



Christina Berndt

Individuation

How We Can Become Who We Want to Be
Steps Towards a Self That Fulfills Us

Original title: Individuation
December 2019
304 pages

Outline

The new book by the personal development expert

These days, many people are searching for their “true selves”. However the I isn’t a fixed quantity, but in constant flux. Christina Berndt has dedicated herself to the big, intriguing question of how we become what we are. She focuses on the creation and development of our personalities, and on the classic turning points in our lives. Which mental tools help to shield us from negative influences and enable us to better utilize the positive ones? Our personalities exist in a constant feedback loop with our lives. Major life decisions and even minor experiences have a strong impact on our identities.

The author provides fascinating insights into recent scientific studies, reflects on our constantly changing identity, and gives recommendations on how you can stay in touch with yourself throughout your lifetime.

Christina Berndt was born in 1969, studied biochemistry and obtained her doctorate at the German Cancer Research Institute in Heidelberg. As a science journalist she reports on medicine and research for *Spiegel*, *Deutsche Presse-Agentur* (*dpa* – the German Press Agency), the *Süddeutsche Rundfunk* broadcasting station and *Süddeutsche Zeitung*, where she has been working as editor since 2000. She was awarded the European Science Writers Junior Award in 2000.



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Sample translation

by Emma Rault (Contents and Introduction) and Sarah Pybus (chapters of main text)

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(translated by Emma Rault)

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We're all trying feverishly to find ourselves and we talk about our 'true self.' But nowadays psychologists know that there is no such thing. People's personalities begin to change from day one. About the big question of how we got to be who we are—and how we can become who we'd rather be.

2. So Much Is Possible
Our personalities can undergo much more extreme change than people commonly assume. For too long the scientific community believed what high-school reunions often appear to confirm—that people tend to stay the same with the passing decades. But change *is* possible. This chapter presents the most recent research findings on the subject, outlining some fascinating examples of changing personalities.

A selection:
 - a. From gang leader to psychology professor: Niels Birbaumer and his transformative internship
 - b. From straight banker to gay hairdresser: Christopher Birch and his stroke
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 - f. From troublemaker to respected court-appointed forensic psychiatrist: Hans-Ludwig Kröber and his boundless curiosity
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3. The Development of the Personality
Everyone changes. This chapter describes the things that determine your personality and how it changes over the course of a lifetime. The traditional watershed moments are especially significant here: puberty, first love, moving out of the parental home, settling down with someone, having children, the start of the midlife crisis, retirement. However, this chapter doesn't just deal with the changes that take place during these phases—it also explains how you can recognize at an early stage that your personality is changing, and explores some of the inner tools you can use to help protect yourself from negative influences and make better use of positive ones.

4. Personality Test: Which Type Are You?

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Even past our formative years, our personalities continue to change in response to the events of our lives. It's not just the classic turning points described in Chapter 3 that play a role, but also the major life decisions that people make: What profession do I want to pursue? How settled do I want to be? What partner do I choose? How close is my relationship with them? Will I have children? And how career-oriented do I want to be? This chapter describes what is known by modern personality psychology about the impact of these factors and how important it is for people to reflect on the implications of these decisions for the self.

But it's not just the major opportunities and challenges that change our personalities. Small events that tend to be considered insignificant also shape who we become. Psychologists nowadays are engaged in an intense debate about the many microtraumas—or, put in positive terms, micro-experiences—that people undergo in the course of their lives. While significant traumas, injuries and life-altering moments doubtlessly have a profound impact on the psyche, it is also thought that constant criticism and recurring minor emotional injuries can affect our personalities. The second part of the chapter focuses on how these repeating assaults on the self change us and how we can best counter them.

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Even if there's no such thing as a 'core self' that needs to be discovered, it's possible to let go of the idea of the self while still taking it seriously. On how you can find out who you'd ideally like to be and what life you really want to lead—and how you can start heading toward that life.

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Introduction

In the beginning, there was just similarity. When Paul and Jan are born in 1982, their family is delighted—twins! It's virtually impossible to tell the two boys apart, including where their personalities are concerned. They're both happy-go-lucky kids who like to seize life by the horns. They'll find their way in life, their mother thinks to herself—we don't need to worry about them. But in puberty the gap between the two boys begins to widen. Paul becomes an ambitious young man—he graduates from high school and enrolls in university. Jan, on the other hand, starts hanging out with a bad crowd, turns to crime and occasionally even becomes physically violent.

How is it possible that the lives of these two young men, who had such a similar start, ended up diverging so profoundly? What made one of them into a diligent student—someone who is capable of contributing to society and being held within the support system that exists around him—and the other, a selfish man who has no qualms about violating other people's rights and appropriating their property in order to satisfy his own needs? Is falling in with the wrong person at the wrong time enough to lead us irrevocably down the wrong road, or is that kind of dramatic change by definition the result of a combination of different factors?

How do we become who we are? That's a question almost every person asks themselves at some point—if not before, then certainly when they hit a turning point in life or find themselves in a crisis. Would I have become someone else if I'd been dealt a better hand? Why am I so quick to get angry or emotional or take it personally when faced with criticism? What has made me into the person I am today? How could I lead a better, happier life? And how can I protect myself against the negative influences that hold me back or scar me?

Researchers, too, are very interested in these questions at the moment. Psychologists, neurologists and sociologists are all trying hard to find out how our personalities are formed. The experts, however, are forced to concede that for many years they were approaching this with entirely the wrong assumptions. For a long time it was believed that the self has an unchanging core and that, after potentially having been steered off-track in our early years and warped by external events, we can set out to find ourselves later on and go on to achieve our true potential. Psychoanalysts, communists, existentialists and hippies alike were fascinated by the idea of self-actualization. To this day, many people believe that they have a stable inner center, and that all they need to do is find it and live in accordance with it. But it's becoming more and more apparent that there is no such thing as a "core self."

There's little doubt that we come into this world with a distinct personality that begins to manifest itself from virtually the moment we are born. But how it goes on to develop is influenced to a significant extent by what we experience and who we encounter. If we'd grown up in a different place, at a different time or in another family, we would be very different people. In other words, there's no such thing as discovering who we actually are deep down. That solid, immovable core doesn't exist.

"People's personalities begin to change from the very first day they're in this world," says Niels Birbaumer, Director of the Institute of Medical Psychology and Behavioral Neurobiology at the

University of Tübingen. We are subject to influences that are difficult for us to control, and what we consider our “self” is something that we construct for ourselves as we see fit in a process of interplay with our surroundings, our life experiences, our allies and our adversaries. We invent our personality more than we discover it. The result is a self that’s inserted in the giant jigsaw of life and that will change again with time—when the jigsaw pieces around it reconfigure, if not earlier.

The magic word here is “resonance.” Originally this term denoted the phenomenon whereby acoustic systems vibrate along with an external source. But in everyday life, resonance doesn’t just occur in our inner ears. More and more, this concept is also salient in the humanities.

Sociologist Hartmut Rosa from the University of Jena recently explored the meaning of resonance in the context of life in society. He describes resonance as the feeling that arises when people are enmeshed in a “relationship with the world.” Thus, we feel resonance when we do meaningful work that we get feedback on, when we look out over the ocean or stand on a mountaintop and feel our spirits soaring, when we spend hours engrossed in conversation with friends, when we’re moved by a piece of music or when our favorite soccer team scores a goal. Within this context, alienation is disturbed resonance.

But the field of psychology is increasingly preoccupied with the phenomenon of resonance as well. After all, the psyche, too, is a system that vibrates in step with external forces. It develops in response to events in our lives. Encounters and experiences reverberate inside it, change it and are fed back to the outside world. People are in a constant state of exchange with their surroundings, which influence their personality and their consciousness.

We adopt ideas from others; we adjust to the environment around us. We identify with the role of gang leader or covet an academic career, and cobble together justifications only in retrospect. The latest psychological research reveals the astonishing extent to which we rewrite and edit our memories. Even events that we consider formative in our lives were completely different in reality.

It should be noted that resonance is by no means always a positive thing. After all, we’re not just in tune with our surroundings when we’re at a meeting, making sure to regularly nod at our boss to signal our approval with a view to getting ahead in our career. We also resonate with the negative forces in our surroundings. We are social beings—we absorb what goes on around us. A loving environment can lead to a positive perception of the world, while a malignant environment can result in certain anxiety-inducing situations being experienced as negative time and again. Even xenophobia and fascism are the products of resonance—powerful ones, in fact.

The impact of this phenomenon reaches far beyond our spontaneous experience. Ultimately resonance is even written into our genes, as the new research discipline of epigenetics has convincingly demonstrated. Our experiences leave chemical markers on our DNA. And if the resonance experienced is particularly strong, the genetic changes are almost impossible to undo. This means that we can even end up passing down our experiences to future generations through our genes.

(...)

It exists, then—the possibility of a totally new self. But by the same token, every day we also face the risk of our personality changing for the worse. There are countless examples in medical history of brain injuries dramatically altering people's personalities—turning a loving family man into a choleric man consumed by rage, for example—or bringing hidden talents to light, as with the British construction worker, criminal and heroin addict Tommy McHugh, who after having a brain hemorrhage turned into a highly-respected poet and painter.

Of course it's not always as extreme as that. We all become aware as we get older of how much we've changed in the course of our lives. We suddenly grow interested in things we never used to care about, and the other way around: the same things that fascinated us when we were young now elicit a weary smile at best. This doesn't necessarily mean that our personality has fundamentally changed. Someone in their mid-forties may not want to go to every single party the way they did back in their twenties, but they may still be outgoing, chatty and very much a part of the social world. Perhaps they just prefer to stop at each garden fence for a chat on their way to the supermarket rather than having their social interactions in a nightclub. But there's also more radical change, the kind that sees former wallflowers turn into extroverts, or neat freaks into people who are late paying the bills and only tidy away their dirty socks when they're expecting visitors. "People's personalities can change to a surprising degree even without a brain hemorrhage or stroke to trigger it," says psychology professor Jule Specht. At the same time, though, repeated small affronts to our psyches—the mini-traumas that we experience at work and in our private lives—constantly chip away at our self-image.

In addition to serious physical or emotional injuries, our life decisions can also have a seismic impact on our personalities. Our choice of career and the decisions we make with regard to our family life are especially formative. Young people embarking on vocational training courses will soon find themselves becoming considerably more conscientious, while university students gain emotional maturity, as a team of researchers at Humboldt University of Berlin, headed up by psychologist Oliver Lüdtke, discovered. After retirement, meanwhile, we tend to see the phenomenon referred to as the Dolce Vita effect: people place lower expectations on themselves; they become more unreliable and focused on themselves. And people who move in with a partner tend to suddenly become less open.

And yet we are more than just the plaything of the events that befall us. After all, we also have a say in what we experience. The choices we make, in turn—college or not, partner or not—depend on our personalities. "Depending on how we throw the switches, we'll find ourselves faced with entirely different challenges in the course of our lives, which we will naturally adjust to—and which will leave their own marks on our personality," says Specht. That means that people can also work on their personalities. The potential for change is huge. People shouldn't feverishly try to cling to what they perceive to be their "self"—but at the same time they should take their actions seriously.

Of course, it's important to retain some degree of realism here: "You can still learn to dance at 55, but not everyone will still have the potential to become a flamenco dancer at that age," says Werner Greve, a developmental psychologist from the University of Hildesheim. But in addition to our physical limitations more than anything it is clichés that sabotage us: working on yourself is especially difficult when you're being pigeonholed into a clearly-defined identity by the people around you. In a small town, or in the workplace, where other people have long formed an image of who you are, it can be difficult to break out of those old patterns. "Often it's feedback from others that keeps us from changing," Greve says. "In a new context it's easier to change." Resonance, then, can also be an

impediment to growth. In a new city, in a new job, with new friends and acquaintances, on the other hand, you can find new opportunities for resonance and design yourself anew.

What makes us into who we are? What circumstances and what decisions have the biggest impact? Do we only grow when we find ourselves faced with challenges—in our professional lives, or when we're raising children? Or are the changes we go through in these situations, if anything, negative? To what extent can we affect how our personalities develop? Where are the boundaries? And how can we manage to escape the influence of unwanted outside factors and create our own personhood? Remaining firmly grounded in the science, these are the questions this book seeks to explore.

The Development of the Personality

(translated by Sarah Pybus)

So it seems that we are constantly changing. But didn't that last high-school reunion show how much we stay the same? Jörn was as funny as ever, Anja chatted just as cheerfully as she did in school, and Karl-Heinz was instantly recognizable with his expansive gestures and mischievous expression—even if he has piled on the pounds and lost most of his hair in the thirty years since our exams. The stability of the human personality had once again been confirmed to everyone present. A room filled with pleasingly familiar faces. We are who we are. People don't change that easily after all, not even in the space of three decades.

Let's be honest though—don't we know better? Haven't we lost much of the personality we had as students; sometimes causing us pain, but sometimes relief? We may miss some of the traits we have lost; our affability perhaps, our urge to explore. But there will be others we are glad to have finally cast off; we may have constantly criticized ourselves or taken an overly naïve view of the world. We have to admit that our once pronounced conscientiousness has taken a back seat; these days, we have so much to do that we cannot always apply the same reliability, accuracy, and punctuality in which we used to take such pleasure. In the intervening years, on some occasion or other, we will have realized that we can make it through life perfectly well without being punctual and have adopted a certain degree of *laissez-faire* in everyday life. Or it might be the other way round—unlike our school days, perhaps we can now complete our tasks on schedule because we enjoy our work far more than studying history, geography, and physics?

And yet, despite all these changes, most people at the reunion will look at each other and think: "Yes! That's the person I know. That's how they are. That's how they've always been. People do stay true to themselves." Once again, this reunion will consolidate the belief that people change very little, if at all.

Until a few years ago, experts shared this opinion. The scientific community assumed that the human personality is extremely stable. The general rule was that our character continues to develop until our 30th birthday. After that, in principle, the process ends; our personality is formed. We remain as we are.

What a fallacy! People certainly do change, often drastically, as the example of Niels Birbaumer shows, and even once we reach a more advanced age. "It sounds a bit like leopards being able to change their spots, but it really does happen," says Chris Boyce of the University of Manchester. "Our personality can and does evolve over time."

But why do high-school reunions seem to show the opposite? "At such gatherings we quickly revert to our old roles," explains personality psychologist Jule Specht. "We become the class clown, the geek, or the neat freak." The role we played in school is the element that links us to the person we were back then. It reinforces our collective memory, familiarity, our journey back into our youth—all the things cultivated by reunions. This is why we willingly slip back into these roles—even if, in reality, we have for the most part long since cast them off. "When I go to gatherings like this, I even remember jokes I haven't told for thirty years," says Werner Greve. At the same time, the other attendees—also yearning for the old familiarity—pick up on the traits they recognize in particular. They are delighted by anything that seems familiar, happily overlooking all the ways in which an old acquaintance has changed over the years so they can relish the experience of being together.

These changes are both numerous and continuous. "There is no point at which the personality stops developing," says Werner Greve. Almost everyone alters their character at least a little during their life, even after they enter adulthood. Some people undergo major, almost revolutionary, changes. "Our psyche has immense potential for both cognitive and emotional change," says Ursula Staudinger, a gerontologist and developmental psychologist at the International Longevity Center, Columbia University.

Psychiatrist Hans-Ludwig Kröber has experienced this for himself. A highly respected court-appointed expert, he spent twenty years as director of the Institute of Forensic Psychiatry at the Free University of Berlin. However, he does not believe that this career path was a profound part of his self. "I have the brain of a psychopath," Kröber says. In his youth he was constantly causing trouble, rebelling against everything and everyone. As a trainee teacher in the 1970s, he was found unsuitable for public service by the Federal Office for the Protection of the Constitution. Ultimately, it was only with luck that he was able to follow the respectable, successful path that facilitated his award-winning university career. And so, rather than turning to crime, Kröber became a psychiatrist, focusing on criminals and aiming to establish whether people who have done bad things can be reintegrated into a peaceful society; whether "once a criminal, always a criminal" is really true. Both his own story and his work have shown Kröber that, on occasion, the penal system sees almost biblical transformations akin to that of Saul/Paul.

As a whole, changes in personality are far more frequent and drastic than commonly assumed. Now and again, the scientific community reports bizarre transformations such as that of Christopher Birch, a conservative British banker who became a gay hairdresser following a stroke. André Agassi was famous for regularly blowing his top on the tennis court and being difficult to handle—at least until he married Steffi Graf. Since then, he has led an ordinary life as a father in the Nevada desert and runs a charitable foundation that helps build schools to give socially deprived children the opportunity to prepare for college. And then there's Harald Lesch, a well-known professor of mathematics who describes himself as a one-time remedial student. It was only after a bicycle accident left him with a skull base fracture that he developed the intellectual gifts that made him a successful mathematician and science communicator (see *Astounding Influences*, p. xy).

Extreme transformations such as those of Birch, Agassi, and Lesch may be startlingly rare, but significant changes take place all the time. Some people alter their character so quickly and extensively that within just a few years, they switch between the three personality types defined by modern personality psychology. In fact, minor changes in personality are routine, experienced by almost everyone.

How We Determine Personality

Even non-experts can spot the personality changes in these extreme life stories. But for scientists to study in detail humanity's capacity for transformation, they require reliable methods that also capture more subtle deviations. As so often in psychology, the most common method is questionnaires. More recently, psychologists have made increasing use of the information we unconsciously reveal about ourselves to the public—for example by declaring our opinions on news, photos, and announcements via the "Like" function on Facebook and Instagram. Now and again, astonishing conclusions can be drawn from just a few likes (see *Measuring the Soul*, p. xy). As a rule, however, if you want to precisely characterize a person's soul, you need to ask them or the people around them about their behavior, thoughts, and feelings. It is in our thoughts, feelings, and behaviors that our differences—and therefore our personality—are buried.

Of course, the expressions available to us to describe a person run into the thousands. In the 1930s, however, American scientists established that the 17,953 terms they found in English-language dictionaries that can be used to characterize humans can ultimately be reduced to 4,504 adjectives. Other psychologists whittled the list down even further, believing that, for example, traits such as “sympathetic” and “good-natured” could also be described using the term “agreeable.” It was eventually determined that the words we use to speak about people can be divided into five groups. The “Big Five” model—the five dimensions of everyone’s personality—had been created (see p. xy).

These five dimensions—openness to experiences (receptiveness), conscientiousness (reliability), extraversion (sociability), agreeableness (thoughtfulness, willingness to cooperate, empathy), and neuroticism (emotional instability and vulnerability)—have been widely recognized by experts since the 1990s. In fact, a US scientific team led by Samuel Gosling and Oliver John has now proven that the “Big Five” model can also be applied to dogs and reliably measured. The only dimension that doesn’t work well here is conscientiousness, which is highly rational and appears to be a trait exclusive to humans and chimpanzees.

For a long time, the dimensions of the personality were regarded as extremely stable. Robert McCrae and Paul Costa, the inventors of the “Big Five,” found that humans came into the world with a specific character and matured only on the basis of internal biological processes, not in response to their environment. They also came up with the idea of the 30th birthday as the turning point by which one’s character must have more or less matured.

However, their conclusion may simply have been a personality-related overreaction. McCrae and Costa wanted to get their five-dimension theory into the public consciousness, particularly in the scientific community, where they met with plenty of resistance at first. In particular, exponents of social psychology would have nothing to do with the concept of fixed personality traits. Social psychologists believed that people evolve with their experiences and adapt to the requirements of their environment—and they were, of course, correct. After all, there is no question that people change after certain experiences—otherwise they would learn nothing from what they experienced. As a matter of course, bad experiences make people cautious, while positive experiences encourage them to seek out more new experiences, challenge themselves, and get to know other people—making them more open.

But social psychologists went even further, denying that humans possessed a personality at all. They believed that the way a person thinks, feels, and acts is not set in stone; it differs every time depending on their current surroundings, the expectations that go along with that environment, and the role the person takes on and is expected to fulfill—for example at a high-school reunion. The very same person will act differently depending on the situation. This stance was also fostered by the 1970s zeitgeist: Were not all people victims of the bourgeois society in which they lived? And if conditions were fair and equitable, was not every form of development possible?

Only as time progressed was it accepted that different people behave very differently in the same situation, and that a person will display the same behavior over and over again. Some people tend to run away, while others seek out challenges. Some enjoy contact while others avoid it. And an individual’s behavior remains fairly stable in various situations. Shy people inherently avoid contact rather than seeking it out. Party animals will talk the ears off anyone who doesn’t manage to escape to the restroom.

Little by little, research began to establish the astonishing stability of the personality. In 1995, Avshalom Caspi and Phil Silva showed that educators’ written comments about the three-year-olds in their care was just as pertinent when these children reached adulthood: At eighteen, they were just as impulsive, aggressive, sociable, or adventurous as described by their kindergarten teachers. Personality psychologists were thrilled by these findings. According to Jule Specht, they “might have got a bit carried away” in their dispute with social psychologists. “They overestimated the stability of the personality to such an extent that for quite some time they failed to notice how clearly the personality changes.” In the end, social psychologists and personality psychologists were both correct: While we are born with a personality, it undergoes significant disruptions, challenges, and developments as time goes by.

An analysis by the German Socio-Economic Panel (SOEP) first revealed how much a person’s character changes (focusing on Germany). Scientists have often smuggled personality questions into this huge survey, which every year asks 15,000 households about all imaginable aspects of their lives. When Jule Specht, Boris Egloff, and Stefan Schmukle teamed up to analyze the data, they were taken aback. It appeared that the “Big Five” did indeed continue to evolve after one’s 30th birthday—and not just in those people to whom life had been particularly cruel or kind, but on average. Emotional stability—for example, how confidently and calmly a person responds under pressure—increases slightly in young adulthood, while extraversion decreases (the propensity to be sociable and talkative). Conscientiousness grows significantly up to the age of 40 and continues to change even at a more advanced age. However, openness to new experiences decreases continuously—how curious and unconventional a person is, and their desire for intellectual challenges and exposure to other opinions and ways of thinking. “Our study refuted the prevailing view among psychologists that the personality becomes increasingly stable throughout the course of one’s life,” says Jule Specht.

However, these changes go beyond individual traits or some of the five personality dimensions. As Jule Specht later established together with Maike Luhmann and Christian Geiser, some people switch personality type altogether. Since the 1990s, humanity has been divided into three major personality types described with the aid of the “Big Five.” According to this model, which harks back to the American couple Jack and Jeanne Block, people are either “resilient,” “overcontrolled,” or “undercontrolled.” If you are resilient, you approach the challenges of life with a high degree of mental toughness and are generally emotionally stable, extroverted, open to new experiences, agreeable, and conscientious. Undercontrolled people are less conscientious and agreeable, while overcontrolled personalities are less extroverted and open but very conscientious.

((Table layout: see layout example))

Personality type	Conscientious	Extroverted	Open	Emotionally stable	Agreeable
Resilient	+	+	+	+	+
Undercontrolled	–	±	±	±	–
Overcontrolled	+	–	–	±	±

However, a person's tendency toward one of these types evolves over the course of their life. This is reflected in the classification of the whole population: While around 40—50 percent of young adults are categorized as resilient, this figure rises to up to 60 percent among older people. This shift toward resilience reflects what is known colloquially as the maturing process. The resilient personality is considered to be mature—people don't get so worked up, are less easily irritated, and are reliable. They have learned that if a task is necessary, it is easier to simply get it done, and they know that while something may be upsetting, it is not worth the agitation; nothing is as bad as it seems and problems are easier to solve when calm and patient than when frantic, stressed, and angry.

Sometimes the switch between types takes place with breathtaking speed. The analysis by Specht, Egloff, and Schmukle showed that one in four people switch personality type—but only four years had passed between SOEP surveys. In young adults, it was largely the undercontrolled personality types that changed—those who were less agreeable and conscientious but matured into more resilient people after their 30th birthday, for example. They became more productive, had greater self-esteem, and were more mentally stable overall. However, up to 25 percent of people aged seventy and over also changed their personality type significantly. "Unlike young adults, personality changes among the elderly do not follow any typical maturation pattern," explains Specht. Some switched to the resilient personality type, while others became undercontrolled or overcontrolled. "To date, there have been far too few studies extending into old age," she deduces from this data. "If we look at this group too, we see that changes in one's later years actually become more significant again."

But how can that be if our personality is largely determined by our genetics? Anyone who has ever been around children knows that babies enter the world with a distinctive character—some children love to explore their surroundings while others cling to their parents. And hasn't it been common knowledge since the time of Sigmund Freud that the early childhood phase, the first three years of life, are crucial to a person's development?

If we look at the fundamentals of the personality, we can see that this is only partly true. Our personality is rooted in our genes, but far less than assumed by the public. We know this from studies of twins in which character similarities between identical twins (100 percent genetic identity) are compared with non-identical twins (50 percent genetic identity). The more character similarities between identical twins compared with non-identical twins, the greater the hereditary factor. In 2015, geneticist Tinca Polderman of the University of Amsterdam re-analyzed all twin studies from the past fifty years, using data from more than 14.5 million sets of twins. In Germany, the most informative data came largely from the Bielefeld longitudinal study, for which over 1,000 twins who had grown up together were surveyed multiple times between 1993 and 2008. All international studies concluded that around half of the personality differences between people can be attributed to their genes. Agreeableness is least influenced by genes and only around 42 percent hereditary. Openness to new experiences has the greatest genetic component with estimated heritability of 57 percent. Extraversion is 54 percent hereditary, conscientiousness 49 percent, and neuroticism 48 percent.

So some people are born to hog the limelight, others to be wallflowers, towers of strength, or followers. "Temperament becomes apparent at an early stage," says neuroscientist Nicole Strüber. Many of the processes that make us shy or approachable, impulsive or needing lots of affection, are rooted in our biology. These traits are probably determined by chemical messengers. Whether some people are less anxious than others, constantly look for challenges, or like to talk with other people depends on the extent to which stress messengers or happiness hormones affect their brains and

how quickly these substances are broken down again. Our genes determine many things; the connections between the nerve cells in the brain and how nerve messengers influence their communication, our sensitivity to hormones, and how many hormones we produce. Other biological factors also play a role. According to a study by the University of Virginia, it is generally easier to trigger surges of emotion in the brains of introverted people. If introverts experience greater stimulation, then they evidently require and seek out fewer external stimuli; if stimulation exceeds a certain level, they feel uncomfortable.

So while our genetic make-up affects us significantly, it is not the only decisive factor. Our genes form the basis for our personality. They influence whether we are quick-tempered or reserved, whether we like being on stage or prefer to leave a party after an hour, how we deal with pressure, how we act and feel. But then come the changes.

If the "Big Five" are around 50 percent hereditary, there remains plenty of scope for environmental influence. Life has just as much impact on our personality as our genes—and this goes beyond our initial years. The idea that people are shaped mainly by the first years of their life is clearly wrong. "Sigmund Freud completely overestimated early childhood," says Jens Asendorpf, an emeritus professor who spent decades researching human personality at the Humboldt University of Berlin. His successor, Jule Specht, says the same: "This seems to be a relic from the beginnings of psychoanalysis." Freud's supposition that the experiences of our very first years must cast a shadow over our entire lives has long been considered obsolete—unless, of course, a child has experienced violence and abuse. Our early years are "definitely important," says Specht. "But all other years are just as important."

The events of recent years are far more relevant to a person's current personality than things that happened decades ago. And their current living situation is particularly important. How do they spend their time? What is their profession? Are they in a relationship? If so, what sort? What are their hobbies? What are their living conditions?

(...)

The "Big Five"

Neuroticism:

People with pronounced neuroticism are considered emotionally unstable. They experience longer and more frequent periods of fear, nervousness, sadness, tension, embarrassment, and instability. As a whole, they worry more about their health, tend toward flights of fancy, and quickly become very stressed in difficult situations.

People with low neuroticism tend to be stable,

English Sample Translation "Individuation" (C.Berndt)

relaxed, content, and calm. They experience unpleasant feelings less frequently—but do not necessarily experience positive emotions more often.

Extraversion:

Extroverted people are excitable, cheerful, and optimistic. When interacting with others, they are sociable, talkative, and active. They enjoy stimulation.

Introverted people tend to be withdrawn and sometimes reserved. They are considered quiet and independent and like to be alone.

Openness to experiences:

People who are high in this trait enjoy new impressions, variety, and experiences.

They are often intellectual, imaginative, and very sensitive to their emotions. They are inquisitive, adventurous, and have a range of interests. They make their own judgments, like to try new things, and also question societal norms.

People low in this trait are more conventional and conservative. They are less aware of their own emotions. They are realistic and objective and often lead a traditional life.

Agreeableness:

People high in agreeableness are often very socially minded.

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They are compassionate and understanding toward others.
They value trust and solidarity. They are usually good-natured
and happy to help others and meet them halfway.

People low in agreeableness tend to be egocentric.
They exhibit mistrust and a lack of understanding
and focus on competition rather than cooperation. Sentimentality
is a foreign concept to them.

Conscientiousness:

Conscientious people plan their actions carefully and are
very organized, goal-focused, and effective. They take responsibility
for their actions and are reliable and disciplined.
Highly conscientious people can also be pedantic.

Less conscientious people tend to act spontaneously and
are not particularly careful or precise. They are considered easygoing
and fickle, and often disorganized.