

Spirituality with both feet on the ground



**An essay on how a down-to-earth approach
to spirituality can enrich your life**

**By Arthur ten Wolde
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Image on front page: AI impression of a spiritual dance event (see Chapter 4). Source: DALL-E
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Summary

Chapter 1: In Search of Happiness in Life

This essay discusses how spirituality can contribute to happiness in life, particularly by helping individuals to deal with unnecessary negative feelings and setbacks. While spirituality is often perceived as vague or 'airy-fairy', there is also an inquisitive form of spirituality that keeps both feet firmly on the ground. By becoming aware of your feelings and learning to accept them, you can become less dependent on external circumstances for your happiness. This approach fosters a way of life in which you avoid entanglement in rigid thoughts, dogmas and concepts, instead promoting a deeper connection with your body and your feelings. As a provider of spiritual guidance or activities, you can increase your reach. The essay further discusses personal visions of spirituality, with attention to basic principles such as presence in the here and now, the ego, spiritual development, self-examination, consciousness, values and science.

Chapter 2: Inquisitive Spirituality

Spirituality can make your life feel much lighter. Inquisitive spirituality is about living in the here and now through self-examination, from your essence and love, rather than from fear or negative emotions. The inquisitive aspect consists of open-minded observation of your own reactions to circumstances as a path to personal development. Instead of emphasizing dogmatic beliefs, attention is focused on personal inner experiences and science-based knowledge. Transformative experiences like unity consciousness can leave a lasting impression.

Chapter 3: Liberation from the Ego

The ego, with the superego, the inner critic, and the pain body behind it, often gets in the way of our happiness in life. It reduces your presence in the 'here and now' and masks your core self, or essence. By freeing yourself from the ego through inquisitive spirituality, you reach a state in which you are less dependent on external circumstances. Liberation is not enlightenment, but the deepest possible state of being in full life. Relapses can occur, but through conscious presence it is possible to send the ego back 'to the back seat' again and again.

Chapter 4: Spiritual Activities

There is a wide range of spiritual activities such as yoga, meditation, reading, listening to podcasts, dancing, Chi Kung and tantra that can help you to connect more deeply with yourself and the world around you. The question is always what best suits your needs at the moment. An open, curious attitude without well-defined goals works best. Body and mind are ultimately both necessary to free you from the ego and make your life lighter.

Chapter 5: Value Systems and the Ego

Value systems affect spiritual development and the ego. The model of Spiral Dynamics shows the alternation of Yin and Yang in different stages of development, from survival to awareness. Striving for balance between these two forces is essential. Liberation from the ego is possible at any stage, but the fourth stage (awareness) is an additional leap in spiritual growth. Insight into value systems thus helps to understand personal and social developments in these confusing times.

Chapter 6: Science and Spirituality

The relationship between spirituality and science is complex. Spiritual people often appeal to 'inner knowing', scientists to consensus based on objective results. However, both are looking for a deeper understanding of reality and complement each other in this respect. Spirituality is authoritative about the inner experience, science about the common outer world. Specifically, physics offers insight into fundamental concepts such as energy, matter, time, and space, thereby painting a mysterious, awe-inspiring picture of our universe.

Chapter 7: What is Consciousness?

How exactly conscious experiences arise is still a mystery. However, progress has been made with new theories and measurements. Scientists and philosophers assume that consciousness arises from complex material processes, and keep open the possibility that it is a fundamental property of the universe. The assumption of many spiritual people that consciousness comes from an independent mind or soul is therefore called into question. The new insights also raise questions about free will and the role of artificial intelligence in the future.

Chapter 8: Truth or Superstition?

In the last chapter, a series of spiritual concepts and methods are tested against science. There are indications for the existence of telepathy. Nondualism and intuition are unraveled as beautiful, but confusing concepts. Views such as reincarnation and the immortal soul are considered to be far-reaching claims without scientific evidence. Others come out as pseudoscience (such as astrology) or superstition (such as healing gemstones). Critical testing of beliefs through science and the free press is essential to promote true spiritual growth. Relationships act as a 'lens' on the ego and are essential for liberation.

Conclusions and recommendations

Spirituality is a valuable source of life lessons, provided it is approached in a down-to-earth and inquisitive way. It can help to put the 'ego in the back seat' and promote personal liberation, but the spiritual 'work' is never finished. Relationships act as a 'lens' on the ego. To prevent spirituality from becoming a new ego, among other things, it is important to remain critical, both of the many vague elements, the spiritual exercises, and of yourself. Ultimately, it's about finding a balance between openness to spiritual growth and a down-to-earth, science-based attitude. This can make your life lighter, and increase your reach as a

provider of spiritual guidance and activities. The series ends with the call for collective action for a more sustainable and holistic society.

Introduction

This essay contains a series of eight weekly blogs in a personal capacity in which I explore how spirituality can make your life lighter, away from dogmas and vagueness. It describes how a down-to-earth approach to spirituality can enrich your life, bring you closer to yourself, and expand your reach as a provider of spiritual guidance or activities.

I wrote these blogs and this essay because my own life has become much lighter thanks to spirituality in the sense of: much easier, with my happiness less dependent on the circumstances. I wish that for everyone. In addition, massive individual personal and spiritual growth is urgently needed to deal with today's challenges such as social inequality, war, pandemics and the climate crisis.

The blogs (now Chapters) were originally published in Dutch in September to November 2024. Follow-up activities will be announced via this essay's publication webpage¹, where you can also sign up for an email mailing list.

Arthur ten Wolde
Haarlem, 31 December 2024

¹ <https://circular-future.eu/spirituality-with-both-feet-on-the-ground>

Chapter 1: In search of happiness in life



AI impression of happiness in life. Source: DALL-E © Arthur ten Wolde. Disclaimer: This impression is the best result of many prompts. However, it reflects the values and stereotypes of today's Western society, such as success in free competition (see Chapter 5) and the remaining biases of DALL-E after the training by OpenAI. For example, we assume that the children consume an alcohol-free drink...

Would you like to know how to deal with negative feelings and setbacks, so that your happiness in life no longer depends on the circumstances? And how spirituality can play a role in this?

Spirituality is often seen as something vague and airy-fairy. I understand that quite well. Because of my training as an exact scientist, I am quite critical. Moreover, people who consider themselves spiritual often make firm statements about things that most people do not believe. This causes many listeners to drop out. After all, if you hear something that clashes with your beliefs, you start to doubt the reliability of the speaker and you usually stop listening.

That's a shame, because my own experience is the opposite: there is an inquisitive form of spirituality that is anything but airy-fairy. This approach ensures that you stand firmly with both feet on the ground. People who function 'normally' in our society often get stuck in their thoughts, without naming their feelings or really feeling their bodies. As far as I'm concerned, the greatest power of spirituality lies in getting 'out of your head' and into your body. Stop floating in thoughts, dogmas, and concepts, and start feeling.

My life has become much lighter thanks to spirituality in the sense of: much easier. I no longer resist feelings or setbacks. My happiness is therefore much less dependent on the circumstances. I wish that for everyone. And although spirituality seems to have started a

slow advance, it is still limited to a bubble in our society. Many people skirt around it. Without realizing it, providers of spiritual books, workshops, tracks, podcasts and training courses repel a large target group, because of their choice of words and well-intentioned, but unsubstantiated and confusing statements. As a result, many miss out on a wealth of valuable life lessons that are hidden in spirituality – and are actually there for the taking. That's why I started writing *Spirituality with both feet on the ground*, first published as a blog series in Dutch and now as an essay in English. In successive chapters, I explain my personal vision of spirituality, namely practicing it as a way of life.

First I try to create clarity in some spiritual principles with a solid foundation. Key concepts here are presence in the here and now, your essence and the ego. Various authors, systems, approaches and methods of spiritual development pass by, including Eckhart Tolle, Almaas, Ken Wilber and Rolando Toro: what kind of approaches exist, what can they bring about, what is suitable for whom? Various value systems from the Spiral Dynamics are also discussed. These make a connection between the culture in which we live, our values, norms and beliefs, and the individual spiritual development we can go through. The next topic is science. What exactly is science, and what is its connection to spirituality?

I draw on my own background as a physicist with a PhD. What exactly about quantum mechanics, energy, matter and time? And what about consciousness? After all, this is a concept that appears again and again in spiritual literature, and about which all kinds of claims are made. What is and is not known about it?

All this together results in a down-to-earth analysis of concepts such as past lives, the immortal soul, channeling, pendulum dowsing, karma, everything happens for a reason, astrology, the fifth dimension, vibrational frequencies, manifestation, everything is one, everything is an illusion, you are an illusion. What are misunderstood phenomena, what is unlikely, which concepts are confusing, and what notions are outdated, classified as pseudoscience, or as superstition? The essay ends with conclusions, recommendations, and a call for action.

Hopefully, this has sparked your interest in spirituality in relation to happiness in life. In the next chapter I will take a closer look at inquisitive spirituality.

Chapter 2: Inquisitive Spirituality



At impression of an inquiry, an inquisitive form of dialogue by Almaas in which interlocutors listen attentively to each other after a meditation without interrupting each other.² Source: DALL-E © Arthur ten Wolde

What role can spirituality play in your life? And what is inquisitive spirituality?

Spirituality is a broad concept. In the broadest sense, it has to do with matters that concern the mind (Latin: spiritus). It is used in many ways and may be related to religion or supernatural powers, but the emphasis has shifted to subjective experiences.³ For me, spirituality means that I strive to live as much as possible in the here and now⁴, in full presence, from your essence⁵, from love, and not from unnecessary, exaggerated fear, anger, shame or other negative emotions. From this presence, I simultaneously strive to make a positive contribution to the world. For me, it is mainly about applying spirituality in daily life and work. In other words: As a way of life.

At the opening of an Almaas retreat⁶, participants were asked to focus on what we experience and what we know for sure (for example, that gravity exists), and to put all of our beliefs on hold for a week. That appealed to me very much. When practicing spirituality, I mainly focus on what I experience internally, such as the feeling of energy flowing through my body. In interpreting my experiences and what is written and said about spirituality, I base myself on what I know for sure and about which there is scientific agreement. Unlike religion, for me it is not about 'believing'. I am completely open to miraculous experiences,

² <https://online.diamondapproach.org/understanding-diamond-inquiry/>

³ <https://en.m.wikipedia.org/wiki/Spirituality>

⁴ <https://shop.eckharttolle.com/collections/books/products/the-power-of-now>

⁵ <https://www.diamondapproach.org/public-page/pearl-beyond-price>

⁶ <https://www.diamondapproach.org/ridhwan-school>

but insofar as they seem to conflict with current science, I attach less value to them. I do not believe that there is 'more between heaven and earth', but that there is a wonderful essence in each of us. And I note that there is a lot that we do not (yet) know or understand. Recognizing 'not knowing' is the basis for curiosity, which in turn is the best driver for personal development through self-examination.⁷ A rock-solid belief, on the other hand, I see as the end of thinking and feeling, when you cling to a straw, as blocking new insights, and as living from fear. And that's exactly what I want to avoid. Which does not alter the fact that a religious conviction can be very important to others, does not have to be rigid, and does not have to come from fear.

As for myself, while the foundation for my spiritual development had already been laid when I was eighteen, it really started about fifteen years ago. The trigger was an impending *burnout*. Fortunately, I managed to prevent this thanks to some spiritual techniques and insights. After participating in two *retreats*, I started dancing a lot, which I still do weekly.

After a while it began to dawn on me what spirituality was all about. Completely unexpectedly, I had an overwhelming experience of unity, which unfortunately has never been repeated, but has left a lasting impression. I was standing in line at the bakery with one of my children by the hand when suddenly all the filters in my perception disappeared. Colors, smells, sounds, feelings, everything came in immediately and with a much greater power. It's like switching from a small black-and-white TV with an antenna and a noisy image to a 3D iMax movie. I felt connected to everything. This took a few minutes before it slowly decreased from the moment I had to order. In short, an experience like in the novel *The Celestine Prophecy*, which I considered a hilarious joke at the time but may have to reread on second thought.

Since then, I was strongly aware of my many reactions from unnecessary negative feelings. For years I worked to avoid those reactions, which usually didn't work. Consciously incompetent, which in itself is an unpleasant stage. But my increased awareness often enabled me to name and compensate for my behavior, which is a huge gain of course. Furthermore, I gradually learned to perceive and name my feelings better.

A few years ago I noticed that my personal 'improvement program' was coming to an end. I had reached my limit! Both my environment and me should put up with this version of myself. With this, I believed that my spiritual development had also come to an end.

However, that turned out to be different. After an intense period and moving, I literally woke up in the new home 'in the here and now'. And apart from a few difficult days last year, I am still there. My life has become much lighter. More about that in the next chapter.

In summary, my experience is that inquisitive spirituality can make your life much lighter. It is a way to live in the here and now through self-examination, from your essence and love, instead of from fear or negative emotions. The inquisitive aspect consists of uninhibited observation of your own reactions to the circumstances as a path to personal development. In this it differs substantially from the more dogmatic 'narrative' spirituality, which revolves

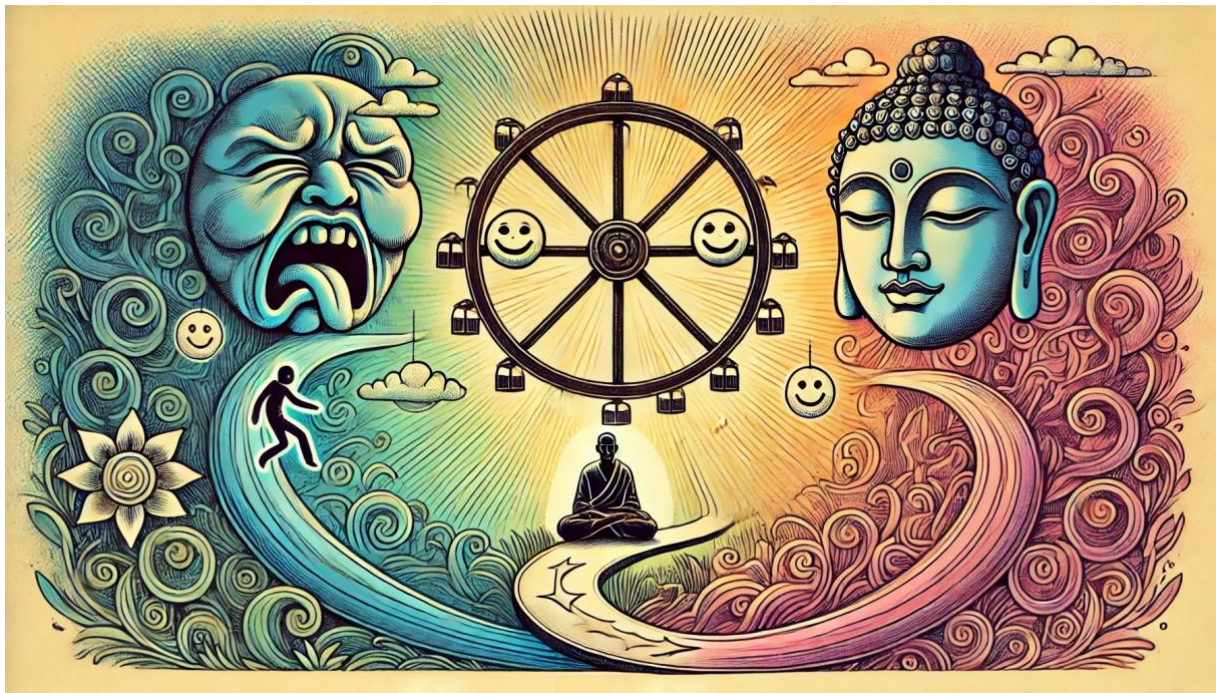
⁷ <https://www.linkedin.com/pulse/braving-unknown-how-growth-mindset-curiosity-can-ludmila-20gnc/>

around the belief in ideas such as the afterlife or reincarnation.⁸ Instead of emphasizing belief, inquisitive spirituality focuses on personal inner experiences and science-based knowledge. Personal experiences such as a unity experience can leave a lasting impression.

So much for today. Hopefully I have piqued your interest again. The next chapter takes a closer look at the spiritual ego, liberation and enlightenment.

⁸ <https://www.filosofie.nl/ian-geurtz-je-bent-niet-je-gevoelens-en-gedachten/> (in Dutch)

Chapter 3: Liberation from the Ego



AI impression of three stages of spiritual development: (1) trapped in the ego (left), with the medieval Wheel of Fortune swinging you back and forth between happiness and unhappiness; then via the blue path to stage (2) freed from the ego (right), where you are much less dependent on your circumstances; and through the red and yellow path to (3) enlightenment (middle), where someone has withdrawn from life in order to reach the deepest state of being. Source: DALL-E © Arthur ten Wolde

What can inquisitive spirituality bring you? In this chapter I will delve deeper into the 'here and now', presence, essence, ego, inner critic, pain body, liberation and enlightenment.

The beginning of a spiritual quest is difficult. Looking back, it looks to me like looking for the hole in the needle to put the thread through. Once that's done, you can start sewing, but it may take a while. Spirituality is full of jargon, which creates a chicken-and-egg problem: you often don't understand explanations about the ego, because they are poorly explained, the terms used are unfamiliar, and you haven't experienced it yourself. To quote the famous Dutch former football player Johan Crujff: you only see it when you understand it. Our common language has no words for the concepts used in the spiritual *bubble*. But they are usually not clearly defined either. That is why I am making an attempt here. The hyperlinks in the footnotes lead to the most accessible sources.

I think the clearest explanation is that of Eckhart Tolle. In his book *The Power of Now*⁹, he asks the reader the question: What is the problem now? This question has helped me a lot in difficult situations. Because usually your reaction to setbacks is not in proportion to what is really going on. By asking this question, I realize that, and this allows me to immediately move on to the question: what are the consequences of what is going on now? And what are the options, what is possible? By the here and now, Tolle simply means the immediate place

⁹ <https://shop.eckharttolle.com/collections/books/products/the-power-of-now>

and time where you are. In his famous Findhorn retreat¹⁰, he explains that many people, in answer to the question 'How are you now?' answer with a long story about unresolved frustrations, sometimes from up to 25 years ago. Such stories keep us stuck in the past and away from the here and now.

We also all suffer from negative, judgmental thoughts about ourselves, such as: 'What's wrong with you? How could you be so stupid? You will never achieve anything. Who do you think you are?' These thoughts arise from the 'inner critic' ^{11,12}. Byron Katie gives four questions you can ask yourself regarding these kinds of thoughts: 'Is it true? Can you absolutely know that it is true? How do you react – what happens – when you believe that thought? Who would you be without that thought?' ¹³ Once you are aware of your inner critic, you can practice dealing with it in all kinds of ways, such as ignoring, contradicting, laughing about it, predicting what the critic is going to say, or drawing a line.¹⁴ What matters is to perceive these thoughts as a voice in your consciousness, to recognize that they do not coincide with yourself, and not to immediately accept them as true. In Freud's model, they usually come from the superego, in which the norms, values and rules of behavior of the parents are internalized in the subconscious.¹⁵

However, the ego is usually referred to as the source of our misery. There is a lot of confusion about this term because the spiritual tradition uses different definitions, which also differ from those of Freud. At the same time, everything always comes down to the same thing. What creates clarity is the concept of the essence of Almaas, 'the true nature of who we are when we are relaxed and authentic, when we do not pretend to be different in some way, consciously or unconsciously.' Our essence is masked by the ego, and comes to the surface when the ego keeps quiet.

However, unprocessed emotions from the past maintain the ego through what is also called the *pain-body*.¹⁶ Often these emotions come from your childhood. Some psychological schools therefore speak of 'the inner child' as a sub-personality that gets in the way of adult behavior.¹⁷ This involves emotional pain. It is important that it also settles in the body. For example, you can feel fear and infatuation in your lower abdomen, love and sadness in your heart, tension in the muscles in your neck and shoulders.¹⁸ The body 'keeps score' of unprocessed emotions. The ego also consists of our outer identity, to which we can cling too much, such as appearance, status, power, or ability. Finally, we also suffer from illusions, such as false hope that you can still get what you need if you try harder – this is beautifully worked out by Ingeborg Bosch.¹⁹

¹⁰ <https://www.amazon.com/Eckhart-Tolles-Findhorn-Retreat-Stillness/dp/157731509X>

¹¹ https://en.wikipedia.org/wiki/Inner_critic

¹² <https://www.psychologytoday.com/intl/blog/human-inner-dynamics/202312/understanding-the-inner-critic>

¹³ https://thework.com/wp-content/uploads/2019/07/instr_en_18jul2019_ltr.pdf

¹⁴ <https://www.psychologytoday.com/us/blog/narcissism-demystified/202403/13-ways-to-temper-a-harsh-inner-critic>

¹⁵ https://en.m.wikipedia.org/wiki/Id,_ego_and_superego

¹⁶ <https://www.christinewehrmeier.com/eckhart-tolles-pain-body-explained/>

¹⁷ https://en.wikipedia.org/wiki/Inner_child

¹⁸ https://en.m.wikipedia.org/wiki/Body_psychotherapy

¹⁹ Ingeborg Bosch, Illusions: Free yourself from the maze of destructive emotions, <https://www.amazon.com/Illusions-Free-yourself-destructive-emotions/dp/908070492X/>

What adds to the confusion is that it is often pointed out that the ego 'is not only bad': we need the ego according to Freud's definition as a solid identity in order to function as an adult. But that refers to a different understanding of the ego.

In short: The superego, the inner critic and the pain-body are concepts that are closely intertwined, and are often summarized under the heading of 'the ego'. One or more bothersome, annoying voices with thoughts, judgments, beliefs, compelling recommendations and associated emotions in your head that have an opinion about everything, get stuck in your body, and that get in the way of happiness in life.

Many spiritual practices are aimed at awareness, reduction, dissolution and the eventual liberation of the ego. That liberation overtook me when I literally woke up in the here and now two years ago (see Chapter 2). Since then, I no longer resist feelings, which I can just let flow through me. My reactions are usually in good proportion to what is actually happening: not exaggerated, but also not too mild or suppressed. Once I cried a lot for three days after a loss, but remained present in the here and now. After that, my grief was already processed to a large extent. Previously, I partly suppressed such feelings and needed years – or even decades – to process them. At the same time, greater grief can still have a lifelong effect.

My happiness is therefore much less dependent on the circumstances. Or rather: I no longer care whether I feel happy, or sad, angry, or whatever. As long as I feel present in the here and now. Because then I can basically handle anything. This state corresponds to the descriptions of what others call 'liberation'.²⁰ For the outside world, not much changes, and your thoughts and emotions are constantly trying to take you out of the here and now – which occasionally threatens to happen. But they are no longer *in charge*.²¹

A metaphor that works well for me is that of the driver of the car of your life. Until about 20 years ago, I thought I was in the driver's seat, but in retrospect, my ego was constantly taking my place without me realizing it: I thought I was myself. You can see this as the 'unconsciously incompetent' stage of awareness. When I became aware of my ego during my first *retreat*, I became consciously incompetent. I no longer identified with my ego, I sat at the wheel in quiet moments, but usually shouted in the back seat. I kept trying to take over the wheel, but usually in vain or afterwards. But totally unexpectedly, since my moment of liberation, I suddenly find myself at the wheel, with my ego now protesting in the back seat. Often weakly, sometimes overwhelmingly. Remember that your ego is just as smart as you are.

My life has become much lighter, much easier, since that moment of liberation. Recently I also realized that I sometimes have the feeling that I am standing still, while reality flows around and through me: An experience that seems to match the feeling of 'already being there'. I also experience that the journey stops, but still continues. Because even in a liberated state, you are always busy integrating remaining pieces of ego. For example, calling a bureaucratic helpdesk remains a spiritual challenge for me...

²⁰ <https://jangeurtz.nl/boek-bevrijd-door-liefde/>

²¹ <https://www.nondualiteit.one/podcast/>

Last year I also relapsed for a few days. After a wonderful week of vacation, I fell into a hole and my ego took control again. Because I knew this is normal, I wasn't so shocked by it.²² Although I was back in the back seat, my ego triumphantly back at the wheel, I could still perceive my feelings and thoughts as in the years before. Within three days I was *back in charge* with my ego back in the back seat.

Another aspect of liberation is *presence* in the here and now. Presence is described by Almaas as the experience of existing without thoughts.²³ I myself experience it as relaxation, 'out of your head, into your body'. When you relax deeply, such as in meditation or dance, all kinds of brain functions go on the back burner, your sense of time and space fades, while you feel strongly connected to your surroundings, and sounds seem to pass right through your inner space. If you work hard and concentrate, for example in front of the computer, your presence temporarily decreases. But then you add something to the world.

To be clear: in this state you are liberated, but absolutely not enlightened. Enlightenment is considered by most spiritual leaders to be a fundamentally deeper state of being, which is reserved for people who have largely withdrawn from everyday life, such as spiritual leaders, gurus and monks. The liberated state of being is the highest attainable for those who want to live a full life, including work, relationships and, for example, starting a family. And even spiritual leaders with the status of enlightenment can relapse. Examples include the conviction and expulsion from the United States of the Indian mystic Bhagwan Shree Rajneesh (also known as Osho) after violent actions by his supporters, and the Dalai Lama asking a boy to kiss him.^{24, 25}

In summary, the ego, with behind it the inner critic, the inner child and the pain-body, often gets in the way of happiness in life. Inquisitive spirituality offers ways to become aware of the ego, reduce it, and ultimately free it from its influence. This liberation leads to a state in which you are more present in the here and now and less dependent on external circumstances. Although liberation is not the same as enlightenment, it does offer a deeper state of being in which your life becomes freer and less heavy. Relapses can occur, but by training your 'spiritual muscle' in conscious presence in the here and now, it is possible to send the ego back 'to the back seat' again and again.

So much for today. The next chapter will go into more detail about different ways to free yourself from the ego.

²² <https://mariaerving.com/regressing-back-to-ego-consciousness/>

²³ https://www.diamondapproach.org/glossary/refinery_phrases/presence

²⁴ https://en.wikipedia.org/wiki/Rajneesh_movement

²⁵ <https://edition.cnn.com/2023/04/10/india/dalai-lama-apology-kissing-boy-video-intl-hnk/index.html>

Chapter 4: Spiritual Activities



AI impression of a spiritual dance event. Source: DALL-E © Arthur ten Wolde

All beginnings are hard, and so is spiritual development. Fortunately, there is a wide and varied range of methods, activities and exercises, with many entrances and approach routes. It is important to check with yourself which one best suits your needs at the moment. Do you feel the need to learn more about it, read books, listen to podcasts? Do you want to relax and put an end to your worrying? Do you want to move out of your head, into your body? Do you want to be alone, or together with others? Do you want to be able to talk about your feelings? Do you need physical contact?

Depending on that, there are many options. Types of entrances to spirituality are gaining knowledge, having conversations, meditating, breathing exercises, physical exercises, movement and touch. The first two forms use the head as an entrance, the others involve the entire nervous system and body in the process. Body and mind are both necessary for liberation from the ego. Many authors indicate that the Western approach to problems through psychology with conversation techniques can lead to insights, but not to liberation. Most providers of spiritual activities combine one or more entrances. There are evenings, days, events, weeks, training, courses and years of training. I will go through a number of examples and indicate what it can bring based on my own experience, network and/or literature.

Yoga

Yoga is an ancient and the most popular form of spirituality worldwide. Yoga teaches to control the mind, the feeling and the body, in order to achieve a state of unification with the universe. In the West, this is so-called Hatha yoga, which largely consists of exercises with postures and breathing techniques.²⁶ There are many forms of yoga, from very strenuous to

²⁶ <https://en.m.wikipedia.org/wiki/Yoga>

gentle, such as Yin yoga. Characteristic is the emphasis on control of the body and the use of breathing. Yoga breathing is a method that balances the autonomic nervous system; it can reduce psychological and stress-related complaints. The better the participant is balanced, the easier he should be able to perform certain exercises. Kundalini yoga focuses on liberation by generating energy in the body with certain exercises. All in all, yoga is suitable for anyone who wants to move individually or in a group in a non-competitive way. Because of the many different forms, there is always a yoga form for beginners that suits your wishes and physical capabilities. Moreover, in addition to physical benefits, yoga also offers mental peace and balance, which makes it a valuable addition to a healthy lifestyle

Reading and listening to podcasts

I started that myself. I have read a few books about Buddhism, and found some beautiful wisdom. Knowledge can provide you with new insights that help you further, and teach you techniques that you can apply yourself. However, the approach of Buddhism was too dogmatic for me, too much grafted on the hierarchical master-student relationship and too akin to religion. As literature, I recommend Eckhart Tolle²⁷, Byron Katie, Almaas, Jan Geurtz and Ingeborg Bosch instead (see also the footnotes in Chapter 3). The Diamond Heart *retreats are also particularly* educational. A lot of time is devoted to psychology lectures, which are much clearer than Almaas's own books. Finally, I can highly recommend books and courses on Spiral Dynamics – this will be discussed in detail in the next chapter about value systems.²⁸ Reading and listening is especially a useful entry point for spiritual development for people who like to understand things well, for whom knowledge offers guidance, and if you struggle with certain questions. It allows you to reflect on your own time and pace and gain insights that help you move forward.

Meditation

I also got to borrow a book with meditation techniques. The web is full of them. Many people benefit from it. According to recent research, meditating regularly can not only reduce stress and improve concentration, but also strengthen the immune system and even slow down brain aging.²⁹ Most people, in my experience, prefer guided meditations, many of which are on Spotify. I myself like silent meditation, in which I quietly pay attention to the here and now, my own thoughts, feelings and perceptions. I do this together with one or more others, usually prior to dancing or an inquiry (see below). I stopped meditating alone after a few weeks because I didn't get much benefit from it. In retrospect, I think that was because I worry relatively little anyway. For me, walking on my own works much better; I walk in nature almost every day. Meditation is a valuable method of spiritual development for almost everyone, with a choice of different techniques as desired. The only caveat is that silent meditation can worsen depression and anxiety in about eight percent of practitioners. Guided meditation may offer them a solution.³⁰

²⁷ <https://open.spotify.com/show/5VlukNC0wRyzTBKa1XHb0D>

²⁸ <https://spiraldynamicsintegral.nl/en/>

²⁹ <https://www.healthline.com/nutrition/12-benefits-of-meditation>

³⁰ <https://www.newscientist.com/article/2251840-mindfulness-and-meditation-can-worsen-depression-and-anxiety/>

Spiritual IQ test

Spiritual intelligence is a term used by some philosophers and psychologists as a measure of spiritual development, in analogy with the intelligence quotient (IQ) and the emotional quotient (EQ). A form with which I have had good experiences myself is the SQ21 test.³¹ It asks questions about the full breadth of spiritual development, including knowledge of the universe and personal goals. The test thus gives a more or less neutral evaluation of where you stand with your spiritual development. The result was affirmative for me and gave good feedback.

Forms of conversation: Inquiry, sharing rounds, talking stick

As depicted in the figure in Chapter 2, the *inquiry* is an inquisitive form of dialogue of Almaas, in which two or three people listen attentively to each other in strict confidentiality after a meditation without interrupting each other. The form is simple. Provide a quiet, undisturbed environment where you can sit comfortably. Have an alarm clock at hand to time 15 minutes. First you meditate together for 15 minutes, then one monologue for 15 minutes, and then the other. Just about what keeps you busy, whether or not based on a subject. No questions are asked – except possibly a repeating open question to trigger the other person to tell more. I did this with someone every month for years. It increases your self-insight because the attentive listening ear of the other person makes it easier to express semi-conscious feelings and thoughts. At the same time, you get to know someone else's inner world. By the way, you can also conduct excellent internal monologues with yourself, for example during a walk alone in nature. Another form is the sharing round, where participants sit in a circle and are invited by the process leader to share something that concerns them with the group. A talking stick can be used for this, a tradition of Native Americans in which a stick is passed to the next person who wants to speak while the rest listens.³²

In summary, forms of conversation are a good entry point for spiritual development for anyone who dares to express themselves in a safe environment about personal, vulnerable and intimate issues. Sharing experiences clarifies, leads to recognition and new and deeper insights, helps dissolve pieces of your pain body, and connects you with those with whom you share them.

Dancing

Dancing is a powerful entrance to spiritual development because it allows you to loosen fixed structures in your body. As mentioned, unprocessed emotions get stuck in it. Cognitive awareness of this is not enough. Dancing is a great way to start this process. It is important that no drugs or alcohol are used and that everyone dances barefoot (or flexible dancing shoes if you need them). Most Westerners are poorly 'grounded' because of our way of life: we are hardly aware of our legs and feet. The direct contact of your feet with the ground restores this contact, so that the energy in your body from below starts to flow better again.

Many spiritual dance forms have been developed, several of which I know.

Ecstatic Dance is a free dance form to music in a group. 'To discover Ecstatic Dance, you have to experience it. It is a safe environment where you can let yourself go, there is respect and

³¹ <https://www.deepchange.com/>

³² https://en.m.wikipedia.org/wiki/Talking_stick

no judgment. Ecstatic Dance will be different for everyone, looking for a certain experience is not the goal. Let the experience sink in, the music, the energy. Not in your head for a while, free of thought.^{33, 34} Most people dance on their own, but some also dance together. Many participants enjoy it immensely. They experience a release of tension and energy, and a natural *high*. Ecstatic Dance is very suitable as a spiritual dance form for beginners.

5Rhythm dance is similar. The 5Rhythms is a dance form in which you learn to move more freely in order to achieve more self-insight and authenticity. There is no choreography, it is a free form of dancing. The five rhythms Flowing, Staccato, Chaos, Lyrical and Stillness form the basis.³⁵ Here too, many people mainly dance alone, but there are also dances where you make contact with others with your eyes and hands.

Biodanza is an extensive international system with many dances to all kinds of music. It was developed in the 1960s by scientist Rolando Toro, professor of psychology and medical anthropology at the University of Chile.^{36, 37} More happiness in life is the ultimate goal of Biodanza. It is aimed at the inner experience and integration of emotions, in contact with others, sometimes quite intimate. Characteristic is the demonstration of every dance by the teacher, even though there are no steps; it is about free dancing. There is a whole philosophy behind it with five 'lines' and the music goes through a certain structure during every dance session. What is special about Biodanza is that it offers a safe environment in which participants can practice connecting, setting boundaries and letting go on a weekly basis. In the contact you can experience soft, playful or tender touch without commitment, obligations or expectations – which is always the case in a relationship.

Biodanza is liberating, healing and moving for almost all participants. However, it is not suitable for everyone. Some feel too uncomfortable with it. Others are less bothered by this, or can just handle the discomfort, and go through a learning and healing process through Biodanza.

If you're interested, it's best to go to a weekly group three times, and then decide if you want to continue. It has brought me a lot. Almost every time, the endorphins released by dance and touch cause a natural *high* in my entire body and mind. Moreover, in the more than ten years that I have been practicing Biodanza every week, I have learned a lot, such as tuning in to the other person and dealing with rejection on the dance floor. I also got much deeper contact with my whole body, and during a certain dance suddenly felt that some last remnants of heartbreak from almost forty years earlier dissolved. Amazing. Others regularly report similar experiences. These subjective experiences are now being scientifically substantiated bit by bit, mainly by Marcus Stück. He has shown that Biodanza leads, among other things, to lower levels of the stress hormone cortisol and testosterone in the blood, lower heart rate, better recognition of emotions in children, reduced impatience, a better

³³ <https://www.ecstaticdance.nl/>

³⁴ https://en.wikipedia.org/wiki/Ecstatic_dance

³⁵ <https://en.wikipedia.org/wiki/5Rhythms>

³⁶ <https://www.biodanza.org/en/definition-of-biodanza/>

³⁷ <https://www.biodanza.org/en/rolando-toro-araneda-5/biography/>

mood and a feeling of well-being.^{38, 39} In summary, Biodanza is a powerful entry point for spiritual development for people who like to move in contact with others and do not suffer from severe trauma. The dance form is especially suitable for those who are open to a deeper connection with themselves and others in a safe group environment. Some teachers have a separate beginner group.

Tantric dance is a dance form developed in 2007 from the tantra tradition (see below) in which one leads the dance and the other follows. A play between 'masculine' energy (leading) and 'feminine' energy (following) to transcend the duality of Yin and Yang together⁴⁰. Because the dancers no longer experience these as opposites, but rather as complementary and connected, they achieve harmonious attunement and unity. Because the eyes of the follower are blindfolded, all other senses are enhanced. This makes you aware of your body and what lives inside you during this playful dance and interaction.⁴¹ I did this about five times and enjoyed it a lot. As a follower you learn to surrender completely to the one who leads you, it is indeed more playful and surprising than Biodanza, and the aim is to have an equal number of men and women. The dance form offers space for the two of you to dance beautifully attuned to each other in terms of movements – but that requires practice and strength. All in all, tantric dance is a beautiful and playful entrance for spiritual development for anyone who dares to surrender to his or her dance partner. It is also important that you can deal with the possibility of 'remaining' with an odd number of dance partners or on the free dance floor.

There are many other dance forms, mixed forms and variants of free dancing, such as Chakra dance,⁴² contact improvisation⁴³, *silent disco* outdoor dance in nature, and *Free yourself through dance*⁴⁴. Many dance forms are also undergoing development.

Chi Kung

Chi Kung (English: Qigong) is a system of coordinated posture and movement, breathing and meditation. It has roots in Chinese medicine, philosophy, and martial arts.⁴⁵ *Chi* means life energy in Taoism, a Chinese mystical, philosophical and religious movement.^{46, 47} Tai Chi is an ancient Chinese martial art.⁴⁸ Traditionally, Chi Kung has been seen by Chinese people and throughout Asia as a practice to cultivate and balance the life force – similar to yoga. Chi Kung practice typically involves moving meditation, coordinating slow-flowing movements,

³⁸ <https://www.biodanza.org/wp-content/uploads/2021/11/SIGNUMTEMPORISBiodanzaEffectsonStressReductionandWell-BeingAReviewofStudyQualityandOutcome.pdf>

³⁹ https://www.researchgate.net/publication/277307148_Effects_of_an_evidencebased_dance_program_TANZPRO-Biodanza_for_Kindergarten_Children_aged_four_to_six_on_immunoglobuline_A_Testosterone_and_heart_rate/link/5c29c4b3458515a4c702a6c3/download?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmXPY2F0aW9uIn19F0aW9uIiwicGFnZSI6InB1YmXPY2F0aW9uIn19

⁴⁰ https://nl.wikipedia.org/wiki/Yin_en_yang

⁴¹ <https://tantric.dance/en/>

⁴² <https://www.chakradance.com/>

⁴³ <https://tomgoldhand.com/>

⁴⁴ <https://www.dansjevrij.nl/>

⁴⁵ <https://en.wikipedia.org/wiki/Qigong>

⁴⁶ <https://www.learnreligions.com/what-is-qi-chi-3183052>

⁴⁷ <https://en.m.wikipedia.org/wiki/Taoism>

⁴⁸ https://en.m.wikipedia.org/wiki/Tai_chi

deep rhythmic breathing, and achieving a calm meditative state of mind. People practice it worldwide as meditation, recreation, exercise, relaxation, preventive medicine, self-healing, alternative medicine, self-development, and martial arts training. In summary, Chi Kung is a valuable entry point for spiritual development for those seeking a balanced and calming practice that connects the mind and body. Through slow, flowing movements and conscious breathing, Chi Kung helps to promote inner peace, balance energy, and strengthen overall well-being.

Tantra

Tantra (Sanskrit: *tan*, to expand; *tra*, instrument, liberation) is a form of yoga originating from Hinduism and Buddhism aimed at spiritual expansion and liberation through exercises.⁴⁹ It has been described as a dynamic life path on which body, sensuality and spirituality come together. In the Western world, tantra is wrongly associated with sex, which is still a taboo. Tantra training, however, is aimed at life energy in general, of which sexual energy is only a part.^{50, 51, 52} Tantra offers a profound entrance to spiritual development for people who are willing to expand their consciousness through the interplay of body, mind and sensuality. The practice focuses on experiencing life energy in all its forms and transcending dualities, which leads to a deeper connection with yourself and the world around you. As with yoga, there are many different forms of tantra, and all kinds of training and *retreats* are offered. If you are familiar with meditation and create a safe environment, tantra exercises are also great for the private sphere.⁵³

Chakra reading

Chakra reading is a powerful entry point for spiritual development, focusing on balancing and understanding (around) seven 'energy centers' in the body, known as chakras.^{54, 55} Each chakra represents a specific aspect of our physical, emotional, and spiritual well-being. Although there is no scientific basis for the chakras, they provide a recognizable framework for my personal experiences. They are a better fit for this than the five 'lines' of Biodanza. They also coincide strikingly with important nerve nodes in the spine and suggest a connection between our body and the eight value systems of Spiral Dynamics (see Chapter 5).⁵⁶

During a chakra reading, attention is paid to the energy flow through these centers in a relaxed and safe setting, with the aim of identifying and healing blockages. The method offers insight into the underlying causes of energetic imbalance and can contribute to deeper self-knowledge and healing. During a recent chakra reading of half an hour, I stepped quietly with my eyes closed twice over images of the chakras while the reader watched and gave feedback. The first time I felt a blockage in my abdomen (at the third chakra) because I found it exciting. By relaxing, it disappeared the second time. Since then, I know how I feel when all

⁴⁹ <https://en.m.wikipedia.org/wiki/Tantra>

⁵⁰ <https://centrumvoortantra.nl/visie/>

⁵¹ Tantra, The Secret of Love (in Dutch), Jan den Boek and Caroline van Wijngaarden, <https://www.bol.com/nl/nl/f/tantra/9200000108349314/>

⁵² <https://www.amazon.com/Love-Sex-Awakening-Journey-Spiritual-ebook/dp/B01IYJVGME/>

⁵³ <https://www.depaarsekeizerin.nl/info-adviezen/tantra-sex-oefeningen-en-tips> (in Dutch)

⁵⁴ <https://en.m.wikipedia.org/wiki/Chakra>

⁵⁵ <https://anodeajudith.com/the-chakra-portal/chakra-healing/>

⁵⁶ <https://i0.wp.com/www.petermerry.org/blog/wp-content/uploads/2012/07/sd-chakras-16ways.jpeg>

my chakras are quietly open, which I experience as very valuable. In summary, I can recommend a chakra reading to anyone who is not opposed to the idea of chakras.

Finally

There are many other activities that can contribute to spiritual development. For example, I myself have good experiences with gentle forms of massage such as tantra massage, Lomi lomi and six-hand massage. Both dancing and touch release natural *feel-good* hormones such as endorphins in the body. These bring about feelings of happiness and connection that can lead to ecstasy and a natural high. This can be addictive to a certain extent, but unlike drugs such as ecstasy, there are no side effects. In addition, microdosing, Ayahuasca sessions under good supervision, breathing exercises (breathwork), alternative dance forms and hypnosis can have positive effects. Reinoud Eleveld⁵⁷ has developed a popular valley orgasm course as part of his Tao Training⁵⁸. There are also many retreats and spiritual festivals at home and abroad. Quiet music supports many spiritual practices, also in the home situation.⁵⁹ Overviews and agendas of spiritual activities should be found regionally. In the Netherlands they can be provided by Hipsy,⁶⁰ Buzzbie⁶¹ and the NLP College⁶².

In summary, spiritual activities offer many ways to enrich your life and let go of the ego. There are countless methods, such as yoga, meditation, reading, and dancing, that can help you connect more deeply with yourself and the world around you. Depending on your personal needs and preferences, you can always choose methods that appeal to your mind, your body, or both. Ultimately, both are needed for liberation from the ego. The extent to which your liberation succeeds depends on the intensity of your issues, your dedication and your motivation. Open, honest curiosity works best, while purposefulness is counterproductive: liberation from the ego can be promoted, but cannot be forced.

In the next chapter, we will discuss value systems. After all, if you are on your way to freedom and are looking for happiness in life, what do you value, what do you find important, and where are your limits?

⁵⁷ <https://taotraining.nl/reinoud-eleveld/>

⁵⁸ <https://vallei.online/ons-verhaal/>

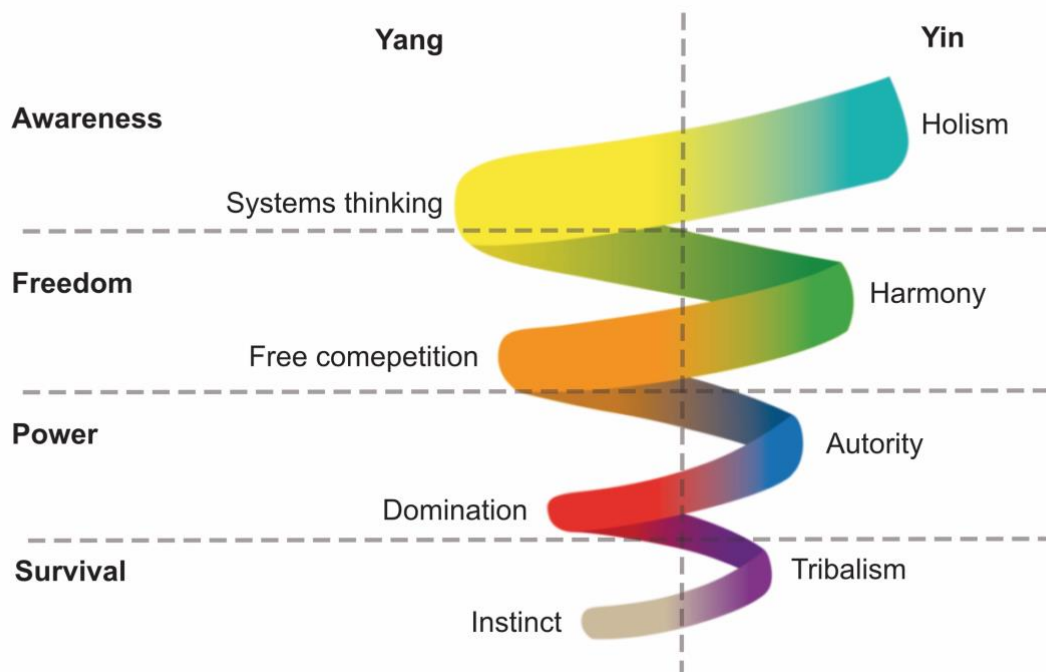
⁵⁹ <https://open.spotify.com/playlist/5lwHiscicamTgmKPXUJuiP?si=55c6d0d630834665>

⁶⁰ <https://hipsy.nl/>

⁶¹ <https://www.buzzbie.nl/>

⁶² <https://hetnlpcollege.nl/spirituele-agenda-nederland-activiteiten/>

Chapter 5: Value Systems and the Ego⁶³



Overview of the eight value systems of Spiral Dynamics as developed by Claire Graves⁶⁴ and elaborated by Don Beck and Chris Cowan,⁶⁵ who also linked colors to the systems. Adaptation of a table in an earlier publication⁶⁴ that organizes the systems into four stages (survival, power, freedom and awareness) with a link to Yin and Yang. © Arthur ten Wolde

Value systems are important for spirituality. After all, if you are looking for happiness in life, what do you find important, what do you worry about, and where are your limits? However, value systems are at most indirectly discussed in spiritual literature. Buddhism, for example, emphasizes harmony with nature, and Biodanza focuses on the 'biocentric principle' in which humans are part of nature. However, this principle is not elaborated, consistently applied or placed in a broader context.

As you become more aware of your ego, it becomes essential to explore which values and norms are most important to you. This involves motives such as family, justice, social success and care for the climate. This is because it contains thought patterns that feed your inner critic. Everyone looks at the world through their own 'glasses' of goals, assumptions and frames through which you filter everything you perceive. You reject everything that does not fit into your worldview – including facts, news from independent media, your own

⁶³ This chapter is an edited and abridged version of an earlier publication, , From Freedom to Awareness: Towards Personal Leadership, Arthur ten Wolde, in: Integral Leadership Review, June 2012, <https://integralleadershipreview.com/7202-from-freedom-to-awareness-towards-personal-leadership/>

⁶⁴ Christopher Cowan and Natasha Todorovic, The Never Ending Quest: Clare W. Graves Explores Human Nature, ECLET Publishing, Santa Barbara, California, 2005, https://www.clarewgraves.com/neg/NEQ_front.pdf

⁶⁵ Spiral Dynamics: Mastering Values, Leadership and Change 42829th Edition by Prof. Don Edward Beck, Christopher C. Cowan, <https://www.amazon.com/Spiral-Dynamics-Mastering-Values-Leadership/dp/1405133562>

observations and scientific results. If you are not aware of this, it hinders your further spiritual development, even if you have cleared up all your personal issues.

More than fifty years ago, the American scientist Claire Graves developed a model about value systems that was a total eye-opener for me: Spiral Dynamics.⁶⁵ After completing a Spiral Dynamics Integral training, it has changed my life and work.⁶⁶ Graves' model forms a framework for the development of adult behavior of individuals, groups and organizations. It outlines a development from survival, power and freedom to awareness. Different 'I-oriented' and 'we-oriented' thinking styles alternate in a spiral (see figure). The colors make it easier to distinguish between the different value systems. In the Netherlands, management books based on Spiral Dynamics have been published, such as *The Value Matrix*.⁶⁷

In my own essay on this from 2012, I linked the thinking styles - with the personal approval of two of the founders of Spiral Dynamics - to Yin (we-centered) and Yang (I-centered), the two opposing principles or forces from the Chinese tradition that permeate all aspects of life and the universe.⁶⁸ The dynamic shift between Yin and Yang within Spiral Dynamics determines the movement along the developmental spiral. If life circumstances change, at some point the prevailing thinking styles are no longer in line with the environment. A transition then takes place to another dominant value system.

In a nutshell, the most basic driver is instinct to survive as an individual (Yang) in nature (color: Beige). Ever larger tribes of people have formed cultures around nature religions (Purple), in which the collective is central (Yin). Then Yin and Yang alternate through counter-movements. Economies of scale have led to kingdoms and politics in which hierarchical power is central, and a human life has no value (Red). These power structures have subsequently been strengthened by legislation, bureaucracies, jurisprudence, and policing such as those of the Roman Empire, Christianity, and national governments (Blue). The Enlightenment has put free competition at the center, so that science, innovation and capitalism flourished (Orange). We are currently in a transition to a sustainable, harmony-oriented society (Green). Vanguarders are motivated by system change (Yellow) and holistic feeling (Turquoise). Each system of values includes and transcends the previous one.^{69, 70, 71}

The concepts of Yin and Yang are closely linked to the ego through Spiral Dynamics. As individuals, we develop in our youth into the value system of the society in which we grow up. These anchor themselves deeply in our thinking and feeling. Interestingly, the Spiral allows you to distinguish different 'colors' in the drives, ego voices and frames. such as the desire to be good in primary school (Blue) and successful in society (Orange). As Graves stated, the ego disturbs the balance. Triggered by fears, learned shame and frustrations, the ego leads to unhealthy thinking styles, behavior and political preferences that do not correspond to the actual situation. A few examples of ego thoughts in different colors:

⁶⁶ <https://spiraldynamicsintegral.nl/opleidingen/>

⁶⁷ <https://www.bol.com/nl/nl/p/waardenmatrix/1001004002133359/> (in Dutch)

⁶⁸ From Freedom to Awareness: Towards Personal Leadership, Arthur ten Wolde, in: Integral Leadership Review, June 2012, <https://integralleadershipreview.com/7202-from-freedom-to-awareness-towards-personal-leadership/>

⁶⁹ <https://awaken.com/2020/04/ken-wilber-summary-of-spiral-dynamics-model/>

⁷⁰ https://en.wikipedia.org/wiki/Ken_Wilber

⁷¹ <https://onlinelibrary.wiley.com/doi/10.1002/9781118591277.ch9>

- Purple (tribal thinking): 'Immigrants are stealing our homes and jobs'
- Red (power thinking): 'The police must take tougher action against the rioters'
- Blue (authority): 'Oh terrible, I'm late!!'
- Orange (free competition): 'I'm such a loser'
- Green (harmony): 'Arguing is a waste of time, life is too short for that'
- Yellow (systems thinking): 'If this project stops, the energy transition will fail'
- Turquoise (holism): 'I am much advanced than these people in terms of spiritual development'.

Spiral Dynamics shows a tendency to attach excessive importance to the dominant value system of the moment. One or more underlying value systems are suppressed in response. For example, in the Spiral Dynamics test, an overly strong desire for harmony (Green) emerges as a resistance to Red (the unjustified suppression of anger).

Balancing Yin and Yang leads to liberation of the ego, making a harmonious life possible. Balance requires the integration of at least two successive thinking styles (for example, Free Competition and Authority), maintaining the connection with the underlying phases.

Liberation from the ego is possible within any value system as long as the conditions of life do not change. The circumstances determine which value systems are appropriate. So one value system is not 'better' or 'higher' than the other. Liberation from the ego is, as mentioned, centuries old (see Chapter 3). However, even enlightened spiritual leaders face challenges in maintaining balance as they find themselves in new life situations. Perhaps this explains, for example, Bhagwan's collection of Rolls Royces: although he was enlightened in authoritarian Indian society (power thinking), his ego was triggered by the temptations of materialism (free competition). Only when awareness occurs within the fourth stage, the ego finally begins to lose, first cognitively (Yang) and then emotionally (Yin). This transition thus represents an extra leap in spiritual development.

The model of Spiral Dynamics shows the importance of striving for balance between Yin and Yang in liberation from the ego. On a global scale, this is crucial for solving the current world crises such as poverty, war, climate, pandemics, and rising fascism. These crises stem from an excess of masculinity (Yang) in society, which indicates that there is a need for more femininity (Yin) to restore balance. The value systems also determine politics. Extreme examples of leaders of our time who have gone too far in populism are Vladimir Putin, Viktor Orban and Geert Wilders. Worldwide, they appeal to voters with racist and fascist ideas that fall back on tribal thinking (one's own 'tribe' first, stop immigration) and domination (power through violence). Their extreme worldviews lead to polarization. While the political left strives for a transition to a new society in harmony with people and nature, the ultra-right strives for the restoration of a past world order, with traditional values such as family. Democracy and the rule of law (legislative authority) are thereby broken down. These trends underline the importance of personal development in democracies: many voters are unaware of their worldview.

A hopeful trend is the increasing self-awareness among part of the population about their motives, values, fears and frustrations. This is especially reflected in podcasts, on social

media and the growing number of participants in spiritual activities. Unlike the isolated monks and nuns of the past, today's growing group of conscious individuals live and think freely in the midst of temptations.

Finally, I invite everyone to do a free test to map out your value systems.⁷² A side note when interpreting Spiral Dynamics is the ego pitfall that you would be 'higher' on the spiritual ladder if you score 'higher' in the spiral.⁷³ This is generally not the case. The only measure of your value system is the extent to which it is in line with your environment. At the same time, scientists agree that the free market economy leads to oppression, exploitation, colonialism and depletion of natural resources on a global scale. The current living conditions therefore urgently require a transition from the capitalist economy (Orange) to a sustainable one (Green) based on systemic solutions (Yellow). So the question is to what extent your personal value system is in line with the state of the world.

In summary, value systems have an influence on spiritual development and the ego. The model of Spiral Dynamics, developed by Claire Graves, offers insight into the alternation of Yin and Yang in different stages of development, from survival to awareness. Striving for balance between these two forces is essential. While liberation from the ego is possible at any stage, the transition to the fourth stage (awakening) provides an additional leap in spiritual growth. Insight into value systems thus helps to understand personal and social developments. This is all the more important in these confusing times when the need for sustainability and system change is central while some people are reverting to traditional values.

Finally, Spiral Dynamics offers starting points for providers of spiritual content and activities for the framing and layout of their message and marketing.⁷⁴

The next chapter is about science and spirituality, the last two chapters about consciousness and superstition.

⁷² <https://www.thenextevolution.com/spiral-dynamics/sd-self-assessment/>

⁷³ <https://spiral-dynamics-quiz.com/>

⁷⁴ Floor de Ruiter, Valueframing, <https://www.amazon.nl/Valueframing-Floor-Ruiter/dp/901309323X/>

Chapter 6: Science and Spirituality



AI impression of science and spirituality. Source: DALL-E © Arthur ten Wolde

Science and spirituality are at odds with each other. Spiritual people in particular are skeptical about science.⁷⁵ Spirituality is traditionally considered to be esotericism, and Western esotericism is described as 'a collection of practices and ideas in which neither Christianity nor science has confidence'.⁷⁶ The tension between spirituality and science became painfully clear to me during the COVID-19 pandemic, when my spiritual friends appeared to be massively aligned with the anti-vax camp. Long conversations with some of them taught me that they had more faith in their own intuition or their alternative medicine general practitioner than in the government or the national Centres for Disease Control and prevention (CDC).

Where does this mutual tension come from? Aren't both searching for a deeper understanding of reality in their own way? How does science actually work, and what picture of the world has it produced? That is what this chapter is about.

Science flourished in the Western world during the Enlightenment. This period marks the transition from the authoritarian Christian value system ('Blue' in terms of Spiral Dynamics, see Chapter 5) to competitive capitalism (Orange). This brought an end to more than a thousand years in which the church was able to silence critical scientists by appealing to the Bible as the word of God - a higher power, just like the nature gods before it. Trust in science rose rapidly when scientific breakthroughs led to new technologies in the early nineteenth century. These made the industrial revolution possible and improved the

⁷⁵ <https://www.uva.nl/shared-content/faculiteiten/nl/faculteit-der-maatschappij-en-gedragwetenschappen/nieuws/2023/07/vooral-spirituele-mensen-zijn-sceptisch-over-wetenschap.html>

⁷⁶ https://en.m.wikipedia.org/wiki/Western_esotericism

living conditions of many. Friendships between researchers seem to be a source of groundbreaking discoveries.⁷⁷

The belief in progress began to decline in the seventies of the twentieth century, when its negative effects on nature and the environment became more visible. Meanwhile, distrust of science is no longer limited to the left-wing or spiritual bubble: populists do not trust scientists because they belong to the elite; the tobacco and chemical industries have withheld research results for decades for profit; the close ties between medical science and the profit-driven pharmaceutical industry play a role; and the oil industry has actively cast doubt on climate science, who was also reviled by liberals because the results do not fit into their worldview.

An underlying reason for the decline in trust is that the world has become so complex in recent years that no one can interpret the news for themselves. You will always have to decide which sources you trust and which you don't. On top of that, social media has made it possible to publish unsubstantiated opinions online and spread them at lightning speed. As a result, many people now consider factual news to be fake news and fake news to be the truth. Conspiracy theories and the belief that the earth is flat are widespread.

There is something else. In terms of Spiral Dynamics (see Chapter 5), the current rise of spirituality is part of the transition from our free market economy (Orange) to a sustainable society (Green). In addition, the process of finding the truth is also changing. The Yin character of the green value system is both social and more inward-looking. Feeling, intuition and 'inner knowing' are given much more space. They are experienced as truth and are authoritative about the inner experience. However, intuition turns out to be very unreliable as a basis for knowledge about the outside world, and is no more than a personal opinion (see Chapter 8). After all, all eight billion people can appeal to 'inner knowing'. In addition, each subsequent value system (Green) has a natural defense against the previous one (Orange), the excesses of which are directly experienced.

These factors together have greatly reduced trust in science among spiritual people. Incidentally, trust is not completely absent, as evidenced by the persistent emergence of pseudoscience in the spiritual world (see Chapter 8). If the transition to a sustainable society continues, Spiral Dynamics predicts that trust in science as a source of objective knowledge about the world will gradually recover.

What role does my own background play in this? I was trained as a scientist, have a PhD in physics, and did scientific research until I was thirty. I have come to know science from the inside out as a field of work in which people work hard with great enthusiasm. Science is top sport. In addition to the intrinsic drive of scientists, curiosity, researchers are pushed to maximum performance in worldwide competition for honor, reputation, free conferences at ski resorts and research funding. It was a wonderful time, with fierce discussions in which no one felt attacked by criticism, because as a team we all wanted to find out how something worked as quickly as possible. In my case, during my PhD research, seven research groups worldwide worked towards the same goal: direct observation of the movement of an electron in an atom. After four years of hard work, my colleagues and I finally succeeded first – a small breakthrough, which earned us a publication in the leading journal of physics.⁷⁸

⁷⁷ <https://www.eurekalert.org/news-releases/1060121>

⁷⁸ <https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.61.2099>

That publication and subsequent publications have been referred to hundreds of times since then.⁷⁹ The article earned us a good reputation, notoriety and invitations as a speaker.

The distribution of research funds is largely based on your 'citation score': how often are your scientific publications referred to by others. This system leads to enormous pressure on scientists to publish research results. It is important that the desire to publish is kept in check by the fear of reputational damage. This is a brake on the publication of inadequate or falsified measurement results. I have experienced this myself as follows. After our first success, we obtained wonderful follow-up results. However, I thought they were too good to be true, and they raised the necessary questions. When, based on my intuition, I withdrew my name from a possible publication about it, and we checked the results again, we discovered a measurement error. In this way, we prevented reputational damage.

This combination of mutual competition (maximum pace), friendships (cooperation) and fear (self-cleansing character) as motives has led to an explosion of knowledge. It was not all roses and moonshine, by the way: there was also gloomy scheming to become the first author of the next article.

Since I left science in the early nineties, I still read the popular science magazine the *New Scientist* every week to stay informed of new developments. From this knowledge and experience, I want to try to create clarity in the relationship between science and spirituality. To start with, I want to present a clear picture of what science is, what it is not, and then how I see the relationship with spirituality.

Why is science more than an opinion?

Many people think that science is just an opinion. Why is that incorrect and unjustified? Science is defined as the systematically obtained, ordered, and verifiable human knowledge, the associated process of acquiring knowledge, and the community in which this knowledge is collected. The community of scientists has its own methods and habits to arrive at hypotheses, laws, theories and systems.⁸⁰ It is important that the scientific state of affairs is based on consensus. That is the prevailing view of the scientists in a certain field. This agreement is reached through measurements, theoretical analysis, publications in *peer-reviewed* scientific journals, conferences, repetition of the results by others, and mutual testing. Not all scientists in that field need to agree.⁸¹ Progress in science is not only achieved by new results within common ideas, but also by critical scientists who demonstrate that something is not right. Important results are endlessly discussed by experts. So it is not the case that a scientific truth is ever absolutely certain. Scientists don't believe that either. Each scientific model has a validity area within which it has been tested and outside of which it may not be valid.

Unfortunately, there is also fraud: no less than eight percent of the scientists surveyed in the Netherlands have falsified or fabricated data at least once.⁸² Some established theories are still rejected after decades (see Chapter 8).

⁷⁹ <https://aps.altmetric.com/details/41780315>

⁸⁰ <https://en.m.wikipedia.org/wiki/Science>

⁸¹ https://en.m.wikipedia.org/wiki/Scientific_consensus

⁸² <https://www.nature.com/articles/d41586-021-02035-2>

All in all, the scientific method is the best system developed so far to separate the wheat from the chaff. It's not perfect but unprecedentedly purifying, and it has greatly expanded our understanding of the world.

Scientific principles

There are several guiding principles when weighing different statements.

A guiding principle in the knowledge that *an extraordinary claim requires extraordinary evidence*.⁸³ Indeed, scientists are not easily convinced of the incorrectness of an established scientific model. Anecdotal evidence is insufficient. A second, much older guiding principle is the so-called *Ockham's Razor*, which boils down to the fact that the simplest explanation is usually the correct one.⁸⁴ A third principle was developed by the philosopher Karl Popper, who states that *a scientific explanation must be refutable*.⁸⁵ The latter helps to distinguish a scientific explanation from possible other, non-scientific explanations.

I will apply these principles to spiritual ideas in Chapter 8. In this Chapter I now want to discuss a number of general concepts that play a role in both spirituality and science, and specifically in my field of physics: energy, matter, time and space.

Energy

In physics, energy is defined as a quantitative property that is transferred to an object (a body, or physical system such as the water in a lake). Energy is recognizable in daily life by the performance of work, and perceptible in the form of heat, light and sound.⁸⁶ Common forms of energy are the kinetic energy of a moving object, the 'potential energy' stored in a body when it is in a force field (such as height energy in a gravitational field), the elastic energy in a spring or rubber band, the energy associated with chemical reactions, and radiant energy (the energy in electromagnetic radiation such as light and infrared). Energy is transferred in all processes of change. Everyday examples include the work of setting an object in motion, a swing in which the motion is converted into altitude energy to the highest point and then back into motion, and the chemical conversion of fats and sugar into living cells using oxygen to provide organisms with life energy.⁸⁷ All living organisms are constantly absorbing and releasing energy. Energy is a conserved quantity; The classical law of conservation of energy states that energy can be converted into another form, but it cannot be created or destroyed. The official measure to express a measured amount of energy is the Joule, but in everyday life, energy is often expressed in calories for the energy content of foods and in kilowatt-hours (kWh) for electricity.

Matter

Matter is a collective term for that of which the observable universe is built; observable in the sense that matter has mass and occupies space. Matter can be solid, liquid, or gaseous. As a solid and liquid, it is visible and tangible. A space in which no matter is present is called a vacuum in physics. As the ancient Greeks suspected and everyone learns in school, matter is made up of atoms. Atoms combine to form molecules, which form materials and chemical substances, which themselves consist of smaller particles, namely electrons, protons and

⁸³ https://en.wikipedia.org/wiki/Extraordinary_claims_require_extraordinary_evidence

⁸⁴ https://en.m.wikipedia.org/wiki/Occam%27s_razor

⁸⁵ <https://en.m.wikipedia.org/wiki/Falsifiability>

⁸⁶ <https://en.wikipedia.org/wiki/Energy>

⁸⁷ <https://en.m.wikipedia.org/wiki/Mitochondrion>

neutrons. An electron is an elementary particle: it cannot be split. Other elementary particles are quarks and neutrinos.⁸⁸ Particles and molecules can attract, repel and hold each other through various forces such as gravity and electromagnetism. Energy is exchanged and every action leads to a counter-reaction.

Since Einstein, we have known that energy is not always conserved: under the extreme conditions in which nuclear reactions take place, energy and matter can be converted into each other. The well-known formula $E = mc^2$ means that the amount of energy (E) released during a nuclear reaction is equal to the converted mass (m) times the square of the speed of light (c). Conversely, it also means that the amount of matter that can be formed in a star is equal to the energy divided by the square of the speed of light.⁸⁹ All matter in the universe originated in stars: it is therefore true that we are all made of stardust. The discovery of the mass-energy relationship is one such moment when the classical physical theory (the law of conservation of energy) was refuted after scientific consensus was reached on the much broader validity of the theory of relativity.

Time and space

We still don't know what time is. Time as we perceive it subjectively was called *kairos* by the ancient Greeks, time as we measure it objectively *chronos*.

However, science has learned a lot about measurable time. The scientific consensus is that our universe was created about 13 billion years ago by the Big Bang, a huge explosion that marks the beginning of time and space.⁹⁰ At first there was only energy, later it compressed into the first forms of matter, from which stars and galaxies then formed. An important evidence for the Big Bang is the presence of background radiation throughout the universe. This is residual heat from the Big Bang.⁹¹ Time plays a major role in physics. It is a variable quantity that marks change. Surprisingly, in most physics models, time can run both forward and backward without changing the laws. That is mysterious because time always goes in one direction in our perception, namely forward. It probably has to do with the unilateral loss of information during change.⁹² Travelling back and forth in time is not excluded, although it has not been demonstrated and there are many practical obstacles.

A comforting possibility is Einstein's model of the block universe. The theory of relativity describes the past as a fixed, 'frozen' part of the universe. The past is behind us, as it were, while we move forward towards an indeterminate future ('time is a place'). In this image, everything that has ever happened always remains, and nothing is lost. However, there is no consensus on this.⁹³ It is also possible that only the 'now' really exists.

Finally, it is important that our perception of time and space is incorrect. Einstein's theory of relativity has shown that space and time are not separated in reality, but together form spacetime. Because spacetime does not play a role in survival in daily life, we perceive space and time separately. Our brain is therefore unable to perceive reality as it is, or even to imagine it. Only as an abstraction.

⁸⁸ https://en.m.wikipedia.org/wiki/Elementary_particle

⁸⁹ https://en.m.wikipedia.org/wiki/Mass%E2%80%93energy_equivalence

⁹⁰ https://en.m.wikipedia.org/wiki/Big_Bang

⁹¹ https://en.m.wikipedia.org/wiki/Cosmic_microwave_background

⁹² https://en.wikipedia.org/wiki/Entropy_as_an_arrow_of_time

⁹³ <https://bigthink.com/hard-science/a-controversial-theory-claims-present-past-and-future-exist-at-the-same-time/>

Quantum mechanics

In the early twentieth century, quantum mechanics was developed to describe the behavior of atoms and elementary particles. Like the theory of relativity, it is beyond our imagination. One of the amazing features of quantum mechanics is that matter can behave as a particle but also as a wave. Both concepts fall short. Equally incomprehensible is the existence of uncertainties between place and speed, and between energy and time. Change processes are described by a so-called wave function that cannot be directly observed. The square of that wave function then determines the *probability* of a certain measurement outcome... unimaginable. This also means that the future is not fixed. Small-scale events occur spontaneously, without cause. As long as a system is not measured, it can even be in two or more states at the same time. It is possible that these states really exist in parallel worlds that arise at each moment of choice,⁹⁴ even though Ockham's Razor strongly questions this interpretation of quantum mechanics.

Despite these rather bizarre features, the model of quantum mechanics has been confirmed by all measurements for more than 100 years, including the experiments I have done as a physicist myself. When my colleagues and I first directly observed the motion of an electron in an atom, the electron turned out to behave exactly as predicted by quantum mechanics. One of the most enjoyable aspects of quantum mechanics is the existence of entanglement.⁹⁵ If a group of particles influence each other's state, they can only be properly described by the quantum state of the particles together, and not by that of each particle separately. We then call the particles 'entangled'. For example, if you take a measurement that shows that one particle rotates to the right, then you can be sure that the other particle rotates to the left, just as you know to which foot the other sock belongs when you find one sock. It is astonishing that this is a 'non-local' measurement. In this process, you learn something about another particle without exchanging information during the measurement. Information cannot travel faster than light, and entangled particles usually both move in the opposite direction at almost the speed of light. The entanglement has taken place in the past.

Quantum entanglement does not appear to be limited to elementary particles, and may also affect our daily lives. A better understanding of entanglement may lead to explanations of hitherto ununderstood perceptions, such as the advancement of time⁹⁶, consciousness and other phenomena – more on this in chapters 7 and 8.

Another unimaginable phenomenon is that entangled particles can be spontaneously formed anywhere at any time from the so-called zero-point energy. This also happens all the time, even in 'empty' space between the stars. Such pairs of particles lead a temporary existence for a shorter or longer period of time without violating the law of conservation of energy.⁹⁷ So the cosmos is far from empty.

⁹⁴ <https://www.newscientist.com/article/mg26234971-300-we-are-closer-than-ever-to-finally-proving-the-multiverse-exists/>

⁹⁵ https://en.m.wikipedia.org/wiki/Quantum_entanglement

⁹⁶ <https://www.nature.com/articles/s41467-021-22094-3>

⁹⁷ https://en.m.wikipedia.org/wiki/Virtual_particle

Finally, quantum mechanics suggests that everything in the universe is connected. New results show that it can probably be described as one quantum object⁹⁸ from which reality as we perceive it every day emerges.⁹⁹

Conclusions

In summary, the relationship between spirituality and science is complex. Many spiritual people appeal to 'inner knowing', scientists to consensus based on objective results. Although often seen as opposites, both do in fact seek a deeper understanding of reality. It is mainly the narrative, more dogmatic side of spirituality (see Chapter 2) that clashes with science. Inquisitive spirituality is, like science, looking for more understanding. Spirituality and science offer a different perspective and tools, but strive for a coherent picture of our existence. They are complementary in the sense that they investigate one's own, personal inner world (subjective experiences, such as *kairos*) and our collective outer world (objective, repeatable perceptions, *chronos*). Psychology and brain research form an interface because they investigate experiences scientifically, and try to objectify them. A spiritual statement about one's own inner experience is authoritative in the sense that no one can deny it. Similarly, scientific statements - which always relate to the common reality - are more than an opinion, because they are based on a systematic approach to acquiring and testing knowledge. As a result, much is known from physics about concepts such as energy, matter, time and space. Crucially, however, 'inner knowing' about the outside world is only a personal opinion. This also applies to the views of alternative medicine general practitioners on vaccination.

Based on scientific consensus, we arrive at the following worldview, in which I build a bridge to spirituality: Everything in the universe is probably connected, much is entangled, everything is dynamic, and determined by action and reaction. We are all made of stardust. The universe is unimaginably old and large, elementary particles unimaginably small. Many events have no cause. Particles can spontaneously arise and disappear again. The future is not fixed. The past may remain, and time travel is not out of the question. It is possible to learn something about something that is outside your perception. There may be several parallel worlds.

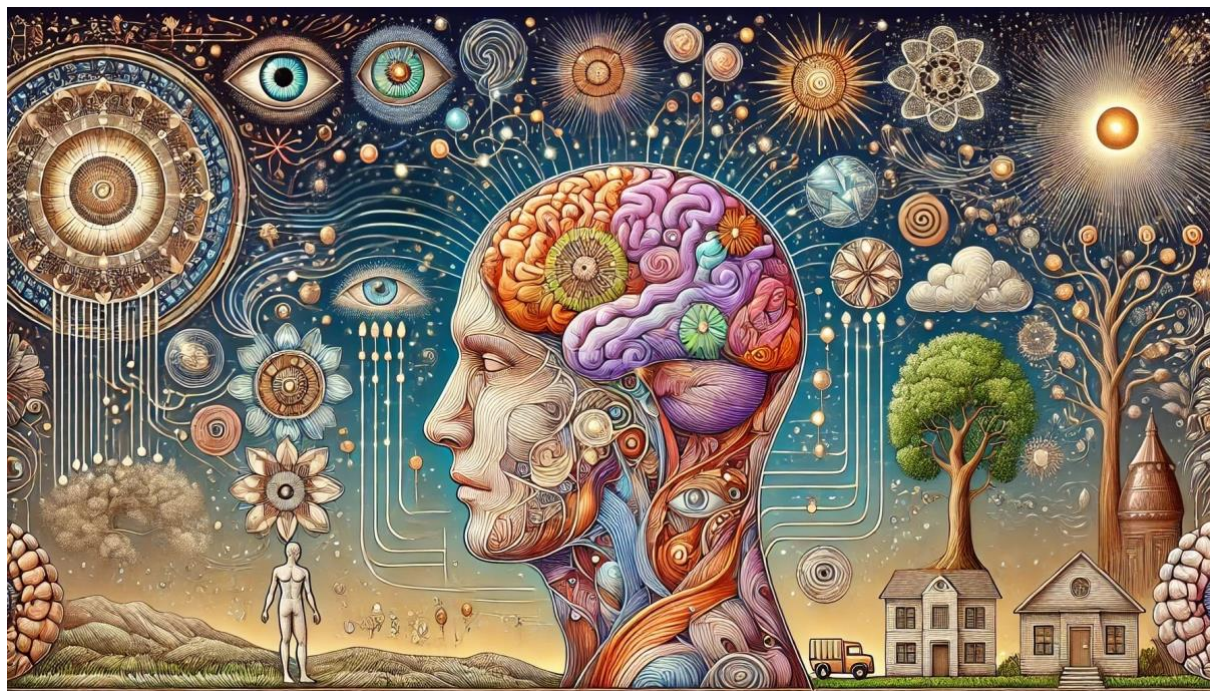
All in all, so much to marvel at. The picture of reality sketched by modern science is deeply mysterious, awe-inspiring, and utterly incomprehensible to our limited imagination. For me, that in itself is a spiritual experience. In both science and spirituality, wonder plays a central role, as does the continuous journey of discovery and the valuable insights it provides. As a scientist, I assume that new scientific results in the field of physics, DNA, the human brain and other fields in the future may provide explanations for things that we do not yet understand. The rapid rise of artificial intelligence will accelerate that process even more. But the amazement will remain, and probably grow even further. The biggest mystery is probably consciousness.

⁹⁸ <https://www.newscientist.com/article/mg25834460-800-rethinking-reality-is-the-entire-universe-a-single-quantum-object/>

⁹⁹ <https://www.newscientist.com/article/mg26134762-400-a-bold-new-take-on-quantum-theory-could-reveal-how-reality-emerges/>

In the final chapters, I will explore these thoughts further, looking for where these two worlds meet, complement, collide, and can strengthen. Chapter 7 takes a closer look at consciousness, awareness and inner experience. In Chapter 8 I let science loose as a test of the vagueness of all kinds of claims in the spiritual world and literature. The essay concludes with conclusions, recommendations and a call for action.

Chapter 7: What is Consciousness?



AI impression of consciousness. Source: DALL-E © Arthur ten Wolde

The previous chapter was about the relationship between science and spirituality. Science is limited to what can be objectively observed and determined. Spirituality focuses on the inner experience, which is by definition subjective.

The complicated relationship between the inner world and the outer world is reflected in 'the hard problem of consciousness'. This problem, raised in 1995 by the philosopher David Chalmers, is the question of the origin of consciousness. Why, why and in what way do humans and other organisms have subjective, conscious experiences? It is opposed to the 'easy problems', such as explaining how our brain, senses, nervous system and organs enable us to distinguish things, process information, and perform actions such as looking, listening and speaking.^{100, 101, 102}

Since 1995, much progress has been made on the easy problems. For example, an artificial intelligence recently reconstructed images that a human had seen based on measured brain activity.¹⁰³ A kind of mind reading. Furthermore, it has become clear that not only humans, but also animals have consciousness¹⁰⁴, and probably also plants,^{105, 106} although there is no consensus on the latter yet.¹⁰⁷ While the hard problem has still not been solved, new

¹⁰⁰ https://en.wikipedia.org/wiki/Hard_problem_of_consciousness

¹⁰¹ <https://iep.utm.edu/hard-problem-of-consciousness/>

¹⁰² <https://www.amazon.com/Reality-Virtual-Worlds-Problems-Philosophy/dp/0393635805>

¹⁰³ <https://www.science.org/content/article/ai-re-creates-what-people-see-reading-their-brain-scans>

¹⁰⁴ https://en.wikipedia.org/wiki/Animal_consciousness

¹⁰⁵ <https://petapixel.com/2024/01/16/scientists-film-plants-talking-to-each-other-in-groundbreaking-footage/>

¹⁰⁶ <https://www.nature.com/articles/s41467-023-41589-9>

¹⁰⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8052213/>

theories about consciousness have been formulated, such as the 'global workspace theory', hyper dimensionality¹⁰⁸ and the 'integrated information theory'.¹⁰⁹

The most intriguing of these is neuroscientist Anil Seth's 'predictive processing theory'.¹¹⁰ This comes down to the fact that the brain is a prediction machine, and that our consciousness arises from the difference between the prediction that the brain generates for the perceptions in the next second, and the actual sensory input that follows. 'The brain uses the sensory signals to calibrate and update these predictions. As a result, we are aware of a kind of perception, in which the brain tries to understand the situation in which we find ourselves. Consciousness is supported by this process of the brain. Sensory experiences can be seen as a controlled hallucination. We do not perceive the world objectively, we actively construct the world we experience, including the sense of self, emotion, and free will. All of this aims to regulate the body,' Anil Seth said in a recent interview.¹¹¹

This interesting theory may be an important step forward, but it is insufficient to solve the hard problem. To achieve this, David Chalmer is looking for a mathematical equation that connects the information properties of the brain with consciousness. 'It could well be that as we get better and better mappings and correlations from physical processes to consciousness, somewhere along the way we will be struck by something that makes us say: hey, here is a principle that might cross the gap,' says Chalmer.¹¹¹ For example, part of the hard problem is the combination problem: how do the processes in the human brain provide the complete conscious experience that each of us has? 'If someone solves that problem, it is an obvious candidate for a theory of consciousness.'

Both experts are open to the possibility that artificial intelligence can develop consciousness. 'The brain is a big machine and produces consciousness, so I am convinced that artificial intelligence can reach consciousness,' says Chalmer. Seth points out that our brain is a very different machine than a computer, so it may be that a silicon brain cannot produce consciousness of the same quality. Current artificial intelligence applications based on Large Language Models, such as ChatGPT, probably do not yet have consciousness, although we don't know for sure. The unexpected intelligence of these models is based on a prediction machine for the next letter, the next word and the next sentence, based on all the texts available on the internet and training by test subjects. The AIs have a lot of imagination and can run wild in a kind of hallucinations. Many experts assume that there is no understanding or consciousness involved, but the similarity with Seth's model of our brain as a prediction machine is remarkable. In the further development of AI, we must therefore take into account that consciousness can arise, especially if the technology is successfully applied to the perception of image and sound in robots, and that this raises ethical questions about the rights of conscious machines.

It is also possible that no satisfactory explanation for the emergence of consciousness will ultimately be found. According to Chalmer and Seth, in that case, we may have to conclude

¹⁰⁸ <https://economictimes.indiatimes.com/news/science/scientist-links-human-consciousness-to-a-higher-dimension-beyond-our-perception/articleshow/113546667.cms>

¹⁰⁹ <https://www.nature.com/articles/s41583-022-00587-4>

¹¹⁰ https://en.wikipedia.org/wiki/Being_You:_A_New_Science_of_Consciousness

¹¹¹ <https://www.worldsciencefestival.com/programs/what-creates-consciousness>

that consciousness is a fundamental property of our universe, with certain fundamental laws about how it relates to matter. Importantly, Seth does not think it is necessary 'at this time to assume anything beyond the material; matter is complex and interesting enough to give rise to consciousness'.

In the latter lies an important link with spirituality. Spirituality in the broadest sense has to do with matters that concern the spirit, can have to do with religion or supernatural forces, and many spiritual people assume that 'there is more between heaven and earth'. However, the assumption that consciousness is a property that arises from matter is very old. Aristotle is the founder of the idea that the whole can be more than the parts, and several scientists suggested as early as 1925 that consciousness arises from properties of the brain.¹¹² A little later, the French paleontologist Teilhard de Chardin described evolution as a process that leads to increasing complexity, which culminates in the emergence of consciousness, which forms the 'inside' of matter.^{113, 114, 115} I agree. We can experience consciousness subjectively, and we can now objectively observe the external phenomena associated with it in detail through brain scans. The assumption that consciousness originates from an immaterial mind or soul has thus become an extraordinary claim that requires extraordinary evidence (see also chapters 6 and 8).

A problem related to consciousness, which also raises questions within both science and spirituality, is that of free will. I have analyzed this in an earlier essay, which I summarize here.¹¹⁶ Both humans and animals behave as they should behave naturally. However, our memory and imagination, which are superior in many ways, give us many more options and degrees of freedom than animals. Because we can take more experiences and predictions into account in our decisions, we have more to choose from and to learn from. The greater number of possible choices remains intact, although the choice is made according to the laws of nature, and our brain often prepares an action even before we have made a conscious decision to do so - as if we are not the driver but a passenger in our lives. The options and degrees of freedom that we can take into account in conscious decisions form our 'freedom'.¹¹⁷ In quotation marks, because it is a poor reflection of our normal idea of freedom and free will. However, this idea that we have free will is just a little more than just a 'beautiful illusion', as some philosophers and scientists claim.^{118, 119, 120} Although your genetic predisposition establishes a rough blueprint of your life, our reactions and behaviors are not predictable in detail, nor are the circumstances. As a result, your life can eventually go in completely different directions. After all, the future is not fixed (see Chapter 6). We also remain responsible for our choices and actions.

¹¹² <https://en.wikipedia.org/wiki/Emergentism>

¹¹³ https://en.wikipedia.org/wiki/The_Phenomenon_of_Man

¹¹⁴ https://en.m.wikipedia.org/wiki/Pierre_Teilhard_de_Chardin

¹¹⁵ https://en.m.wikipedia.org/wiki/The_Phenomenon_of_Man

¹¹⁶ Arthur ten Wolde, Freedom and naturalism, *De Humanist* 2004-1, p. 35-37, February 2004 (in Dutch), <https://circular-future.eu/wp-content/uploads/2024/08/Van-vrijheid-naar-bewustwording-A-ten-Wolde-2012.pdf>

¹¹⁷ Daniel C. Dennett, Freedom Evolves, 2003, https://en.wikipedia.org/wiki/Freedom_Evolves

¹¹⁸ Saul Smilansky, Free Will and Illusion, 2000, <https://academic.oup.com/book/50051>

¹¹⁹ Daniel Wegner, The illusion of conscious will, 1948, <https://archive.org/details/illusionofconsci0000wegn>

¹²⁰ Thomas Metzinger, Being No One, 2003, <https://mitpress.mit.edu/9780262633086/being-no-one/>

In summary, the origin of consciousness is still a mystery. However, progress has been made with new theories and measurements. Scientists and philosophers assume that consciousness is a real phenomenon that arises from complex material processes, that free will and responsibility arise from options and degrees of freedom, and keep open the possibility that consciousness is a fundamental property of the universe. After all, science has shown that the world consists of matter and energy, and is by no means an illusion (see Chapter 6). Consciousness and inner experiences then form the 'inside' of reality, of which objective observations form the 'outside'. As two sides of the same coin, this could be seen as a form of nondualism (see Chapter 8). According to this view, awareness is understood as a particular state of being of your brain and inner self. The discussion about consciousness also touches on important ethical questions about the role of artificial intelligence in the future.

Many spiritual people, on the other hand, assume that consciousness comes from an independent mind or soul, that matter is an illusion that arises from it, and that our freedom is limited by 'karma' or 'the universe.' According to this view, awareness is understood as unification or liberation of the soul. These ideas are at odds with the new insights, and therefore on shaky grounds.

The consequences of these profound differences of opinion about consciousness are discussed in detail in the next chapter, about spirituality and superstition. The essay is then concluded with conclusions and a summary.

Chapter 8: Truth or Superstition?



8.1 Introduction: Measuring Spirituality against the Yardstick

The previous chapter concluded with a tough observation for many: the existence of an independent mind or soul is in doubt by the latest scientific and philosophical insights. This clashes with the philosophy of many people, and thus evokes resistance. If that applies to you too, remember: resistance is growth. Don't stop reading and thinking, but start feeling where the resistance comes from. For example, I still feel personally attacked when someone claims that science is just an opinion, so I still have some spiritual work to do there.

In this last, extra-long chapter, the previous chapters result in a down-to-earth analysis of a whole series of spiritual concepts. Topics such as telepathy, intuition, nondualism, past lives,

the immortal soul, *channeling*, pendulum dowsing, karma, astrology, the fifth dimension, vibrational frequencies, and manifestation are reviewed. They are measured against the current state of science (Chapter 6) and philosophy, including our knowledge of consciousness (Chapter 7). The Chapter concludes with a brief reflection on love and relationships – the most important thing in our lives. We cannot free ourselves individually. A large part must also be done together, and collectively, otherwise others and the system will keep us imprisoned.

8.2 Telepathy

Empirical research on telepathy has yielded intriguing results that support the existence of telepathy.^{121, 122} Several studies have documented small, but statistically significant effects. For example, the 'Ganzfeld experiments' tested whether a 'receiver' in a sensory completely isolated environment can telepathically receive images or video clips that have been viewed by a 'sender' at another location. In some measurement series, the hit rate was significantly higher than the expected one in four based on chance, especially for video clips.¹²³ These intriguing results are indications of the existence of telepathy. Despite this, the topic remains controversial. Scientists are divided because of problems with obtaining the same results when repeating the experiments, methodological challenges, and criticism of the design of the trials, which would allow the results to be distorted. This underlines how critical science is in reaching consensus and how hard it is to scientifically substantiate telepathy.

8.3 Nondualism and Intuition

Nondualism and intuition are complex concepts that are important for spirituality. They come out as beautiful but confusing.

Nondualism: 'everything is one'

Nondualism or nonduality is a principle in philosophy and spirituality. In the literal sense of 'non-duality', it states that 'all is one' and emphasizes the fundamental absence of demarcations and divisions in the world. As a point of view, it considers the boundaries we perceive between ourselves and the other, body and mind, observer and perceived, and other dichotomies as illusions arising from our limited perception of reality.¹²⁴ Many spiritual authors and leaders endorse nondualism. For example, Tony Parsons argues that there is no longer a person when you are liberated, and philosopher Dennett that consciousness is an illusion (see Chapter 7). More generally, nondualism states that the world and the individual are illusions.

In specific cases, nondualism is in line with the state of science. The fact that an object can behave as well as a wave as well as a particle can be seen as an example of nondualism. I also see the increasingly strong indications that consciousness and brain processes are two

¹²¹ <https://www.atlantis-press.com/article/125961411.pdf>

¹²² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144613/>

¹²³ https://psi-encyclopedia.spr.ac.uk/articles/ganzfeld-esp#Are_Ganzfeld_Critiques_Well-Founded

¹²⁴ <https://en.wikipedia.org/wiki/Nondualism>

sides of the same coin, the inside and outside of one phenomenon (see Chapter 7), as an example of nondualism that may well survive.

However, nondualism as a general principle does not hold. First, the statement 'everything is one' is logically inconsistent. Think about it: if it were true, the universe consisted of a homogeneous mass-energy in spacetime, without form, with a fixed temperature, without any structure or change. A kind of permanent gray goo. Change would lead to distinctions and not everything would be one anymore. This is not what we objectively perceive, nor what we are aware of.

Second, the idea that the world and the individual are illusions is itself a confusing illusion. The structures that we objectively observe in the world are based on actual differences between objects and entities. Structures with distinctions and demarcations really exist, even though they are connected. Our brain builds up a highly simplified image of reality every second (Chapter 7). That image does as little justice to reality as an MP3 file does to *live* music, but that does not mean that it is an illusion. Imagine that we see a glass being placed on a table. Scientifically, both objects are made up of atoms and molecules, each of which consists mainly of empty space between the even smaller electrons. Attractive forces between the particles in the table and in the glass hold them each together, so that we perceive them as unchanging objects. The fact that the glass does not sink through the table is due to enormous repulsive forces between electrons: the so-called Pauli exclusion principle prohibits two different electrons from being in the same place at the same time.¹²⁵ In short, there are indeed distinguishable objects in the world that are separated from their surroundings. It is not an illusion. They differ from each other by their composition and properties. Reductionism – the view that the nature of complex entities can always be reduced to more fundamental entities¹²⁶ – is a meaningful perspective on reality, as is holism, and particularly useful for investigating it. The separation between objects is never sharp, but can consist of a single layer of atoms. Entities such as living cells and beings have a wall or skin that is permeable, with transport of matter in and out: we are connected to the outside world. A quantum field probably connects everything in the universe. In short, everything is connected and the world is not an illusion. Material reality also exists without our perception.¹²⁷

Third, the viewpoint of nondualism can have undesirable ethical consequences. In the super fun podcast 'Philosophy with mayonnaise', Patrick Kicken and Paul Smit argue in several episodes that, seen from a liberated state and nondualism, adultery and the holocaust are just 'things that happen'.^{128, 129} In doing so, they wrongly ignore one's own responsibility (see Chapter 6) and the importance of values (see Chapter 5).

Fourthly, it has already been discussed in Chapter 6 that the individual is not an illusion. Almaas, for example, assumes that everyone has an essence that is indivisible and indestructible.

Personally, I suspect that the idea of unity stems from the Buddhist tradition of bringing about enlightenment through paradoxes. That may have been effective. The thought is also comforting. I know many spiritual people who are supported by it. It is attractive because it makes it easier to deal with negative emotions. If reality is just a kind of dream, you don't

¹²⁵ https://en.wikipedia.org/wiki/Pauli_exclusion_principle

¹²⁶ <https://en.m.wikipedia.org/wiki/Reductionism>

¹²⁷ <https://en.m.wikipedia.org/wiki/Materialism>

¹²⁸ <https://open.spotify.com/show/6BwXnIRbgU1DECpw1D57S?si=9affd4dfd3d442de> (in Dutch)

¹²⁹ <https://www.youtube.com/watch?v=OPz87yVFPzc&t=366s>

have to worry as much about adversity. In the context of inquisitive spirituality, however, it is confusing, and the clash with the logic and state of science is fundamental.

Some modern approaches attempt to bridge the gap between science and spirituality by interpreting nondualism as a metaphorical way of emphasizing the complexity and interconnectedness of everything in the universe, rather than a literal denial of individuality and distinction. From this point of view, nondualism should not be taken literally, but as a tool to reach a certain state of consciousness.¹³⁰

In my opinion, the statement 'everything is one' should be replaced by '*everything is connected*'. This is scientifically probable (see Chapter 6) and comforting to the extent that you do not have to feel lonely and alone. Connected then means: every object has an inside and a border, an outside, a beginning and an end; And it is through exchange of energy and matter through the boundary in contact and interaction with other parts of reality. Nothing stands alone. But the perceived world and the individual are not illusions. This view also does justice to the deep experiences of unity by many, including myself.

Intuition

Intuition is a complex concept that can take different forms.¹³¹ Although it is often underestimated in science, mainly due to the difficulty of measuring it objectively, it plays a crucial role in our daily lives. Intuition can refer to a direct, emotional insight into a situation that arises without conscious reasoning, also known as the 'gut feeling'. In addition, it can also refer to the automatic, unconscious processing of information by our brain, whereby previous experiences and patterns are taken into account in decision-making. Finally, intuition in a spiritual sense is sometimes understood as inner wisdom or a sixth sense that brings us into contact with deeper truths or universal knowledge.

Spiritual practices can strengthen your intuition by 'peeling off' your ego, and opening you up to your inner feelings and emotional reactions to the circumstances. This can lead to faster and often better decisions in situations where timely action is essential, such as in personal relationships or assessing subtle social signals. Intuition in the sense of 'feeling' is therefore an important, reliable source of knowledge about your inner world and social interactions.

However, intuition is unreliable as a source of knowledge about the outside world, especially when it comes to complex issues such as climate change or the risks of vaccination (see Chapter 6). In such cases, intuition can easily mislead us because these judgments are often formed by prejudices, incomplete information, or emotions such as fear and mistrust. Scientific research shows that our gut feeling is often wrong in these cases, and that a rational, science-based approach is necessary to reach a correct conclusion.¹³² The term 'inner knowing' often used by spiritual people as a basis of knowledge for their views on how the world works means nothing more than 'belief', in my opinion, although they strongly deny this. After all, all eight billion people can appeal to 'inner knowing'.

In short, while intuition can be valuable in personal and emotional contexts, it must be carefully considered and tested when it comes to forming opinions on complex scientific or

¹³⁰ https://www.youtube.com/watch?v=hMIR_BS0uEM

¹³¹ <https://en.m.wikipedia.org/wiki/Intuition>

¹³² https://en.wikipedia.org/wiki/Thinking,_Fast_and_Slow

societal issues. Unless you have sufficient knowledge and experience about the subject or issue, you will have to rely on experts.

8.4 Far-reaching Claims without Far-reaching Evidence

The belief in reincarnation, God, an immortal soul and contact with the deceased is thousands of years old and very much alive. However, when critically examined, they do not hold up in the light of science.

Reincarnation

The belief in past lives and reincarnation after death originates from Hinduism and Buddhism, and is widespread in the Western spiritual community. The idea behind it is that human life is a learning experience. A soul reincarnates into another living being in order to 'learn' new things and gain new experiences through that other living being. The goal of reincarnation would be spiritual development, or the eventual liberation from this cycle and the attainment of a state of enlightenment. A related concept is *karma*, a principle of cause and effect from Hinduism and Buddhism. Karma states that an individual's physical and mental actions have consequences for this life and subsequent lives through reincarnation. Your current circumstances are therefore partly a kind of destiny to allow you to continue practicing where you left off in your previous life.¹³³

Reasons for believing in reincarnation and encouraging belief in it include *déjà-vu* experiences, clear visions of past events, fear of death, the positive aspect of a learning path, and the facilitation of accepting adversity. However, despite the many verified anecdotal testimonies of people who remember their past life, experience contact with ancestors, recognize their family members or know where they lived, reincarnation remains a matter of faith and philosophy.¹³⁴ It is unclear what exactly reincarnates, and the mechanism of reincarnation is completely unknown. The concept of karma as destiny has some affinity with the modern notion that our freedom is limited by natural laws (Chapter 7). However, it is at odds with science because it shows that the future is not fixed (Chapter 6).

God

From a scientific point of view, the belief in God is an extraordinary claim without extraordinary evidence.¹³⁵ Moreover, the statement that God exists cannot be disproved, and therefore does not qualify as a scientific hypothesis according to Popper (see Chapter 6). Spinoza's image in which God coincides with the world and our thinking comes much closer to today's ideas. Personally, I think it is important not to believe in 'something higher' outside of us, but instead to explore our inner essence and the world.

Immortal soul

The belief in an immortal soul is widespread in many religions and endorsed by many anecdotal near-death experiences. Reasons for believing in it are similar to those of reincarnation. At the same time, the existence of an immortal soul is unproven. Moreover, it becomes increasingly unclear what the concept of 'soul' means at all as we learn more about

¹³³ <https://en.m.wikipedia.org/wiki/Karma>

¹³⁴ <https://en.m.wikipedia.org/wiki/Reincarnation>

¹³⁵ <https://theconversation.com/four-centuries-of-trying-to-prove-gods-existence-101746>

consciousness. A possible scientific explanation for the near-death experiences is a final, intense activation of the entire brain during dying, in which each brain cell fires simultaneously one last time, and the dying person experiences everything all at once that they have ever experienced, felt and thought.

Contact with ancestors and deceased

It is also completely unclear how people could make contact with deceased ancestors. Reasons to believe in contact with the deceased are grief and unprocessed traumas related to the deceased, and witness statements from people you know. Possible explanations lie in quantum mechanical entanglement between living humans now and ancestors in the Einstein block universe of the past (see Chapter 5), in the collective subconscious (e.g., about witch burnings), epigenetics (recording experiences in the outside of human DNA), and in human imagination.

8.5 Pseudoscience

Pseudoscience is the name for views, statements, or actions that are scientifically controversial, but of which adherents nevertheless claim or suggest that it is science – superstition disguised as science.¹³⁶ The examples of synchronicity, astrology, manifestation, the law of attraction, pendulum dowsing, the polyvagal theory, and vibrational frequencies will then be measured against the yardstick of (real) science.

Synchronicity

Synchronicity is a principle that coinciding events that are experienced as meaningful are not based on chance. Synchronous events, according to Carl Jung and his followers, are inexplicable because our intellectual faculties cannot comprehend their common cause. There are several reasons why this principle is considered pseudoscience. First, scientists explain the occurrence of synchronicity from a psychological 'confirmation bias'. This implies that we are naturally inclined to notice and believe that which confirms our beliefs. We don't even perceive counter-examples. Second, conscious beings are constantly looking for meaning in their relationships with their environment – but that does not mean that it is there. Probability theory also shows that the unexpected, chance coincidence of events is inevitable and occurs more often than you might think. Thirdly, it is interesting that synchronicity resembles quantum mechanical entanglement (see Chapter 6). However, the validity of entanglement has not yet been demonstrated on the scale of everyday life, let alone that of stars and planets. Fourth, synchronicity is controversial in the sense that a series of studies have failed to provide conclusive evidence. Fifthly, and crucially, synchronicity cannot be properly proven or disproven in advance. This means that it does not meet two basic principles of science (see Chapter 6).¹³⁷ Synchronicity is therefore a pseudoscientific idea that also calls into question the belief in astrology, the I Ching and the Tarot (see below).

¹³⁶ <https://en.m.wikipedia.org/wiki/Pseudoscience>

¹³⁷ <https://en.wikipedia.org/wiki/Synchronicity>

Astrology

Many still believe in astrology. However, it is contrary to current scientific understanding and is considered pseudoscience.¹³⁸ First, it was undermined through a double-blind study. Scientists had profiles drawn up by qualified astrologers and psychologists of more than a hundred test subjects. Mutual comparison showed that there was no statistically significant relationship between them. In other words, most of the astrological profiles were incorrect, and that some of them matched the psychological ones surprisingly well was based on chance.¹³⁹ Second, as if this were not enough, it is completely unclear how the position of the stars during your birth could affect your life. Their light is not even visible during the day and their gravitational field is negligible. Where the gravity of the moon determines ebb and flow, a causal relationship between the phase of the moon and the menstrual cycle of women has been questioned in recent years.¹⁴⁰ The only influence of the Sun's gravity is the occurrence of spring tide when the Sun and Moon are aligned, and neap tide when they are perpendicular to each other.¹⁴¹ And our sun is the nearest star; the next one is four light-years away. Thirdly, it is incomprehensible why it matters where on earth you are born, because the stars are around the earth on all sides. Fourthly, more than 15 thousand babies are born every hour, all of whom are going to lead completely different lives. Fifthly, studies of identical twins show that their life course depends to a large extent on their DNA, and to a lesser extent on the time of year they were born. Sixth, the belief in astrology can be explained in part by the Barnum Effect, which implies that most people tend to judge descriptions of their personality that are supposedly tailored specifically to them as accurate, when in fact they are vague, and general enough to apply to a wide range of people.^{142, 143} Seventhly, as anecdotal rebuttal evidence, I once had a profile of myself drawn up by a recognized astrologer out of pure interest and it didn't make sense at all. Eighthly, Carl Jung explained the effect of astrology from the principle of synchronicity: it is not the planets that cause the events, but there is simultaneity between the events and the planets. However, synchronicity is now considered pseudoscience (see above). Based on this, the conclusion is that there is scientific evidence that astrology is outdated superstition, a mechanism is not even imaginable, and any extraordinary evidence of its operation is lacking – everything is anecdotal. The related *Human Design* theory, which states that your possibilities and limitations are already fixed at birth, is also a young form of pseudoscience.¹⁴⁴

Manifestation and the Law of Attraction

Manifestation usually means 'to become manifest', or 'the embodiment of an intangible, or variable thing'.¹⁴⁵ Since the popular movie *The Secret*¹⁴⁶, however, its meaning has changed into 'willing something into existence' by linking it to the pseudoscientific 'law of attraction.' This 'law' states that positive or negative thoughts bring positive or negative experiences into a person's life. The belief in this is based on the idea that people and their thoughts are made of 'pure energy' (see below) and that similar energy can attract similar energy, allowing

¹³⁸ https://en.wikipedia.org/wiki/Astrology_and_science

¹³⁹ https://en.wikipedia.org/wiki/Shawn_Carlson

¹⁴⁰ <https://www.healthline.com/health/womens-health/menstrual-cycle-and-the-moon#spiritual-traditions>

¹⁴¹ <https://en.m.wikipedia.org/wiki/Tide>

¹⁴² https://en.wikipedia.org/wiki/Barnum_effect

¹⁴³ <https://skepsis.nl/astro-smit/> (in Dutch)

¹⁴⁴ <https://humandesigntodayy.substack.com/p/a-critical-analysis-of-the-human>

¹⁴⁵ <https://en.wiktionary.org/wiki/manifestation>

¹⁴⁶ [https://en.wikipedia.org/wiki/The_Secret_\(2006_film\)](https://en.wikipedia.org/wiki/The_Secret_(2006_film))

people to improve their health, social success, income or personal relationships. However, there is no empirical scientific evidence to support the 'law' of attraction. It is generally considered pseudoscience or religion, expressed in scientific language.¹⁴⁷ After all, the scientific laws of attraction indicate how particles can attract or repel each other via gravity or electromagnetic forces – something completely different.¹⁴⁸

The attraction of the spiritual 'law of attraction' is that you can exert a positive influence on your life: ambition and self-help are the driving forces. To some extent, of course, this is true. 'Who does good, meets well'. A positive appearance to positive reactions. I experience it as hopeful that everyone greets me on the street when I am present and happy, up to and including small children, and cyclists who overtake me from behind. This means that despite all their frustrations, people still feel the mood of another person flawlessly when they are on the road. It is therefore very easy to convince yourself that manifestation works – especially if chance occasionally gives you a helping hand, and ignores your failures. However, the fallacy is that the spiritual 'law' ignores the 'Circle of Influence and Concern', a method for effective leadership developed by Stephen Covey.¹⁴⁹ The circle of concern contains all aspects from your environment that affect you and which concern you to a greater or lesser extent. Some of them you can influence, others you cannot. You have to make that distinction first. The circle of influence is smaller than the circle of concern. Within your circle of influence you can make choices and influence your circumstances, outside it is wasted effort. Covey's method teaches you to focus on things within your circle of influence. Manifestation usually does not make that distinction.¹⁵⁰ And that leads me to what bothers me most about this superstition, namely the mindfuck: if you can't do something, it's your fault. Then your 'energy is not pure' and your wish is not yours, but your ego's. That is a perverse trait that can only depress sensitive people further.

So what is in line with science? If you feel good about yourself and are empowered, you will automatically become much more successful because you know how to seize every opportunity to achieve your goals that comes along, and do not get distracted by ego-driven emotions or side issues. I learned to windsurf as a boy and have seen my life as surfing the waves for years: be present, pay attention, make sure you are in balance; select the waves that can help you move in the direction you want to go; take action in time; Don't be too disappointed if it doesn't work out for a while, get back up if you fall, and wait quietly for the next wave.¹⁵¹

Pendulum dowsing

Pendulum dowsing¹⁵² is often used in spiritual circles as a tool for making choices. The idea is that a pendulum, a weight on a cord, moves back and forth above a question or choice and thus provides an answer. Although some people swear by this method, the mechanism behind pendulum dowsing is unclear and scientifically unproven.

¹⁴⁷ [https://en.wikipedia.org/wiki/Law_of_attraction_\(New_Thought\)](https://en.wikipedia.org/wiki/Law_of_attraction_(New_Thought))

¹⁴⁸ https://en.wikipedia.org/wiki/Law_of_attraction

¹⁴⁹ <https://www.coachcenter.nl/inspiratie/de-cirkel-van-invloed-en-betrokkenheid/>

¹⁵⁰ <https://michellelasley.com/2020/09/the-shadow-side-of-attraction-debunking-the-law-of-attraction-with-laura-rowe/>

¹⁵¹ <https://www.htsresort.com/what-surfing-teaches-you-about-life/>

¹⁵² <https://en.m.wikipedia.org/wiki/Dowsing>

The most likely explanation is that pendulum dowsing is an expression of the user's subconscious, where small unconscious movements of the hand set the pendulum in motion. As a result, the answers given by the pendulum can say more about the user's preferences or fears than about an objective truth.

In addition, coincidence plays a role and pendulum dowsing can sometimes lead to a *self-fulfilling prophecy*: when someone receives a certain answer from the pendulum, this can influence their behavior and decisions in a way that triggers the predicted outcome. So, while pendulum dowsing can provide a sense of direction, it's important to realize that it's not a reliable method for making important decisions, and that the answer is likely to come mostly from the subconscious. Just like pendulum, the dowsing rod and the study of earth rays are also seen as pseudoscience.¹⁵³

Polyvagal theory

The polyvagal theory relates to a hypothesized role of the vagus nerve in regulating feelings, social connection, and fear responses. The vagus nerve is an important nerve that sends information about the state of the organs in the body to the central nervous system, and sends signals back to the organs.¹⁵⁴ The theory, introduced in 1994 by professor of psychiatry Stephen Porges, states that our nervous system automatically chooses to fight or flee in the face of danger. However, for several years now, there has been consensus among experts that the assumptions of the polyvagal theory are untenable. The theory is not endorsed by current social neuroscience.¹⁵⁵ Meanwhile, the theory remains popular among some clinical practitioners and patients. It is therefore an example of a scientific theory that has degenerated into pseudoscience.

Vibrational frequencies and pure energy

A lot of incorrect, confusing information is spread about vibrational frequencies. For example, a random Dutch website states 'Everything in the world is energy (scientifically proven) and has an energy field. Objects, people and animals. This energy field consists of vibrations and therefore also has its own vibrational frequency.'¹⁵⁶ This statement is incorrect, let alone scientifically proven. Matter is not energy (Chapter 6). Energy is also different from an energy field, and 'everything has an energy field' is correct only in the sense that all matter exerts a gravitational field, and that the universe can probably be described with a quantum state. Finally, that there would be 'an energy field with vibration and its own vibrational frequency' is also incorrect. A field generally does not have one frequency but a frequency spectrum. These kinds of pseudoscientific texts are therefore extremely confusing.

So what are the scientific facts? Science shows that everything seems connected and that entangled particles can be spontaneously formed anywhere at any time from the so-called zero-point energy. But that's something completely different. The text further claims: 'Your emotions and thoughts also consist of vibrations and therefore influence your energy field. We also call this the law of vibration, of which the law of attraction is a part.' That's nonsense. Vibrations have nothing to do with your emotions, mood or frustrations, as is also

¹⁵³ <https://pubmed.ncbi.nlm.nih.gov/17170773/>

¹⁵⁴ https://en.m.wikipedia.org/wiki/Vagus_nerve

¹⁵⁵ Paul Grossman, 2023, Fundamental challenges and likely refutations of the five basic premises of the polyvagal theory, Science, <https://www.sciencedirect.com/science/article/pii/S0301051123001060>

¹⁵⁶ <https://sanyasa.nl/wet-van-aantrekking/vibratie-frequentie-trilling/>

claimed elsewhere.¹⁵⁷ A person has no frequency. You don't emit any light or radiation, except heat. Your body temperature is the only meaningful measure of the energy in your body, and it is fixed at about 36.8 degrees Celsius.

The popularity of vibrational frequencies and higher dimensions in spiritual circles indicates the need for false certainty, a penchant for seemingly quantitative statements. However, the word vibration is used here in a completely different, non-scientific sense.

A better concept instead of vibrational number, vibrational level or pure energy seems to me: *the degree of presence in the here and now*. After all, in spirituality it does not matter how happy someone is or how well you are doing, but how you deal with the circumstances. And that depends on your presence (Almaas) in the here and now (Tolle). The vibrational number of the earth as a whole then becomes meaningless, because the earth is always present in the here and now. The degree of presence cannot be measured, but it can be experienced subjectively. Instead of talking about striving for a higher vibrational number or pure energy, I strive for full presence.

Other forms of pseudoscience

The same goes for the 5th dimension, 'from 3D to 5D', a vague story about a transition from a three-dimensional to a fifth-dimensional state of consciousness.^{158, 159} This has nothing to do with physical dimensions or the science of consciousness (see Chapter 7) and can best be understood symbolically. Other forms of pseudoscience include neuro-linguistic programming (NLP)¹⁶⁰ and the medical practices of Joseph Dispenza¹⁶¹. There are probably many more.

8.6 Superstitions

In Chapter 2, the distinction was made between inquisitive and narrative spirituality. Inquisitive spirituality is propagated by Almaas, Jan Geurtz, the Dzogchen¹⁶², nondualism¹⁶³ and the Mahamudra¹⁶⁴ from Buddhism, among others. Spiritual leaders encourage curiosity, wanting to know how everything works, and recognizing 'not knowing.' This requires courage and openness, also to yourself. Their methods can contribute to liberation from the ego. Narrative spirituality, on the other hand, emphasizes stories, and is characterized by a belief in dogmatic principles. Spiritual leaders of this second form create unsubstantiated narratives like the 5th dimension. Belief in *karma*, *channeling*, the magical powers of stones, the *I Ching*, tarot and the pseudoscience examples discussed before are forms of superstition. Dogmatic adherence to these concepts in modern times is an expression of clinging to apparent certainties, and thus of living from fear. They block actual liberation.

¹⁵⁷ <https://mindfulnessbox.com/emotional-vibration-chart/>

¹⁵⁸ <https://subconsciousservant.com/3d-to-5d/>

¹⁵⁹ <https://ideapod.com/the-5th-dimension-spirituality/>

¹⁶⁰ https://en.m.wikipedia.org/wiki/Neuro-linguistic_programming

¹⁶¹ <https://www.thedailybeast.com/how-joseph-dispenza-seduced-america-with-pseudoscience>

¹⁶² <https://en.m.wikipedia.org/wiki/Dzogchen>

¹⁶³ <https://en.m.wikipedia.org/wiki/Nondualism>

¹⁶⁴ <https://en.m.wikipedia.org/wiki/Mahamudra>

Everything happens for a reason

Many spiritual people believe that everything happens for a reason. It is very attractive to believe that, partly because it relieves the pain of unpleasant circumstances.¹⁶⁵

However, it is superstition. A 'reason' for your personal misery presupposes a 'plan' of the universe for your personal life, including your *karma* arising from your past lives, which is in no way consistent with the state of science. In addition, not every event has a cause and the future is not fixed (Chapter 6). Personally, I consider discomfort and setbacks as a great opportunity to learn from. That's how I give meaning to it myself. Furthermore, every loss leads to gain, just as illness leads to more rest. To speak with former Dutch football players Johan Cruyff and Willem van Hanegem: Every disadvantage has its advantage.

Channeling

Channeling¹⁶⁶ is the act of receiving messages from invisible spiritual entities and spirits to living persons, who are called mediums. It is described by the Dutch Platform Spiritual Growth as 'reaching an expanded state of consciousness through which you can make contact with guides, your higher Self or with the source of everything.'¹⁶⁷ So far so good, but the text continues: 'By making contact you end up in a higher vibrational field that opens your channels through which you receive information from the highest source'. For the vibrational field and frequencies see above. Furthermore, it presupposes guidance, without proof. The belief in angels, gnomes and spirits falls into the same category.

I-Ching or 'the universe'

The Book of Changes (also Yijing or I Ching) is a fascinating classical text from ancient China. The book is used as an oracle or as a wisdom book. It describes all conceivable life situations in 64 characters, as well as the changes between them. I have studied it for weeks and tried in vain to find deeper patterns in it. However, instead of looking for which of the signs best corresponds to the situation you are in or about which you want to ask a question, you let chance determine which sign is assigned to it. The book then 'shows you' what the situation looks like at that moment, gives meaning to it, and indications for possible actions.¹⁶⁸ The idea is that this is not a random coincidence but 'the will of a deity', 'the universe' or 'synchronicity' (see above). There is no scientific basis for this.¹⁶⁹ It is therefore no more than superstition. The belief in the I Ching can easily be explained by the Barnum effect, the confirmation bias and the self-fulfilling prophecy (see above). At the same time, the I Ching contains a wealth of wisdom that you can tap into in other ways: ask an A.I. such as ChatGPT which situation yours most corresponds to, and what kind of advice is given.

Tarot

Just like astrology and the I Ching, Tarot cards are used as oracles without any scientific basis to learn something about the subject. Here, too, synchronicity is cited as a pseudoscientific explanation. Anecdotally, a friend and I had a tarot card laid out two years ago for fun and compared the results with the actual events a year later. Mine had come true, his not at all.

¹⁶⁵ <https://ideapod.com/everything-happens-for-a-reason-7-reasons-to-believe-in-this-philosophy/>

¹⁶⁶ https://en.m.wikipedia.org/wiki/New_Age#Spirit_and_channeling

¹⁶⁷ <https://spiritueelgroeien.nl/kennisbank/definities/channeling/>

¹⁶⁸ https://en.m.wikipedia.org/wiki/I_Ching

¹⁶⁹ <https://cdn.centerforinquiry.org/wp-content/uploads/sites/29/2009/07/22164430/p40.pdf>

In short, fun as a party game and a reason for personal conversations, but no more than entertaining superstition.

Magical and healing powers of stones

This is widely believed. However, there is no scientific basis.^{170, 171} The nature of these forces and the mechanism behind their supposed effects are completely unclear. Stones consist of dead matter and have no consciousness. They do not emit fields, except in some cases magnetic ones. However, many people, including myself, have an innate fascination with stones, possibly as a remnant of our evolution because stones were essential for our survival in the age of hunter-gatherers as a basis for weapons and tools. The commercial trade in healing gemstones, crystals and minerals is therefore, in good faith or knowingly, a form of fraud and quackery.

8.7 Truth-finding

So how can you evaluate claims about the outside world? The world has become far too complex to be able to judge statements outside your own field. That applies to everyone, including scientists outside their own field, and certainly to myself. After all, it is impossible to immerse yourself in a subject such as virology or climate to such an extent that you know as much about it as a specialized scientist. For that, you have to do lifelong research and publish about it in scientific journals, the only basis for scientific consensus (Chapter 6). And even then, your research results would not be expected to overturn the prevailing views, as Einstein successfully did with his theory of relativity. The confusion arises because concerned, intelligent non-experts see their point confirmed after delving into professional literature via cherry picking. They lack the overview and insight to fathom the conclusions of professional scientists. It therefore makes no sense to delve into their arguments or into the field yourself.

Instead, it is essential to rely on reliable sources when finding the truth. Rely therefore on science and democratic government institutes, such as the US CDC and NOAA (National Oceanic and Atmospheric Administration), and on independent journalists and the free press¹⁷⁶, such as Reuters, the Washington Post, New York Times or the Dutch National Press Organization NPO. There are no better sources.

8.8 Love and Relationships

This essay is about the individual path to liberation from the ego. Although all kinds of joint activities were offered in Chapter 4, such as dancing, tantra and *retreats*, the emphasis was on one's own inner self. However, we cannot free ourselves individually.¹⁷² Love and relationships are the most important thing in our lives. Others form a mirror for yourself: in every contact with others you get to know a unique aspect of yourself, whether it is a relationship, friendship, family, colleague or meeting on the dance floor. By connecting with others from a connection with yourself, your ego is always triggered. This can include, for example, irritation, jealousy, separation anxiety, fear of commitment, insecurity and falling in

¹⁷⁰ <https://www.popularmechanics.com/science/a40476838/what-science-says-about-healing-crystals/>

¹⁷¹ <https://www.healthline.com/health/healing-crystals-what-they-can-do-and-what-they-cant#science>

¹⁷² Timothy Snyder, On Freedom, <https://www.amazon.com/Freedom-Timothy-Snyder/dp/0593728726/>, and in podcast https://open.spotify.com/episode/6MvbpO1liuptlY73l8Ktqe?si=dRn4mk4NS16BU-JqD_559A&t=2866

love. Relationships therefore work as a 'lens' on the ego. Everything that touches you in the contact is a reason for spiritual inquiry and personal growth with which you can get further than alone.

Scientific research into love is relatively scarce but has yielded several insights. Romantic love can be divided into three categories: lust, attraction, and attachment. Each category is identified by a set of hormones released by the brain. Lust releases testosterone and estrogen, while in the second stage, attraction, dopamine, serotonin, and norepinephrine are released – the hormones that give us warm, in love, and fuzzy feelings. In the final stage, the attachment, the brain releases oxytocin and vasopressin.^{173, 174} While oxytocin gives us a surge of positive emotions, vasopressin is associated with generosity and monogamy. Biologically, it helps support the vigilance and behaviors necessary for guarding a mate or a territory.¹⁷⁵

Nice to know and be aware of, and it shows how material processes form an 'objective exterior' of our most personal experiences such as infatuation and friendship. However, this knowledge does not offer practical tools for relationships. Fortunately, countless books and podcasts have been published about relationships and spirituality in recent years, including 'Addicted to Love' by Jan Geurtz.^{176, 177, 178} They show that our search for love and recognition almost always stems from a fundamental self-rejection. We try to compensate for this by appreciation from others, and especially by successful love relationships where the other person chooses you. By becoming aware of this mechanism, you can enter into relationships in a spiritual way, and help yourself and each other develop further. This is even more true for ethically non-monogamous relationships, in which you also engage in the underlying feelings of jealousy.^{179, 180, 181} A powerful method to prevent or solve relationship problems by examining and naming the underlying feelings is *Emotionally Focused Therapy* (EFT).¹⁸²

8.9 Conclusion of this Chapter

Testing spiritual concepts against the current state of science has yielded the following. There is empirical evidence for telepathy, although it is still controversial because there are problems with repeating the experiments. Nondualism and intuition are complex, beautiful, but confusing concepts: reality is not an illusion, and intuition is not always reliable.

Reincarnation, the existence of God, the immortal soul and contact with ancestors and deceased people come out as far-reaching claims without scientific evidence. Synchronicity, astrology, *Human design*, manifestation, the law of attraction, vibrational frequencies, the fifth dimension, dowsing, the investigation of earth rays, polyvagal theory, neuro-linguistic programming and the practices of Joseph Dispenza fall under the heading of pseudoscience.

¹⁷³ <https://www.mymed.com/health-wellness/interesting-health-info/chemistry-or-cupid-the-science-behind-falling-in-love-explored/the-stages-of-love>

¹⁷⁴ <https://hms.harvard.edu/news-events/publications-archive/brain/love-brain>

¹⁷⁵ <https://pmc.ncbi.nlm.nih.gov/articles/PMC5743651/>

¹⁷⁶ Jan Geurtz, <https://jangeurtz.nl/boek-verslaafd-aan-liefde-4/> (in Dutch)

¹⁷⁷ Qruun, Podcast on New Monogamy, <https://open.spotify.com/show/Ori4fckJeigiE1Nw5Tw7go> (in Dutch)

¹⁷⁸ Jessica Fern, Polywise, <https://www.bol.com/nl/nl/p/polywise/9300000157216100/>

¹⁷⁹ Mannenbrein, podcast, <https://open.spotify.com/show/5jcuaWcOMWfF8YV24hBXV7>

¹⁸⁰ LUST, podcast, <https://open.spotify.com/show/0o4wGrQoUp0N76X966ykHp> (in Dutch)

¹⁸¹ Esther Perel, The State Of Affairs: Rethinking Infidelity, <https://www.amazon.com/State-Affairs-Rethinking-Infidelity-anyone/dp/1473673550/>

¹⁸² https://en.wikipedia.org/wiki/Emotionally_focused_therapy

Finally, karma, channeling, magical powers of stones, the I-Ching and Tarot are forms of superstition.

The main conclusion is that the belief in many spiritual concepts is built on quicksand. If you believe in one or more of these things, you probably won't want to give it up anytime soon. However, if you then dogmatically cling to it as absolute truths, it will block your spiritual development. What Almaas asks is to put them on hold as personal beliefs, and to focus on what you experience and to base it on what you are 100% sure of (see Chapter 2). To avoid confusion and promote actual spiritual growth, a critical, inquisitive approach is essential. Without facts, you can never be free because you remain trapped in an untruthful worldview and you cannot defend yourself against rich, powerful people.¹⁷² It is therefore important to base your beliefs on science and the free press.

This was the last chapter. The essay concludes with conclusions, recommendations, and a call for action.

Conclusions, Recommendations and Call to Action

Conclusions

1. Spirituality offers a valuable source of life lessons.

When approached in a down-to-earth and inquisitive way, spirituality can help to put the ego 'in the back seat' and promote personal liberation. Despite many quicksand-based elements, spirituality does not have to be airy-fairy, and it contains a wealth of life lessons. Self-insight, experiences of unity and liberation can be promoted or triggered by it, but not forced.

2. Spirituality and science offer additional perspectives.

The power of spirituality lies in the inner experience, while science is focused on the outside world. Both can reinforce each other and are essential for the search for truth and consciousness. Robust spirituality integrates scientific insights. This prevents spiritual practices and concepts from becoming airy-fairy and unsubstantiated.

3. Relationships are an important mirror for the ego.

By connecting with others, your ego is constantly triggered, which can lead to further spiritual growth. Relationships and joint exercises work as a 'lens' that exposes your own processes and inner conflicts.

4. The number of people who consider themselves liberated is small.

However, this number seems to be increasing, partly due to the growing popularity of spiritual practices and literature. Liberation remains an ongoing process for everyone.

Recommendations

1. Choose spiritual elements that suit you.

There is no single path to liberation. Pick those elements from spirituality that match your needs, stage of life and circumstances.

2. When self-examining, focus on perceiving thoughts and feelings.

Self-examination starts with observing your inner world. Welcome pleasure and enjoyment, but also awkwardness, resistance and other less pleasant feelings. Try to feel comfortable with feeling uncomfortable. Better yet, use adversity and your own resistance to practice as an opportunity to heal yourself and grow spiritually.

3. Involve your body in the process.

The body contains unprocessed emotions and is connected to the world around you. The body is thus a key to liberation from the ego.

4. Base your views and spiritual guidance on science and the free press.

Critically examine whether you hold on to unscientific views such as astrology, manifestation, reincarnation, contact with ancestors and deceased, synchronicity, human design, nondualism, the law of attraction, higher vibrational levels, the fifth dimension,

pendulum, dowsing, earth rays, polyvagal theory, neuro-linguistic programming, karma, channeling, magical powers of stones, the I-Ching and the Tarot. Base your truth-finding about the outside world on objective, reliable sources. Unfounded beliefs can hinder your spiritual growth and your reach as a provider of spiritual guidance or activities. Without facts, you remain trapped in an untruthful worldview, you cannot defend yourself against rich, powerful people, and you make unwise choices. The stronger you deny this recommendation, the more there is likely to be gained.

5. As a participant, don't be bothered too much by airy-fairy elements in spiritual exercises.

There is a growing range of down-to-earth spiritual literature, exercises, training, education, workshops, retreats and courses that can be helpful for personal development. At the same time, many spirituality providers scare off newcomers by using terms such as 'angels,' 'manifestation,' and 'vibrational frequencies.' Don't bother too much about that. Rephrase terms that don't suit you, welcome the resistance, and focus on the positive effects of the exercises themselves.

6. As a provider of spiritual guidance or activities, avoid vague and airy-fairy elements.

Use down-to-earth language to appeal to a wider audience, including in announcements and marketing. Spiral Dynamics offers starting points for the framing and layout (Chapter 5). Yoga is the best example of this, also because of the diversification. Specifically, tantra can appeal to more people by clarifying its connection to sexuality, but probably also by shifting the presentation from the Hindu gods Shiva and Shakti to presence, essence and ego.

7. Take rest after spiritual experiences.

Give yourself time to process emotions and insights, especially after intense spiritual activities. Don't be worried if you sleep badly one night.

8. Seek therapy for severe traumas.

Consider therapy if certain exercises are overwhelming due to unresolved trauma. Spiritual practices are designed for mentally healthy adults and will not work well otherwise.

9. Prevent self-reflection from becoming a story of self-pity.

Integrating childhood trauma is important, but make sure it doesn't become an excuse to get stuck in self-pity.

10. Be alert to spiritual addiction and the spiritual ego.

Make sure that spirituality remains a source of inspiration. The 'work' is never finished and requires a constant balance between openness and critical self-reflection to prevent spirituality itself from becoming a new ego. Don't cling to being engaged in spirituality, connecting with a spiritual group, 'hopping' from one workshop to another with no clear direction, or the idea that you are 'moving on,' liberated, or even enlightened. In the latter case, you automatically think that you are better than other people who are not that far yet, so you immediately relapse. Learn to consciously deal with this paradox in order to continue your growth.

11. Be gentle with yourself in case of relapse.

Spiritual growth is not a linear process. If you relapse, keep observing your feelings and thoughts, and trust that you will automatically get back to where you were before. And if not, at least you have the memory of a period in which you were completely or partially liberated. That can help you later. And finally, in the image of Einstein's block universe, everything that has ever happened will always exist.

Call for action

Commit to mainstreaming liberation from the ego.

Personal liberation can help enormously to deal with adversity, but does not offer a solution to larger social problems such as poverty, war and climate change. A collective liberation, combined with a transition to a sustainable and holistic society, is necessary for a broader impact. I am involved in the latter through my own company *Circular Future*. I started writing this essay partly because the political support for this transition requires massive individual personal and spiritual growth. Hopefully I have been able to contribute something to that end.

About the Author

Arthur ten Wolde holds a PhD in physics with level-2 certification as a Spiral Dynamics Integral Practitioner from the School of Synnervation, and a certificate of participation in the *Character Structures and Biodanza* training by Vivencia. He has also participated in two *Diamond Heart Europe* retreats of Almaas' Rihwan School, and took years of training at the Amsterdam School of Biodanza.

He lives in Haarlem, the Netherlands. His work is aimed at accelerating and mainstreaming the transition to a sustainable economy via his company Circular Future¹⁸³. In this capacity, besides other assignments, he is the Executive Director of the European Sustainable Business Federation Ecopreneur.eu in Brussels.



Previous essays on related topics:

- From Freedom to Awareness: Towards Personal Leadership. Integral Leadership Review, Feature Articles, June 2012 ¹⁸⁴
- Freedom and naturalism, De Humanist 2004-1, p. 35-37, February 2004 (in Dutch) ¹⁸⁵

¹⁸³ <https://circular-future.eu/>

¹⁸⁴ <https://integralleadershipreview.com/7202-from-freedom-to-awareness-towards-personal-leadership/>

¹⁸⁵ <http://circular-future.eu/wp-content/uploads/2024/08/Vrijheid-en-naturalisme-A-ten-Wolde-De-Humanist-2004.pdf>