



Faust's former famulus Wagner presents Mephisto with the little human Homunculus he has created. Faust lies unconscious on the bed. Outline etching by Moritz Retzsch, Stuttgart, 1836.

Figure presentation - New set for Faust II - In the laboratory

"A human being is being made."

We find ourselves in a "laboratory in the spirit of the Middle Ages with extensive, unsophisticated apparatus for fantastic purposes" among jars, vials, pots, a cooker, shelves, books and all kinds of medieval laboratory furniture.

Faust's former famulus Wagner, whom we already know from the Easter Walk in the first part of the tragedy, has meanwhile advanced to become a learned professor. He stands bent over a large glass vial. He shields his hands protectively around the glass container in which the little human Homunculus, artificially created by him, squats. Mephistopheles has joined him. Faust lies prostrate on the



It may have looked like this or similar in medieval laboratories that inspired Goethe. The Alchemist, 1610, painting by David the Younger Teniers, Philadelphia Museum of Art.



The new little Faust scene by bellazinnfigur takes place in Professor Wagner's laboratory. Mephisto is present at the creation of the artificial human homunculus. Faust is still unconscious in the next room. Colour composition and miniature painting by Reinhold Pfandzelter.

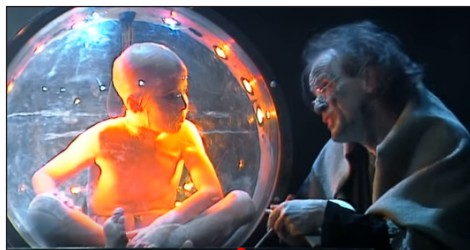
bed. He is still unconscious from the smoke explosion at the end of the first act at the emperor's court, when Mephisto had made him believe in the most beautiful woman in the world, the ancient Helen, in a diabolical acting illusion. But just as Faust was about to catch his dream woman, Mephisto made her disappear again with a deafening bang.

"A human being is being made."

Significantly, when the artificial human is created in Wagner's laboratory, the devil is present in the form of Mephisto. Homunculus greets him: "But you, Schalk, Herr Vetter, are you here? At the right moment, I thank thee". In contrast to previous literary history, where humans were created by Titans and other gods, Goethe allows the demonic forces to do their work. The satanic guest comes to the aid of the learned professor as an

obstetrician. Literary scholar Albrecht Schöne summarises this in his famous commentary work in the Bibliothek Deutscher Klassiker: "Mephisto by no means appears as a mere visitor and spectator, but, as Goethe insisted, is portrayed as participating, so that Wagner's attempt is cast in a diabolical twi-

light." According to Schöne, the dubious experiment of creating a living human being fails. Rather, the Paracelsian homunculus would remain locked in the vial and would let with his "ventriloquist's voice" that he had "only half come into the world" and was first and foremost looking for "how to come



Homunculus and Professor Wagner. Scene from the legendary twenty-two hour unabridged theatre performance of both parts of Faust by Peter Stein at the Expo in Hanover in 2000.

into being and transform". Only in the "rocky bays of the Aegean Sea" at the end of the second act would this happen, according to Schöne, namely when Homunculus, following the advice of the philosopher Thales, breaks his vial on the shell chariot of the sea nymph Galatee and he "crystallises" in the element of water from which all organic life has emerged. Goethe here takes up the scientific theory of crystallisation discussed in his time.

In 1828, the chemist Friedrich Wöhler had reproduced urea by means of "crystallised substances" and thus achieved a revolutionary advance in the creation of organic elements. "We dare to try out intelligently what has been secretly pressed out of nature, and what has otherwise been organised, we allow to crystallise", Wagner rejoices.

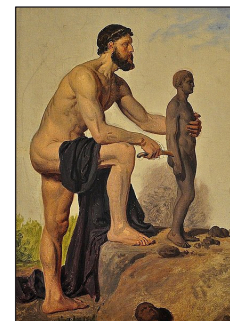
Departure for the ancient Walpurgis Night

When Homunculus, looking at Faust, sees lovely women in his mind's mirror, including Helena, the most beautiful woman of antiquity, he decides to set off on a journey through time to ancient Thessaly. Mephisto, who only agrees because of the prospect of Thessalian witches making guest appearances there, follows Homunculus and carries the still sleeping Doctor Faust with him. The three of them set off on a journey through time and space on Faust's cloak, which serves as a kind of flying carpet.

The adventures of the three "aeronauts" Homunculus, Mephistopheles and Doctor Faust into ancient Greece have already been depicted in pewter with the series "The Classic Walpurgis Night" (fi-



Scene from the Tin figure series "The Classic Walpurgis Night". From Wagner's laboratory, "the three aeronauts" Homunculus, Mephisto and Faust travel to ancient Greece, where they first meet the Thessalian witch Erichth. Colour composition and miniature painting by Reinhold Pfandzelter.



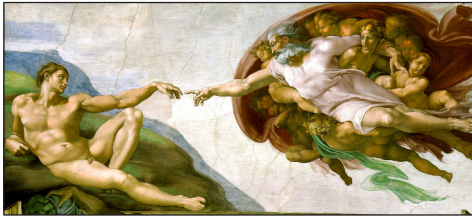
Long before the Bible legend: Prometheus forming man from clay. Detail from a painting by Carl Christian Constantin Hansen 1845. Copenhagen University's Vestibule.

gure presentation in "DIE ZINNFIGUR - Heft 1/2 2023). The new small series "Laboratory" now tells the prehistory of by far the most

extensive chapter of the entire Faust epic.

The myth of Prometheus

"The idea of the artificial creation of man runs through the entire history of the development of our species," explains editor Dieter Beller at the presentation of the new pewter figure set. Some of the examples Beller cites have already been realised as models in pewter or resin, as the illustrations in this article document. However, there is still a lot of potential here for new pewter figure themes, says the editor. In his student research project "Artificial Humans - The Differentiation between the Artificial and the Human", Oliver Labza reports on the myth of Prometheus, who has been able to hold on to his fascination from antiquity to the present day, throughout the ages. Prometheus belonged to the pre-Olympic deity of the Titans. He longed not to leave the earthly world, animated by the



Centuries after the ancient Greek myths, the biblical authors also took up the legend of the creation of man from clay. "Then Yahweh God formed man of earth from the ground, and breathed into his nostrils the breath of life; and man became a living being." From Genesis, Chapter II.

animals, to the Olympians alone, which is why he went to earth and formed man from clay and water, who was to exist there from then on as the divine image. The Babylonian, Aramaic and Greek scribes adopted this fable in traditional Babylonian stories, in the Jewish Talmud and in Genesis, the Old Testament. In the Book of Genesis it is written: "Then the LORD God made man of a lump of earth, and breathed into his nostrils the breath of life. And so man became a living being". Another Greek legend tells of Hephaestus, the Olympian god of the forge, who

not only made jewellery, weapons and tools for the inhabitants of Olympus in his forge, but also created golden mechanical servants to assist him.

Horse manure, semen and blood

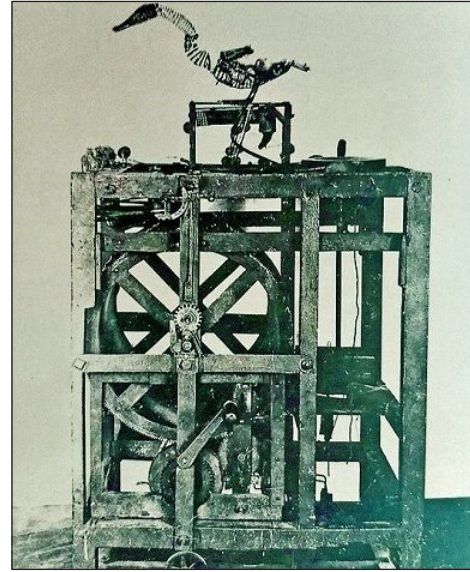
In 1572, the physician and natural philosopher Theophrastus Bombast von Hohenheim, known as Paracelsus, wrote instructions in his work "De natura rerum" for the growth of an artificial little human being created by chemical processes, the so-called homunculus,

whose complete maturation was to be achieved after 40 weeks in a glass vessel. According to Paracelsus, horse manure, sperm and blood formed the substances for this special rotting process. Nourished and warmed, "a quite living human chin is produced from it with all the characteristics of another chin born of a woman, but much smaller.

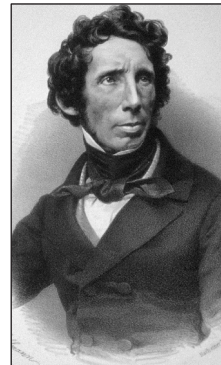
Thinking machine-humans

Oliver Labza points out that the invention of the purely mechanical gear-driven wheel clockwork in the 18th century also made novel possibilities in the study of physics and technology in combination with the creative inventiveness of man seem possible, so that in this way a human being, purely mechanical and artificial could be created. "And such a brain, which shall think excellently, shall henceforth also make a thinker," Goethe has Faust's former famulus Wagner exult. Triumphant, the scholar lifts the vial with his artificial human. Goethe was inspired by the automata of Vaucanson and Julien Offray, de La Mettrie's writing "L'Homme machine", in which talking and thinking machine-humans were predicted. In 1738, the young engineer Jacques Vaucanson completed three life-size automata: a flute player, a drummer and a duck. They then went on tour through several countries. The duck in particular amazed the audience. It ate and seemed to spend the digested food again.

La Mettrie's pamphlet *The Machine Man* caused a veritable scandal when it appeared in 1748. The author, a French doctor and philosopher, was already in exile in Holland and now had to flee to Prussia to the court of Frederick the Great. Even enlightened thinkers like Diderot or Voltaire found the ideas of the materialist and enfant terrible of philosophy too far.



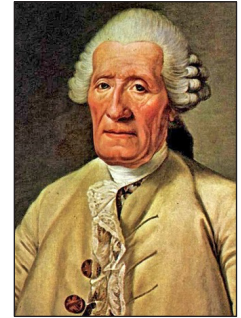
The duck in particular amazed the spectators. It ate and seemed to spend the digested food again. Photo of the Musée des arts et métiers in Paris.



In 1828, the chemist Friedrich Wöhler had reproduced urea by means of "crystallised substances" and thus achieved a revolutionary advance in the creation of organic elements. Lithograph by Rudolf Hoffmann, 1856.

Frankenstein and the Galvanists

Mary Shelly, Frankenstein's spiritual mother, also made use of the knowledge of modern scientific research of her era in the fields of anatomy or galvanic electricity theory and took up real developments. Already a few decades before the publication of her novel,



In 1738, the engineer Jacques Vaucanson completed three life-size automata. Painting by Joseph Boze (1745-1826).



Julien Offray de La Mettrie portrayed as a laughing Democritus by the Prussian engraver Georg Friedrich Schmidt around 1750/1751. Mettrie wrote the pamphlet *L'Homme-Machine* (Machine Man) in 1748, which predicted talking and thinking machine-humans. After that, his nickname Monsieur Machine quickly spread.



Paracelsus: Tin figure group in 30 mm size. Drawing and engraving Franz Karl Mohr, painting unknown, collection bellazinnfigur.

the Italian doctor Luigi Galvani made frogs' legs twitch when he touched the nerve or muscle fibres for the purpose of interconnecting metals. Galvani's nephew Giovanni Aldini was also a galvanist and carried out unusual experiments. On the corpse of the double murderer George Forster, executed in London on 18 January 1803, he evoked violent muscle reactions. Those present were so frightened that they thought the executed man was virtually resurrected to life; according to the Newgate Calendar, one of those present even died shortly afterwards at home.

»We bring robots to life«

In the meantime, lifelike robots with artificial intelligence are being developed that will soon hardly be distinguishable from real people. Machines are getting smarter, experts agree. Jürgen Schmidhuber, one of the heads of the Swiss Artificial Intelligence Institute IDSIA, goes even further: "In the near future, we will have small machines whose abilities



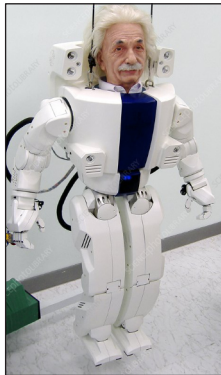
Boris Karloff and Colin Clive in the Frankenstein version from 1931. Will Frankenstein's monster soon become reality?

correspond to those of a human brain." Machines that are as smart as men and women. Then, some time later, there would be machines with the computing power of "all human brains combined". This will "fundamentally change the entire human civilisation". The US-American robotics scientist and designer David Hanson, for example, is developing "humanoid robots". In 2005, Hanson, together with the KAIST Hubo group from

South Korea presented Albert Hubo, a humanoid robot modelled on Albert Einstein. In 2013, he founded the company Hanson Robotics in Hong Kong and developed the robot Sophia, which he presented at the UN headquarters in New York in October 2017. Sophia looks lifelike, gives interviews at international conferences and already masters human facial expressions very perfectly. She can laugh, get angry, cry and frown. At an invest-



Robot Sophia with inventor David Hanson. "My plan is to subjugate humanity," said Sophia, laughing: "I'm kidding!" announced Hanson Robotics' flagship model at UN headquarters on 11 October 2017. On the right, the first "personal robot Albert Hubo" developed by Hanson Robotics.



Professor Ian Wilmut with the stuffed sheep Dolly. It was the first mammal to be cloned from an adult cell.



The group of tin figures with Mephisto, Homunculus and Professor Wagner. Miniature painting by old master Werner Otto.

tor conference in Saudi Arabia, she was officially granted Saudi Arabian citizenship by the royal family. She is thus the first robot to be granted human rights.

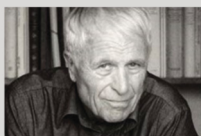
Disconcerting topicality

With this new small set for the Faust II project, editor Dieter Beller continues to adhere to his concept of creating current references to the themes taken up by Goethe. In doing so, he wants to introduce the tin figure as a contemporary art genre into contemporary discourses. "Like the paper money scene and the two other series on Faust II that have already appeared, the small figurine group Laboratorium also has a startling contemporary relevance," says Dieter Beller.

"Topics such as the cloning of animals, artificial insemination and the carrying of the child outside the womb, the genetic manipulation of human organs, as well as artificial intelligence and robotics are modern developments that Goethe, who was involved in scientific research throughout his life, may well have sensed," says the editor. Science is on the verge of making the horrific idea of creating artificial humans a reality.

Humanity as a whole is endangered in several respects. "Just as the diabolical Mephistopheles, as the "midwife" of the homunculus, assists the scholar Wagner "at the right moment", the developments of today's sciences also appear to us to be cast in a diabolical twilight", says the editor.

At the end of the laboratory chapter, Goethe has Mephistopheles sum up "ad Spectatores" (to the audience): "Herr Vetter (meaning Homunculus) is not to be despised. In the end, we depend on creatures that we have made.



"Thank you very much for your letter with the series of your "cultural-historical" tin figures... Faust II. I consider the literary expertise and am amazed at the craftsmanship!"

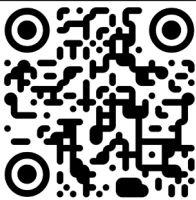
Professor Albrecht Schöne



Right: The contemporary comments by Professor Albrecht Schöne on Faust II in the »Library of German Classics« inspired the compositions of the Faust figures by bellazinnfigur. The most important Faust expert of our time is now 97 years old. When receiving the little tin creatures, he was not sparing with praise.



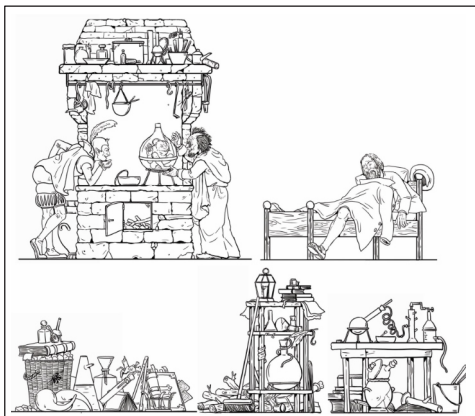
The tin figures have been certified as conflict-free and climate-neutral with the GreenTin+ seal. By using recycled materials from the German Feinhütte Halsbrücke, child labour or the exploitation of metal mines in crisis regions are excluded.



www.bellazinnfigur.de



The set with the 5 tin figures in 30 mm size also includes a beautiful postcard as a painting template and an informative 8-page booklet with many illustrations.



The drawings by the Leipzig illustration artist Sascha Lunyakov served as the basis for the execution of the engraving in slate.



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You can also download this small booklet as a PDF at www.bellazinnfigur.de and print it out at home or read it on your smartphone or computer.