



# Hand

A Complete  
Guidebook

VÍTĚZSLAV MECNER  
MAGDA GARGULÁKOVÁ

A Complete Guidebook



Hand



b4u publishing



# Every hand is

hand	/
fingers	###
palm	/
wrist	/

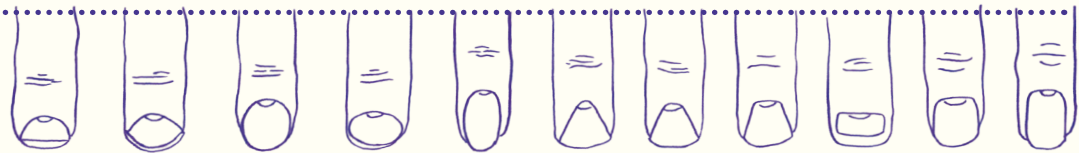
No two hands are the same! Hands come in all shapes, sizes and colours, and their fingers are variously curved. Yet the most interesting things about them are small and easily missed. Take a good look and what do you see? That's right: lots of twisty lines and grooves – some larger, some smaller, some straight, some meandering. Known as papillary lines, these are extremely important, for they make each hand unique.

unique

## NAILS

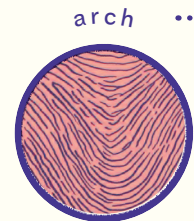
The end of each finger is protected by a hard nail, which grows at a rate of 2-3 millimetres per month. The older we get, the more slowly these nails grow, meaning that we don't have to cut them so often.

Nail types according to D. M. Koerner



For decoration & care, see p.64

Monkeys have papillary lines too.



## BASIC FINGERPRINT TYPES

## PAPILLARY LINES

Tiny papillary lines make intricate patterns on the palm and fingers of the hand and the soles of the feet. They are composed of variously intersecting arches and spirals that are very hard to see with the naked eye. No two people in the world have the same patterns. Known to experts as 'markers', these patterns remain forever unchanged, so that a person can be identified by them.

## DACTYLOSCOPY

Otherwise known as fingerprint identification, this science is mostly used in the investigation of crime. It studies papillary lines, whose uniqueness and unchangeability can convict any criminal. If you want to know more about fingerprint identification (and even if you don't), turn the page.



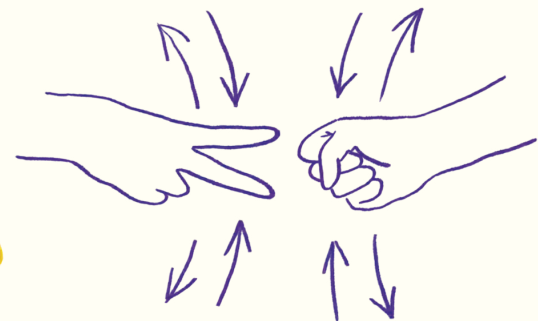


What is the best thing  
about hands?





hold a large mug of tea



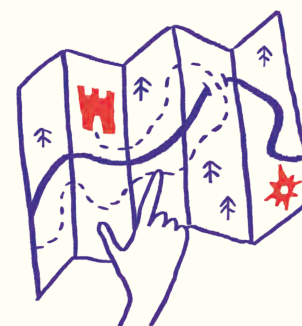
play rock, paper, scissors



comb hair



stroke



follow a map



perform a play



play the saxophone

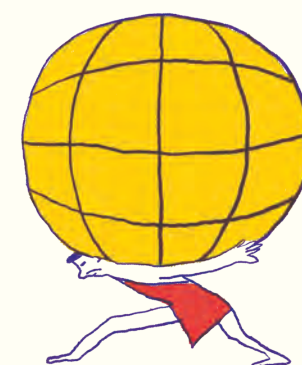


change into a wolf

# What can



click



hold the celestial vault

# a human hand do?



make pizza dough



help a friend



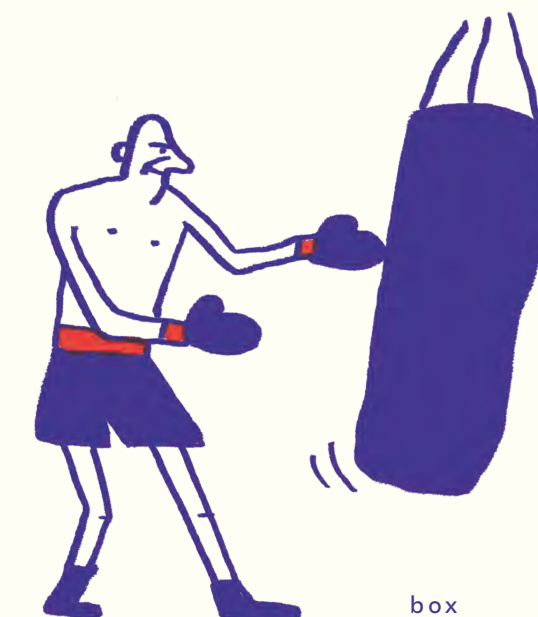
knit



find the way in the dark



draw



box



catch a thief

steal



open a door



serve as a glass



swing from a tree



catch a ball



turn a page

Corner  
TO BE CUT



# It holds

The hand's main function is the handling of objects. We use our hands all the time, without thinking. As well as giving us a firm, precise grip, hands allow us to work with tiny things.



How we hold a thing depends on how heavy, big or fragile it is, and also on the intended use.



# gives & cooperates



Would you be able to carry a heavy pot of soup or tie your shoelaces with just one hand? Probably not. Some activities need both hands.

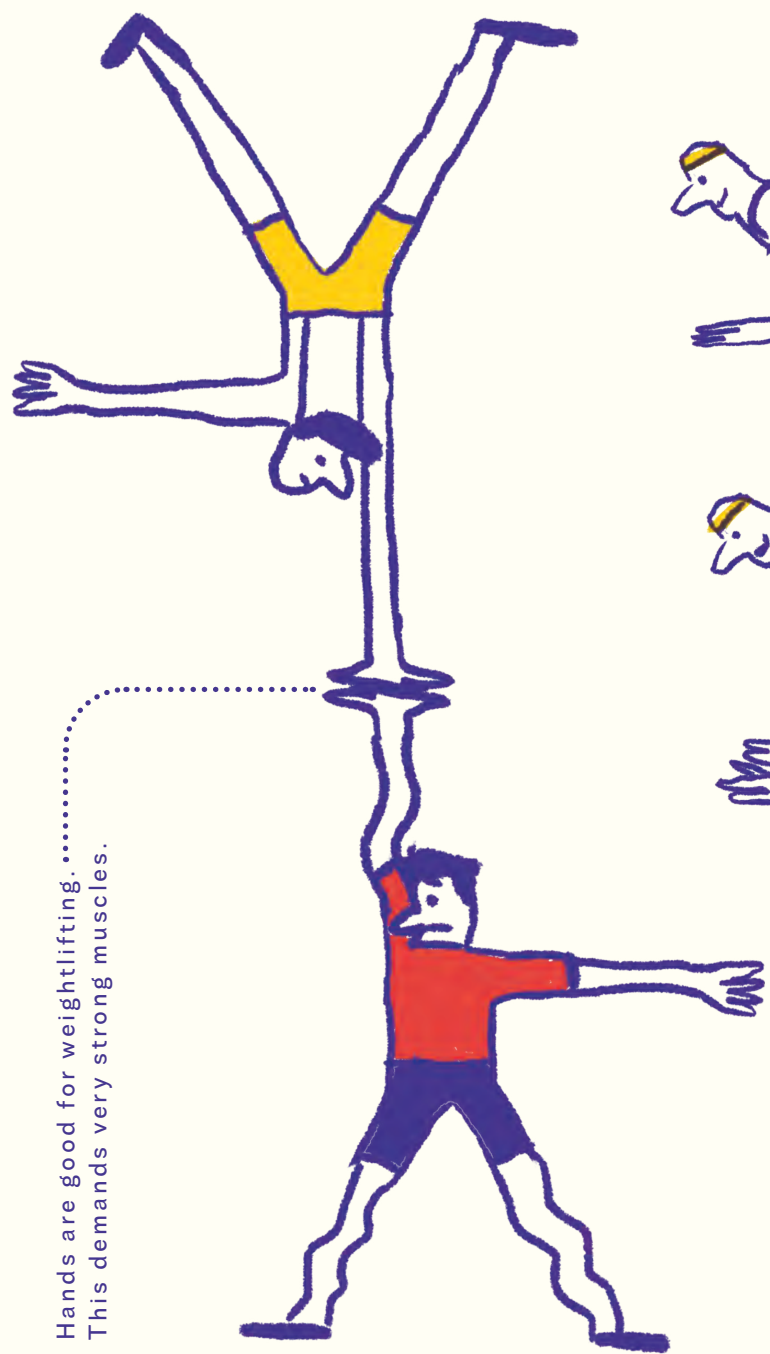
One hand isn't enough when ...



# rests

Our hands come in useful when we need to lean on or support something. When we fall, we hold our hands in front of us by instinct.

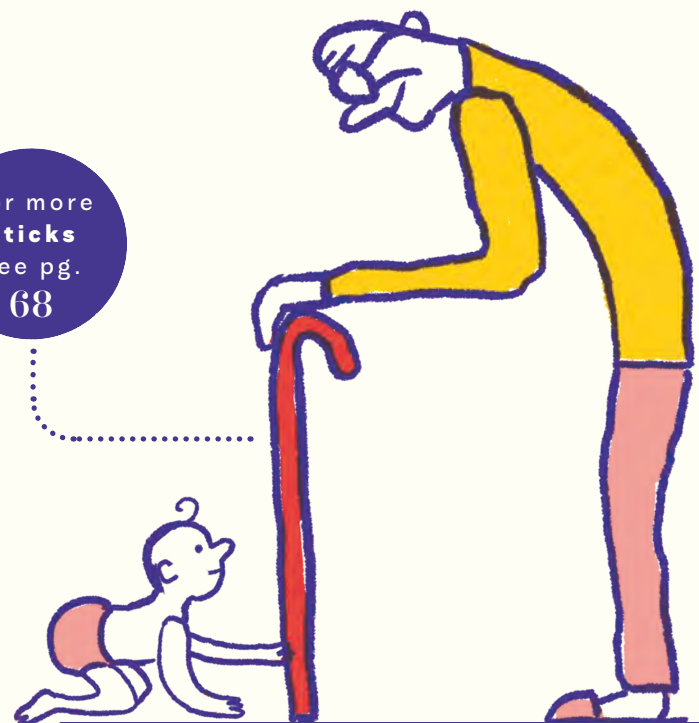
Hands are good for weightlifting. This demands very strong muscles.



## THE HAND AS SUPPORT

We can lean against many things – a wall, another person, ski sticks ... We use this skill mostly when very young or old, when we are less stable.

For more sticks see pg. 68



## TOUCH

We touch things and we touch each other. As touch is the 'first language' of life, parents take their baby in their arms straight after the birth.



There are touches of kindness – a mother's stroking hand or a hug from a friend, for instance.

# & touches

But there are unkind touches too, like the blow of a fist.







We perceive cold, humidity and heat by touch.

#### THE HAND AS SENSOR

As well as being a protective cover for the body, the skin has a sensory function. Its nerves respond to stimuli in its surroundings. This is due to the important sense of touch, which sends signals to the brain via receptors and nerve endings. Because the fingertips have most receptors by some distance, the hand is perfect for exploration and discovery.

## feels & recognizes



By touch, too, we recognize the size, shape and texture of things. So we never confuse a rabbit with a ball.

#### TOUCH

Touch is the first sense we develop in our mother's tummy. After sight, we rely on it more than any other sense.

If you can't believe what you're seeing, **touch** it to make sure.



The hand feels pain, too. Ow! We've just realized that our fingers are trapped in the door or that the stove is hot.

#### Curiosity

9 out of 10 doctors recommend it.



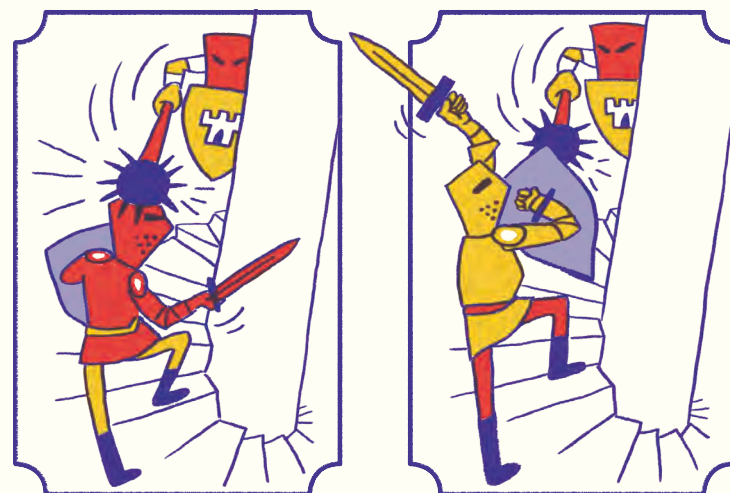




Whether a child will be right- or left-handed is decided in his or her mummy's tummy. But we won't know for sure which hand is predominant until he or she is at least one year old. Sometimes it only becomes clear when the child starts school.

# Left & right

**We learn as small children which of our hands is the defter. We use it more often, pick things up with it without thinking, write with it ... The dominance of one hand over the other is known as laterality.**



Castle staircases ran clockwise – so favouring defenders over would-be conquerors, as most people are right-handed. Of course, a clockwise staircase was no help against a left-handed invader.

left

9%  
of people

Although left-handers have lots of minor inconveniences to deal with, left-handedness has its advantages too. It is said that left-handers are more creative and have better spatial perception. The moment of surprise is also in their favour – in sport as when conquering a medieval castle.

## FAMOUS LEFT-HANDERS

Julius Caesar  
Charlie Chaplin  
Isaac Newton  
Johann Sebastian Bach  
Franz Kafka  
Václav Havel  
Martina Navrátilová  
Lady Gaga  
David Bowie



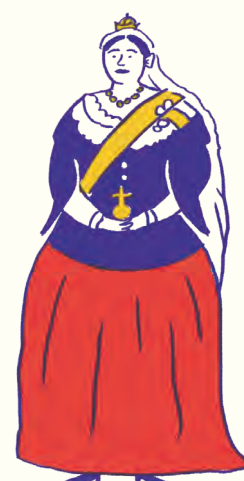
Jimi  
Hendrix



Robert  
de Niro



Alexander  
the Great



Queen  
Victoria



Wolfgang Amadeus  
Mozart

ambidexterity

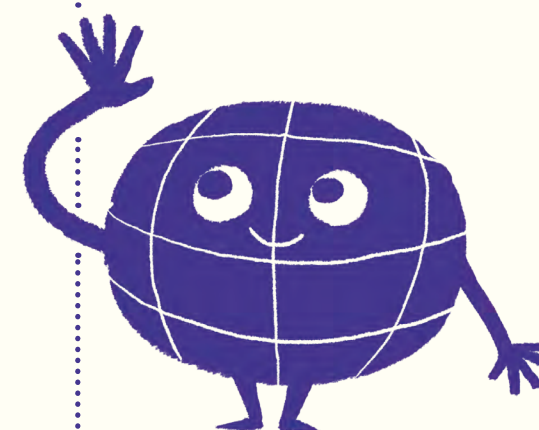
Strange as it may seem, a few of us use both hands equally well. These people are ambidextrous.



Michelangelo painting  
the Sistine Chapel

## FAMOUS AMBIDEXTROUS

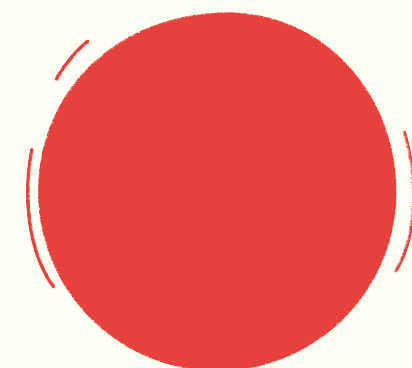
Leonardo da Vinci  
Tapio Wirkkala  
Keanu Reeves



Most people are better with their right hand – which explains why most objects and instruments (musical instruments, domestic appliances, tools, etc.) are made for right-handers. What this means for left-handers you will find out on the next page ...

right

90%  
of people



## FAMOUS RIGHT-HANDERS

There are lots of them.





# Left hand in trouble

Is one hand better than the other?  
Of course not. But all of us favour one hand over the other.



Even so, the left hand has a harder time. It was once thought of as worse and weaker, and also as unclean. The right hand was associated with reason, order and logic.

Some cultures still view the left hand in negative terms – a fact of which we should be aware in India, the Arab world and North Africa, for instance. Until the late 1960s, in some countries it was common for left-handers to be converted to right-handers. Fortunately, this is no longer done.



A computer's mouse is always on the wrong side.



Elbows of left-handers are forever poking people.



Use of right-handed tools is a pain for left-handers...



... and it may even be dangerous.



Most things are the wrong way round, including soup ladles.



Most things are made for right-handers.



The left-handed writer can get into difficulty.



## Competing hands in history



stupid



devilish



rational



clever



unclean



clumsy



LEFT vs RIGHT



clean



skilful



# Hand decorations

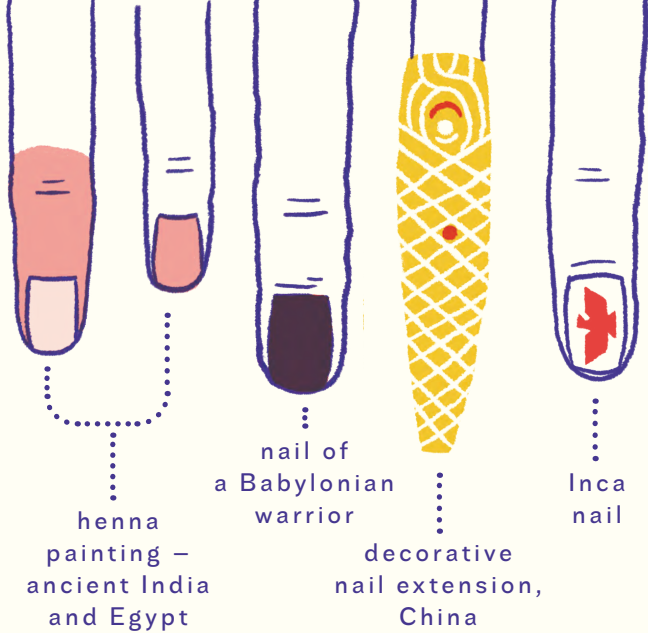
People have always decorated their bodies – including their hands. Tattooing, body-painting with henna and nail-colouring have been worldwide phenomena for over 5000 years.



## Skin dyeing



The motifs we adorn our bodies with may be abstract, realistic or ornamental. **Henna** or **tattoo**? Well, the former is temporary (a natural dye, it lasts only a few days), the latter permanent. A tattoo is made by injecting a coloured pigment under the skin. Tattoos can be removed only deliberately, by a laser procedure.



## Nail-colouring

Nail-colouring really took off in the 20th century.

1917 – first nail varnish

red – iconic nail colour popularized by Rita Hayworth in the 1930s

French manicure – 1970s

1957 – false fingernail

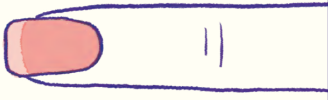
glitter nail varnish

pebble nail varnish

very long false nail with colourful motif

nail filed into an almond shape

nail filed into a square shape

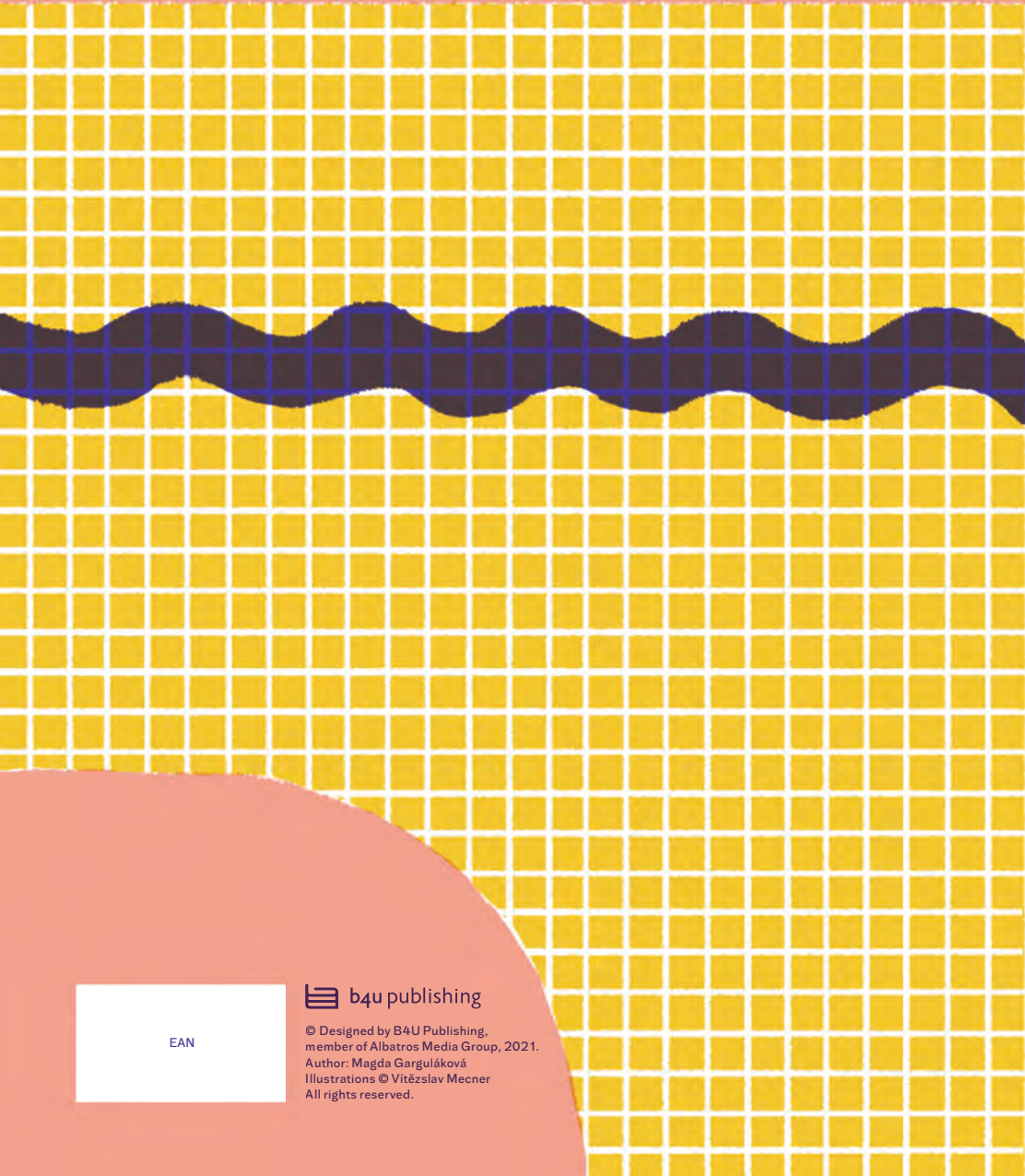







The hand is so much part of our bodies that we barely notice its presence. We use it to carry a mug of tea to our mouth, stroke a beloved pet, and bang on the table, when we are angry and when we are not. Composed of wrist, palm and five clever fingers, the hand is a reliable partner we would struggle to be without.

Have you ever wondered how the hand works? Or why some of us are left-handed and others right-handed? Or how the hand of a sculptor differs from that of a pianist or a bricklayer? Did you know that we can use our hands to talk with, by communicating thoughts where words can't reach? We may think of the hand as ordinary, but it is truly remarkable ... We guarantee that once you have read this book, you will think of your hands in a whole new way.



EAN

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