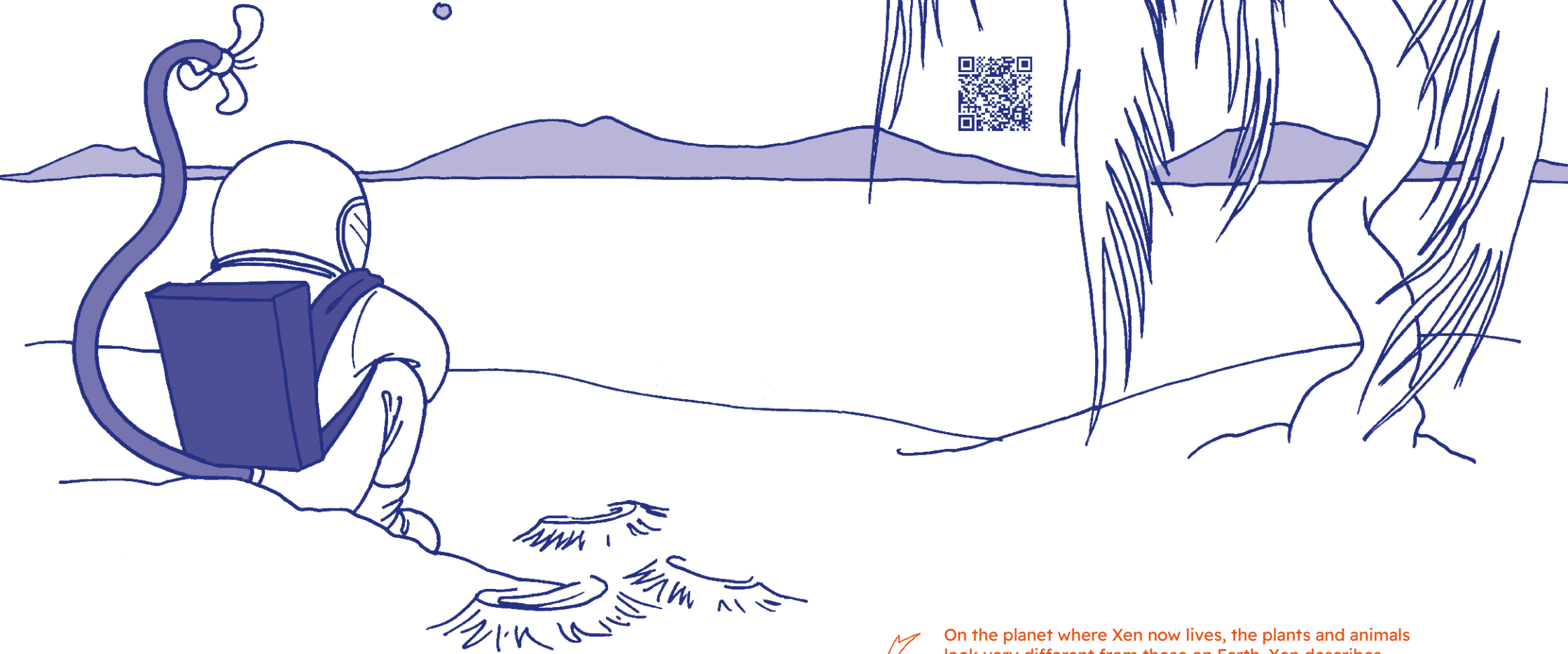


FUTURE BUDDYS



On an alien planet,
far far away,
far far in the future,
Xen lives all alone.



Xen has to explore the environment every day for a whole year and in the evening write down what was discovered. At the end of the week, Xen sends a report to their home planet Earth via radio.



On the planet where Xen now lives, the plants and animals look very different from those on Earth. Xen describes the differences in the weekly reports. Would you like to hear them? Then find the QR code hidden on this page!



How do you imagine plants that are made up of completely different parts?

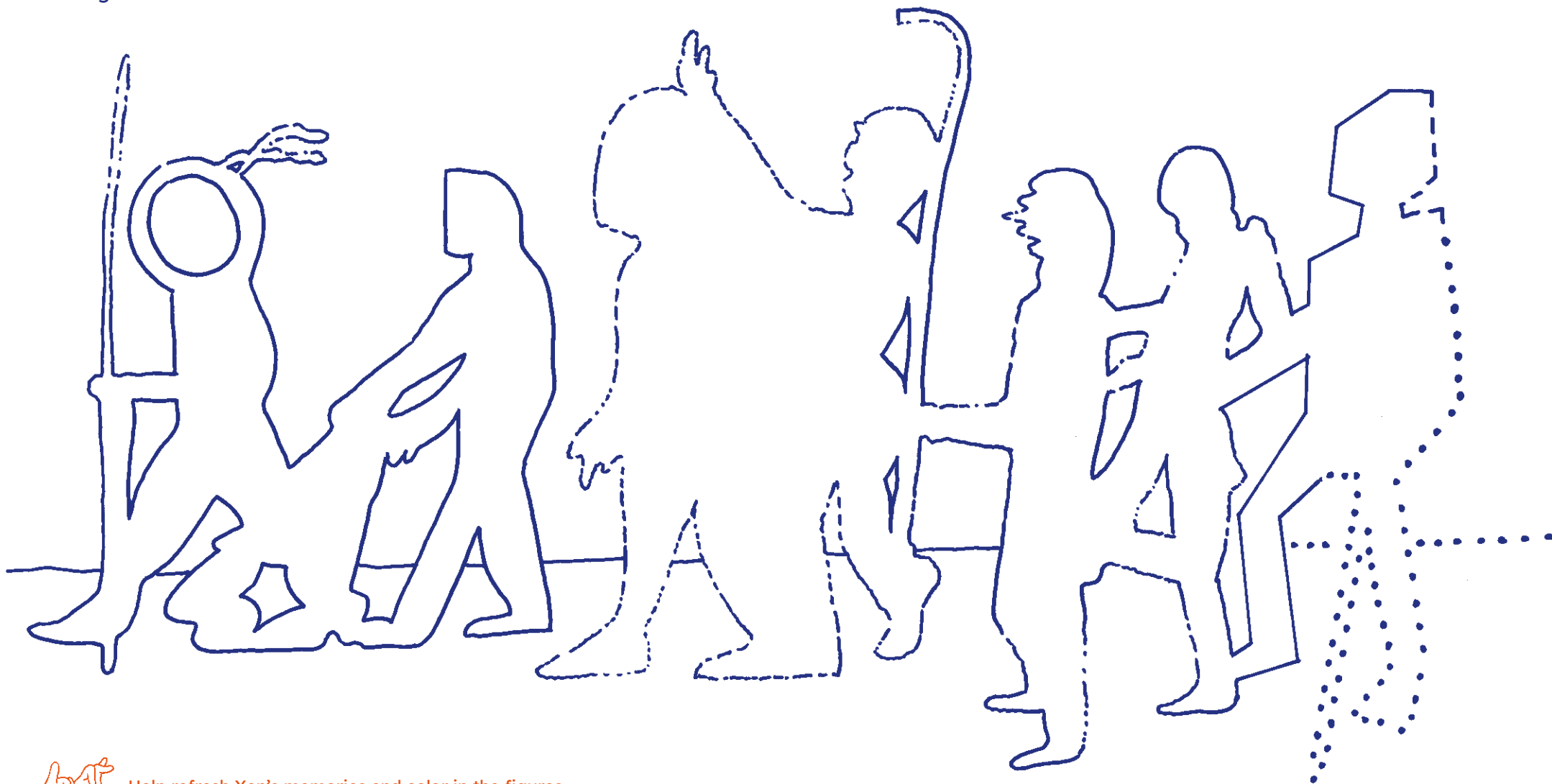


Draw a fantasy animal that might live on Xen's planet!

At times, Xen feels very lonely. That's why Xen likes to think about Earth, where family and friends are waiting.



But that was a long time ago, and slowly the memories are fading.



Help refresh Xen's memories and color in the figures.

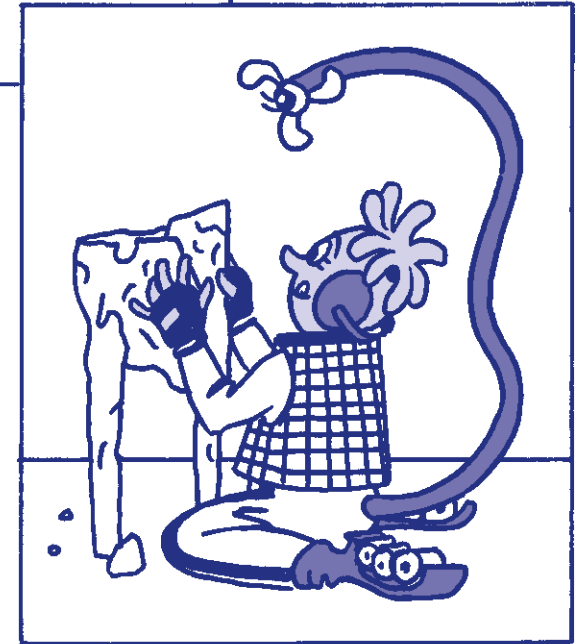


The figures are made of different things and materials. Which ones do you recognize? What might they have been used for before?



At Museum Brandhorst, you will find the artwork "Bródno People" (2010) by Paweł Althamer in Room 0.2. You can use the QR code on this page to view the work again at home.

When the loneliness once became so great that it was no longer bearable, Xen created a friend out of old wire and metal scraps.

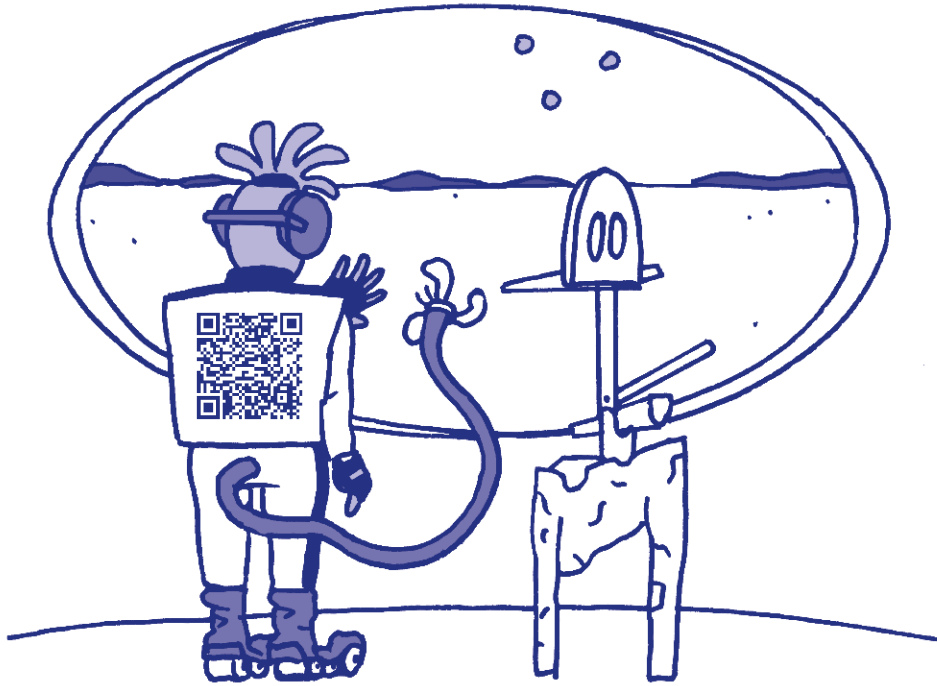


Draw or glue a character using various photos and pictures. You could also try to recreate it with wire and old objects. Find the QR code hidden on this page for step-by-step instructions!



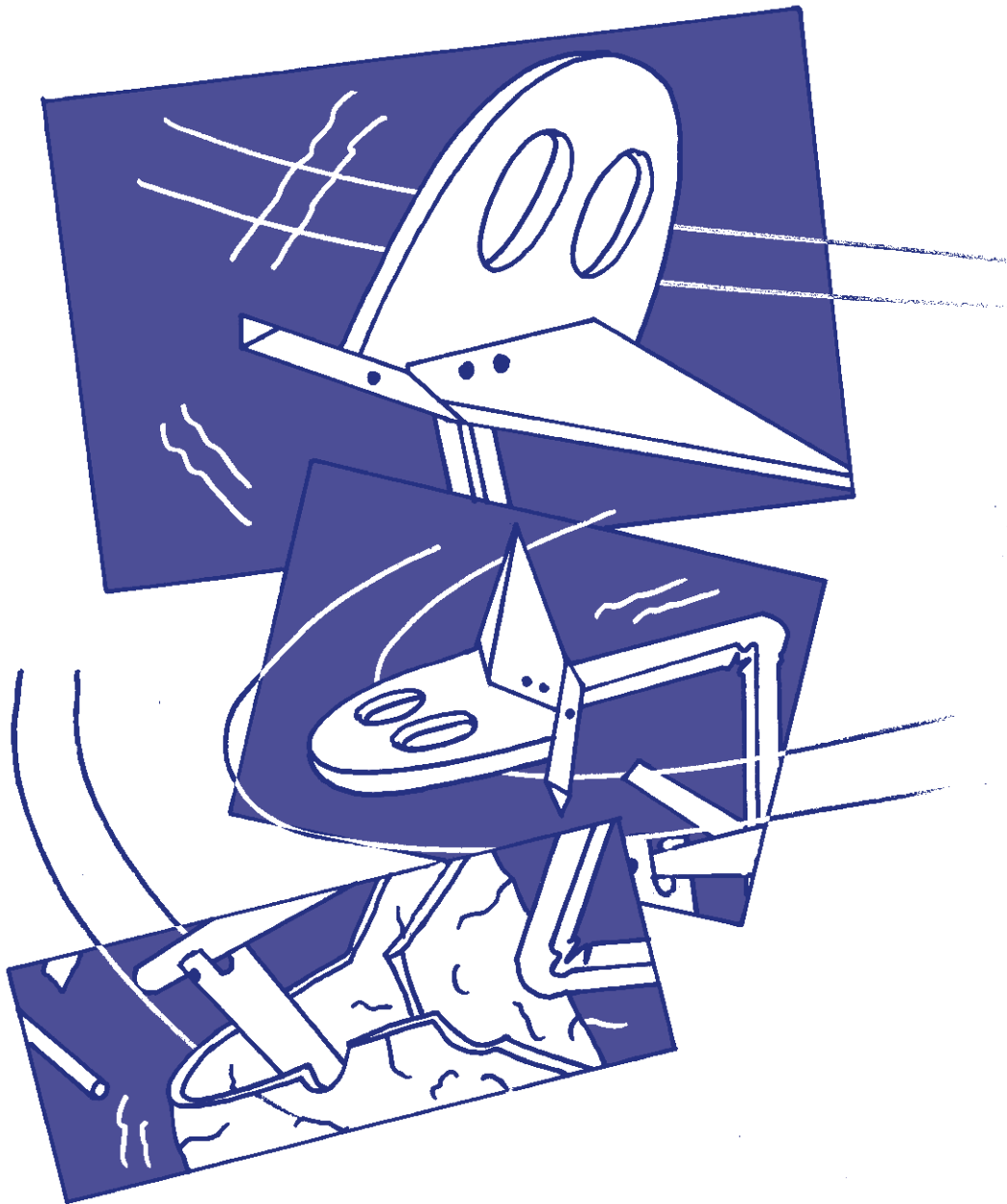
How might Xen's friend have looked made from wire and found materials? You can find ideas in Room 0.4 or at home using this QR code.

Sometimes when things were boring, Xen would tell the little friend what thoughts go through someone's mind when they are alone on an alien planet.

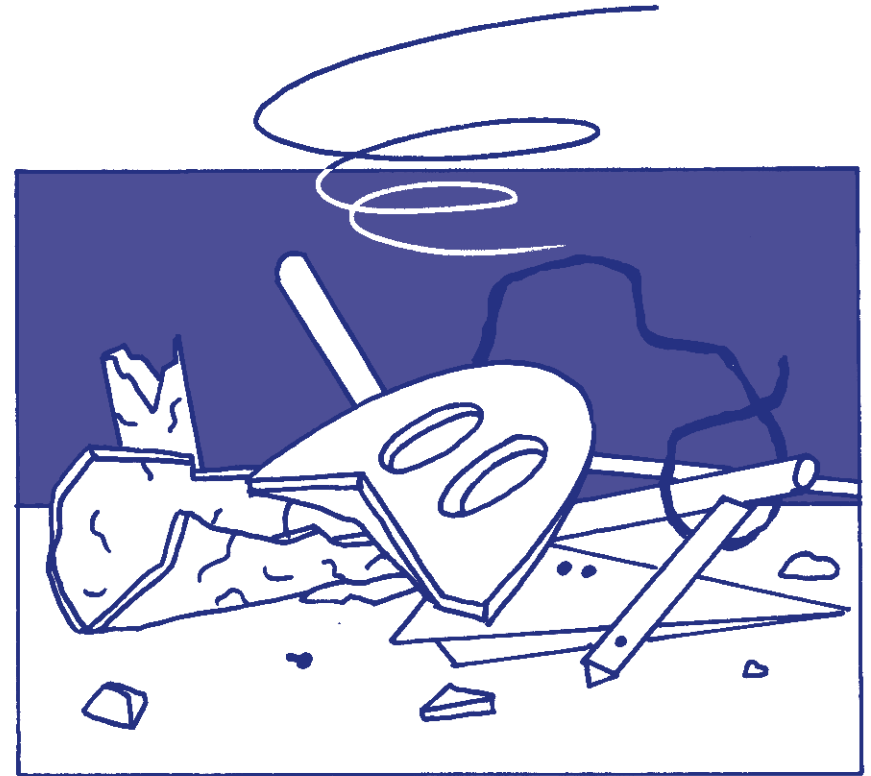


Would you like to hear Xen's thoughts? Find the QR code hidden on this page.

Sadly, one night during a heavy storm, the metal friend broke into a thousand pieces.



Xen has had enough of being alone and decides to do something. They need someone to talk to. A buddy who can do more than just stand around. A buddy who also answers when you ask something. But to build such a buddy, Xen needs your help.

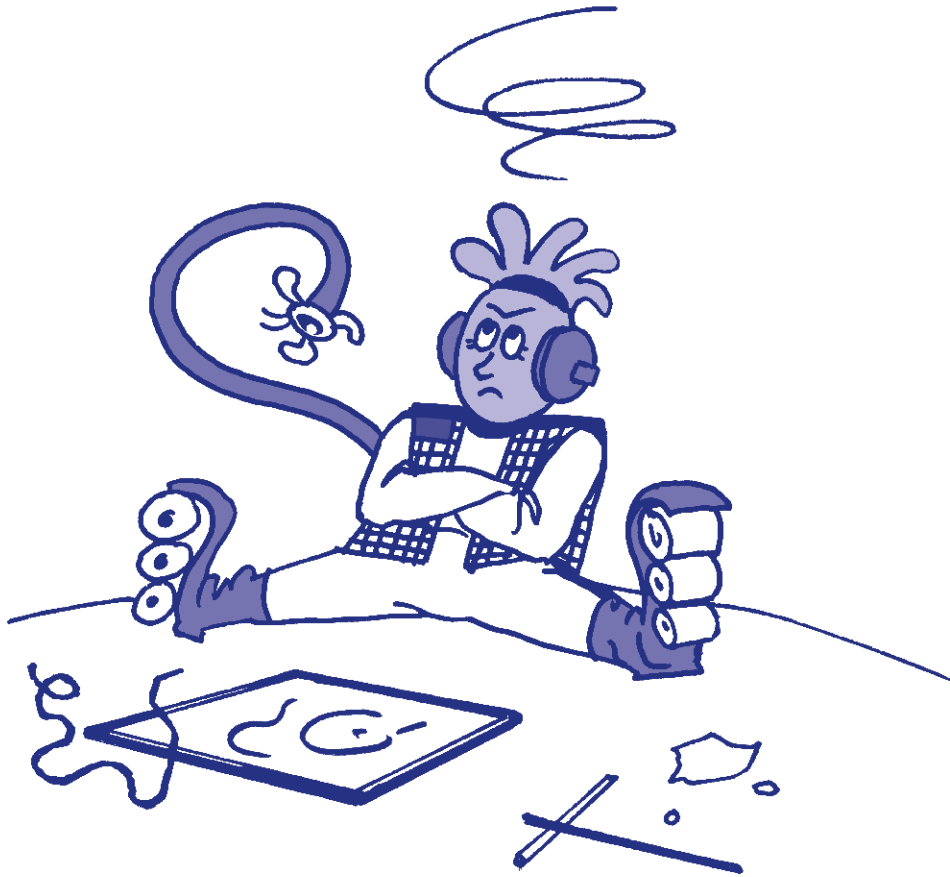


What should Buddy be able to do to keep Xen company? You can collect your ideas on the blank pages at the end of the booklet. There you will also find some of Xen's suggestions for Buddy.

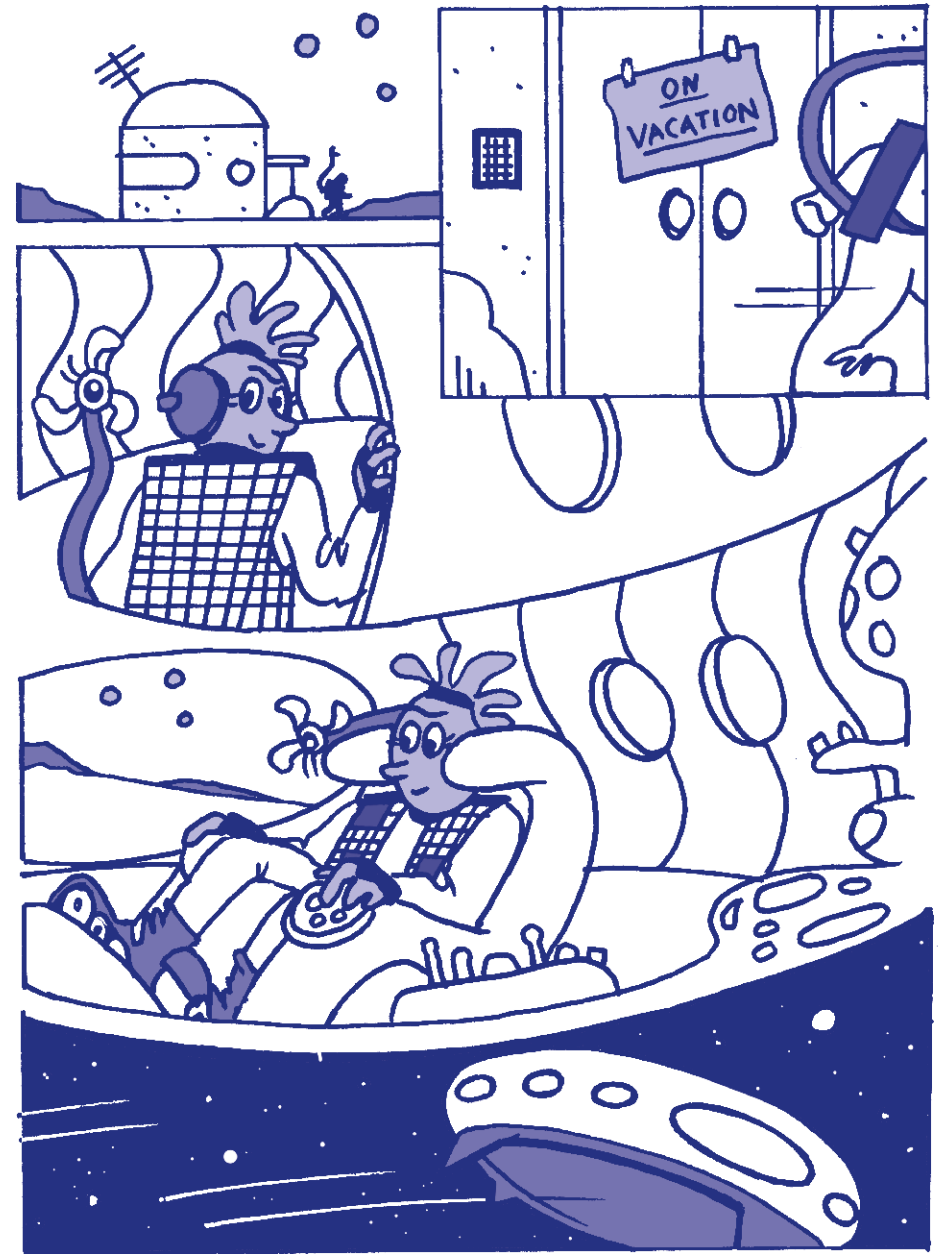


Can you imagine a robot as a buddy? What kind of buddy would you like to have?

Phew, it isn't easy to create the perfect buddy! There are so many shapes and possibilities. After all, you want to be sure when you are building someone you want to be friends with - and preferably forever.

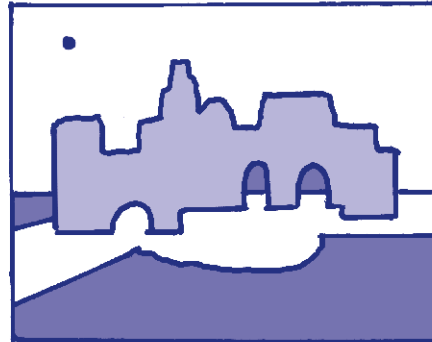
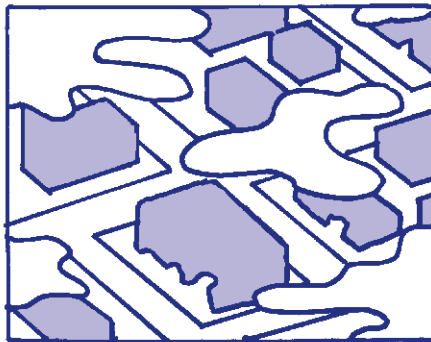
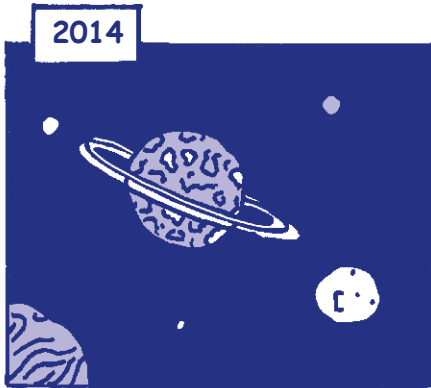


Xen wants to know more. So, Xen sets out on a journey to faraway places and through time - specifically, through the history of Xen's home planet, Earth.



Join Xen on this journey! See how bodies and forms have changed over time and how different they can look.

Before traveling deep into the past, Xen makes a stop at Mark Leckey's place in 2014. The studio of this researcher and artist is a very special place. Here Xen can get lots of ideas for Buddy's shapes, body parts and equipment.



Do you want to know what it's like at Mark's, and what's special there? Then find the QR code and listen to Xen's report.



A studio is a place where artists produce their art.



Maybe you'll meet Xen? Quick, dash down to the lower level! There you will find three stages: They are part of the work "UniAddDumThs," which Mark Leckey has been working on since 2014 and which you can also view via the QR code.



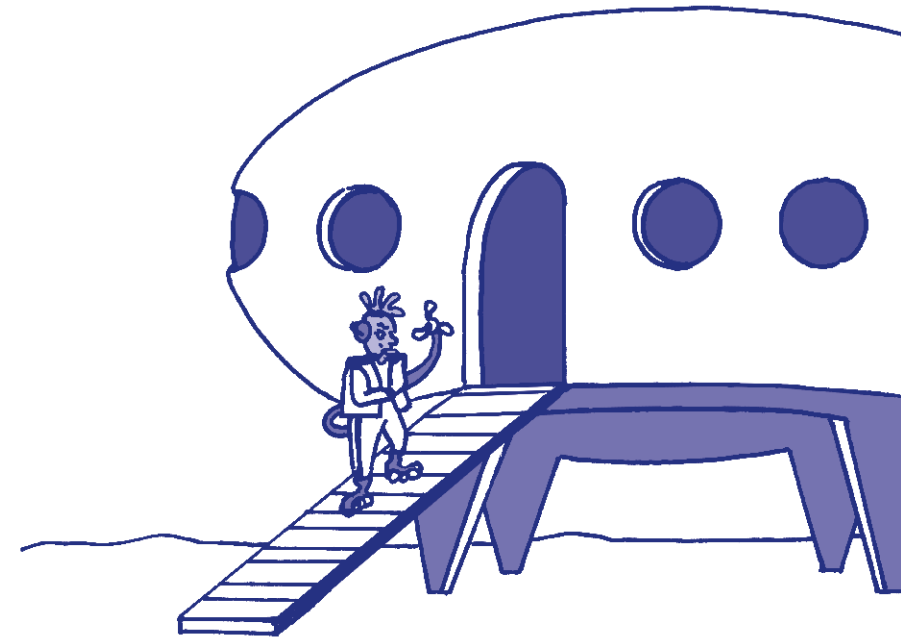
With Mark, and in the exhibition in general, you will find ideas for possible body parts or Buddy's equipment. What will go into your collection on the blank pages at the end of the booklet?

“I don’t know much about robots, but have you thought about what the skin or surface should look like? After all, it will have to hold all the individual parts together and protect them from rain or something similar,” says Mark to Xen as he says goodbye. “Clothing and devices can also be useful in making sure that Buddy is well-equipped for life on different planets.”



Pay attention to how surfaces are constructed. Skin and fabrics have different structures. Look at them more closely! Draw a surface, a net, or skin made of repeating shapes, such as small circles.

Xen climbs thoughtfully into the spaceship. Together with Xen, Buddy will explore completely different planets. It is crucial that Buddy doesn’t break down again right away. People have been protecting their bodies for thousands of years. Xen wants to take a closer look and travels first to the Middle Ages.

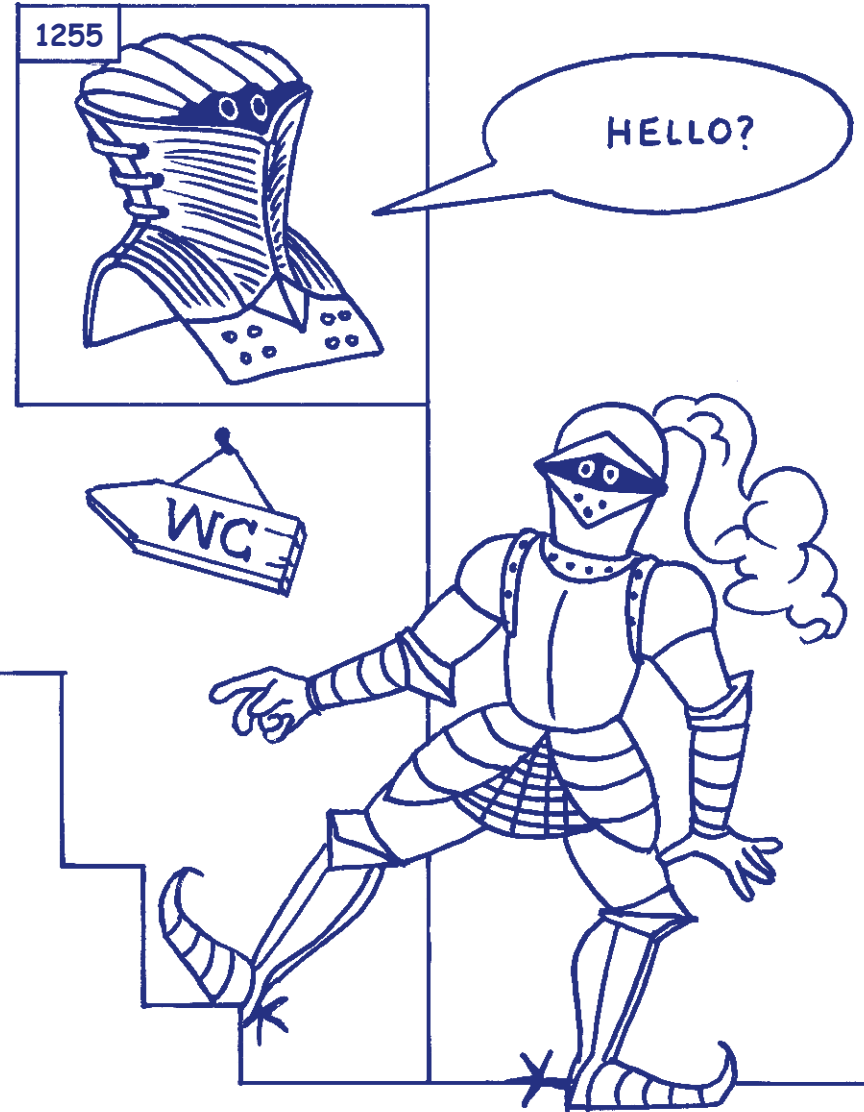
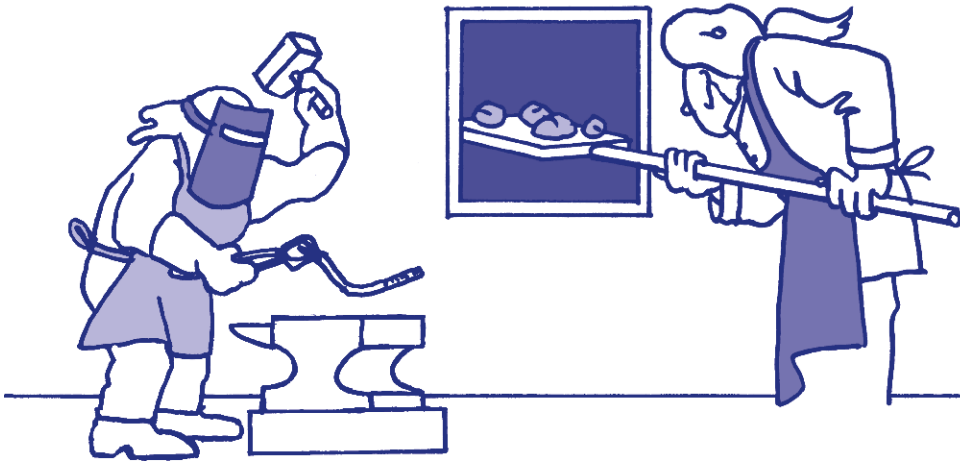


To get ideas, check out the works “Hannah” or “Mila” (both 2015–2017) for example in the same room. Artist Seth Price magnified shots of skin for these in ways you’d never see otherwise.



Using the QR code hidden on the page, you can also view the works at home or discover a new creative project on surfaces and structures.

Armor, clothing and equipment protect and enhance our bodies and help us to do different things. Without tongs, no blacksmith can work on red-hot horseshoes, and no baker can get bread out of the oven without a baker's paddle.



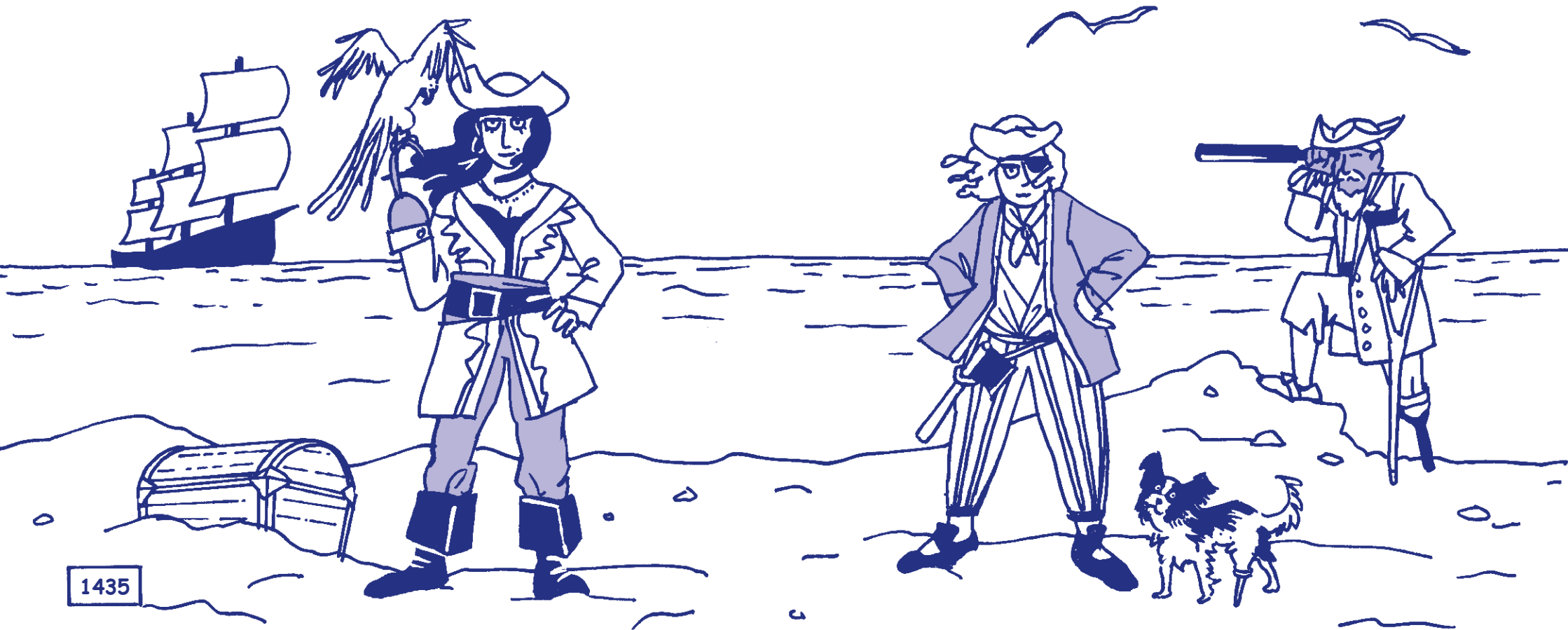
However, beekeepers and knights are also restricted in some movements by their equipment. You might know what that feels like? For example, if you have to wear a tight turtleneck sweater, a jacket that's too big, or an elaborate carnival costume: you suddenly find it difficult to move the way you're used to. You won't win a race in beekeeper's clothing, but you'll be protected from bee stings.



What body-enhancing aids do you know from your everyday life? Do you wear glasses, for example? Can you imagine playing football without shoes? Do you know anyone with a hearing aid? Have you ever seen your parents without a cell phone? What else can you think of?

As early as 600 years ago, explorers, pirates and merchants sailed the seven seas. For them home was as far away as for Xen.

If they got injured on the high seas, they could not simply sail to the nearest hospital. Therefore, amputations were often necessary. This meant that if an injured part of the body, such as a leg or an arm, could no longer heal, it had to be removed. This was the only way to save the life of the injured person.



1435



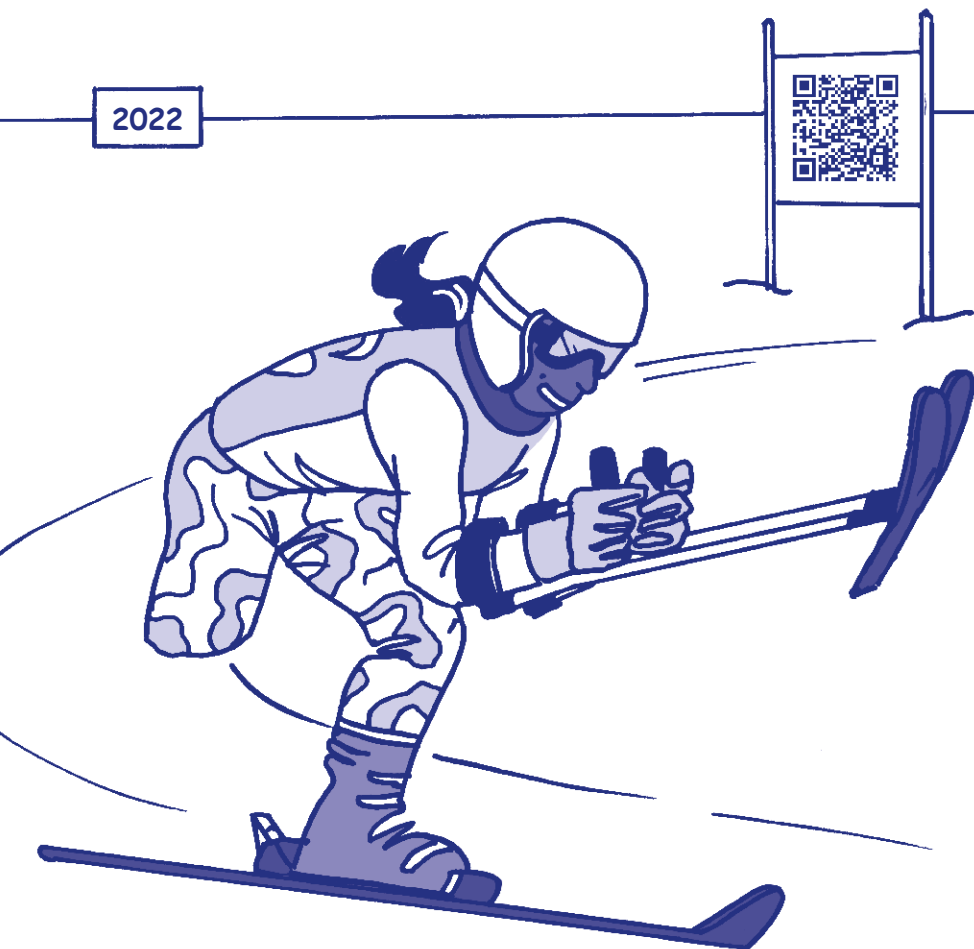
Robots - such as Buddy will become - consist of many mechanical parts. Cyborgs are hybrid beings, i.e. the human body is supplemented by technology.

Various aids were used in order to be able to walk or grasp things; today we call these “prostheses.” They have since been developed further and are now much better.

For a long time, people have dreamed of using technical means to expand and improve their own bodies or to acquire new abilities – such as flying. Technically, many things are now possible. We have experimented with new materials to replace body parts or to improve our sensory perceptions. Today, artificial prostheses are so good that you can even run races with them.

Do you know about the Olympics and the Paralympics?

In 1988, American athlete Dennis Oehler uses carbon prostheses for the first time at the Paralympics, winning the 100m, 200m, and 400m sprints with new world records.



Xen starts dreaming. What if Xen or Buddy could jump as high as a kangaroo? Or run as fast as a jaguar?



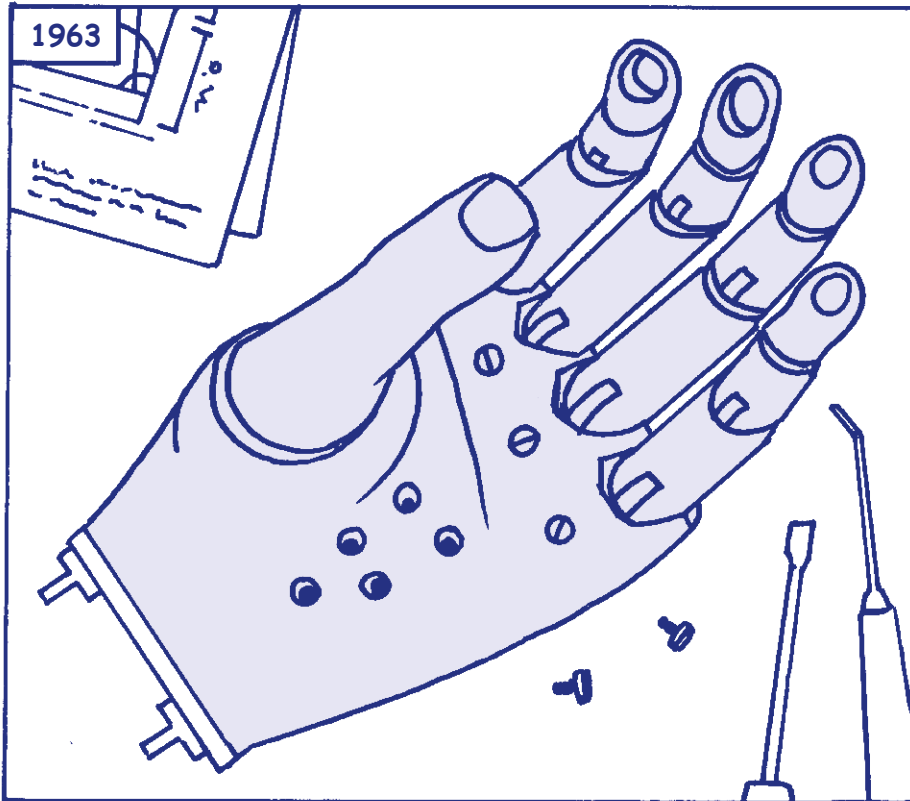
Have you ever taped a pencil to your finger, made magnetic gloves, or tied a meter stick to your arm? How do your abilities change when you use such tools for a while?



Let the exhibition or the internet inspire you! Which body enhancements do you already know? Do real cyborgs already exist today?

It is important to Xen that Buddy can help on the research planet. Therefore, Buddy should be able to grasp and hold an object, and even throw a ball.

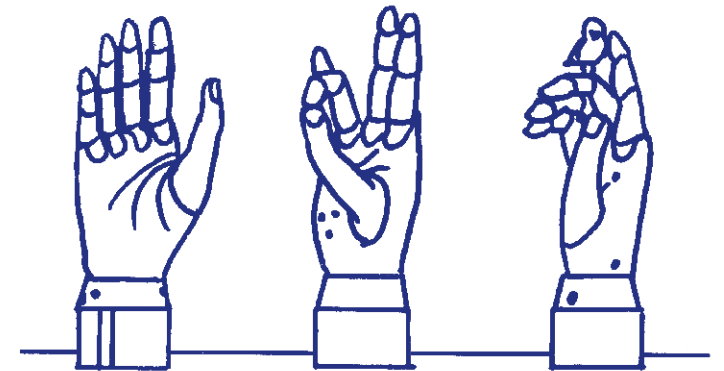
Recreating a hand that can grasp is difficult, but humans have already learned how!



Serbian engineer Rajko Tomović designed the world's first bionic hand prosthesis: it is equipped with five fingers and a sense of touch and is called the "Belgrade Hand." Its fingers can grasp when a control panel sends them electrical signals.

Artist Aleksandra Domanović was impressed by the Belgrade Hand. She replicated it with a 3-D printer, using special materials. But these hands were not meant to serve as artificial spare parts - instead, Aleksandra turned them into works of art. The posture of the hands in the artworks "Fatima", "Mayura Mudra", and "Little Sister" (2013; room 0.8) is not accidental. Maybe they look familiar to you? Aleksandra has chosen hand gestures that have a special religious meaning in different cultures.

2013



Replicating the thumb is the greatest challenge.
It is the most flexible finger.

“What would a hand that only has thumbs actually look like?”
wonders Xen.



Bruce Nauman even created such a sculpture! It is called “All Thumbs” (1996). Take a look at it in Room -1.6. And at home, you can view it via the QR code hidden on this page.

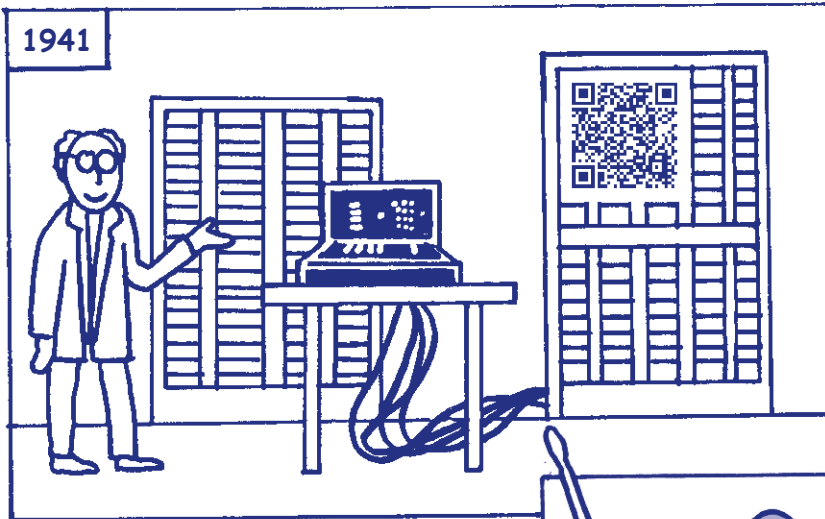


On Xen’s research planet, even the plants have thumbs. Want to hear Xen’s report in that? Find the QR code hidden on this page and listen to Xen’s report.

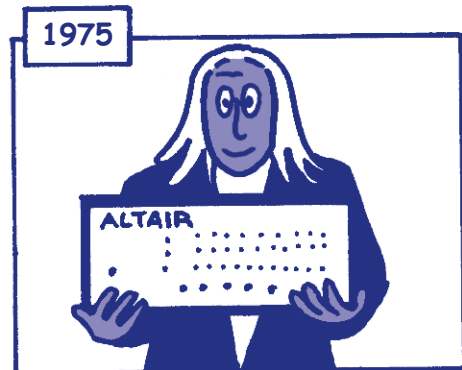


Our human bodies only seem “whole” when everything is exactly where you expect it to be. Tales of a sixth finger, a third foot or ears in places where we are not used to them are more familiar from horror stories. Why is that so? What changes or additions to the body would you find helpful or fun in everyday life? Perhaps an eye at the back of your head to see what’s going on behind you? Or a third, extendable arm to reach the cookies on the top shelf?

Xen can easily send research reports or talk to their family – and hopefully soon to Buddy – via a chip in their body. All this is quite normal for Xen: The computer is already part of their body. But how did that actually come about?



The first fully programmable computer by Konrad Zuse filled an entire room. The first PC (personal computer) went on sale in 1975. At least it could be carried with two hands.



This is roughly what the first cell phone looked like in 1983. Pretty big, right?

The first laptops were available as early as 1987. In the mid 1990s, much smaller and lighter computers followed: so-called tablets and smartphones.



Smartphones and tablets are becoming more and more powerful and are now also like a small computer that you can hold with one hand.



Xen is astonished: In the past, it seems that people took their cell phones – or other small computers – with them everywhere. They often carried them close to their bodies. “Quite a hassle”, Xen thinks to themselves, and can’t believe how long and how often people stared at a small square screen back then. Their thumbs must have hurt from so much typing!



If you think about it, cell phones also extend our bodies. We use them to talk to friends who are so far away that they couldn’t hear our voice without a cell phone. Or we watch movies and listen to music without having to go to a cinema or a concert. Our thumb is the link in all of this. Through it, information flows from our head along our arm and the screen directly into the smartphone.



Thanks to technology, the support of computers and the internet, our bodies are developing more and more into real super-bodies. At the same time, our thumbs and eyes can start to hurt or change due to carrying out the same movements or holding the same positions. What do you wish for? How closely would you like to merge with technology, or live with it?

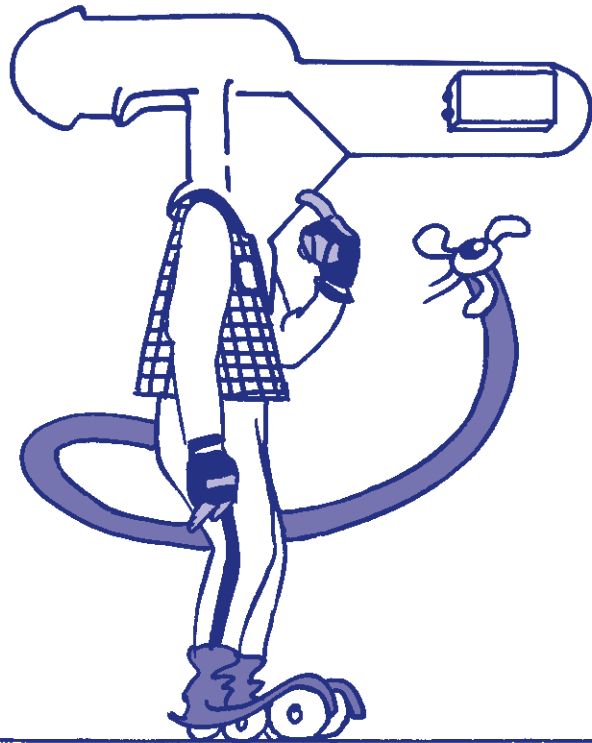


Artist Judith Hopf created sculptures that show how our bodies sometimes merge with technology. Laptops and cell phones are part of her sculptures. You can find them outdoors, in Room -1.2, or under the QR code.



What do you look like when you’re using your phone and forget everything around you? Or what do your parents look like? Re-enact it and take a photo, preferably with your cell phone.

A computer that is part of your body. How is that supposed to work? Does the watch grow onto the arm, or is the chip inside the body, as with Xen and Buddy? That sounds a little creepy.



1967

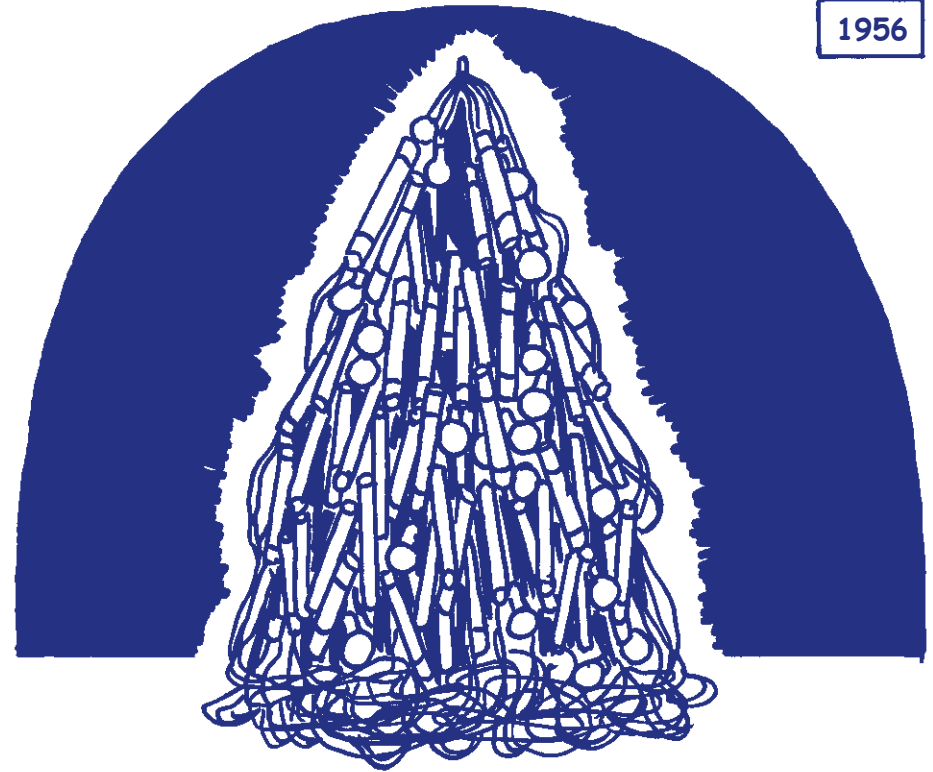


Artist Walter Pichler created “TV-Helmet (Portable Living Room)” in 1967. It allows you to watch TV without interruption, but you are also cut off from the outside world.



Imagine you couldn't take off your helmet; then you'd be half-human, half-helmet, and you'd have the TV with you everywhere – but would you want that?

1956



What does it mean when technology becomes increasingly important in our lives and influences our bodies? Atsuko Tanaka also thought about this as early as 1956. The Japanese artist designed a dress made of light bulbs and fluorescent tubes. When you put it on, at first everything hangs down on you and is very heavy. As soon as you plug in the cable, the dress starts to glow. While it looks nice, you never really know if you're going to get electrocuted. That is why wearing Atsuko's “Denkifuku (Electric Dress)” (1956/1999) is always also associated with a fear of technology.



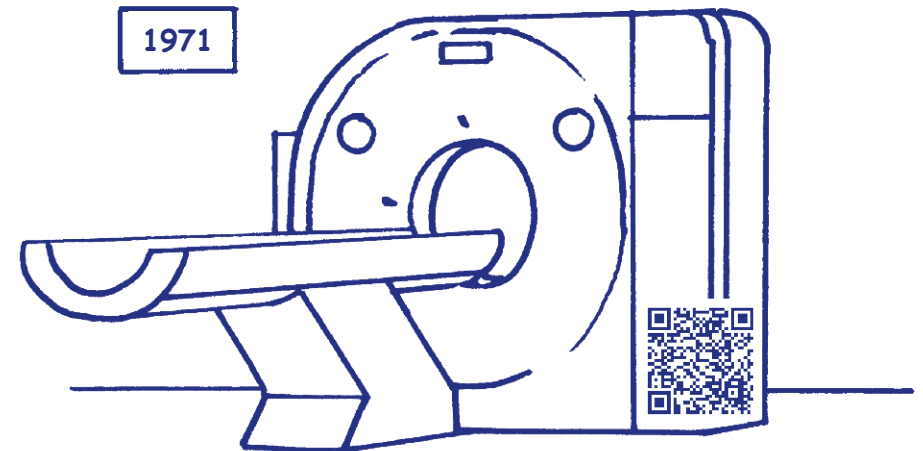
Think about what Buddy should be able to do and what they should definitely not be able to do. Where could you use some help? Perhaps Buddy should have a built-in sorting machine or a special clean-up arm, a night-vision device or rather an integrated popcorn machine? Are there any technologies or functions you would like to protect Xen and Buddy from?

People have always been a bit afraid of technology. That's no surprise, because when you see something for the first time, you don't understand how it works. But at the same time, you find the unknown exciting and want to know what it's all about. So you are torn. On the one hand, you simply have to look, but on the other hand, you would rather keep a safe distance to avoid any nasty surprises – such as electrocution.

Now Xen and you have already seen a lot. It's not so easy to say what exactly belongs to a body and what doesn't – and where do the boundaries actually lie? Do they exist at all? The pictures by Kiki Kogelnik and Lynn Hershman Leeson show that bodies not only differ externally. What is inside them also plays a role.



Visit Kiki and Lynn's pictures on your way out in Room 0.1, 0.2, and 0.8 or follow the QR code.



In 1971, the first computer tomograph designed by the English engineer Godfrey N. Hounsfield delivered images of the inside of objects. It was developed further specifically for medicine to let us look inside human bodies. This helps, for example, to detect diseases early.



This is well illustrated by the story of one of the first films ever made. Are you curious? Follow the QR code!

Did you know, for example, that all babies initially carry the same predispositions and that it takes several weeks in the mother's womb to decide how the body will develop? And how you feel inside has nothing to do with your appearance. There are no limits there either. Xen, for example, feels somewhere in the middle. And what about Buddy? Buddy can be anything, only you decide!

Now it's time to build Buddy. You are completely free to use everything you have seen so far. Here in the booklet you will also find some sketches and ideas from Xen.

You could also take the pictures by Kiki Kogelnik or Lynn Hershman Leeson as a model and make a collage: First you paint some parts of Buddy, then you cut out other parts and glue them on top.

Or, like Mark Leckey you can search for pictures on the internet and print out what you like. Or you could rummage through old newspapers. Maybe you'll even go on an art expedition again: You can find many exciting works in the exhibition. You can also view them at home using the QR codes.



Draw Buddy in the picture next to Xen.



And do you perhaps want to write a report like Xens' about your own trip and about Buddy? Look closely at the artworks in the exhibition: Write down what you see and what it reminds you of! You're sure to find ideas there for your story of fantastic creatures or distant worlds.



We'd love for you to share your picture of Buddy or your fantastic report with us and other time-travelers via social media and the hashtag #MBFutureBuddys!



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See you next time and have fun experimenting!

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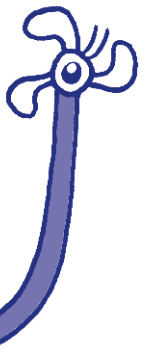
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The activity booklet is published to accompany the exhibition “Future Bodies from a Recent Past—Sculpture, Technology, and the Body since the 1950s” (June 2, 2022, to January 15, 2023).

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