Co-creativity and Community
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Before we get started

... It took quite some time before I gradually realised that I had been searching for something all my life – something that everyone else all around the world has always been searching for, too.

Like all small children, even as a baby I must have noticed that just a little smile from me was all it took to make my mother’s eyes light up. And when I managed to produce that effect, everything was fine, and I was happy, too. It didn’t take much effort and always seemed to work like a charm – with my mother, my father, my grandparents and anyone else who carefully and tenderly leaned over my pram. I can only imagine the boundless energy with which I tried out everything new. And just about everything I did, everything I learned as I expanded my repertoire step by step, made my parents happy. In turn, their happiness sparked my own desire to discover and create.

But then one day the inevitable happened: all of a sudden, not everything I did or said seemed to spark that wonderful feeling of happiness in those around me. Sometimes it was a bit too much for them, sometimes it just wasn’t the right time or place, and sometimes Mummy and Daddy were downright annoyed. It seemed more and more of the things I did weren’t what they had expected or hoped for.

And so the bliss of my carefree childhood gradually came to an end, and my parents began the task of my upbringing.
Like all children I tried my best to make them happy, tried to be “a good boy” and live up to their expectations. Not because I had to; it was important to me, and I was happy when I succeeded. But the feeling of unadulterated joy that had once flowed through my entire body now took on something like a bitter aftertaste. The carefreeness and the unbridled enthusiasm I had enjoyed as a little explorer and inventor were no longer free of ulterior motives. I now had a goal to pursue and my efforts were focused on a result that needed to be achieved: namely, that my parents stayed happy with me. The joy I felt when I occasionally succeeded was now mixed with the fear that I might lose their affection and with it my sense of security and connectedness with them, if what I learned or achieved failed to measure up to their expectations.

Back then, this fear could have easily continued to grow and I could have tried harder and harder to escape it. Then my desire to discover and create, to learn and acquire new skills and abilities, would have been increasingly reduced to simply learning all those things expected of me or hoped for by those I felt I belonged with, felt connected to or somehow dependent on. I would quite likely have become a smoothly functioning person. One who did his best to be recognised and liked by others, first by his parents, then by other kindergarten children and school teachers, fellow students and friends, and later by his co-workers and superiors. I might even have managed to gather so much knowledge and outstanding expertise in a specific field that I could make a real career out of it, gaining me the respect and admiration of all those who were busy doing exactly the same thing. Whether I would have had more success or a bit less, in any case I surely would have been happy about everything I had achieved. The fear of being left all alone, of not fitting in, and of losing my sense of security would have then been transformed into contentment, perhaps even pride.
Thankfully, that never happened. Perhaps because even in my childhood there were a handful of people who simply liked me the way I was, and whose affections didn’t depend on whether or not the things I chose to learn and try, the things I was interested in, matched their own tastes and expectations. And perhaps those who were responsible for my upbringing weren’t so worried that I might never amount to anything and instead had faith that I would eventually find my own way. Maybe they didn’t have any other choice because they simply didn’t have the time to worry about every little thing I did. In any case, I had opportunities enough to give the little discoverer and creator in me free rein, to try out all kinds of things and find out for myself what I was best at, and to focus on those things that interested me most. In the process I learned so much and enthusiastically picked up so many skills that I managed to survive my school years with no real harm done.

I then chose to study biology because I was fascinated by all living things, and would eventually become a neurobiologist because I wanted to understand why people think, feel and act the way they do.

Back then, I still thought this was because of our brains and the genetic programmes that control their development. It took quite a bit of time before I realised that that isn’t true, that there is no genetic programme that controls the formation of highly complex interconnections between the billions of nerve cells in our brains. I was there for the exciting phase in which neurologists discovered that over the course of a lifetime the brain essentially “wires itself.” The phenomenon, which they dubbed experience-dependent neuroplasticity, simply means that the formation of networks and connections within the brain depends on how a person uses their brain, and what for. And that in turn depends on what seems most important in that person’s own lifeworld, what they open themselves up to, what moves them most, what they enjoy, what they are looking
for and what they hope to achieve. As such, the kind of brain a given person ends up with isn’t determined by any blueprints or programmes. It’s much simpler than that: our brains structure themselves on the basis of the solutions that we find over the course of our lives while searching for – yes, I suppose I can use the expression once, even if it’s not entirely accurate – what makes us happy.

And since what makes a given person happy – which also includes anything that helps them cope with difficult situations – varies greatly from individual to individual and from the time they’re born to old age, we all end up with correspondingly different brains, with which we think, feel and act differently.

It took a long time before I grasped that. I had spent so many years, read so many books, attended so many conferences, conducted so many experiments, written articles and led discussions, all to find out how these highly complex networks in the brain, which shape our thoughts, feelings and actions, are formed. And all the while I had assumed that the answer to my question could only be found in the brain itself. But then I was forced to realise that all our knowledge of how the brain is structured – which connections and networks, which transmitter systems and receptors it is home to and how they work – still couldn’t explain why a given person’s brain developed the way it did.

To find that out, I would have needed to research what type of lifeworld the person had grown up in and into over the course of their life, what problems and obstacles they encountered and what experience they had gained while searching for solutions. I would have needed to determine whether (and if so, how) they had succeeded in satisfying their own needs, in pursuing their interests, discovering what there was to discover in their world, and in shaping their life the way they wanted to. And if in my research I had stumbled across people who had experiences in their childhood or later in life that were painful,
disheartening or damaging, I should have not only asked which consequences these experiences had on the person in question’s further developmental process, but also whether (and if so, how) they could have been avoided. Then I would have much sooner come to the conclusion that the most important experiences in our search for happiness are experiences with other people – and unfortunately not just the types of experience that encourage them, that reinforce their own desire to discover and create, and that satisfy both their longing for independence and freedom on the one hand, and for a sense of belonging and security on the other. And I would have quickly realised that the ways in which we interact, how we shape our relationships, isn’t all that it could be. And I wouldn’t have wondered for so long why we find so many disturbed relations and tangled connections between the nerve cells in various regions of the brain in so many people. Then, instead of trying to use cutting-edge scientific methods to determine what was going wrong up there from a neurochemical, neuroanatomical or neurophysiological standpoint, I would have started doing what I could with my humble means to help improve relationships between people.

But then again, this seems to be a fundamental principle of the human quest for knowledge: that we don’t realise we’re on the wrong path until we’re utterly lost in the woods. And it’s equally true that we sometimes have to take a wrong turn before we can recognise the right way to go forward.

And so I not only began to develop an interest in the relationships that shape the development of the neurons in our brains in the form of synaptic connections and neural networks, but to increasingly concentrate on the question of the nature of relationships between human beings, why they are the way they are, and how they can be changed.

In the process I noticed how many parallels there are between the brain and a human community. Just as we use language to communicate, neurons produce specific substances
in order to pass on their excitement to others, or to brake their activities. Just like communities, our brains are home to individual members, i.e. neurons, with broad networks of contacts that each can use to influence several others. There are regional networks responsible for the completion of certain functions, and there are overarching networks that in turn coordinate their activities. Further, just as in human communities, the relational patterns between the neurons of the brain are constantly disrupted and have to be rearranged if the disruption can’t be done away with.

Needless to say, just as in a society, some relations in the brain are formed that, while suitable for solving a given problem in the short term, prove to be a major hindrance to long-term development. Sometimes what is going on in the frontal lobe no longer meshes with what the networks of the brain stem need to fulfil their own duties. In a society and in the brain alike, it can come to such a massive state of confusion that simply nothing works. When this happens to someone’s brain, we send them to a psychiatrist. As for a society that has reached this point, its only hope is that it can muster enough energy to restructure its relationships on its own. If not, its own dysfunctional relationships will all too easily be passed on, not only to its children, but also to all other communities it comes into contact with.

I found all of these parallels so remarkable because they indicated that there was something like an overarching principle that dictated both the nature of relationships between the members of a social system and that of our brains.

This principle is currently being intensively researched by system theoreticians, i.e. by scientists whose work focuses on the structuring of complex systems. They refer to it as the “principle of self-organisation”, and in recent years biologists have found more and more indications that the formation and maintenance of living systems can also be understood as self-organising processes.
Accordingly, I sought to transfer these modern concepts to the formation of relationships between human beings within communities. If the relationships between the living organisms in an ecosystem, the residents of a city, or the neurons in our brains are self-organising, the result will inevitably be a relational network of such a nature that the individual members remain as autonomous as possible, but remain interconnected. In the context of human societies this not only means that something is gradually formed that links all of the members while simultaneously reinforcing their autonomy; it also means that whatever connects them must be something that the community itself, through the process of forming the relationships between its members, generates and continually refines. Any community that fails to do so will fall apart. This process usually begins when a community grows inflexible and loses its creativity and ability to evolve because it no longer gives its members any room to breathe.

This “room to breathe”, which human beings need in order to grow and evolve, is the pleasure they take in thinking – something we all inevitably lose when forced to live in a society only held together by some form of external or internal pressure. When at some point this pressure subsides, there is suddenly nothing left to hold the members together and strengthen their sense of belonging and importance. Sooner or later, these members lose the desire to create and build things together, and each only looks out for him- or herself. That’s what I’ve discovered in my attempts to find what it is that determines which experiences we gain in our relationships with other human beings – and which relational patterns are consequently created in our brains in the form of synaptic connections and neural networks.

Communities in which the members have lost their joy in thinking are just as poorly suited to releasing the potential every individual holds as are those that have robbed these individuals of their desire to work together. Both phenomena make people
sick and destabilise the community in question. But since we cannot live alone, without other people, we have no choice but to work together to find some form of relationship that links us together, while still allowing each of us to freely develop his or her own innate potential.

No genetic programme will aid us in this task, nor will some all-powerful genius arise to lead us and show us how to shape our relationships so that neither our children nor their children will lose the joy they feel in creating things together; that’s something we have to discover on our own. We’ve been trying to do so from day one, but have never truly succeeded. That being said, we have learned a great deal in the process. Never before have we known so much, and never before have we possessed stores of knowledge that were so massive or accessible to so many people – not yet everywhere in the world, but at least in those parts of it where people’s thoughts and actions aren’t primarily shaped by hunger, suffering and misery, nor by violence and repression. Wherever human beings come together without fear, without being blinded by some ideology and of their own free will, they can seek to shape their interactions differently than in the past. They can form small islands in the form of communities where no one has to lose the innate pleasure in thinking for themselves, and where people can start working together to shape their future gladly and freely – and not because everything is already just as they like it, but because they have found in these communities exactly that which all of us, everywhere around the world, are looking for. That’s why I chose to write this book.

I would like to invite you, encourage you and perhaps even inspire you to give some thought – together with other people and at home, at work or just the next time you go for a walk – to the question of how we can rediscover our own joy in thinking for ourselves and creating together with others. And not by simply trying harder, but by attempting to find new ways to look at
and approach one another. This approach is important, because
I can already let you in on a little secret: the pleasure we feel
in thinking for ourselves and in building and shaping together
with others never “just disappears”; it can only be lost as the
result of painful experiences from relationships. But every sin-

gle one of us can also rediscover it, even if we’ve grown so old
that these experiences lie years or even decades in the past.

However, achieving this on our own is extremely difficult;
to do so, the person in question would need to have a different,
more positive experience in their relations with another per-
son or even with several other people. In this way, they would
need to see that their own ideas and suggestions do matter; that
by sharing their ideas they don’t merely participate, but can
actively contribute to jointly finding a solution to a problem – a
solution that, by its very nature, is more complete, more com-
prehensive and as such more lasting than any that an individual
could ever come up with on their own. Hence the book’s title, a
call for achieving co-creativity through community.

In order to gather these positive experiences with the other
members of a community, we have to learn to interact differ-
cently. Instead of looking at each other as the objects of their
personal assessments, expectations or even ulterior motives,
the members of these societies would need to be ready and
willing to engage with one another as subjects. Granted, that
would mean a completely different relationship culture from
what most of us are familiar with in our day-to-day lives.

In this book I have sought to describe what such a culture
could look like, which opportunities it would offer, and how
we might succeed in creating it. From the outset it was clear
to me that this approach represents an attempt to shake the
foundations of our current societies. The way we live, learn and
work together today is, after all, an expression of our current
self-understanding. And these notions we have of ourselves, of
that which characterises us, what we consider to be our human
nature, have taken firm root in our brains in the course of generations; they can’t simply be changed overnight. As such, I chose to divide the book into three main parts.

The first part focuses on the question of where our insights and the beliefs we derive from them actually come from. In other words, the question is how certain and reliable all those notions of ourselves and how we shape our lives that we consider to be accurate, universal and therefore true, actually are. How can we ever reassess how we all live together if we’re still convinced that it’s part of our human nature to coexist in this way and not some other?

But even if we succeed in recognising that we could also live together in a different way, this insight alone won’t make us treat each other differently in the future. In order for that to happen, what is more important than a new insight is a somewhat deeper understanding of our own development to date. Accordingly, the book’s middle part addresses exactly this question: just what it was that made us and every other person we meet turn out the way they did, what made us and them into who we are today. After all, how can we ever decide to treat someone else differently – more compassionately, perhaps even more lovingly – if we only look at them as they are today, without ever asking how they came to be that way?

Ultimately the theory of relativity can be summarised in a single formula. In order to relativize the current state of knowledge concerning what defines us as human beings, and with it our own self-understanding, I had to address these two parts before turning to the insight they lead us to in the third and final part: namely, that it doesn’t have to be that way.

And many of us are already acting quite differently. We don’t have to keep treating each other the same way we always have; we could also start trying to truly approach one another. Instead of making other people the objects of our assessments, plans and ulterior motives, we could invite, encourage and inspire
them to rediscover their own joy in thinking for themselves and creating together with others. Only then will we succeed in tapping the potential slumbering in every individual and in every community.
Part 1: Life as an Ongoing Learning Process

Everything’s a mess; nothing works the way it should. Wherever you look, there are problems on top of problems: problems with our partners, with our children, within the family, at the kindergarten or at school, with our neighbours, at university or on the job. And this only gets worse when we look at the “big picture”, at what happens in cities and communities, at companies and other organisations, in politics and the economy. When we open the daily paper, follow the latest news, tune in for political roundtables on TV, or check out online forums; everywhere we see the same thing: countless problems – whether personal, interpersonal, regional, national or global. And just when one problem seems to be solved, two new ones pop up to take its place … and there’s no end in sight.

No wonder that more and more people are losing their joie de vivre and, like sailors do when the storm-tossed seas threaten to capsize their ship, choose to batten down the hatches. This usually works for them; after all, no storm can last forever. But our problems won’t go away on their own. On the contrary, if we don’t find solutions, they’ll only grow worse.
Why do we have so many problems?

Maybe the strategies we use aren’t exactly the best. We tend to think of each problem as a hotspot that we’ve somehow managed to land on, and which is now growing warmer and warmer. When things start getting uncomfortably hot, we back off a bit to take a look at things from a distance. Those of us who now recognise their situation will do their best to get off the stovetop as quickly as possible. After all, recognising you’re in trouble and getting yourself out of the situation is also a viable solution. The challenge here is to make sure you don’t unwittingly flee from one hotspot, only to land on another one (and perhaps one that’s not so easy to recognise).

All those who don’t manage to get away, or whose attempts to solve the problem only take them to the next hotspot, will start getting hot feet. Some of them, those who are flexible enough, will try to cope by alternately standing on one foot, so that each has a chance to cool down a bit. The virtuosos among them may even develop complex dances, constantly switching between efforts to solve the problem and attempts to avoid it – until they eventually collapse from exhaustion, a phenomenon aptly dubbed “burnout” these days.

Then there are those people, mostly of the male persuasion, who act like they don’t have any problems at all. To the shock of all around them, they simply remain standing on the hotspot, some with a smile on their faces. They keep up this pose as long as they can, and until their feet are badly burnt. These are the ones in denial. They don’t even recognise that they have a problem until the ambulance comes to pick them up.

Given a bit of time to nurse their wounds, both groups, the exhausted dancers and those with the burnt feet, then have a second chance. But they all too easily wind up in exactly the same spot as before. After a few rounds, the truly incorrigible specimens among them are done for; the others finally succeed
in solving the problem that had given them so much trouble. They’ve managed to learn something, and in the future they’ll act a bit differently, pay a bit more attention, and think things through, having developed a new attitude. This progress is in turn embedded in their brains, as corresponding, dedicated neural connections, as new networks that simply didn’t exist before and were formed by this very experience. Accordingly, someone who has succeeded in solving a problem that weighed heavily on them is no longer the same person as before. He or she has grown – and not just anywhere, but right up top, in their brain.

Unfortunately, the solutions found in this way aren’t always ideal. Someone who’s having problems with their life partner, with their boss at work, with him- or herself, or what have you can also solve them, at least temporarily, by getting massively drunk; then all their problems simply disappear. But when they sober back up, the problems return. Those who then reach for the bottle again sooner or later end up being constantly drunk. And, since their brain adapts more and more to being drunk, they ultimately have to keep drinking to avoid going into withdrawal. So now they have even more problems, at least until their liver finally gives up the fight.

We don’t need to go into detail here about all the ways people can numb their minds so as to temporarily forget about the real problem they have to solve. Methods can range from gluttony to self-destructive fasting, from compulsively buying new shoes to the weekly football fever, and becoming addicted to everything from television to extreme sports, computer games or the Internet. There are any number of ways to temporarily calm a brain beset by problems. Unfortunately, we tend to give in to these temptations time and time again – even though by doing so, we wind up with even more problems in the end, not to mention making new problems for the people we live with.
If someone only realises after the fact that what they’re doing isn’t helping them to achieve what they wanted to, there are only two possible explanations. The first is that they acted without considering the consequences of their actions. This can only happen to people for whom thinking, and above all thinking ahead, has become too difficult and therefore uncomfortable; i.e. those who lost their joy in thinking for themselves at some point earlier in their lives.

The other explanation: they certainly did (perhaps even intensively) consider other courses of action they could pursue to avoid having so many problems. When these people nevertheless constantly find themselves in sticky situations, it tells us that the concepts and convictions that guide their thoughts are apparently poorly suited to finding more favourable solutions. The next natural step would be the realisation that there must be something wrong with those concepts and convictions. When these people still don’t start to consider why they hold the views and beliefs they do, even though they don’t seem terribly helpful, it’s a clear sign that their joy in thinking for themselves was lost somewhere along the way. They prefer to simply keep trudging along than to question their own beliefs.

On what are our thoughts oriented?

Small children don’t have these problems; there’s nothing they like better than to think about things. They’re constantly trying to find out what all the things they sense and experience mean, and how they fit together with everything they already know, to figure out what the things we say to them actually mean, and how to express the things that move them in a way that we can understand. When they succeed, the joy they feel fills them from head to toe. The same thing is true of any child on this planet; the pleasure they take in thinking is written all over their faces. When at some point later in their lives, they lose
that feeling, there must be a reason, and it doesn’t take a neurobiologist to recognise it. It’s not because at some point their parents, other children, their kindergarten or school teachers are no longer as thrilled to hear about everything they think up.

That wouldn’t be so bad, and such factors alone are hardly enough to spoil our children’s pleasure in thinking. It’s something else, something that happens inside them that has a much more subtle but lasting effect: within their brains, all the things they’ve seen and experienced gradually crystallise into certain beliefs about how everything they experience is connected. Up there, in their heads, they form their own hypotheses about how everything should be classified and evaluated. And when these views more or less jibe with their later experiences, the neural connection patterns activated in the process grow more solid and more stable, until at some point they have been so massively reinforced that their thought processes can no longer let go of them. Once this has occurred, the child in question, even after having reached adulthood, can only think in ways that match these beliefs; they increasingly channel their thoughts.

This isn’t so bad, either, and doesn’t necessarily mean they’ll lose the pleasure they take in thinking; in fact, some beliefs can have just the opposite effect: for instance, that each new discovery broadens their horizons, that they have so much to learn from other people, and that topics they choose to research intensively only grow more interesting and constantly lead to exciting new questions.

However, there are unfortunately other views that become solidly anchored in the brains of children and adults alike and structure their thinking in such a manner that they can’t help but lose their joy. All of these views essentially poison the joy they feel in thinking, hindering people from going out and discovering for themselves all the world has to offer. If you try to determine where these strange, suffocating convictions, which can rob us of the courage to think for ourselves, come from,
you’ll come to the conclusion that every single one of us carries these toxic beliefs inside us. We either learned them from others or constructed them in our own brains because others either refused to listen to them or, often enough, even dismissed them as nonsense. And now we’re passing them on to our children, just as unthinkingly as our parents and grandparents did with us. These thoughts, which taint and destroy our joy in thinking, are: “I’m not smart enough”; “I’m always in the way”; “My ideas don’t matter”; “I’d better go with the flow”, etc. No one develops these ideas on their own; they can only form when we come into contact with other people who ruin our joy in thinking.

Why they do so isn’t that hard to fathom. Some people simply don’t give any thought to the effects their criticisms, their know-it-all behaviour and their self-righteousness might have on others. It’s more important to them that they prove to themselves they are brighter, cleverer and therefore better than everybody else. And some of them are so convinced of the rightness of their own beliefs that they simply can’t accept it when someone thinks differently and consequently arrives at other conclusions.

Further, some people simply never stop to think about the questionable ideas and beliefs they pass on to their children, friends and co-workers. In so doing, they help these ideas to gradually spread and become adopted by more and more people. As a result, the majority of a community’s members can ultimately become convinced that human beings are collective in nature and always need a central leader, that humans are notoriously egotistical and only pursue their own interests, that there can be no advancement without competition, or that intelligence is hereditary.

As a matter of course, more and more individuals will begin to orientate how they think and act on the basis of these commonly held convictions, and to shape their lives, including their interactions with others, accordingly, ultimately creating life-worlds for themselves that perfectly match their beliefs.
These developments are particularly problematic when certain convictions, which offer a generic orientational framework for compatible concepts in the form of specific views on the nature of human beings or the world, have spread and become anchored within a community. For instance, if a great many people are convinced that everyone only pursues their own interests and competition is the mainspring of innovation, then each of them will be moved to selfishly pursue his or her own interests in competition with others.

This phenomenon is connected to how our brains function. From earliest childhood, we seek to translate what we see and hear into universal concepts and rules. For instance, on the basis of all the traits we learn about by observing different forms of life, a general image of what characterises an animal or a plant gradually forms in our brains. When we later encounter a life-form we’ve never seen before, we then use these concepts of what animals and plants are like to classify it as either a plant or an animal.

When it comes to more complex phenomena, e.g. types of behaviour we observe in others, children often have a hard time trying to derive universal concepts for them on their own. As such, they eagerly adapt the concepts offered by the people they live with – like explanations that a certain type of behaviour is typically Jewish, typically Muslim or typically Christian. Or that that’s just the way all people are – that they only think of themselves, that they’re lazy, idle or treacherous, maybe even that their behaviour is hereditary.

When many other people think this way, it’s extremely difficult for children, and later for adults, to develop a point of view of their own that differs from that of the majority. As such, the odds are very good that the way the person in question later thinks and acts will be orientated on these beliefs and will be shaped by the convictions developed by other members of their cultural group.