

metalligent[®]

Happiness: good fortune,
a state of well-being and contentment



WE ARE
metalligent®



*Taking Dan, our family dog,
for a walk every morning and
planning my day while I enjoy the
peace and quiet of the forest is for
me personally a wonderful way to
start the day and a happy moment
for both of us.*



Uwe Arnold, CEO Arnold AG | Photo: Wolfgang Günzel

Dear Readers,

The first two issues of our new magazine metalligent® were titled "Evolution" and "Processes." We deliberately chose two themes of key importance both for science and for us as a company that would offer exciting new ways of looking at the things that inform our day to day activities.

This time, for issue no.3, we have deliberately been a little bolder and chosen "Happiness" as the title theme, well aware that we were venturing onto thin ice. Of course, you may well ask what happiness has to do with the work of a metal engineering company. In fact, the answer is already there in the values that distinguish our corporate image: we tick a bit differently to other companies, we sometimes get a little crazy, and we have taken on the challenge of thinking outside of the box. Happiness can indeed be found in many things, can take many different forms, and it is something one can argue about—such as whether one is fortunate to be working with or even for Arnold. But that's another matter.

In seeking out that cherished moment, we self-assuredly looked through the lens of the theoretician and the practitioner and discovered some curious things. We asked: Is everyone the architect of their own fortune? Is it all just a question of attitude? How do you make your customers happy? Does consumption make people happy? Is the glass generally half empty in Germany, or can we consider ourselves lucky to be part of German society? I look forward to hearing your thoughts. Please write to me at: uwe.arnold@arnold.de and I'll be happy to discuss these questions with you.

But now I invite you to immerse yourself in this new sensually metallic issue of metalligent® and hope that reading it will bring you a few moments of happiness. Enjoy!

Best wishes

Your

Uwe Arnold

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TRAIN YOURSELF
TO BE HAPPY!

CULTURE



Photo: iStockphoto



Photo: Fotolia, reichdernatur

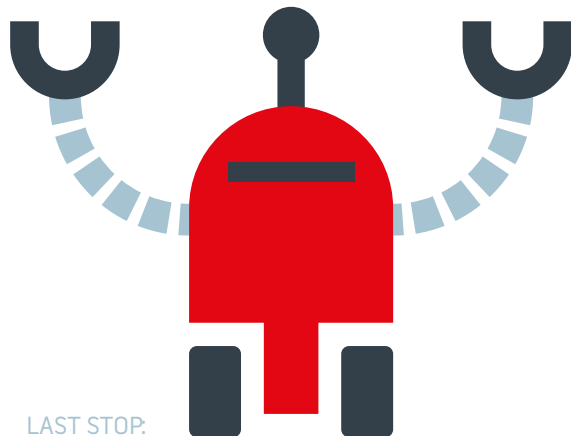
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Photo: HypoVereinsbank / HG Esch

20–29 IT TAKES MY BREATH AWAY

EXPERIENCE



30–43 LAST STOP:

A BETTER WORLD

INNOVATION

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The Many Aspects Happiness

It's right in front of you – you just have to see it

Soon she'll be sitting in front of us again while we eat our traditional dish of Frankfurters and potato salad. The chancellor, Angela Merkel, one of the world's most powerful women, will once again conclude her New Year's address with the words: "On that note I wish all of us good health, strength, optimism, and God's blessings for the New Year." She never wishes us happiness though. Hasn't done so for years. Does she think there's no longer any point in this country? Given the media hype and bad news we are bombarded with on a daily basis, even quiet optimism requires superhuman effort.

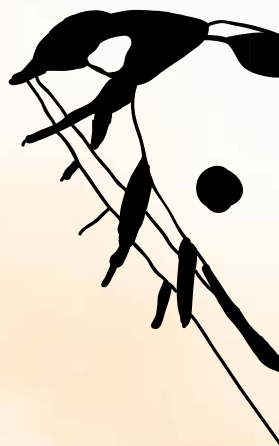
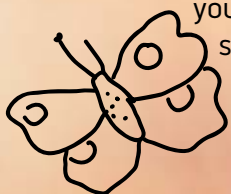
Merkel is, however, a rather down to earth kind of a person who knows full well that simply saying "Happy New Year" isn't going to help anyway. Every adult in this country has a chance to work on their happiness and inner harmony. First I have to identify the interfering factors in my life and banish them. Next I need to find out what really brings me joy and activate it. The saying "Everyone is the architect of their own happiness" may sound trite, but it continues to hold true. In the pursuit of happiness we can draw inspiration from many different sources.

The scientists

They know what brings us joy: professional success, our families, even knitting. They also know how the mechanisms of happiness work — it basically all comes down to neurotransmitters and hormones. Theories of happiness can certainly provide us with food for thought. Why not become your own therapist? How about spending fifteen minutes a day pruning roses?

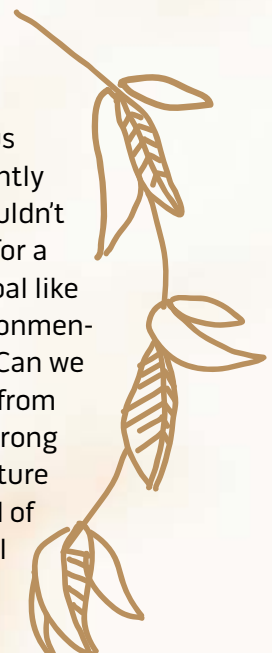
The German patient

Some of us think it's pretty hard to be happy in Germany. Not per se, but for reasons we create artificially. We certainly no longer have anything in common with the carefree fairytale character, Hans in Luck. The thought of owning nothing, just like Hans, doesn't make us happy but fills us with dread. Why? — Because a loss of things is like standing in front of the abyss.



German angst

What we Germans fear most of all is the loss of our security, our wealth, and our good health — fears that are stoked by opinion-makers. All this comes together to produce the world-famous German angst. The world's happiest people apparently live in Colombia and Denmark, two countries that couldn't be more different. How come? Does it make sense for a state to declare the pursuit of happiness a national goal like the Kingdom of Bhutan has—where, incidentally, environmental protection has also been an official goal for years? Can we learn something from these cultures? Certainly not from one day to the next, for cultural socialization is so strong that every culture and every person within that culture defines happiness differently. If it's a Danish brand of happiness I'm after, then I need to work on social equality. The good thing is — and this is universal — everyone can find their own way.



The compulsive critic and the spirit of innovation

Aren't happiness and sadness both part of life in equal measure? Just like good and bad moods? Or being either in a state of harmony or in inner turmoil? Ultimately it is our fears that lead us back to a state of happiness. The formula is simple: Fear + compulsive criticism + curiosity = German spirit of innovation. This is what drives us and inspires our engineers to invent robots that can make producing sneakers in Germany profitable once again. Individualized products intended to bring their consumers moments of delight. Manufactured using ideas that boost the economy and secure jobs.

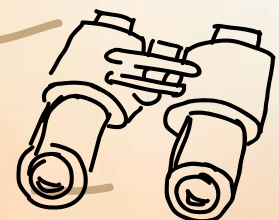


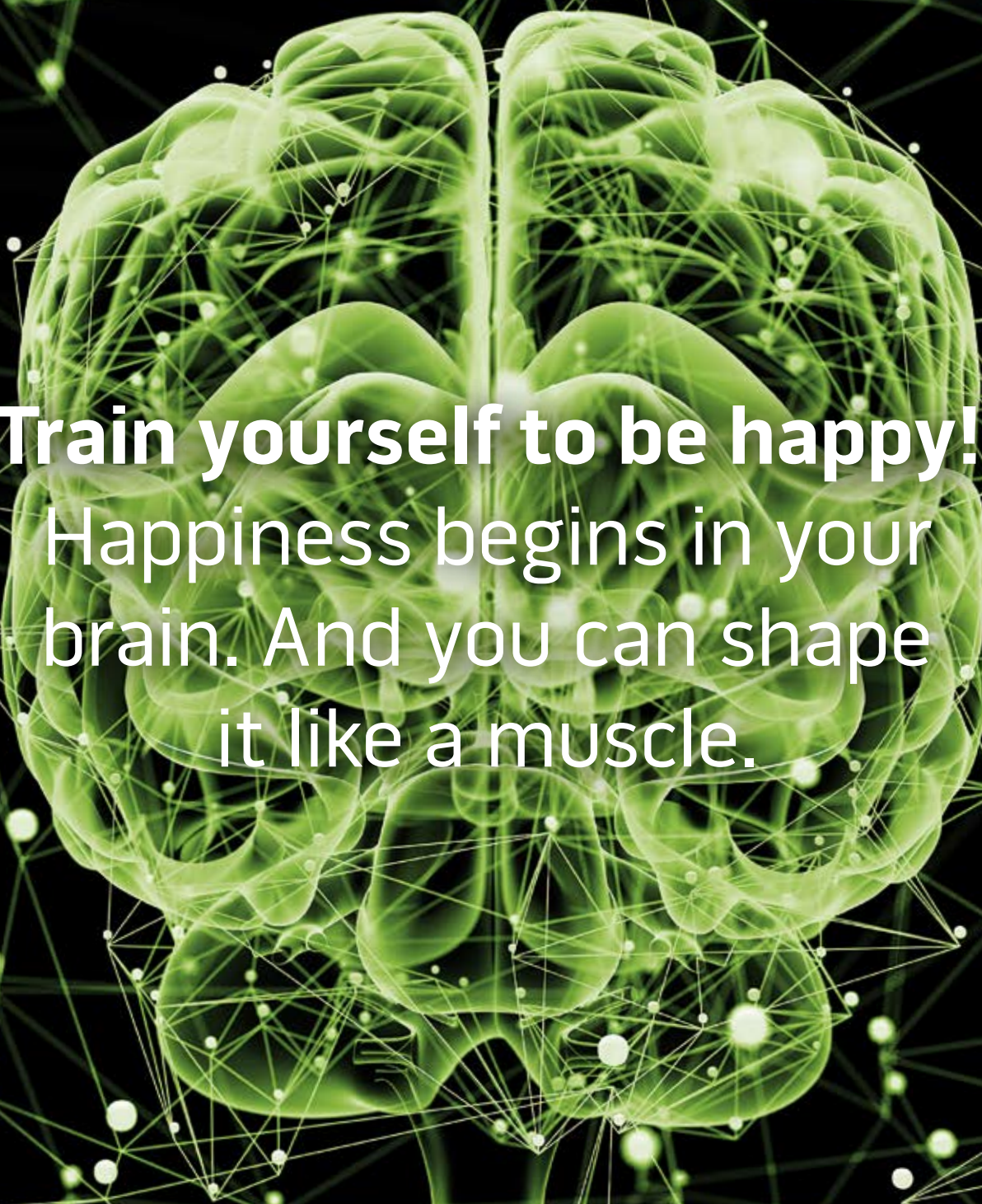
The simple things in life

"Wait a minute!," not a few people will say. "Living simply, surrounded by nature, isn't that what makes me really happy?" A bit of comfort is nice too, but isn't a walk through a scented garden of roses actually just as good? Why is gardening so popular? There are many aspects to happiness, but my own basic attitude provides the soil in which the shoots of happiness can put down roots. The roots for the tree of happiness which really does exist.

The individual recipe

There are eighty million people in Germany and eighty million different recipes for happiness. Many ingredients make up my inner feeling of contentment. The down side: happiness is something you have to work on. Unhappiness comes of its own accord. Does that sound too pessimistic? What do you think? Write and tell us: redaktion@arnold.de





Train yourself to be happy!
Happiness begins in your
brain. And you can shape
it like a muscle.

Can you practice being happy? Or does Goddess Fortuna strike by chance, like winning the lottery? Scientists have come up with a conclusive answer: since we now largely know how happiness works and what our neurobiological rewards system requires from us, we really can train ourselves to be happy.

The most important wiring center for happiness has been around for quite some time. Our emotional motivation and rewards system is located in the limbic system, which had already developed by the time we evolved from reptiles into mammals. Here neurotransmitters call the shots. This is where our attachments system is located, and where love and attraction are controlled by neuropeptides and signal hormones.

Life perpetuates itself

As Professor Tobias Esch—researcher in the study of happiness—discovered, “The system is designed to make us feel good so that we receive incentives and rewards for our continuous efforts to perpetuate life.” Our brain associates both positive and negative emotions with certain experiences, situations, and triggers. It continually reconditions these according to what we experience. The medical term for this ability to rewire the brain, which has ensured our survival for thousands of years, is neuroplasticity.

The great thing about all of this is that it means permanent stress triggers standing in the way of a contented, well-balanced state of mind really can be “trained away” through antistress training. Like a muscle the brain simply modifies itself. Relaxation techniques like yoga or meditation can change our brain structures.

It's even possible to trigger happy moments deliberately: our happiness system particularly rewards togetherness and shared activity. Cultivating friendships and family relationships, ensuring that we treat our colleagues with respect—all these things make sure we enjoy pleasant little doses of well-being in our everyday lives. The attachment hormone oxytocin brings us these for free.

Jogging instead of the rat race

Other substances that give us a buzz, chemicals such as dopamine und endorphins, are activated when we have the prospect of a reward or when we become fully absorbed in a task, which is why visions and goals are so important for our well-being. We experience a feeling of euphoria. Avid joggers run a couple of extra laps to obtain the same effect, which we call “getting into the flow.”

A state of happiness always requires a stimulus, mindfulness of oneself and others, and enthusiasm for what we are doing at any given moment. Whether it's jogging, painting, making music, juggling, playing with our children, or getting passionately involved in a new exciting project: when the dose and the demands are in tune with one another, pretty much anything can make us happy.

Text: Annette Mühlberger



Further reading

Tobias Esch, Die Neurobiologie des Glücks. Wie die Positive Psychologie die Medizin verändert (*The Neurobiology of Happiness: How Positive Psychology Is Changing Medicine*), Thieme Verlag



„The best moment of the day for me is when I come home from work and look into my little daughter's radiant eyes.“

Adem Bozdemir, Arnoldian for 25 years



„It's just great watching my sons grow up and being involved in their development from little rascals into adults.“

Michael Schüler, Arnoldian for 5 years

"Happiness is ... knowing you have a secure job and that you are working in a team that you can rely on 100 percent."

Sebastian Rommel, Arnoldian for 2 years

Klaus Altevogt in pursuit of happiness



Having or Being?

Other languages have many words for that which we all strive for. In German we have to make do with just one: Glück, which means both happiness and luck. But this isn't really the problem, for the real difference is between "having" and "being."

Anyone can get lucky. The Germans have an expression for luck dating back to the middle ages: "Schwein gehabt!" Translated literally it means: "Got the pig!" and refers to the custom whereby the loser of a shooting contest got to drive a pig home as a consolation prize. Did that make him feel lucky or even happy? Hard to say; but at least he had meat on his plate for a while to come. But just like luck, the meat will run out at some point. Anyone who has won the lottery knows that.

"Being happy" is the same as "knowing how to be happy." Scrooge might find that harder to deal with than a more happy-go-lucky guy. How did Luther put it: "A cheerful fart never comes out of a grouchy ass." Are our genes to blame? Well, yes, they are in part, "but after the age of thirty everyone is responsible for their own facial expression." Anybody can learn to be happy. Anybody can find out what makes them feel good. The trick is to live each day mindfully and with open eyes that can let us see life's smaller and greater pleasures and reach out for them. And remember: gratitude is good for vision!

"Ultimately, the soul becomes dyed with the color of its thoughts," the Roman Emperor Marcus Aurelius said. But when it only becomes dyed with the color of banknotes, then "happiness" is in trouble. That's when things turn critical and we have to choose between being or having.



Klaus Altevogt studied humanities and has spent many years working as a lecturer, editor, and studio speaker in Germany and abroad. Today he works as a freelance journalist, author, and translator and is director of the text agency Textwerkstatt Corvo in Dortmund.

Happy despite the bad weather. Who would have thought it: the happiest Germans live in Schleswig-Holstein. It must be the soothing sea.



Off to find out Where happiness resides

There are places where people are more contented than elsewhere. Work has a role to play too, but money influences our well-being only indirectly.

In Germany, Fortuna resides in the north, in Schleswig-Holstein to be precise. There, right next door to Europe's happiest people, the Danes, is where the happiest Germans live. This was recently confirmed for the third time running by the German Postal Service's "Happiness Atlas" — leaving you wondering why the people who deliver the mail feel moved to investigate pleasurable states of mind. Could it be the Glücksburg (literally: "the happy castle") built by the Danes long ago in the town of the same name? Or is it the foul weather that gives them an excuse to indulge in a nice hot cup of the local sweet coffee with rum and cream known as Pharisäer? Perhaps the proximity to the Baltic and the North Sea?

Money can't buy happiness

"As a rule income has no significant role to play in whether a person is happy"—200 years after the Brothers Grimm even Deutsche Bank managed to come to the same conclusion. The bank has a whole research department devoted to finding out, among other things, how happiness and wealth hang together. The money researchers published a report ten years ago entitled "GDP alone doesn't make people happy." Apparently the message didn't make its way into banking circles, as the painful example of the subsequent greed-triggered financial crisis was to show.

At any rate, a successful economy is certainly no guarantee that a country's inhabitants will overall be happier. The Happy Planet Index (HPI)—yes, it really does exist—yielded some extraordinary findings: Uzbekistan, which is not exactly known as an oasis of wealth, is one of the countries where people feel particularly happy. The same is true in Mexico, where you better not get caught in the crossfire between warring cartels. And in Brazil, too, which has regularly made negative headlines for years now, people don't easily let things get them down.



**GDP alone doesn't make people happy:
nevertheless, happy people usually live in
places where they are materially well off.**

...

The Luxembourgers, on the other hand, come pretty close to the bottom of the happiness charts. If one includes factors such as sustainability or the “footprint” that a nation leaves on the globe, they find themselves trailing badly.

But nor can no money

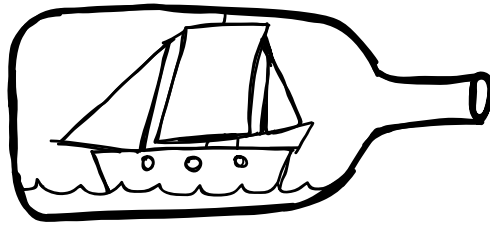
So there's more to quality of life than having money in the bank. Happiness researchers agree that happiness depends on many factors. But we also now know that a certain level of material security is a precondition for a carefree and happy life. There's certainly a reason why crisis-ridden Greece is in the doldrums, ranking last in the European happiness charts—despite the unbelievably blue Aegean.

In Germany, too, happiness resides where people are materially well off. The Baden region comes second after Schleswig-Holstein in the happiness table. The Franconians, the Hessians, the Württembergers, and the Upper Bavarians also belong to the more cheerful half of the country.

Unemployment, for example, is an obstacle to happiness. Many people say that the crummiest job is better than no job at all. If we're happy with our work, then we're generally satisfied with our lives—this has been confirmed time and again. But what makes offices or factories harmonious places to work? Here, too, it's not just material things that make our job more or less enjoyable. Good relations with our colleagues and feeling appreciated definitely contribute more to feeling happy at work than money or career. Another important factor is finding fulfillment in one's work and having opportunities to realize one's own ideas. So happiness really can't be swayed by bribery—even at work.

Text: Annette Mühlberger





metalligent® on tour: happy in Rio

Editor Ingo Woelk went to the Rio Olympics as a volunteer.
He worked for free, but certainly not for nothing.



During the Rio Olympics the weekly *Die Zeit* ran an article about a volunteer who described how much she had enjoyed her time there. The story provoked a great deal of anger among readers who thought this woman was a complete idiot and accused the organization of exploiting her. Many readers couldn't understand at all how money could be totally unimportant for an individual who claimed he or she was happy. Probably they are often unhappy themselves. I too became a happy dummy: as a volunteer in the Communications Department of the 2016 Olympic Games in Rio.



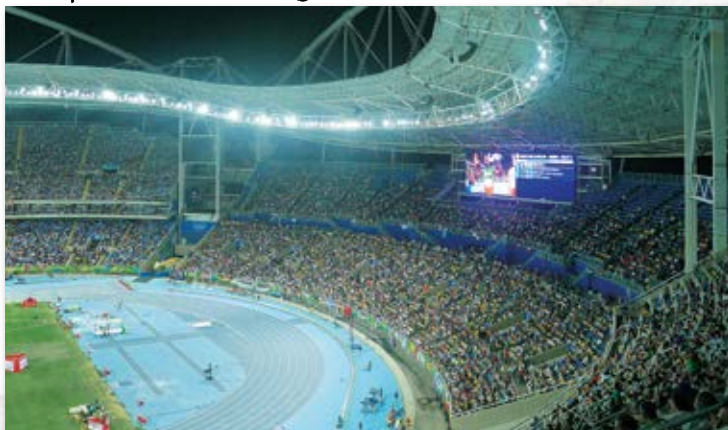
My wish to work in communications was granted and my job was to take care of thousands of journalists from all over the world. And I learned Portuguese.

Both privately and at work I was in close contact with the nicest people from all over the world.



Friendships

Experiencing the Games live



I love sport and in the stadium I was really close to the competitors.

I was able to do sports myself, even though there weren't any medals to be won.

Fitness



Free time



In my free time I was able to enjoy fantastic views.



"Perhaps happiness resides in the really simple things of this world."

Hubert Lampo · 1920-2006 ·
Flemish writer



Arnold from the inside: A visit to the HVB Tower project in Munich

"IT TAKES YOUR BREATH AWAY"

The three-story crystal

Crystals are believed to provide strength and energy and to have healing powers. The HypoVereinsbank (HVB) in Munich built itself its very own crystal, three stories high inside its refurbished HVB Tower. For this project it chose the most robust and consistent architectural design. Alongside its original function as a parapet, the crystal was intended to provide inspiration for staff and customers alike, to encourage the exchange of ideas, and to release new ideas. Has it succeeded?



Even the weekly *Die Zeit*, known and respected as a serious newspaper, has run features on the power of crystals and the effects of lithotherapy, which has come back into fashion: "From carrying around stones and laying them on your body to relieve physical complaints all the way ... to developmental and healing processes that revolve around working with crystals, all this is in great demand," *Zeit* author Tanja Rupprecht-Becker reported.

Frankfurt's Goethe University, where Germany's biggest team of crystallography researchers is based, takes a much more down to earth approach. And there's a good reason for this. For crystals certainly do have some extraordinary properties. Take the piezoelectric effect, for example, where there is a correlation between crystal forms and electric current. The piezoelectric effect is responsible for a fifteen billion dollar market, because it helps sensors, actuators, and electrical components to perform their required function.

CRYSTAL'S MAGICAL ATTRACTION

Back at HVB headquarters in Munich. The listed building is one of Munich's most familiar landmarks. "Breathtaking," Christian Nocht can hardly contain himself. The man in charge of the project for Arnold is normally a very down to earth person who is used to juggling figures, appointments, and timetables. But this is his most exciting project to date. With raised voice and a radiant look in his eyes, he says: "When I enter the lobby, the crystal draws me right into the center of the space and directs my gaze upwards—and then it takes my breath away."

Joachim Grund is delighted, for that means he has achieved his goal. Grund is project director at Architekturbüro Henn, the Munich architects firm commissioned with carefully bringing the aging listed building up to date. He has succeeded, for anyone approaching the city will not notice any changes to the silhouette of this unique building with its towers on the four corners. But inside, the architects were largely given a free hand—and they have made good use of it.

A WORKPLACE OF THE FUTURE

What should the office of the future look like if it is to motivate its users to peak performance? The Fraunhofer Institute for Industrial Engineering IAO in Stuttgart, headed by Professor Wilhelm Bauer, took a scholarly look at this question and came up with some answers. In an era of multiple forms of digital communication, physical space must encourage personal informal communication. "Chance encounters often give rise to new ideas, new impulses, and ultimately to innovation. To be successful today companies need to be spontaneous, quick off the mark, and agile," says Bauer.

Ergo: the need for communication and team areas is growing, while that for desks is diminishing. That doesn't mean the end for physical work stations, rather they are morphing into "places of communication and centers of vibrant corporate culture." Workplaces are becoming "hybrid" as the digital and physical worlds of work start to complement rather than replace one another.

The architect is seeking to put such findings into practice. Professor Gunter Henn is the owner of Architekturbüro Henn. He thinks the value of a building goes well beyond its aesthetic impact. His central thesis is that social changes over time also affect working conditions in companies and help to shape them in key ways. In the early twentieth century, communication was not considered desirable, the "factory required people to be mute, the assembly line ensured order." Today, on the other hand, knowledge production has replaced knowledge application.

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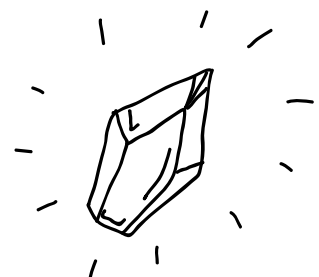




Photo: HypoVereinsbank / HG Esch

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COMMUNICATING ABOUT WORK AT "META-INTELLIGENT" WORK STATIONS

The HypoVereinsbank has been working on "smart working" concepts for some time, and it commissioned Henn architects to organize the workplace to meet HVB's specifications. According to Henn, workplaces of the future need to create a "meta intelligence," spaces should facilitate networks, "because innovation never happens in isolation, but only by bringing together different areas." Joachim Grund was responsible for realizing such path-breaking smart working concepts in practice. He too uses the word "force" when he describes the "spatial sculpture in the center of the lines of force." The crystalline form was the logical extension of the basic shape of the building, which consists of three prisms.

"We wanted an object that would direct the gaze upwards to the tower block, which appears to float 114 meters above the lobby." This ruled out the idea of a closed crystal. The lines of sight were supposed to reveal architectural connections and by analogy to encourage the viewer to engage in communication and exchange. "We cut open the side walls of the crystal in order to allow a direct view of the utility and access areas."

But wouldn't looking at such a "breathtaking" view everyday distract people from their work? "There's certainly a danger of that," Grund concedes. However lofty the concept, one shouldn't lose sight of the human scale. Which is why there is a coffee bar, concealed corners, and team rooms around the crystal that allow people to withdraw.

Joachim Grund and his colleagues also paid careful attention to the acoustics, for they likewise have an important role to play in well-being. The echoey sound of a cathedral might go well with the majestic appearance of the crystal, but it would force people to whisper—which doesn't exactly encourage communication. And to ensure that people don't feel lost in the large HVB spaces, lines in the form of light and dark contrasting grouting take you optically by the hand—and lead you into a new world of work in which communication is primary.

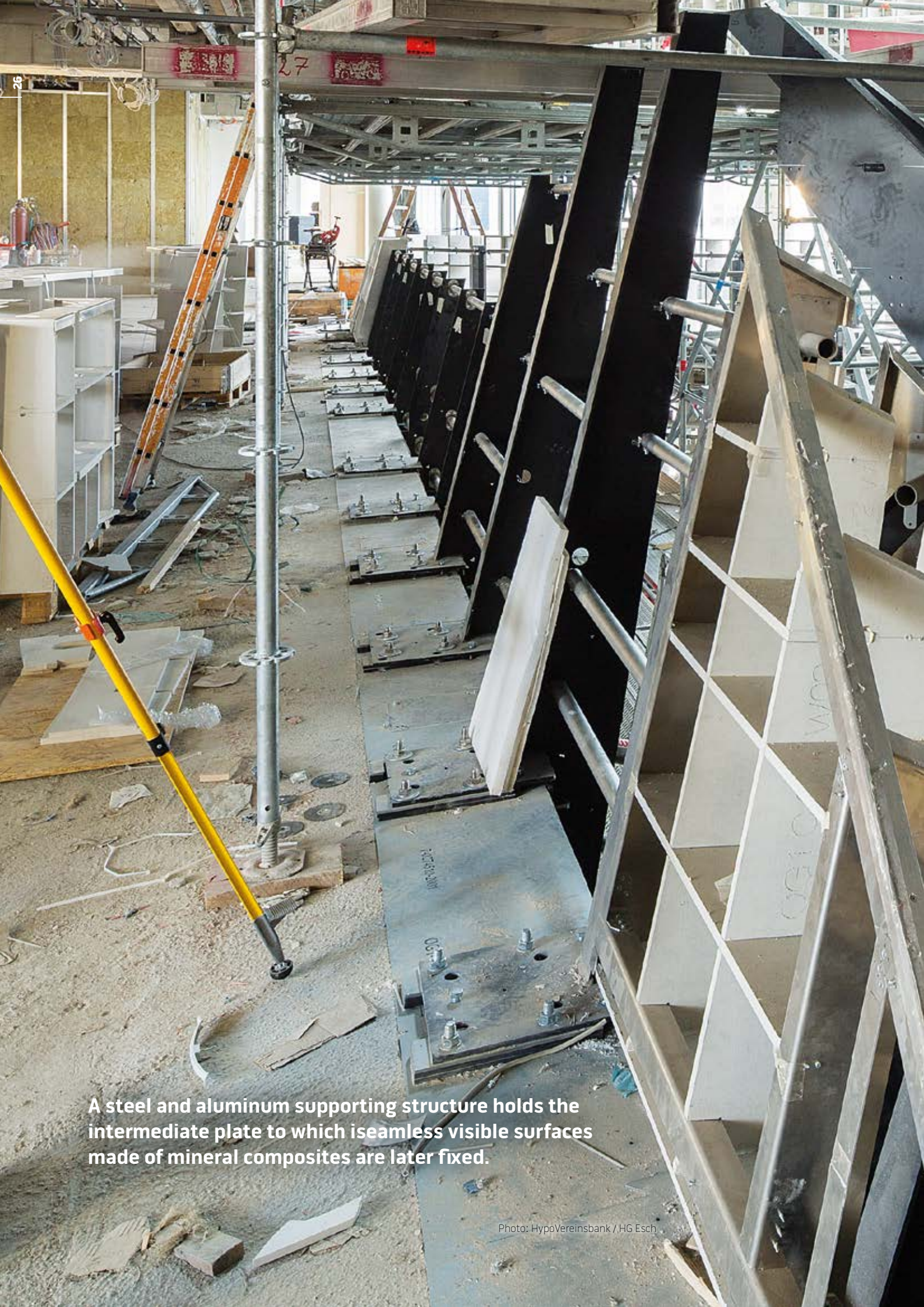
Text: Michael Pyper





"My most important capital has feet.
It leaves the company every evening.
I can only hope it will come back
the next morning."

Alfred Bertschinger, Swiss Productivity Institute



A steel and aluminum supporting structure holds the intermediate plate to which seamless visible surfaces made of mineral composites are later fixed.





A JOINT VENTURE

The crystal is the central design element in the interior of the HVB Tower. The clearly recognizable basic shape stretches up seventeen meters through three floors connecting optical and functional elements in a unique way. Thus each section serves simultaneously as a parapet and as an eye-catcher, separating or connecting.

COMPANIES PARTICIPATING IN THE PROJECT

Henn-Architekten: Overall direction of the HVB-Tower project

Arnold: general contractor and crystal supporting structure

5D-Engineering: execution planning, statics, and individual planning permission

Design-to-Production: parametric planning of all individual components

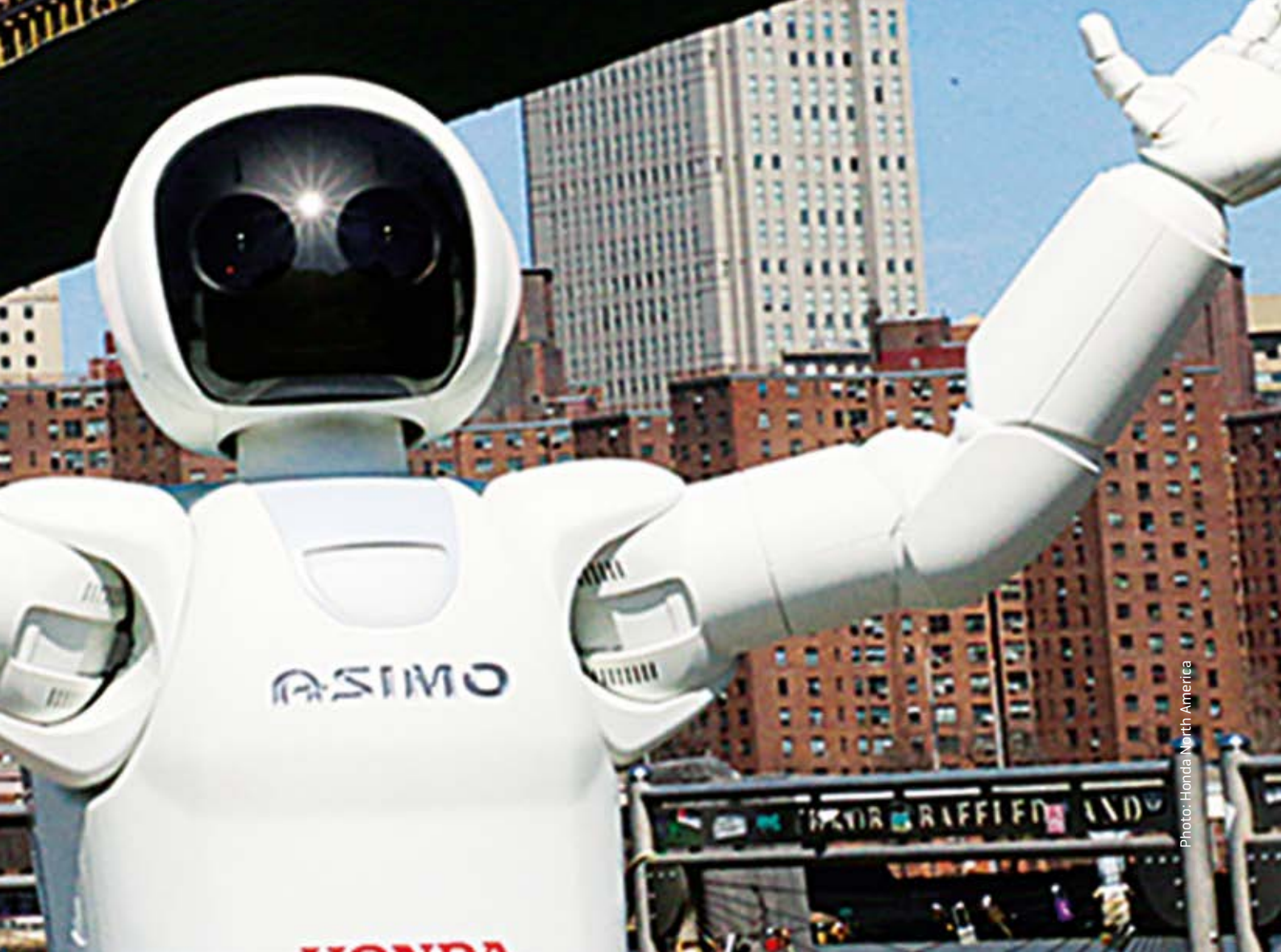
Rosskopf + Partner: manufacture and assembly of the mineral composite surface



LAST STOP: A BETTER WORLD

32–39 Where will the robotic journey take us?

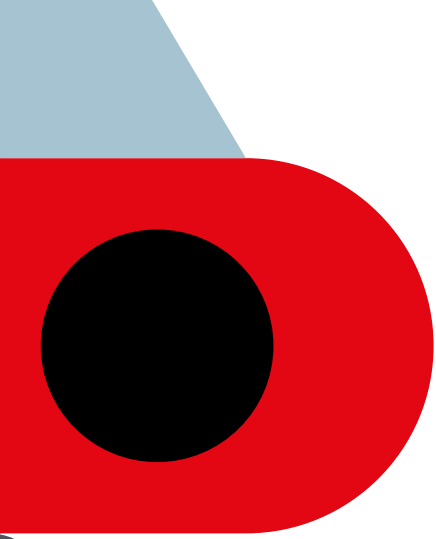
40–43 Adidas is already doing it



Where will the robotic journey take us?

Servant?
Colleague?
Bosom Buddy?





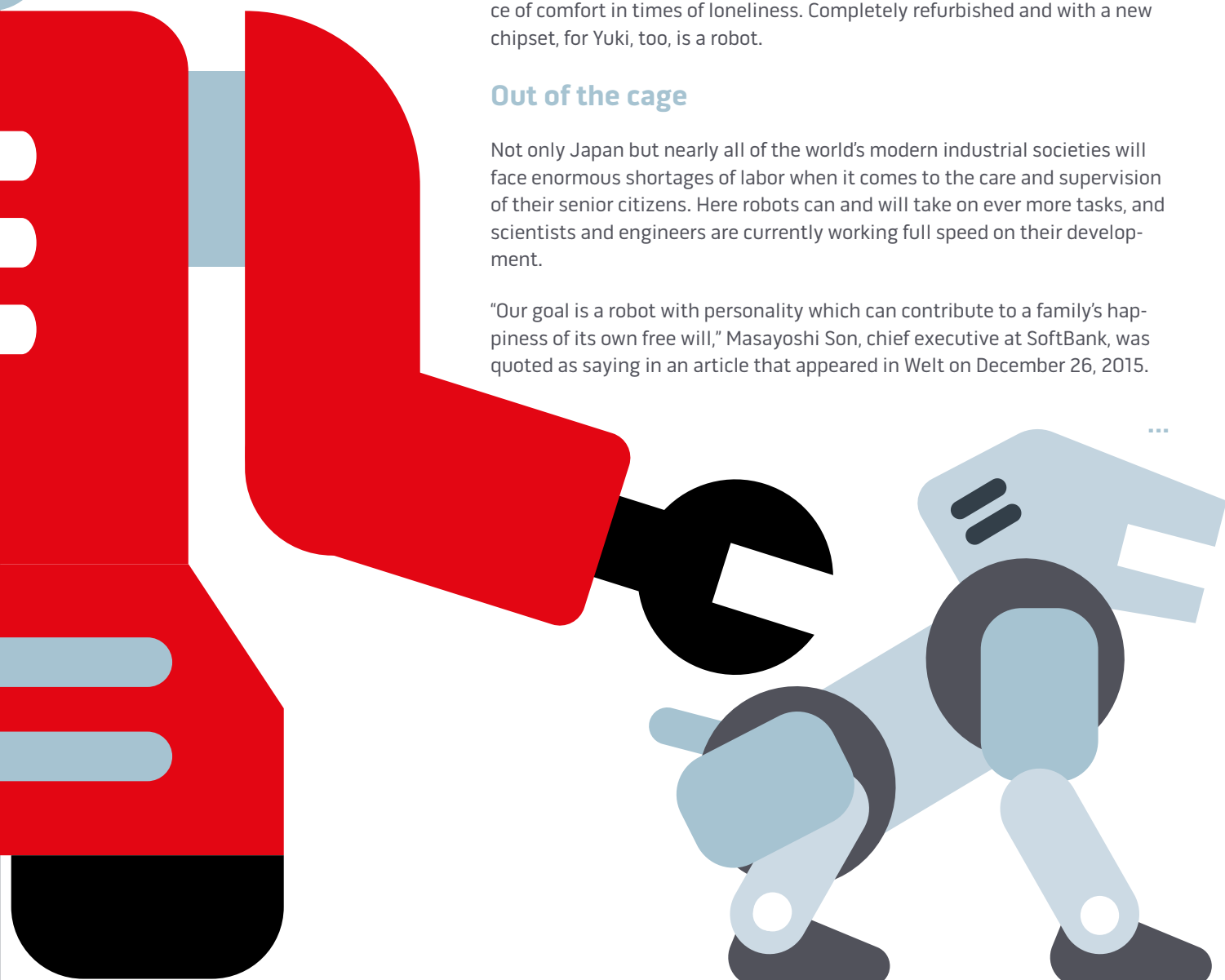
The classical robot is breaking out of its cage in which these reliable, but not entirely innocuous, tools go about their routines. Now there is a demand for flexible and mobile machines that can work alongside humans and take on ever more complex tasks, learn from them, and become more intelligent in the process. And someday they'll even make decisions on their own.

Mrs. Hitori nearly tripped over her kimono when the foil screen on the back of her hand suddenly lit up: "Your dog is back from the clinic." The house robot raced to the door and brought Yuki inside, Mrs. Hitori's little darling and source of comfort in times of loneliness. Completely refurbished and with a new chipset, for Yuki, too, is a robot.

Out of the cage

Not only Japan but nearly all of the world's modern industrial societies will face enormous shortages of labor when it comes to the care and supervision of their senior citizens. Here robots can and will take on ever more tasks, and scientists and engineers are currently working full speed on their development.

"Our goal is a robot with personality which can contribute to a family's happiness of its own free will," Masayoshi Son, chief executive at SoftBank, was quoted as saying in an article that appeared in Welt on December 26, 2015.



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The more human they appear the better. Will the near future see the appearance of such “androids” that can move independently through space, are sensitive to their surroundings, and can communicate in spoken language?

“At present we’re not even close. Today we are working on the development of safe and sensitive robots that can leave their cages,” says Dominik Bösl, innovation manager at Kuka. This traditional firm based in Augsburg is an industry leader in the field of industrial robots—and the Chinese appliance manufacturer Midea recently acquired a near 95 percent stake in the company in a takeover bid.

The state of things

Care robots vacuum the home and mow the lawn. In the retirement home they motivate residents to participate in singing and other activities; they make sure medications are taken on time and help residents out of bed or to the toilet. Nowadays it’s impossible to envision an operating room without medical robots. The da Vinci Surgical System’s master controls carry out the operator’s actions precisely and this robot surgeon’s hands do not tremble. The doctor at the control panel can observe and steer its actions in real time.

Industrial robots in the field of manufacturing—highly functional, enormous “electric screwdrivers”—have taken over monotonous and physically strenuous tasks in high-risk areas, an enormous relief to human staff. Currently gaining ground are collaborative robots, designed to work side-by-side with humans without endangering them, which is why they are outfitted with cameras and sensitive surfaces, do not leave their work areas even in cramped spaces, and can stop in their tracks at the slightest contact.



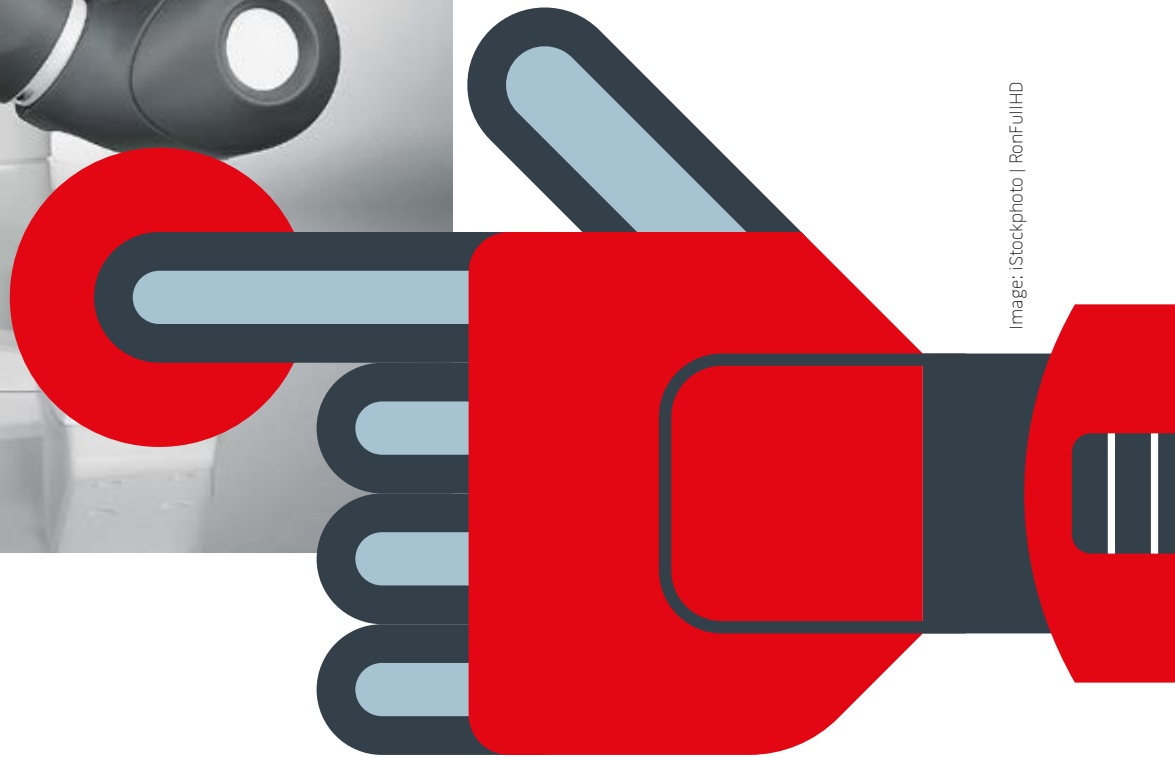


Image: iStockphoto | RonFullHD

But assigning them tasks much as one would a colleague or apprentice, teaching them new movement patterns and skills, or robots that are capable of learning new things and making decisions on their own? Such developments are still a long way off. For this to happen robots have to be conscious of their surroundings and be capable of responding to and changing them—and they have to “want” to do so. We have to equip them with “artificial intelligence.”

Artificial intelligence

The idea has been around since the mid-1950s. Put in simple terms, artificial intelligence (AI) is about creating machines that are capable of mimicking human patterns of behavior, particularly “intelligent” behavior. One only has to think of self-driving cars, the “smart factory” with not a single human employee, rescue robots that can locate and retrieve survivors from ruins, killer drones capable of deciding for themselves who is friend or foe. IT specialists are conducting intensive research in the area of AI.

...

Skeptics, including luminaries such as Stephen Hawking, Bill Gates, and Elon Musk of Tesla Motors, warn of the threat posed by AI. In his book *Superintelligence: Paths, Dangers, Strategies* (Oxford University Press), the British philosopher Nick Bostrom describes a scenario in which rapid growth in computational capacity and worldwide cloud connectivity leads to the uncontrollable growth of AI. In this scenario it is no longer the programmers but rather the systems themselves that can introduce cognitive improvements that add up to a super intelligence, a so-called “singularity” that supersedes humans as decision makers. Even now researchers are discussing ways of introducing “emergency off switches” that can stop out-of-control AI systems.

In an interview on page thirty-nine, Dominik Bösl explains why he believes such speculation is of little help and prefers to rely upon the facts. The discussion was at times contentious.

A lack of feelings

When it comes to memory, computing capacity, and speed, these systems have already surpassed our capabilities. But AI faces a different problem:

“Greatest possible use and the highest effectiveness”: this is the ever-present logic that has become ingrained in us humans. Jogging, survival camps for managers, table soccer in the office—these are all examples of maximum output. Even happiness has been transformed into a function of use: ROFL, or “Return on Flourishing,” is the byword which promises investment in employees’ motivation and happiness so as to cause their overall potential to “blossom”—meaning their effectiveness rises, too.

But, wait a minute! It’s certainly true that whoever wishes to maintain their position in the global marketplace and safeguard jobs certainly must by all means drive forward and make use of innovation, scientific research, and technological advances.

But is happiness something that we can program? Love, fear, shenanigans, social interaction, loneliness, desire, creative potential, joy, individuality? In other words, what is the formula for “human”? This is an algorithm the machines do not know—and neither do we. But we have it in our own programming, for it is a part of our “human software.” THAT is our unsurpassable edge. We’ll never lose it as long as we pay heed to it and take care of it consciously and collectively.

Humans still have the edge

By the way, Mrs. Hitori has just dozed off with her beloved Yuki in her arms. Luckily she had noticed her house robot’s red alarm signal as it attempted to upload the results of her evening’s health check to the population control authority’s cloud. She just pulled the plug on his motherboard...

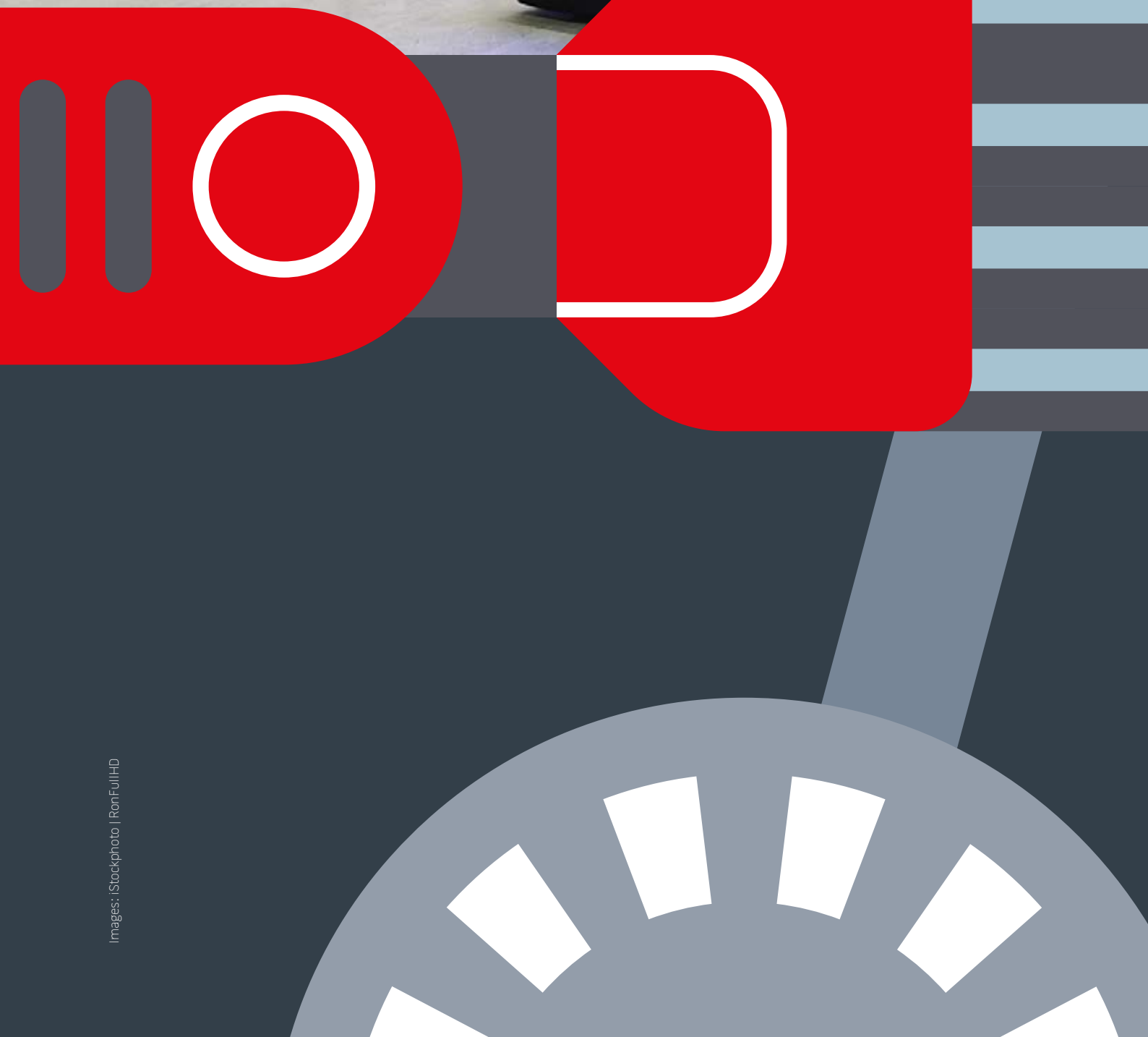
Text: Klaus Altevogt

“Our goal is a
robot with **personality**
which can contribute
to a family’s happiness
all on its own.”

SoftBank chief executive Masayoshi Son



Photos: © KUKA Roboter GmbH



Images: iStockphoto | RonFullHD



An interview with Dominik Bösl,
innovation manager at Kuka

Using Technology for the Common Good

Mr. Bösl, what do developers dream of?

We believe in four revolutions that will take place in automation technology. After a phase of concentrating on the most efficient automation of work operations, we are now working on sensitive and safe robotics. Sensitive robots can feel, which allows them to carry out new complex tasks. The increased levels of safety mean that people can interact directly with the system. The third step would be to make the systems mobile—for safety reasons the robot would come to the work piece, and not the other way around as has been the case to date. In the fourth revolution artificial intelligence will be introduced into the mix, and we will no longer have to program the system. No longer will we tell them: “Do exactly X at point Y.” Instead I’ll tell the robot, “Hey, I have a problem here. Please glue these two pieces together,” or “Rosi, empty the dishwasher.”

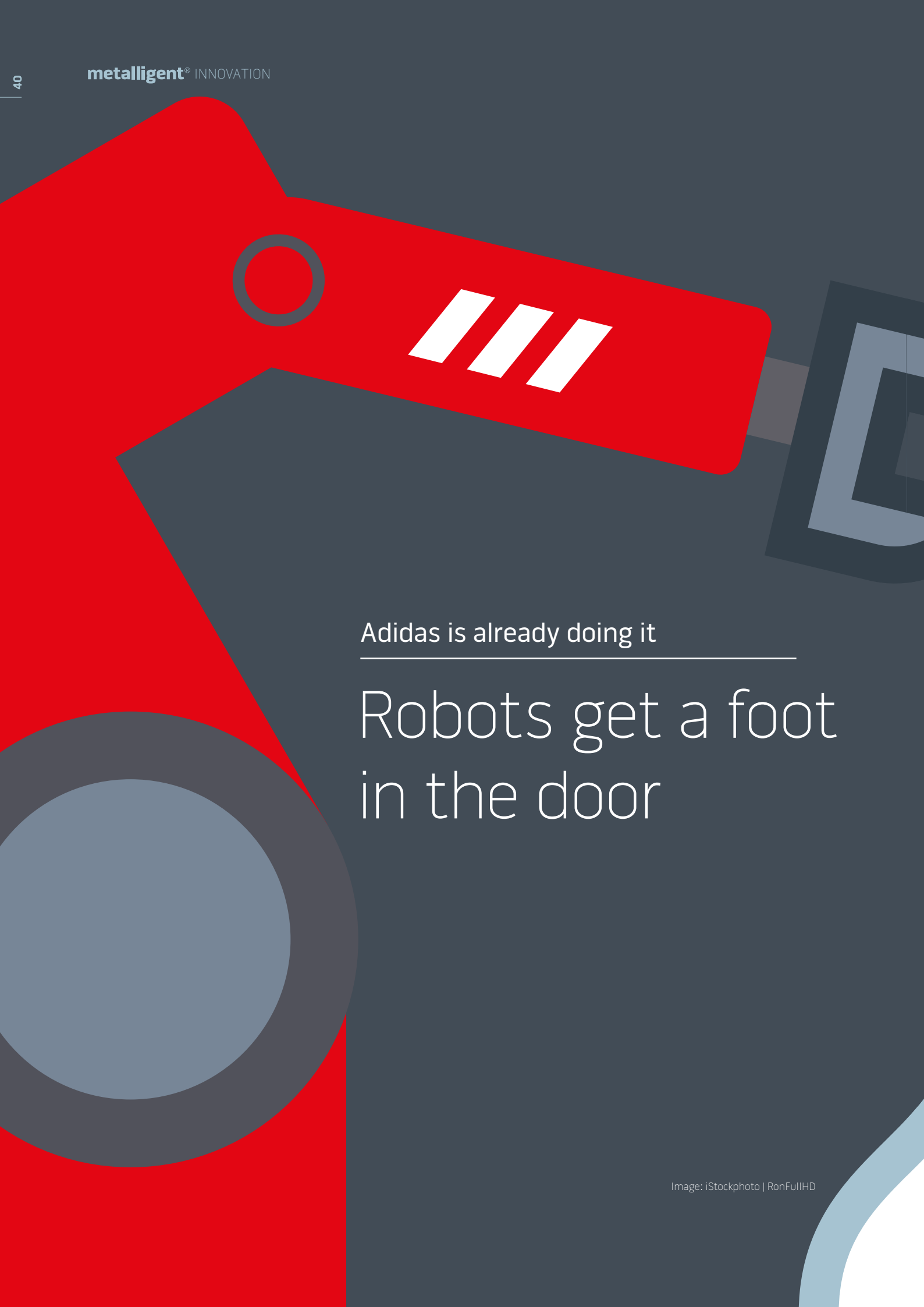
But in the Jeep factory in Toledo (Ohio) Kuka robots are already transporting and assembling entire auto bodies all on their own.

Sure, but first of all they are simply doing what they were programmed to do, and second, there are only very few such examples. They don’t play a major role in the marketplace.

Do you share the skepticism about AI?

Taboos and fearmongering are dangerous. We need to have a fact-based discussion on the issue. There are of course ethical and moral issues. What are we capable of? What do we want? What are we allowed to do? And there are sociocultural, socioeconomic, and sociopolitical questions as well. I believe maximum consensus reigns in the global economic system, among nearly all notable scientists, in politics, and in public opinion. We wish to use technology for the common good in a sustainable and common-sense fashion. We have perhaps eighty, ninety, or a hundred years before AI could become a threat. We must use this time wisely.

The interview was conducted by Klaus Altevogt



Adidas is already doing it

Robots get a foot
in the door



Photo: © Adidas

Product individualization is a cause for joy among German brand fetishists and entrepreneurs while Asian seamstresses fear for their jobs. Will industrialized nations win back their manufacturing power by means of robots and automation? Adidas' high-publicity Speedfactory appears to anticipate these developments. Who will be the winner in the manufacturing industry of tomorrow?

Sports shoes and coffee machines have one thing in common: they are status symbols of our era. Hedonists sporting cheaply produced and expensively sold sneakers on their feet celebrate around their soy lattes, while even normal consumers find themselves ashamed of their everyday filter coffee. But nowadays expensive simply isn't enough—individualization is the new watchword. Customers wish to win back the happiness that was lost over the course of their everyday consumption binges. These are the tough requirements facing leading manufacturers such as Adidas or Bosch Siemens Hausgeräte: individualized consumer products.

Michael Roth, expert for product development at the Technical University of Munich, believes he knows the reason for this desire for individualization amid the rising prosperity of Western countries. "In line with Maslow's hierarchy of needs, the basic needs of these societies have already been met, which means individuals strive to fulfill even higher needs of individuality and self-actualization."

The solvent customer has had it up to here with the same old products on offer. He wants new delicacies when he heads to the shops. This represents a challenge for name-brand manufacturers, for they suddenly have to compete for customers. A magic word in this regard is "customer satisfaction," which can be raised when companies ramp up their attempts to meet customers' individual needs. But what does this mean for companies? "From a product development perspective, it comes down to the challenge of recognizing and implementing every individual customer need," explains Roth.

This is rather difficult when it comes to mass markets, however. According to existing concepts, such as the configuration of cars, "individual customer wishes are addressed within predefined frameworks, meaning they can only be roughly met. This is why for us product individualization is the logical consequence." Roth is working on the research project InnoCyFer, which pushes forward development and production solutions aimed at individualized consumption. Their pilot project: an individualized coffee machine.

...

Adidas races ahead

A sports shoe that fits my personality as well as my foot? A wide form and a golden beer color would be an option—certainly no problem for global player Adidas, which is already producing prototypes of sports shoes in its “Speedfactory” in Ansbach in Middle Franconia and in doing so brought back manufacturing jobs to Germany for the first time ever. The sporting goods giant wishes to supply these shoes to the German as well as neighboring markets. Within only a few days—and in the future perhaps within a matter of hours or even directly at the point of sale—Adidas can assemble personalized “dream shoes.” The customer chooses the design and color; the shoe is fitted to the customer’s body and athletic ability. In a similar development, albeit with a different manufacturing process, Adidas is looking into the development of 3D-printed midsoles for running shoes in a project known as “Futurecraft.” The soles are individualized to best fit the running behavior of the individual consumer.

Additive instead of subtractive

It is hoped that in the near future one out of every 300 pairs of Adidas will be produced in a Speedfactory. The one in Ansbach is operated by Oechsler, a specialist in polymer processing. The means of production are supplied by Manz in Reutlingen. Manz’s trump card is an additive manufacturing technique known as “patch placement.” “It allows for the flexible manufacturing of light components made of various rolled materials, such as components and products for the textiles, athletic, leisure, and automobile industries,” explains Axel Bartmann from Manz. “It allows for individualized customer designs for shoe components to be conveyed into the manufacturing data completely automatically so that these can then be produced locally.”

Existing subtractive manufacturing techniques such as milling, drilling, and lathing remove material in order to lend an object form. An additive technique such as patch placement creates geometrical shapes by joining materials. It allows for resource-friendly and cost-efficient manufacturing thanks to minimal material usage. CEO Dieter Manz sees himself as a pioneer in the field: “The consistent digitalization of the process from design to the manufacturing of the final product is a prime example of the successful implementation of Industry 4.0 when it comes to product solutions.”

No one-sided race

Who would have thought that in doing so manufacturers could also lower labor costs? After all, it’s clear that shifting production back to industrialized countries will not directly spark a new job boom. But they are safeguarding administrative and supply industry jobs thanks to their impressive market appearance and healthy balance sheets. Nevertheless, the trend towards individualized manufacturing provides the formula for how companies can actively shape markets: think outside of the box, pay attention to customer wants, and harness the power of innovation. This of course will take place at the expense of existing manufacturing centers. Viewed as a whole, perhaps the best advice is for manufacturers in Germany as well as Asia to keep their shirts on, so to speak. The individualized sports shoes will first remain a small but lucrative market in the West, while Asian seamstresses will continue to produce mass merchandise for the wider public—and will probably be content with any pair of shoes that fit.

In the coming years over a half-million pairs of running shoes are to be produced in Germany.



In the future customers will be able to design their own shoes.

Think outside of the box,
pay attention to customer
wants, and harness the
power of innovation!

Revamped

WHEN YOU'RE ROCKING, EVERY- THING LOOKS DIFFERENT

Katharina Karras, the young product designer and winner of the 2016 Pink Dot Design Award, is convinced that “even a single piece of furniture, whether small or big, can shape the entire room, change it's impression, and thus determine how a person feels when they are in it.” Even the furniture's position in the room can have a marked influence on our feeling of wellbeing, explains the twenty-eight-year-old designer.



Katharina Karras

Photo: Samir Suker



She's feisty. She's young. Her designs lend everyday objects a new sense of meaning: after completing her bachelor studies at the University of Art and Design Burg Giebichenstein in Halle at the age of twenty-eight, Katharina Karras has developed her own brand. She calls it "Wemakeit"—and it's already been awarded a number of prizes. Her "Wendetiere" won the renowned Pink Dot Design Award in 2016.

Berta and Franz, the cow and pig, are her "children." Karras' animal figures are three dimensional, but they're not purple and they're not made of chocolate, nor are they pink and made of plastic. She constructed the figures of felt, fur, and leather (tested for harmful substances), but their insides are what make them really special. They show where the ribs, loin, and shoulder are in the animals—and how they can be used to produce food for people: goulash, schnitzel, or roast. "My desire is to promote the considerate perception of our environment and communication between objects and users with my works," says the designer, who, after a period of parental leave, is now working on her masters' studies in art education at the Bern University of the Arts.



Image: capt'n & partner

A SIDEWAYS ROCKING CHAIR

The rocking chair she designed is also aimed at changing ways of perception. Instead of rocking backwards and forwards, it rocks from side to side. An experiment of sorts, for "in my research I have never come across a single chair that rocked sideways." The prototype for this piece of furniture, which keeps users firmly on the ground despite the balancing act, was created in the Arnold AG apprenticeship workshop.

It's an object that continues to consume Karras' attention. She didn't even set out to design a rocking chair. "I didn't start with chairs; I began with the act of sitting" as well as with a "principle of simplicity," as she calls it. The two rounded and riveted metal bands in her original object were still "free of purpose"—they were solely concerned with the perfect rounding of the circle and were not intended for a practical everyday use. "It was in this object that I discovered the model for the rocking chair."

Karras observed people as they sat. She watched as they tilted back and forth or tucked in their feet under their bottoms in order to get comfortable. She observed them rocking, tilting, and teetering. "People's natural movement is a soft forwards movement," she soon recognized. It was an observation that she confirmed in her discussions with the specialist in the area of the psychology of perception Professor Rainer Schönhammer. But this did absolutely nothing to stop her from creating a rocking chair that countered the body's natural physical instinct.

...

THE PRINCIPLE OF PERFECTION

"It's precisely this phenomenon—how do I perceive rocking sideways—that interested me and made me wish to try it out." The Swiss designer modified forms and proportions after conducting tests and calculation together with her brother, a physicist, so that "they follow the movement and function of rocking sideways and, like the original object, the chair is subject to the principle of perfection as well as simplicity. It forms a whole with as much as is needed and with nothing more."

Maximilian Corell, metalworker in the third year of his apprenticeship, constructed the chair under the direction of his instructor Matthias Roepke based on the designer's instructions, her sketches, and a wire model. "It took three weeks," explains the twenty-two-year-old apprentice. First, two steel tubes had to be cut to identical lengths of more than two meters, filled with sand, and sealed so that they would retain their form in the roller. Finally they were welded together on the sides of the rounded tubing. The unusual "experiment" of sideways rocking requires a degree of footing. Two steel bars prevent the rocking chair from tipping over.

CURIOUS ABOUT SIDWAYS

Maximilian Corell found it "exciting" to sit on the chair, even though he tested it using a "wooden substitute" as a seating surface. Karras has yet to decide which material she wants to use for the seat. She is experimenting with textiles, with bast fiber, and even with bicycle inner tubes. "Whatever people like whenever depends on the individual," although it must be said that there are certain insights and constants when it comes to what people generally like. Such as textiles that are soft and cooling, generally as close to the skin as possible. They provide people with a sense of wellbeing.

Rocking chairs have generally been considered furniture for older people. Katharina Karras chuckles: "When it comes to my chair, rocking is a game for adults. It's the right furniture for a waiting room in public facilities, for example, as a counterpart to the kid's corner. Rocking, tilting, teetering—with this unusual idea Karras wants to make people more aware of how they perceive their worlds while at the same time making them more content. "I'm convinced that awareness, realization, and conscious action in everyday life can make people happier."

Text: Corinna Willführ



Photo: Dennis Treu



Bild: Katharina Karras

"I'M CONVINCED THAT AWARENESS, REALIZATION,
AND CONSCIOUS ACTION IN EVERYDAY LIFE
CAN MAKE PEOPLE HAPPIER."

Katharina Karras





Is online destroying us?

Ping!

New message!

Eating with cell phone and fork. Dad has to quickly answer an email between the salad and the spaghetti, as tears roll down his daughter's face into her dessert. Her boyfriend has just dumped her on WhatsApp. According to the radio station WDR 5, Germans reach for their cell phones every eight to ten minutes, which is as many as eighty-five times a day.

Of course we all benefit from the opportunities offered by modern communication and computer technology. We are reachable at all times and almost anywhere, and we can send texts, documents, and images around the world at all times and from almost everywhere. Fantastic.

But this also means that the boundaries between work and leisure, real and virtual are becoming blurred.

Permanently reachable

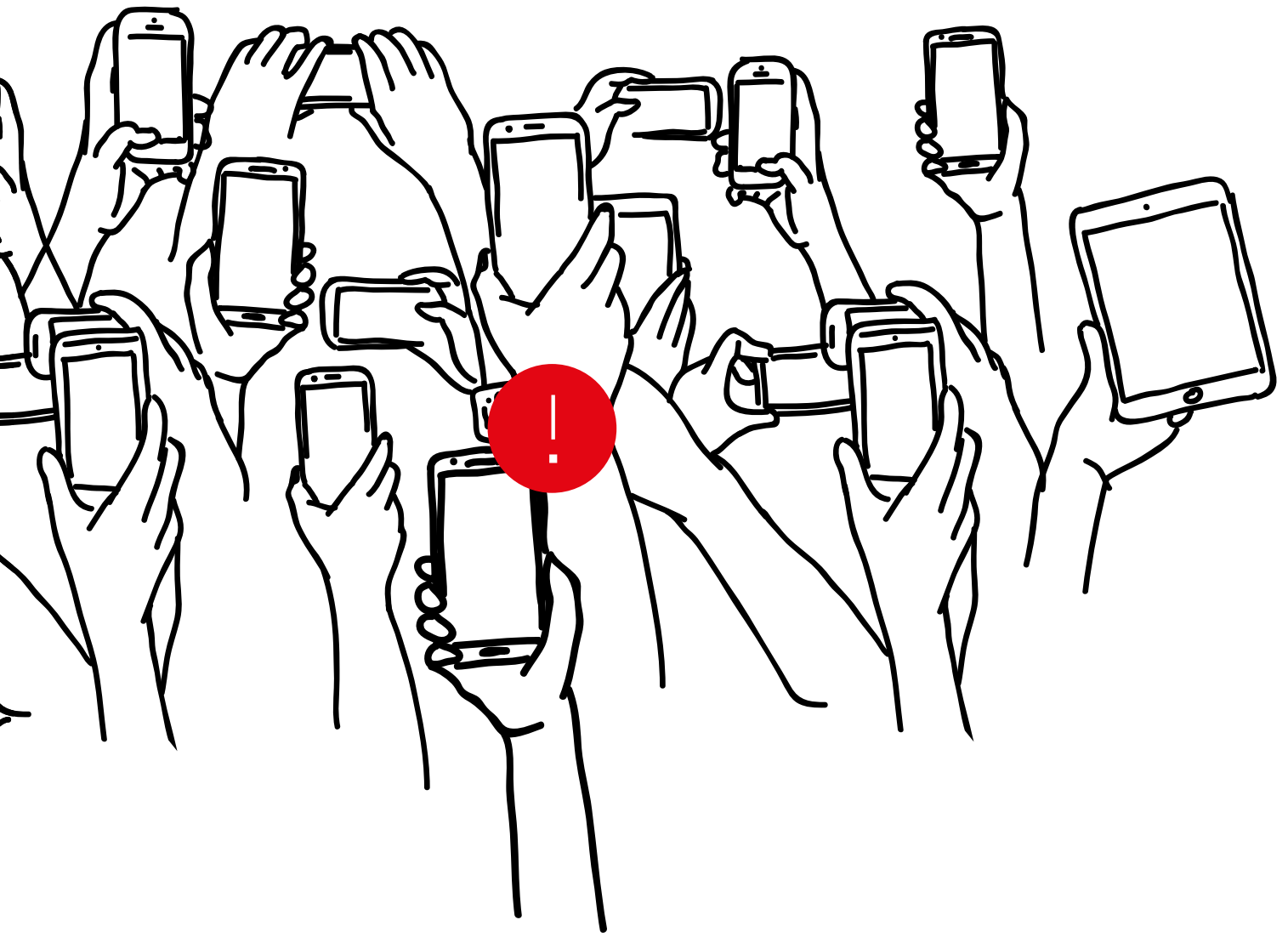
77 percent of all employed cell-phone users say they are reachable after office hours. At least that's according to a study by the German Federal Association of Information Technology, Telecommunications, and New Media. Good news for employers and good news

for employees: if anything that didn't get done in the office can be dealt with from home or on the road. But a problem has arisen that is a growing concern for occupational medicine. Dr. Nina Pauls, psychologist at the Masters program at Freiburg University, sums it up neatly: "People are not relaxing enough in their free time. If you are permanently reachable you can never switch off properly. Over time, performance drops and the number of people calling in sick due to sleeping problems, burnout, and depression is rising rapidly."

Companies like Daimler and BMW are setting a precedent by turning off their email servers at weekends. They also issue cell phones with two SIM cards, one for private use, one for work. Professional partners have to work out solutions together.

More is less

As Sherry Turkle, a sociologist at MIT, asked in brand eins magazine (04/2011): "If you are sending or answering 80 emails a day, plus text messages and phone calls, how do you have any time left to think?" Is digital communication becoming more superficial and less binding because we have become used to doing things at a lightning pace



The **borders** between work and leisure, real and virtual are becoming **blurred**.

and within a Tweet limit of 140 characters? When it comes to important content, probably not. But there are studies which show that speed over quality, good enough over good, downloading over research, anonymous over personal, sending/receiving messages over conversations are yet more consequences of the flood of information that washes over us on a daily basis. More problematic still is this:

No real life in the virtual world

No network, no WiFi? Panic! Then when we finally get online, up pops the one thing that's missing in our lives: 70 percent off! Today only! We believe things just because we find them on Wikipedia. We sign on-

line protests from our armchairs instead of getting out and pitching in. We spend time in the virtual community (of lonely souls) instead of with our real friends. Instead of fighting for our relationships, we press send. Ping, new message: "Sorry, it's over, take it easy."

Not so great, huh? How about taking a good long walk (no cell phone) and thinking it over?

Text: Klaus Altevogt

When aesthetics are a priority — for example, in the case of a work of art with a special finish — stricter standards apply.



Photo: Dennis Treu

Legally speaking...

Forever young:

Visual defects as a point of controversy

“The greatest piece of good fortune is that which corrects our deficiencies and redeems our mistakes,” Johann Wolfgang von Goethe mused. But when is a defect a real defect—and a financial issue? This issue has divided opinions in the world of construction and architecture since time immemorial. But there are court rulings that provide some helpful pointers

The legal issue: When is a work defective?

According to both the German civil code (BGB) and the German Construction Contract Procedures Part B (VOB/B), a piece of work must be flawless. This is fundamentally the case if it has the agreed quality and meets recognized technological regulations.

Functional and visual defects

One way of categorizing defects is to ask whether they affect the function of the work or are (merely) an eyesore. But visual defects are also defects in legal terms, so they are not second-class shortcomings at all. Customer warranty claims apply here no less than in the case of functional defects. This means the customer can demand repair, compensation, and/or a price reduction.

Evaluating defects

Determining and evaluating visual defects is no easy matter. In addition to any dispute over whether a visual defect even exists comes the altercation over the severity of the defect and how it should be evaluated. You could apply the rule of the thumb that when aesthetics are a priority—for example, in the case of a work of art with a special finish or the counter of a hotel reception area—stricter standards apply than in the case of an unsightly crack in the cellar of a family home.

The right distance

Customer and contractor will often have wildly different opinions about how far away to stand when assessing a visual defect. While customers like to come at it with a magnifying glass, the craftsman generally maintains due distance and “cannot see a thing.”

Flatness tolerances: DIN18202:2005-10

Inside micrometres as limit values for distances between measuring points in mm

Applicable to	< 0,1 m	< 1 m	< 4 m	< 10 m	< 15 m*
Unfinished upper surfaces of floors, concrete bases and subfloors	10 mm	15 mm	20 mm	25 mm	30 mm
Unfinished upper surfaces of floor, concrete bases and subfloors subject to more stringent requirements (e.g. to receive floating screed, industrial floors, tile flooring and bonded screed) Finished surfaces for minor purposes (e.g. in storerooms or basements)	5 mm	8 mm	12 mm	15 mm	20 mm
Finished floors (e.g. screed as wearing courses or screed to receive a flooring, tiling, trowelled or bonded floorings)	2 mm	4 mm	10 mm	12 mm	15 mm
Finished floors subject to more stringent requirements (e.g. with self-levelling filler)	1 mm	3 mm	9 mm	12 mm	15 mm
Unfinished walls and unfinished ceilings	5 mm	10 mm	15 mm	25 mm	30 mm
Finished walls and ceilings (e.g. plastered walls, wall claddings and linings, suspended ceilings)	3 mm	5 mm	10 mm	20 mm	25 mm
Finished walls and ceilings (e.g. plastered walls, wall claddings and linings, suspended ceilings) but subject to more stringent requirements	2 mm	3 mm	8 mm	15 mm	20 mm

* The limit values for flatness tolerances up to 15m shall also apply to distances between measuring points of over 15m



Dr. Ingo Lange,
specialist attorney
for building and
architectural law
and board member
of the IfBF Institute
for Building Law
Freiburg im Breisgau

Photo: Lange-Brunner



Amended Regulation on the Award of Public Contracts 2016

The German public procurement law reform took effect in April 2016, paying tribute to the consolidation of the European single market and the harmonization of EU procedures. The new VOB/A (paragraph 1,2,3) as well as amendments to the VOB/B took effect on April 18, 2016. The new regulations can be found in the Federal Gazette from Jan. 19, 2016, www.bundesanzeiger.de.

The decision

The Higher Regional Court of Schleswig (OLG) had to decide on how to assess the visual defects of a metal fence around a piece of land. After complaining about "substantial irregularities, or flatness deviation" in the fence, the customer had withheld payment of 9,000 euros (the order value was 15,000 euros). Since the irregularities were not visible from a distance, the supplier had taken the matter to court. The court ruled that defects of this sort should be assessed from a "typical viewing" distance, although a distance of five meters has been suggested in the case of exterior building parts (OLG Schleswig, ruling from June 12.2009 – 17 U 15/09; Federal Court of Justice, resolution from June 24 2010 – VII ZR 124/09 (non-admission complaint rejected: BauR 2010, 1640; IBR 2010,561).

Legal DIY for metal workers

So the customer's criticism of the defects failed to have effect. When it comes to those famous cases of "light falling from the side," metalworkers will find it useful to know about the DIN standards that apply (in this case DIN 18360). In section 3.1.1.2 DIN 18360, for example, it was stipulated that "in the case of surface irregularities that become visible when light shines on them obliquely, statutory limits stipulated by DIN 18202 may not be exceeded." In such cases you won't even need to consult a lawyer!

Text: Ingo Woelk



Arnoldians on the Brand Tour

HEADLONG INTO ADVENTURE

What gives people the ability to overcome their fears and master extreme challenges? Iron will? Peer pressure? Sheer recklessness or basic trust? Australian Rappelling takes you headlong over the edge of a 100-meter facade in a rush of adrenalin and self-discovery. Everyone works out their own personal coping strategy. Metalligent® editor, Stephanie Werner, tested her mettle on the rooftop.



"There are two types of vertigo—one of them can't be overcome," Peter Bärsch informed me recently. He's Production Manager at the Arnold subsidiary Nordlicht and he knows what he's talking about. Illuminated advertising is usually mounted at dizzying heights—and that's where he has to go. Even if my vertigo is the treatable kind, it's impossible for me to imagine myself heading down the facade of a high-rise attached to a rope. My twenty-seven colleagues who were standing at the foot of the Leonardo Royal Hotel Frankfurt on the first leg of the "Brand Adventure Tour" at the beginning of July represented the full spectrum of emotions from "How long till we finally get going?" to "No one is getting me on that roof!"

Soon afterwards I was fastened into my climbing harness with the first group of six in the hotel lobby. "Nice knowing you!" was a popular wisecrack that morning. Even the final step onto the hotel roof was challenging. "You can see the southern cemetery down there. You might as well pick out a nice spot for yourselves now," joked one of the two employees from the Jochen Schweizer events agency. In a panic, my eyes take in the 100 meter plunge to the ground. "Are those impact cavities in the asphalt?" another colleague quipped. Our boss Uwe Arnold takes the lead, leaning fearlessly over the edge of the roof. Obviously his role is to set a good example. If not him, then who? He doesn't hesitate long, he's obviously not lacking in courage. After all he has to lead the way at work every day.

I'm feeling nauseous, my eyes wander across the skyline. Michael Grimm is normally so unshakeable. Now he's standing on the edge, obviously struggling, and he keeps trying to call it off. We cheer him on, the guide offers encouragement. Then at some point he takes the plunge and follows his boss down to the bottom. Frank Lohmann tips leisurely over the edge as the third in the group—he looks as if he's spent his whole life doing this kind of thing. Marco Recknagel even had to be fetched back up again after he'd finally bitten the bullet. The rope was not coiled properly—my fear mounts.

"I didn't need to overcome my fears, I was motivated by the team spirit."

Carsten Hoffmann, Project Manager

"I just completely concentrated on my breath and let it flow through my whole body. That really helped."

Bianca Landau, IT team member

"I had complete faith in the equipment and the people in charge."

Michael Grimm, Head of Technology & Education

"YOU CAN DO IT, IT'S ALL IN THE MIND!"

Stephanie Werner, Human Resources Officer

100 meters are pretty high when you're looking down—the view over the edge of the roof of the Leonardo Royal Hotel, Frankfurt. This perspective triggered doubts in many an Australian Rappeller.

We're going down any time now—the laughter was more relaxed when it was all over.



Now there are only three women left up here. Isabell Issing talks without drawing breath. No wonder—she is Marketing and PR after all. But once she's on the scaffold in her harness, she just keeps asking if everything's going to be alright. After a long time wavering she finally pulls herself together and then shouts: "I hate you all!" Not long afterwards from a little further down follows: "I love you all!" The last woman on the team doesn't even want to go near the edge. I try to give her encouragement, but I'm really directing it at myself. She even dares to go as far as the railing, but eventually calls it off. I wonder whether it's more courageous to take the plunge or to stand by the fact that you didn't dare. She has my respect whatever the case!

I will regret it forever if I wimp out now. I'm standing right on the parapet, the abyss gaping before me. I lean forwards a little but don't dare surrender my weight to the rope. "You can do it, it's all in your mind!" I tell myself again and again. I follow the instructions and fold one arm across my chest, concentrating on breathing in and out. Suddenly a deep sense of calm envelopes me. Everything around me fades and I let myself fall and place my feet centimeter by centimeter, one in front of the other. I'm walking! My steps get bigger and bigger. In no time at all the guide below is counting down the final meters: "Nine—eight—seven—..."



By the time I'm on the ground again I can't stop grinning. A wave of endorphins is crashing over me. Down here it doesn't matter in the slightest how long we stood up there and what tricks we had to use to overcome our fear—no one can take away our pride in the courage we showed, and all life's little adventures will look very different from now on.

Text: Stephanie Werner

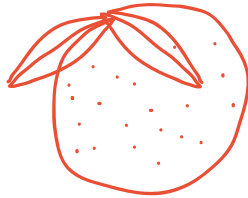
TOURING THE BRAND

The start pistol was fired last December. Arnold AG had reinvented itself and at the Brand Event all its employees were getting to know the company anew—and finding out what it means to be "metalligent." In June, twenty-eight Arnoldian brand ambassadors, namely, the members of the brand project team and the winners of a company competition, took part in the Brand Event Tour. After breakfasting together they conquered their fears and took a 100-meter vertical plunge. Things took a more relaxed turn later at the classic cars rally from Frankfurt's "Klassikstadt" to Kellenfürsten and Glauburg, Wetterau. The day was rounded off with a Classic Car Dinner at the Werkskantine in the Klassikstadt.

Short and sweet

When in Rome...

Symbolic fruits



The table is laid for the members of the Chinese delegation. At each place, an orange. The citrus fruit from the south symbolizes luck for people from the Far East. A dessert of apricots might round off the meal perfectly—sealing a fruitful deal. Pears, on the other hand, are more dubious messengers, symbolizing both longevity and separation. If flowers are used, then less is definitely more. Because in China floral decorations are reserved for remembering the dead. And if there is a gift to present, then however small, it must be wrapped. Red paper is a popular choice—although greetings should never be written in red.

Lucky and unlucky numbers



All good things come in threes. At least in fairytales when the fairy grants three wishes. And even if very few people manage, like the valiant little tailor in the Brothers Grimm story, to hit seven in one blow, seven is a lucky number in many cultures. Not so 13. Row 13 in airplanes, deck 13 on cruise liners, room 13 in hotels—bad news. There are many reasons why this number is regarded as unlucky: in Christianity it is because Judas was the 13th disciple who betrayed Jesus; in the Jewish Kabbalah there are 13 evil spirits; in China the 13th month is known as “Master of Affliction.” Mere superstition? The Olympic Games in Beijing were opened on 08.08.2008 at 8 a.m. In China, eight is a lucky number, it is pronounced “Fa” in Cantonese, which sounds like “get rich” in Mandarin.



Texte: Corinna Willführ



Tips on tipping

You don't discuss tips. You give them. To people who bring a smile to your face with their friendly service. Taxi drivers, chambermaids, waiters. But this friendly gesture is not always appreciated. For example, French air stewards are strictly forbidden to accept a “pourboire.” And a gratuity for the service is frowned upon in Japan and South Korea, where perfect service is taken for granted and is included in the price. Here in Germany, however, tips should never be so meagre that they prompt the waiter or waitress to comment: “You better keep that yourself. It might come in handy when times get bad.”

*I wish you the happiness that
you wish for yourself. Stay with us.*

Yours, Uwe Arnold



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CONTACT:

What does happiness mean to you? We'd love to hear from you, so write, fax, or call us.
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