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## AN OUTLINE OF DEVELOPMENT OF THE GYMNASTIC HORSE FROM THE ROMAN TIMES TO THE AGE OF HUMANISTS

**Key words:** gymnastic horse, acrobatics, Roman times, Humanists.

### ABSTRACT

First descriptions of models of wooden horses used for military training appear in literature of the Roman times. In later centuries models of horses were also used for acrobatic and artistic demonstrations considered one of the seven knightly virtues. In the late 18<sup>th</sup> century, the wooden horse lost both its initial form and purpose. Eventually, it was “transformed” into a gymnastic apparatus known as the gymnastic horse, vaulting horse or pommel horse. The purpose of this study was to examine the historical development and uses of the wooden horse and its transformation into a gymnastics apparatus from the Roman times until the Age of Humanism.

### ACROBATICS AND USES OF HORSE AND BULL MODELS IN ANCIENT CULTURES

Since ancient times people have performed spectacular acrobatic exercises using animals, mainly bulls and horses. The earliest forms of such acrobatics, accompanying religious events, can be found in the Minoan, Mycenaean, Hittite, Egyptian, Etruscans, and Chinese cultures as well as among some other peoples in more recent times [2, 3, 4, 15, 22].

These ancient forms of acrobatics can be regarded, with some reservations, as distant ancestors of the modern gymnastic horse (vaulting and pommel), as they share many common characteristics. Yet, as it will be established further on, the gymnastic horse evolved directly from the wooden horse models which originated in the Roman times. Certainly, wooden horse models had been known many centuries ago; however, they had

been manufactured and used for other purposes. The Trojan Horse is the earliest, most known example of a wooden horse, which, as we know, was not used for military training, but as a special trick in fighting the enemy [8, 9].

It has been reported that proto-Christian Chinese manufactured small, sledge-like, wooden models of horses, on which hunters slid on snow and ice at a high speed with the aid of special bars used for support and thrusts [3].

Spieht reports that some American sources mention that Alexander the Great’s soldiers used large wooden models of horses for military training and building up body strength. It should be stressed, however, that we cannot take these sources seriously, since there are no other references to these wooden horse models in any ancient sources [18].

## THE EMERGENCE OF THE GYMNASTIC HORSE IN THE 4<sup>th</sup> CENTURY A.D.

The most ancient and reliable source providing a detailed description of the wooden horse is the second part of a four-volume book by Roman writer Flavius Renatus Vegetius from 375 A.D. Vegetius describes the structure of a Roman legion and mentions Roman soldiers training using wooden horses:

“In the winter the wooden horses were placed in specially designed sheds and on summer days they were left outside. The trainees mounted the horses first without carrying any arms and later in full panoply. With conscientiousness and extra caution the trainees learned each vault (mounting and dismounting) from both sides of the horse, in an artistic style, with a sword or a spear in hand” [20].

It can be assumed that the transformation of the real animal into a wooden model, and the development of the wooden military horse into a gymnastic apparatus took place at that time. Unfortunately, there are no other reliable sources confirming the origins of the wooden horse around the 4<sup>th</sup> century. It is certain that from that time on military training using wooden horses became very popular. There are many 6<sup>th</sup>- and 7<sup>th</sup>-century reports on the usefulness of the horse models for military purposes [4]. In the Middle Ages, horsemanship and performance of various exercises on wooden horses were classified as one of the seven knightly virtues. The wooden horse was regarded as the most suitable for the acquisition of military vigour and development of overall good physical condition [16]. Later on this knightly activity became widespread at universities and military faculties [18].

Soon the military exercises on the wooden horse began to develop into more artistic and acrobatic forms. The popularity of this medieval athletic activity was attested in a great number of literary works published on this subject from the 17<sup>th</sup> until the 19<sup>th</sup> century (Weingarden, Wallhausen, Andreae, Paschen, Schmith, Slave).

It should be mentioned that for the medieval noble youth, training with wooden horses was not only a means to acquire body strength and martial arts skills, but also to affirm one's social position. It should be noted that wooden horses were found only in noble households. Horse models owned by people from other social classes were filled with wool, sawdust or other soft material and were

covered with buckram or skin. Stretching toes and other movements which the youngsters learned on the horse models were skills necessary for hall dancing. Thus dancing and equestrian exercises using the wooden horse models became closely related [4].

The widely known novel *Gargantua and Pantagruel* (1565) by F. Rabelais (1483-1553), includes a chapter titled “On the artificial little horses of Gargantua” describing little Gargantua's practice with horse models. The chapter opens with the following words: “Then, they created a large and beautiful wooden little horse. Little Gargantua made it jump, hurl, go away, bend down, kick and go away...” [17]. This kind of activity resembles the modern gymnastic horse used for acquisition of kinetic skills on a much lower, softer, and safer apparatus.

In 1603 German fencing instructor, Wilibald Weingarten from Weimar taught dance to children as well as vaults and various leg swings, using as an educational aid a wooden horse model [1]. Different vaults and the extended supports of leg swings resembled modern exercises performed on the vaulting and pommel horses.

A German study from 1616 written by a fencing teacher J.J. Wallhausen, for the first time included a specialized description of the wooden horse as well as individual exercises. The title of that book was *Romanische Kriegs Kunst* (Roman martial art) and it was based on the four volumes on Roman military instruction by Flavius Renatus Vegetius, which survived intact [7].

In Wallhausen's book the horse is portrayed as an exact copy of the real horse, while the trainee is a fencer although without a hat and a sword [4]. An expert can easily notice that these descriptions point towards the modern pommel horse. Moreover, the absence of the hat and the sword reveals not an athletic but more a knightly orientation.

In Germany the wooden horse had been used much earlier. In his autobiography German theologian Johann Valentin Andre (1586-1620) mentions “a very useful practise on the wooden horse”. As he writes that he had several proposals to establish a “faculty of practise on wooden horses”, however, he did not accept any of them and in 1614 he decided to become a priest [7].

In 1666 the great fencing teacher Johan Georg Paschen published a thorough and detailed study on the horse and the trapeze, which included 107 colorful pictures. The title of the book was

*Kurtze jedoch gründliche Beschreibung des Voltiger Sowohl auf den Pferde als über den Tisch* (A short but thorough description of exercises on the horse and the trapeze). Paschen's horse bore a very close resemblance to the real horse, and for the first time, the height of the horse's legs could be adjusted [7, 19]. Its low head and long neck constituting a straight line with the back were also noteworthy. The horse had a regular saddle and a long tail. This design was by no means accidental as the lowered head favoured performance of long vaults. Studying the numerous pictures in Paschen's book, one can easily note many artistic and acrobatic features characteristic of the modern pommel horse. Paschen also described in detail the appearance of the horse and exercises. As mentioned above he also described various jumps on the trapeze, which had already been used for military training in the Roman times [4, 7].

All these fencing and horse riding exercises using horse models aimed primarily at training skilful and harmless mounting and dismounting, but they had also artistic, acrobatic and exhibition dimensions. At that time, but also many years later, spectacular shows were organized during which acrobats-fencers performed on wooden and real horses with co-trainees and assistants using enormous starting blocks. These acrobatics were later included in circus programs as well as in various gymnastic shows, where the living horse was substituted by an enormous gymnastic trapeze and the gymnastic horse [4].

In 1713 fencing instructor Anton Schmidt from Heidelberg published a book titled *Die Kunst des Fechtens* (The Art of Fencing), in which he described exercises on the wooden horse resembling those reported earlier, but nevertheless displaying some differences. The head and the back of the horse were at the same level, but the horse neck was shorter. Its trunk was thin and its tail was short. The height of the wooden legs – which did not resemble the legs of a real horse – could be easily adjusted. There was no saddle but instead there were two tall, crescent-shaped ledges [18]. It appears that apart from supports and leg swings, this horse was also used for long and side vaults. For the first time also some kind of handholds appeared which later on evolved into pommels.

In 1719 Alexander Doyle, another great fencing teacher, published a lavishly illustrated book titled *Kurtze und deutliche Auslegung der Voltigier Kunst* (Short and explicit presentation of horse vaulting art) [12, 19]. He provided there

detailed descriptions of the manufacturing and the form of the horse as well as vaulting exercises. Doyle's horse featured very low handholds, thin body, square legs with height adjustment, small head, and long neck situated a bit higher than the rest of the body. The tail of the horse was even shorter than Schmidt's horse. In addition, Doyle's illustrations show that the horse was used for a combination of acrobatic, fencing and equestrian exercises. As the book was meant for fencers the portrayed men wore fencing hats and uniforms. Some pictures resemble vaults on the modern vaulting horse, while others bull acrobatics. Moreover, certain illustrations presented combinations of acrobatics, equestrian art, fencing and gymnastic vaults. It can be assumed that Doyle concentrated on artistry and acrobatics, while his sketches, like Paschen's, are considered ones of the best in the literature of that time [7].

In the second half of the 18<sup>th</sup> century, the popularity of exercises using wooden horses declined. No publication concerning this gymnastic apparatus appeared at that time [18]. Such exercises had, however, become quite widespread in various European states. In 18<sup>th</sup>-century France soldiers trained riding, using overhanging horse models. In this way they trained in conditions similar to the real equestrian exercises [1].

## THE GYMNASTIC HORSE IN THE HUMANIST MOVEMENT

From the mid-18<sup>th</sup> century until the beginning of the 19<sup>th</sup> century some enlightened educators, mostly Germans, created a pedagogical and intellectual movement called the Humanist movement, which considered physical education (gymnastics) an important pedagogical means [13]. The Humanists, who were actuated by the Renaissance philosophy, included in their pedagogical systems physical education which followed the ancient Greek model. Their main representatives were Guts Muts and Gerhard Ulrich Anton Vieth, who vastly contributed to the establishment of the 19<sup>th</sup>-century physical education systems and gymnastics, in particular. These two Humanists also focused in their original and instructive works on the ways of practicing using the horse model, which soon afterwards began to be used as a typically gymnastic apparatus [13, 16].

In 1793 Guts Muts (1759-1839) published an unflinching book *Gymnastic für die Jugend*

(Gymnastics for the young), which for more than a century was considered to be one of the most important treatises on the subject. In this book, revised and republished in 1804, Guts Muts also described the gymnastic horse. Its main characteristics were two legs, no head, short neck, small tail and small round iron pommels. Illustrations depicted trainees no longer wearing fencing hats and outfits, which was an indication that Guts Muts's horse was not destined for fencers, the nobles or the knights, as it used to be, but for the common folk, and particularly for the young. Since that time a "metamorphosis" of the wooden horse from a military apparatus into a gymnastic one can be observed [6]

In 1794 a sizeable book by Gerhard Ulrich Anton Vieth (1763-1836) was published titled *Versuch einer Encyclopadie der Leibesübungen* (Encyclopaedia of physical education). Here, Vieth also included a description of the exercise horse with the following characteristics: no head, short neck at the same height as the thin body, a tail, and round and low pommels which have replaced the saddle [21].

Vieth's illustrations presented trainees wearing, like in Doyle's book, fencing hats and outfits, while performing various supported side vaults [4, 5]. In the second part of his work (p. 284), Vieth described "nine long vaults and nine side vaults" on the horse, which he had learned, in Göttingen and in Leipzig. Vieth wrote that [21] "With exercises on the horse, the body is trained in such a way, so that it is strictly controlled. No other exercise mobilizes all body parts in this way, nor offers such intense emotions, nor do the muscles participate so in the exercises with such intensity".

It is important to mention that Vieth was obsessed, like all other Humanists, with the pedagogical and humanistic role of gymnastics, therefore in his work and even more in Guts Muts's book, the horse model begins to change into a gymnastic apparatus.

Ludwig Jahn, the founder of the German gymnastic system, following the Humanists adopted the horse as a gymnastic apparatus and gave it a new form and new prospects. Jahn's gymnastic horse was used for many years by almost all great educators of that time in their gymnastic methods [10]. Jahn, in his manuscript published in 1816 titled *Gymnastik für die Jugend* devoted forty pages (102-142) to the gymnastic horse, which indicates his special interest in this instrument [10].

## CONCLUSIONS

By studying the development and usefulness of wooden horse models from the Roman times up to the Humanist period the following conclusions can be drawn:

– In the Roman times, wooden models of horses were manufactured and used for military exercises more effectively than any other real equestrian techniques;

– With time exercises using the wooden horse became immensely popular among the noble classes. Thus from an apparatus aimed at training soldiers, the horse developed into an apparatus for body training and amusement. The exercises and vaults performed by the young trainees became more related to technical perfection, skills and artistry, i.e. elements characteristic of the vaulting and pommel horse exercises rather than horse riding. At the same time the wooden horse was gradually changed and transformed into a gymnastic apparatus, which still maintained, however, the main characteristics of a horse;

– Horse models used from time to time by several fencing instructors were not alike. Following different aims and types of exercises the instructors adapted the horse's form accordingly;

– Fencing and horsemanship were considered significant "brotherly, knightly virtues" among the noble society of that time, and that is why practising with the aid of the substitute of the real horse was a task commonly undertaken by fencing teachers;

– By the end of the 18<sup>th</sup> century, thanks to the Humanists, the horse model began to evolve into a gymnastic apparatus and was used for gymnastic exercises in the humanist pedagogical systems henceforth.

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