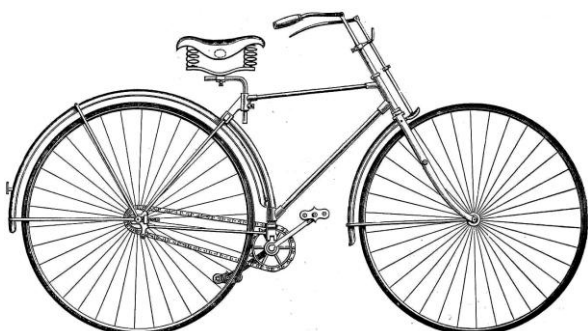


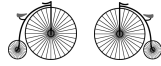
The concept of a chain, used to link the pedal and the backwheel, was put forward by Andre Guilmet in 1870. And then from 1880 onwards John Starley (England) came up with what he labelled "safety bikes".



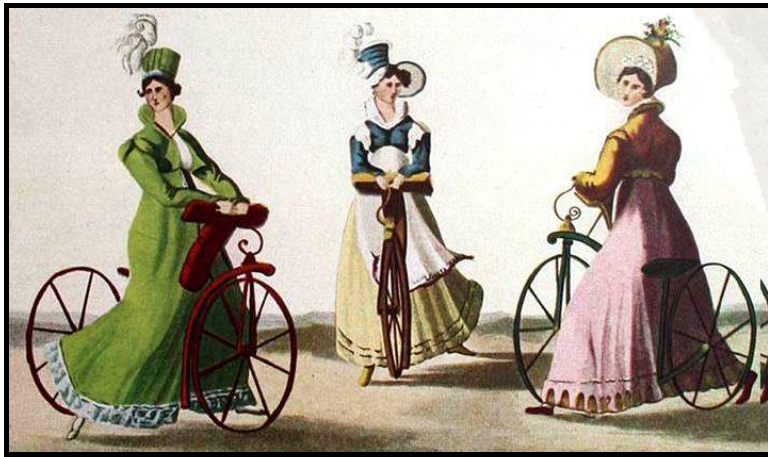
This one here by *Stanley*, named "Rover" (meaning 'mover'), from 1885, is usually appraised as the first 'real' bicycle!

Then other companies developed standard bicycles, for men and soon for women as well.





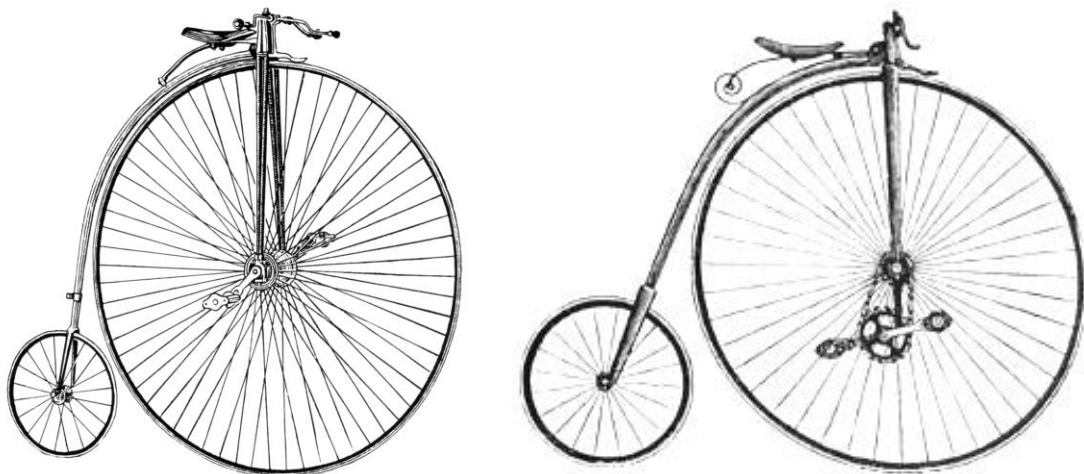
Bike rides became a social fashion, and women were part of this from quite an early stage.

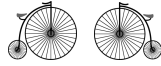


Two inventions were essential for the further progress of cycling - around 1880 wheels with spikes were made, and 1888 John Dunlop created tyres filled with air.

Bicycles: Early idiosyncratic designs

Between the 'draisine' and the 'real' bicycle, that's between 1820 and 1890, all sorts of unusual devices were created. The most popular one was a high-wheel bicycle (German: Hochrad), colloquially in England called "penny-far-thing".



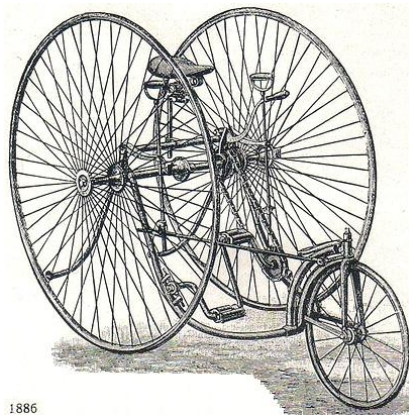


The mechanic Eugène Meyer in Paris (France) is regarded as the father of the high bicycle, with his model inaugurated 1869. James Starley in Coventry (England) built the famous bicycle named "Ariel" in 1870 (both shown above).

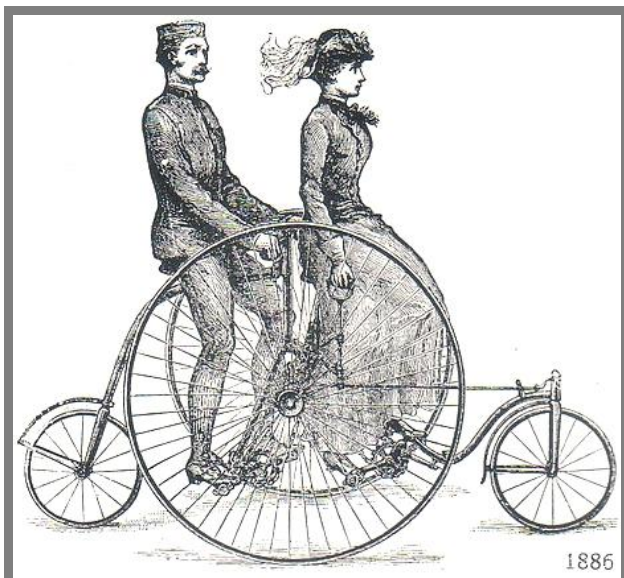
To ride a high-wheel bike is not easy though, and crashes were quite frequent.

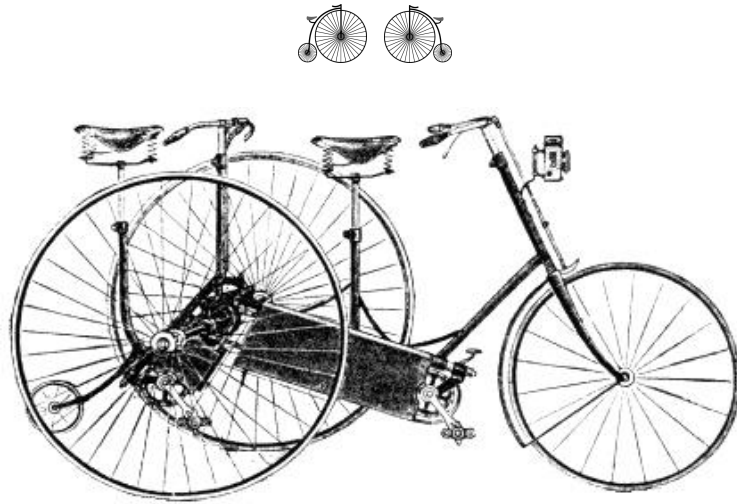


Consequently different designs were realized, namely, to add one or even two wheels so that the bicycle would stay upright permanently. Some of these were actually tandems.



1886





Strictly speaking such devices are not "bi"cycles though - they are tricycles or quadrocycles.

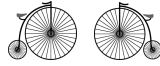
Anyway, these **idiosyncratic** machines got soon popular, and many couples indulged in excursions, wearing a formal or a sportive dress when doing so.



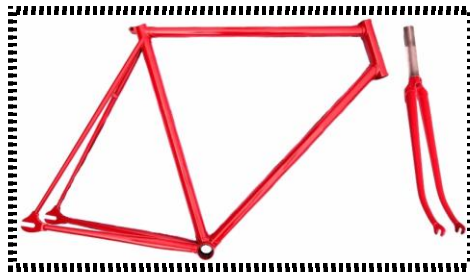
BICYCLE MAIN TYPES

Bicycles: Standard ones for him & her

A proper bicycle has large wheels with mudguards, brakes for frontwheel and backwheel, lightning, a chain fender and at least one luggage rack, mounted over the front wheel or the back wheel



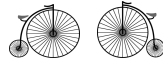
The principal frame of bicycles has been created around 1880 and not much changed; it is designed to hold the two wheels, the axle for the pedals and the stem for the saddle. The fork for the frontwheel is a separate piece and enables the steering of the bike.



Bicycles for women have been composed for a long time; what's different is the frame, originally designed to reflect the traditional female dress.



This bicycle type is especially common in the Netherlands, and therefore often called the Dutch bike. Actually it is convenient for everyone because it's easy to step through when starting or stopping.



Currently almost all bicycles have a gearshift setting, handled through the chain and steered from the handlebar. Depending on the bicycle type, the handlebars vary considerably.

The basic equipment has changed over time: New 'modern' bikes have no mudguard, no lightning, no chain fender and no luggage rack or basket.

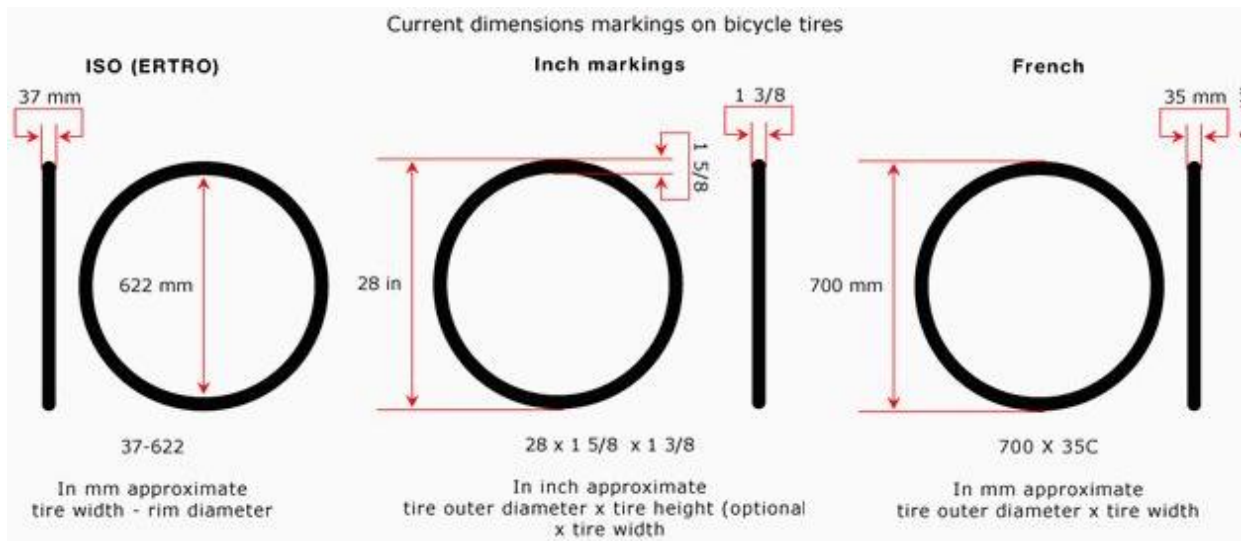
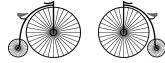
All this can be bought and installed; however, only lightning is compulsory.

Bicycles: Wheel sizes



The size of the wheels of bicycles varies considerably. For business/shops where you buy bicycles and for administrative reasons it was necessary to have a solid measurement procedure.

Yet that was hard to achieve - firstly because one can measure a wheel with or without the tyre (~ tire); secondly, the conventions in England, France, Germany and USA differ.



The naming based on inch, with "26", "27" and "28" for the main road bikes, is still very common, however, the International Standardization Organization decided for a metric principle.

Many tyres show its size with the pertinent numbers.

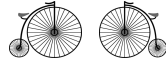


Bicycles: Tandem



Tandem is the name of bicycles for two people, sitting behind each other and both pushing the pedals.

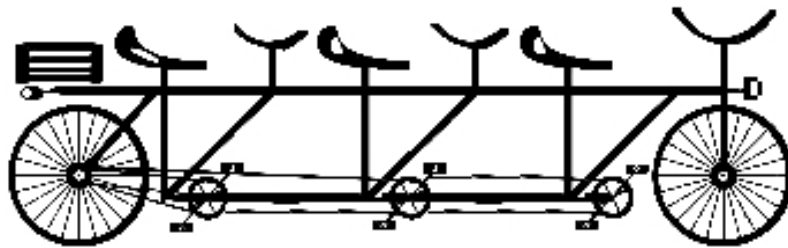




Modern tandems have a gearshift equipment and strong breaks but no mudguards and luggage racks anymore.



In historic times there were inventive tandems for sitting beside each other. This avoids the common feeling of the 'behind' person to be 'second class'.



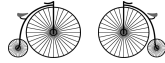
Mainly for entertainment, tandems for three or four or five people have been built.

Bicycles with three wheels ~ tricycles

Three wheels were quite common in the early bicycle phase (as shown earlier), and the main rationale was to avoid crashes, especially with high-wheel bikes.

Yet tricycles are still produced nowadays, for two reasons: As an offer to impeded people (actually, I was tempted myself to get such a one, after an accident), and as the basis for transport bicycles.





Beside such serious intentions, some are just designed for weirdness, and for fun.



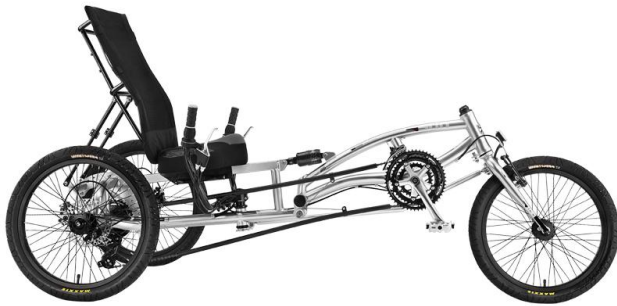
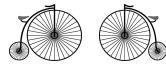
Bicycle recumbent

A special type of bicycles - a bicycle that places the rider in a laid-back reclining position and positions the pedals in front - is usually called recumbent bicycle. First pertinent designs happened quite early, yet only from about 1970 on this became part of the bike culture.



The handling of the - very long - chain varies, as do the wheels and the seat pattern. Tricycles are also built as recumbent devices, with the double wheel either front or back.

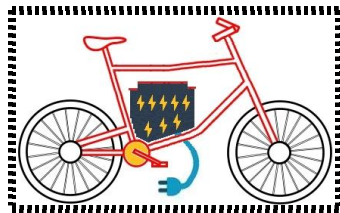




These bicycles are thought to be fast, and healthy for the back. However, when used on normal roads, they are less visible because of their low height, and this certainly induces a safety problem. Nevertheless, the enthusiast attitude is strong, and meanwhile even recumbent tandems are available.

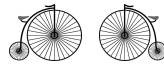


Bicycles with engine



Not surprisingly, nowadays electric engines for bicycles have become popular, regardless of how expensive they are. They fully, or more likely in supportive mode, move the bike





The electric unit is positioned in three manners, which influences the reloading procedure, which is due at least daily.

And even for electric bicycles are now products available which can be folded.



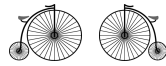
And surprise surprise - or perhaps not surprisingly -- there are bicycles with a motor! To build such bikes has been an obsession by quite a few companies and engineers.

They are still available, not as a standard device, rather, as a unique and exclusive bicycle.



Bicycles foldable

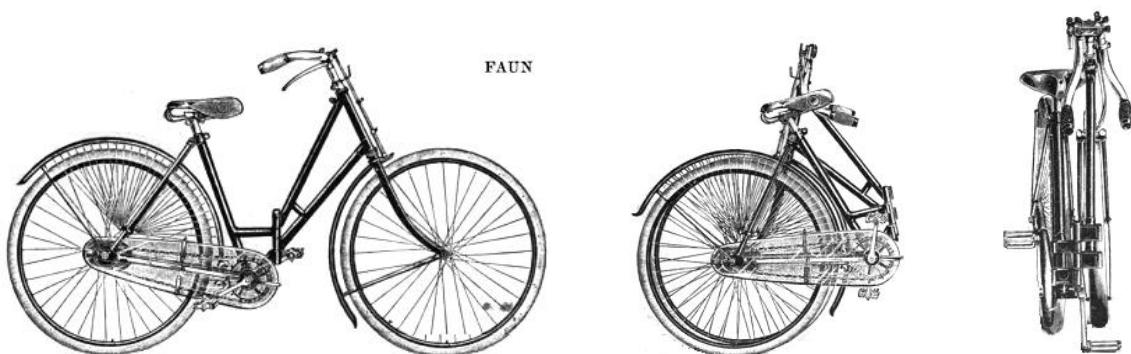
It is not possible to load bicycles into normal cars, and taking them onboard is forbidden in busses, trams and most trains. Thus the idea came up to create bicycles which can be made smaller, by reducing the wheel size and the frame, and by folding them.

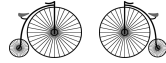


Folding is usually a two-sections design, and often the frontwheel has to be freed. Sometimes engineers re-design bikes seriously in terms of extreme foldability.



Folding bicycles are actually around for a very long time, especially female bikes.





SPECIAL PURPOSES OF BICYCLES

Bicycles for racing



Bicycle racing started as soon as there were enough cyclists, and the first race happened in Paris in 1868!

Many events are established for decades, and quite a few countries have an annual large-scale road race, including Australia, Belgium, China, Denmark, England, France, Germany, Italy, Netherlands, Spain, Switzerland and USA. These races are mostly lasting for a week or even longer.

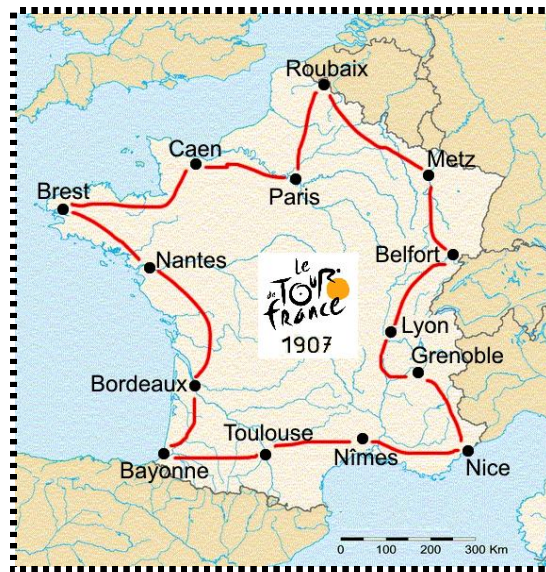
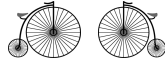


Bicycles for racing vary considerably from other bikes: Built with lightweight materials, many gears, very slim tyres, and a special handlebar.

All this is meant to enable high speed and races of many hours in time.



The by far most famous race is the Tour de France, which started in 1903 and lasts over three weeks.



Bicycles for mountain trips

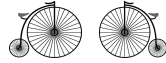


Trips into forests and mountainous areas are a sport, not a transportation mode, and this requires powerful bicycles.



They tend to be slightly smaller than road bicycles, and they have big tyres, which is essential for the landscapes they have to cope with.





Mountain biking has become quite popular; races and championships are part of this. However, this sport is in considerable conflict with environmental issues.

Bicycles for kids



How do kids learn to cycle? There are three approaches: Little bicycles without pedals and chain; tricycles or bicycles with stabilizing wheels on the back; and real bicycles of very small size with big tyres.



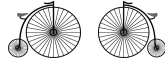
These ones here are used like the historic velocipedes, and they can be steered.



The left one is the safest option. The additional two little wheels at the right one can be removed as soon as the kid masters cycling.



This type contains all features of the adult bike, yet they are so small that the feet can always reach the ground - which is crucial for learning.



Bicycles as taxi



To use bicycles - actually: tricycles - as taxi is mainly occurring in eastern Asia, where there are many millions. They are also called cycle rickshaw.



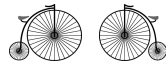
The part for customer offers two pleasant seats with a back lean and is roofed.



In western countries in recent years modern "velotaxis" have become fashionable. However, they are driven by electric bicycles or built around a motorbike.

In historic times unusual bicycle taxis were sometimes used for a very special event!





Bicycles for moving children



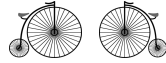
To take a kid with you when cycling is an important task, and not an easy one - where to place it?.



A seat for the kid mounted behind the driver is more common, yet one in front of the driver is safer because then the kid is always in sight and in control.



In case that two or three kids are to be moved, instead of bicycles various tricycles are available.



Finally, one can pull a "kids wagon" - or have a tricycle with the kid cart aside.



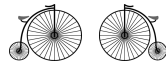
Bicycles as cafes



Bicycles have been used for countless 'business' purposes, especially in Asia -- I could create a whole book about this! Here is a slim report about my personal favourite, bicycles as cafes!



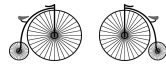
This one here is a bike - yet many of them use actually tricycles. They are mostly well-equipped, and quite a few have an espresso machine. Striking!



Bicycles as brunch place

Other ones focus on food, e.g., hot dogs are tendered. And if coffee as well, they offer a whole brunch.





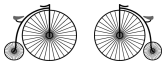
Yet for someone like me the most stunning bicycle shop is of course an icecream bar! Unfortunately such a gorgeous offer isn't here in Melbourne, pity...

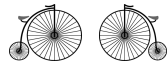


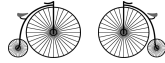
Bicycles as shops

The pictures presented her speak by themselves - almost everything can be offered on a bicycle -- bicycles are easily made a shop!







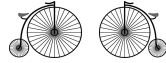


And after lunch, or at early afternoon, the dealer may feel to need some rest, and thus falls asleep.

Bicycles for transport: Loaded = overloaded



In many countries to buy a wagon or even a truck is just out of reach for the poor residents, thus their bicycle get loaded, loaded, loaded - and often enough rather overloaded!



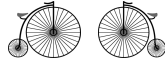
We may smile when seeing these pictures. And of course we know that no country like Australia would ever tolerate such transport modes...

Bicycles of extraordinary purpose



What I have observed during my long "cyclist life", and what I found when researching special functions of bicycles (beyond budging beer bottles), is quite stunning in its variety.

A daily thing is the delivery of mail by post officers - here in Melbourne they use a well-installed bicycle, and new ones even have electric power support.

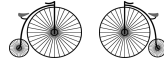


Bicycles are also used for traveling - very long journeys by some! The lady here has 9 packages installed (my own maximum was 7), and the guy wanted to carry so many things with him that he needed a trailer!



The most extraordinary purpose is, in my view, this here -- namely, that firebrigade officers utilize a bicycle to reach the fire, carrying a spade and even a hose with them. Of course that's history now - yet what an enthusiasm it was!





EQUIPMENT ESSENTIALS FOR BICYCLES

Bicycle setup: Intro



It has become common that a bicycle when bought only contains the true "must" equipment - frame, wheels, chain, paddles, handlebar, saddle.

Yet as you certainly know, there are far far more appliances available, and at least some of them are rightly indicated, for safety and/or for practicality.

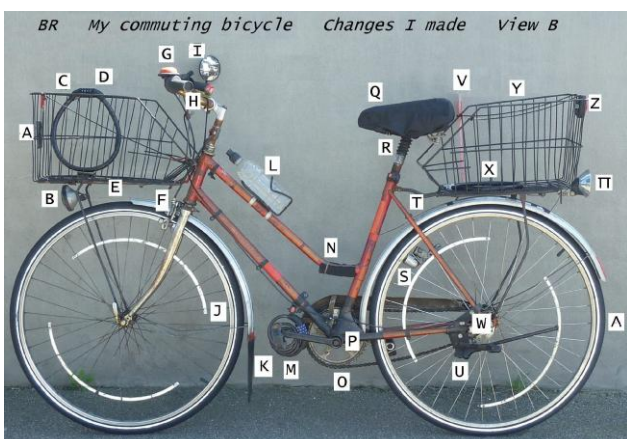
Every cyclist who gets a bike should carefully think about what's truly relevant for her or him.

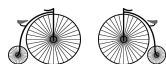
Bicycle equipment: Personal outline

My own main bicycle is an old-fashioned Dutch-style bike which I use almost every day for commuting in the city, as well as shopping, and even exercise rides. I bought it, an old second-hand one, in 1993 for mere 40 dollars, and use it for 24 years now.

Given that I don't have a car anymore, it's vital for me, and because of its many purposes it must be both safe and and practical. Consequently, over time I made a lot of technical changes, to increase the bike's functionality. These changes relate to about every equipment feature a cyclist should consider.

And therefore I will here use this - admittedly rather strange - bike for an overview of gear facets.





List of added or modified features

Three gears (sits in axle) [W]	Special buffered saddle [Q]
Wheel rim brake [F]	Mirror [I]
Slightly bigger tyres (<i>no letter attached</i>)	Red reflecting tool near backwheel [V]
Stronger axle for crank arms [O]	Standing tool [U]
Chain cover (<i>no letter attached</i>)	Bell, special design [G]
Suspension between saddle & frame [R]	<i>Second bell, quasi-trumpet missing in pic</i>
Strong tube for backwheel, plus inlet [Λ]	Reflecting pedals [P]
Handlebar shaped to my request [H]	Front reflector [A]
Dynamo [S]	Back reflector [Z]
Front light [B]	Reflector ring for wheels [J]
Back light [Π]	Selfmade device re spraying wheel [K]
Carrier for basket, front [E]	Water bottle [L]
Large front basket [C]	Buffered grip area for carrying bike [N]
Carrier for basket, back [T]	Flexible lock [M]
Large back basket [Y]	Lock using numbers, large & strong [D]
<i>Strings to hold basket stuff missing in pic</i>	Lock using numbers, small [X]

There is one equipment which I have not yet realized, namely a larger 5-gear system (instead of the current 3 gears) in the back axle.

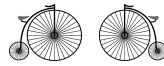
In terms of *safety*, brakes, lightning, mirror and locks are essential. Also, wider tyres can help to avoid a crash on damaged road surfaces. In terms of *practicality*, the baskets are vital, as is the gear system, which can be handled while standing, as well as the Dutch bike style. Plus, in terms of *comfort*, suspension tools are valuable and even healthy. The potent one built into the fork at the front I couldn't realize yet the saddle one is serving well.



Finally, I always have several air pumps. They differ in how you can link to the valve of your tyre. Plus - they get regularly stolen, and therefore I have always a reserve one at home, and furthermore, I carry a mini pump with me which fits in my bag ...

Bicycle helmets

I guess that nowadays every cyclist knows how crucial a helmet is for the own safety. They are available since decades, and meanwhile prescribed in many countries.



Here are two examples of an ordinary helmet of plain shape, with two straps on each side which are then connected into a clickable/unclickable lock.



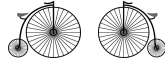
Many companies produce helmets, and each strives to offer unique designs when hunting customers. Maximize ventilation is a typical objective, even though this may be in conflict with maximizing safety.



The following graph identifies the main features of a bicycle helmet. The inside buffer, usually styropor, plus rubberfoam patches within some fabric, is not visible in the pictures of helmets. Many helmets have some kind of flat extension at front, meant to be a light protection, like a cap - although it doesn't really work, it's more a fashion.



A significant change in the design of helmets goes back to the many accidents in a sport called BMX, an abbreviation for bicycle moto-cross. Their helmets are very strong, and cover most of the head, including the neck. The BMX helmets are now widely used by 'every day' cyclists as well.



Quite a few people like to wear unusual helmets. One amusing offer of helmet companies is to hide the helmet within something looking like a hat!



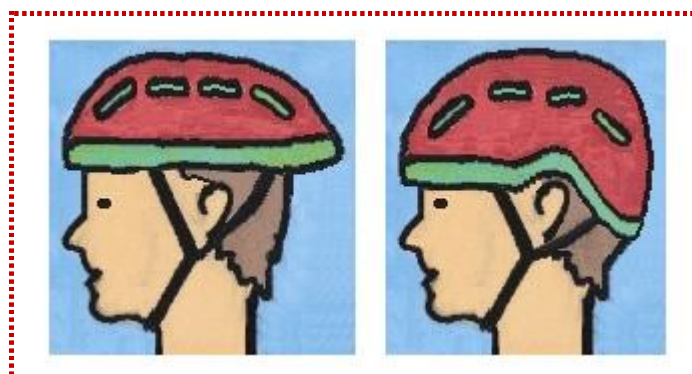
And definitely helmets can be coloured, plus, a wide variety of pictures is used; for this style, the BMX helmet is optimal.

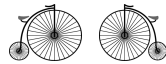


Finally a critical comment.

Of course I wear a helmet, and because of a severe accident (described later in this essay) I am certainly aware what their safety impact is - to reduce injuries and possibly attain that one's skull does not crack.

Unfortunately a lot of helmets are not optimal in this regard. Many are flat, and the extension at the end is useless in safety terms. The BMX helmet goes much more around the head, and it covers the neck, something important which is not done by most other helmets.





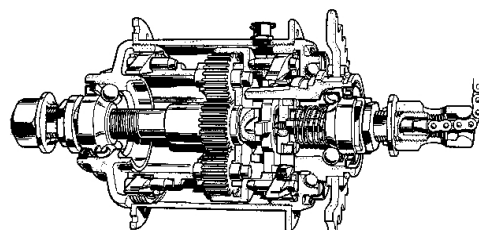
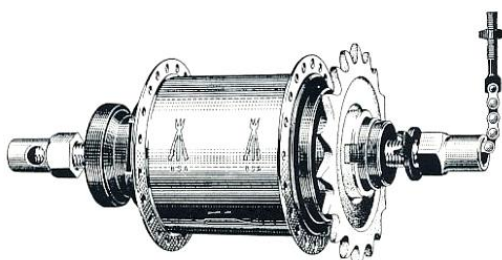
For a while BMX helmets were not liked because they seemed to be less good in ventilation, and just looked so very unfashionable. Yet both issues are long overcome! Thus I suggest seriously to make safety the crucial point when buying a helmet.

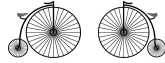
Bicycle gears



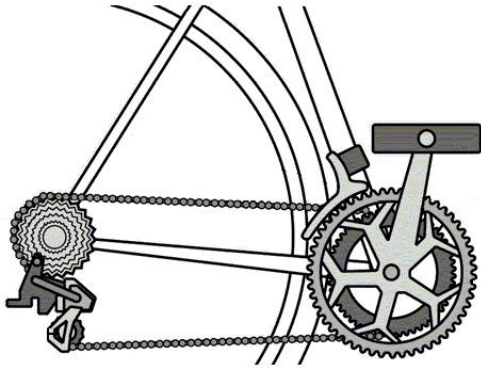
Originally, bicycles had only one gear, i.e., fixed gear ration and no gear change system. Meanwhile most bikes have this equipment, and there are two types: Gear shift within the back wheel axle ("hub"), or gear shift by using either the chainrings attached to the crankset and pedals (if there are 2 or 3), or using the cogset attached to the rear wheel (between 5 and 9 sprockets).

The following graphs show the hub-based gearshift. It used to be handled mechanically, yet there are also electric tools available. It used to be restricted to 2 or 3 gears; now systems up to 9 gears are on the market.





The following graphs show the handling of the chain regarding the cogset.



The chain-based gearshift can provide up to 30 gears, and it can be set up much finer set up. However, it is 'touchy' and needs careful adjustments.

A crucial difference between the two systems is that chain-based gearshift can only be done while going, while hub-based gearshift is also feasible while standing, for example at a traffic light or when starting. For cycling in the city this is a relevant facet.

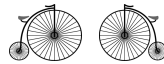
Bicycles: Light

At first a good light source was needed to see the road. Thus bicycle lamps are around for a long time - first oil lamps (!), then electrical ones, fed by a dynamo mounted at a wheel.



Yet now, when cycling in the dense traffic in a city, the issue not to see, it's to be seen, especially by car drivers.

Furthermore, strong battery lamps are available, and they are shining even if the biker stopped, which dynamo lamps can't - so they are now dominating.



In terms of sound visibility, bicycles should have two reflecting tools as well - white at front, red at back.

Bicycles: Bells

Bicycles were equipped with bells from the very beginning - in order to give a signal to pedestrians, or to other vehicles on the road.

The early bells looked like this one. And yes, my first bike, around 1950, had one. When it broke I opened it, to see the mechanics. It's simple - one has to move the handle, and then two little metal rings knock the metal lid of the bell and thereby create the bing-bing. They need to be oiled regularly.

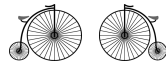


Very soon the lid became the spot where to add some funny notions, or symbols of city - the one below refers to Hamburg/Germany. Furthermore, soon Bells were painted in any colour, and the favourite was of course red.



Yet cyclist realized before long that the bing-bing of bells was often ignored. Therefore the bell 'engineers' created "double bells" which had the mechanism twice and were intense indeed.





Here are a few examples of colourful and nicely decorated bike bells, all made in the old design.



Given that classical bells are almost 'complex' and not cheap, eventually much simpler bells were invented to create a 'bing'.

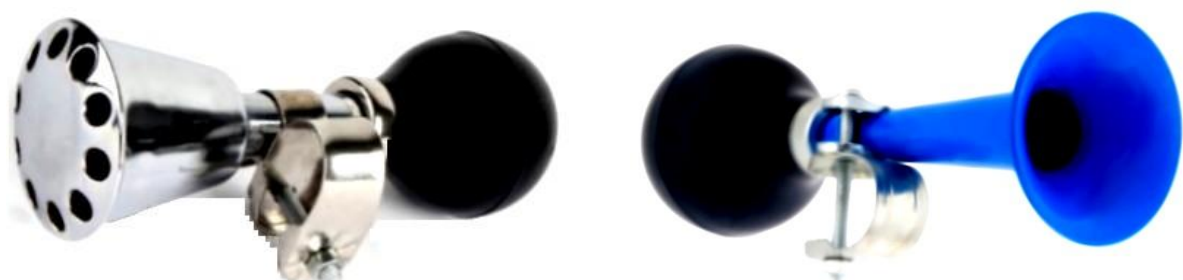


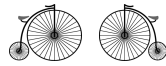
The bell shown below, my personal favourite, is a very clever tool, namely, you turn the black wheel with your finger as long as you like, thus producing an ongoing bing-bing-bing.



If you think the notice must be even stronger - there are actually trumpet-like bells available!

My bikes certainly have such a thing, and they are noisy indeed.





Finally, any kind of bicycle bell invites designers to come up with unusual or silly models, for fun!



Well, this was a pretty detailed section about an equipment feature which isn't exactly crucial - so, am I almost obsessed with bicycle bells? I guess I am somewhat - all my bicycles have two bells. Furthermore, my house door has two bike bells! One is the classical in green and one is a trumpet.



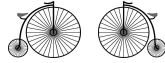
People visiting me may simply knock, yet quite a few of them actually prefer the bell or the horn!

Bicycles: Theft prevention

Yes, bicycles get stolen, thousands everyday everywhere. Therefore locks are crucial - unlocked bicycles will be robbed for sure. The two core reasons for taking a bike: To use it or to sell it. Sometimes stealing one happens just fun, a nasty hobby of naughty youths.



The locking mechanism is either a key or a number. As keys can easily get lost, a number is more convenient - yet the owner needs to remember the number.



A longtime existing type of locks is part of the bicycle, usually mounted at the backwheel.

All these locks have a crucial disadvantage, they do not allow to lock the bicycle to a post or tree. Thus longer locks are now available, including strong ones which can not easily cracked by a cutting tool.

Locking to something like a post or fence or wall facet has become important since bicycle theft has become something like an industry - teams with a truck don't bother with the lock immediately, they just grab it and put it in their wagon.

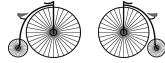


Quite common are so-called D-locks or U-locks. They are strong, yet too small to utilize thick posts or trees. Thus long locks, if strong ones, are the better option.



If owners don't take proper care of their bicycle, even if locked, thieves will soon take away everything, except of the frame.





My general advice is: to always use two locks, to use locks which are long enough to use a post, to include the wheels into the locking, and to select a reasonably public place.

Or perhaps just paint the bicycle wildly?? No one will steal it then I reckon...



Bicycles for tours

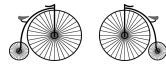
The purposes of bicycles are numerous - the most frequent ones are probably to move between home and work, to visit friends, to explore shops and to have an exercise. To use them for tours is far less common.

Tours can be for some hours, or a whole day, or several days including to camp at night. Obviously that determines what to take 'on board'...

Minimum: Water, some bites to eat, a towel to deal with sweat, and a basic set of bicycle tools, including to handle a flat tire.

Below is my first bike, set up for a day trip and possibly one night somewhere in a forest. This included sufficient food and a sleeping bag but no tent.



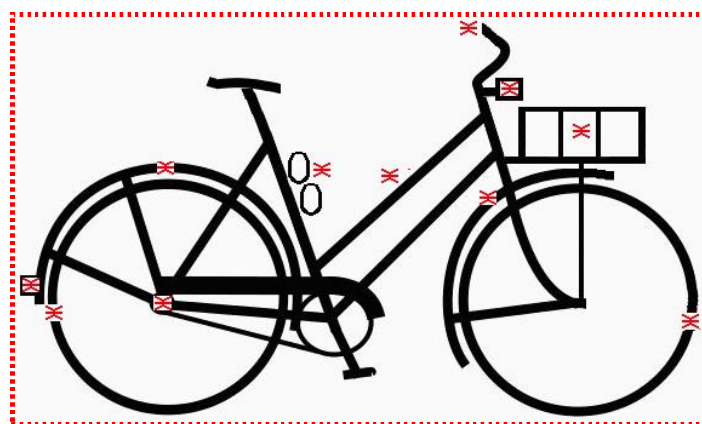


And above is my second bicycle, set up for a 5-day tour. Six bike containers were installed, for maps & books, food, clothing, hygiene utensils, (mini-)tent for two, matress, sleeping bag, lantern, and a larger collection of bicycle tools. The matress is already put down.

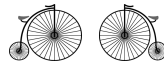
The longest bicycle tour ever, together with my partner (she had a better bike and was faster anyway), happened decades ago in Korsika and took 9 days. My then bicycle was rather simple and had only three gears, urghhh... And of cours flats occurred...

The cycling spirits were top though, and had to be!

Bicycles: Practicality



I am aware that assessing what's "practical" is very very subjective - so take my outline just as that... It refers to a road bicycle for daily use.



What I mark in the model above is this:

// step-through frame // strong and not too thin tyres // gear shift in the axle (not via chain) with 5 gears // carriage box above front wheel // almost straight handlebar // wheel fenders // strong front & back lights // two large locks.

Why I say so is explained in previous chapters.

Bicycles: Repair



That's how I looked when I had my first bicycle misery... Fortunately, only my bike was unwell, not me...

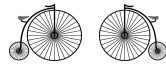


What I learned for repairing it myself was (1) first planning then acting, (2) have proper tools, not just one plier, (3) when demounting something put the pieces on the floor in the right order, (4) check whether a fallen-off part is damaged or was only loose, (5) if a tyre with holes has already been mended often, install a new tyre, (6) make sure that the wheels sit firm, (7) learn to trim spikes, (8) utilize good oil, and finally (9): go to a professional workshop whenever things are out of your competence!!

BERND & BICYCLES

Bicycles owned

How many bicycles did I own? Many - yet I don't remember how many - perhaps a dozen? My very first bicycle I got when I was 10 years old, 1950, was a very old one, previously used in the German Army. I paid 10 German Marks. It looked like this one here:



It was very simple, traditional design, 28" wheels, and had no gears - yet a dynamo and a lamp. Actually, once cleaned and oiled, it did go quite well. Since then I always had a bicycle. None of all my next ones survived - I gave them away when buying a new one, or they got stolen.

While living in Hamburg, I bought a tandem, to cycle together with my partner, on just one bicycle!



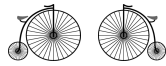
It was an ingenious piece of bicycle design: It consisted of three parts, which were linked together, and one could also mount the front and back section, thereby getting a foldable single bike! It had no gears. This bicycle is not produced anymore; a roughly similar one is shown below.



This one, a current model, can be folded, using its two sections, and it has a gear system

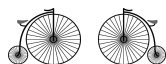
When moving to Australia, I decided not to have a car anymore, rather, a convenient bicycle. After some years, and after again getting one stolen, I established two "serious" bicycles - that is, serious for me, given my concepts & criteria..

The first one is my city bike, the commuting bicycle. It is Dutch design, has 'only' three gears, and two large baskets for transporting my briefcase, bags from shopping and so on. The size of the tires is 26".



The second one is my bicycle for bike tours, both on roads and on tracks. It has 24 gears and strong tires, size 28". The handlebar gives two options.



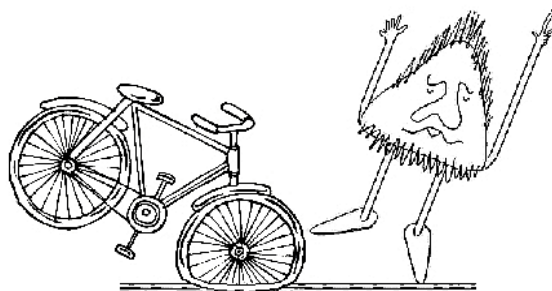


Six carrybags can be mounted to this bike, to transport camping equipment, in case a longer tour of several days is conducted.

Both bicycles have many safety and practicality features, as outlined in the previous chapter. Three locks are allocated to each bike.

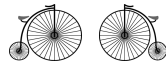
And for both bicycles a "calamity container" was prepared, containing basic tools, tyre repair stuff, reserve bulbs, and a torch.

Bicycle accidents



I am a cyclist since 1950, i.e., for a very long time, and yes I had accidents, sometimes because of my faults, sometimes because of bike failures, sometimes because of other people. In this essay I'll mention just three events.

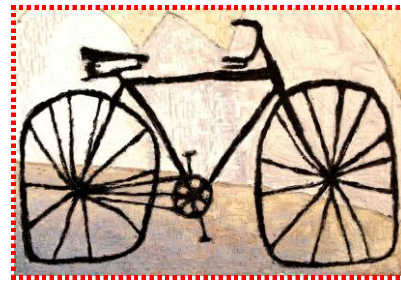
- <> My first serious accident happened decades ago, when cycling regularly to my high school. The front fork broke while I was on a downhill section of my road., urghhhh. I kind-of flew over the bike and down the slope beside the road. I had all sorts of light injuries and tweaks - yet, hard to believe, not one bone was broken, nor any joint overly squeezed...
So I stumbled then home, carrying my broken bike. My parents were a bit angry with me, because they had to handle the wounds, and I was quite dirty!.
- <> My second accident, when I was still a young boy, was not serious, yet rather strange. It was Sunday, and I had the 'official' Sunday dress on, that's white trousers and white shirt. I cycled on a track along a little river, made an error, and ended up in the water! No injury at all, yet of course I was very very wet. So, what to do, given that I wouldn't dare to tell my parents what had happened? And then I had a 'brilliant' idea, at least so I believed. I went to the truck garage beside the house, where the big cars were just cleaned, and asked that guy to put the engine of the largest truck on, and I would stand at the big exhaust, trying to get dried. He kindly did so - however, what came out was not hot air, it was a very black blast, resulting from the washing of the truck - oh oh oh ... I tried to clean my now pretty black dress in the garage yet it was completely hopeless ...
I don't remember which story I told my parents, well, I simply hadn't a convincing one anyway!
- <> My third story is clearly the most serious bike accident I ever had. In 2003 I was a guest professor in Fribourg/Switzerland (as several times before). The Dept organized my accommodation, and a lecturer there lent me his bicycle, plus a helmet. On a Sunday afternoon I cycled home, and I was on the cyclists section of the road when a car came from behind and basically flattened me. An ambulance arrived very soon to deliver me to the main hospital. I was 5 or 6 days in coma. I was lucky that my skull didn't crack, because of the helmet, yet my left ear and balance system were completely destroyed. Other injuries (eye, knee) did all heal. However, I never fully recovered, and in 2014 the little remaining brain injury induced a serious epilepsy attack.
Later the doctors in the hospital tried to convince me to stop cycling, but I didn't follow them. I kind-of re-learned cycling, and I found out what I can't anymore, like driving narrow curves or looking downwards on my wheels. My bicycle #1 was the bike which made cycling possible again, and after a year I rode bicycle #2, which was a tough task for me!



Bicycle use nowadays



Yes, I still ride one of my bicycles, almost every day. And yes, like me they do not get younger. Yet their health is easier to deal with than my one, so I take care of due repairs.



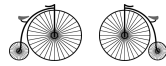
Here is my esteemed red #1 - - a bit old it is, yet surely not as frail as the black one!!

BICYCLES SPIRITS

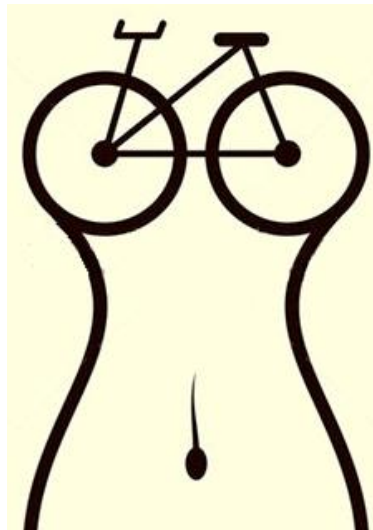
Bicycles in art

As a true art enthusiast, I indeed enjoy paintings which display cyclist. There are quite a few! So I show just two, one by Leger and one by Habvergessen.





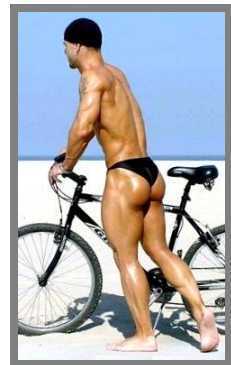
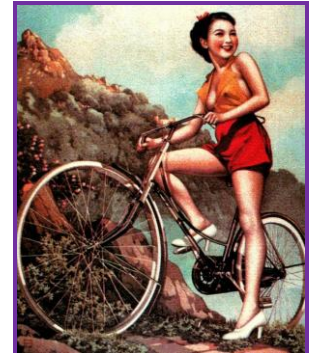
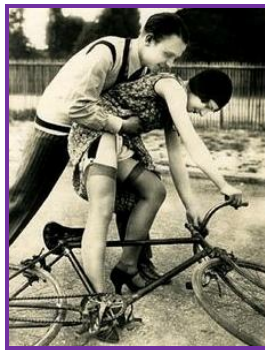
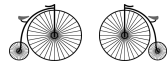
Bicycles shown in erotic flair

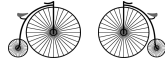


For the history chapter of this essay (presented already above), and the eventual involvement of women in the role of bicycles, I searched pertinent images.

What I found was a real surprise - lots & lots of pictures with an "erotic flair", quite a few presenting film stars, like Brigitte Bardot, and even rather naughty ones!

So, what to do with all these? Well, naughty or not, I found them so amusing that I decided to put 20 pic's into a collage and add it to my essay - here it is!





Bicycle weird styles

This amusing tricycle presents a pony - and this is neatly related to the meaning of bikes in early times, beginning with the velocipede - - they were seen as a final replacement of horses, at least for poor people...



And those who can't even afford a bicycle? Well, they may create weird models just with fruits, making their funny ideas visible!

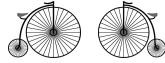


BICYCLE OUTLOOK



First men, yet soon also many women became well-spirited cyclists. They stood cheerful around a bike, and they engaged in demonstrative excursions, so well dressed.

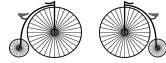




Nowadays bicycles are not rare anymore, in fact there are millions & millions about everywhere in the world - by far most of them in China,



Furthermore, there is big flood of information & advice & programs which praise cycling as crucial health initiative, as an answer to endless car traffic jams, and just a pleasurable hobby.



Consequently, quite a few cities offer local bikes free of charge, for example in Berlin and in Melbourne.



So - to sum up this essay in one sentence, bicycles are, and will be, for very very many people an essential part of their life.

