



# Humanity 2.0

**Aviram Rozin**

with

Gijs 'Jazz' Van den Broeck



# Humanity 2.0

10 Principles  
for a Compassionate Society

Aviram Rozin  
with Gijs 'Jazz' Van den Broeck



*Dedicated to my wife Yorit and my daughters Osher and  
Shalev who made this journey possible*

## Humanity 2.0

### 10 Principles for a Compassionate Society

Aviram Rozin and Gijs Van den Broeck

2025

Cover art 'Action' © 1992 by Michel Granger. All rights reserved. Used with permission.

Cover and text design by Yorit Rozin.

**This book is offered as a gift, free of charge. To download it, go to [www.sadhanaforest.org/humanity2](http://www.sadhanaforest.org/humanity2)**



**CC BY-NC-ND 4.0**

This work is licensed under a Creative Commons Attribution-Non Commercial-No Derivs 4.0 International license. For more information, visit

<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Published by Sadhana Forest, Auroville,  
India.



Contact: [humanity2.0@sadhanaforest.org](mailto:humanity2.0@sadhanaforest.org)

**SADHANA FOREST**

# Foreword

I have been asked to write a few words about a book which, in fact, is a Message coming from the Divine to modern men and women all over the globe. It is a Call of Him and the author of the present book has listened in and followed it. The result is 'Sadhana Forest'. Sadhana Forest is not a man-made plan. It is His Plan. He transmitted His plan in the head of the author and thus the story started. The author has been just instrumental in carrying out what He wanted.

The objective of the author (as the Plan tells us) in writing this valuable book is to outline, in his own words, "the principles for creating a compassionate society," where all could feel happy, healthy, complete, and connected. The author has not sketched the lines on paper only, but he has made it a reality which can be seen and felt at his Sadhana Forest at Auroville and in many other places. And this is, perhaps, his greatest contribution – he did what he thought, while most of us only "think".

It was my good fortune to be at Sadhana Forest in Auroville many years back. There I realized how happy and healthy, complete and connected were the people

living there. For the first time in my life, I realized what actually is meant by ‘living in tune with Nature’. This is just what the author of the book expects from all of us – to listen to the innermost call and live accordingly.

I know Aviram for many years. As already said, I had an opportunity to see his dream project ‘Sadhana Forest’ in Auroville, Pondicherry. I found it was not a one-day setup. It could not be. It took years to give the shape which it has today – indeed a work of lifelong dedication, untiring patience, and hard labor.

I heartily wish that his dreams may come true to the utmost. For, here I find a person really willing and working to create a society of beings who are all good, compassionate, chaste, pure, dedicated, truthful, and working hard for the well-being of others; their work keeps expanding even toward the plants and trees, animals, in fact they reach wherever they are needed. Such volunteers are rare to find. My good wishes are always with them.

I would like to end with these enlightening words of Vedic seers:

“Let us go together, speak together, and understand together. Just like the Devas share their offerings together,



We shall also share our fortunes together.”

Rig Veda 10.191.2–4

“Let your thoughts be alike, let your hearts and minds be alike, and let your thoughts prosperity to all.”

Rig Veda

Om Peace to All

Swami Kedarnath

1 January 2025

# Table of contents

Foreword .....	7
Table of contents.....	10
Preface.....	13
Introduction .....	21
PROLOGUE .....	29
Go your own way .....	29
Abundance or scarcity? .....	34
I. A VISION FOR OUR CHILDREN.....	47
1. Natural Birth.....	49
From home to hospital and back .....	50
Birth position .....	53
Caesarean Section .....	54
Other interventions.....	57
2. Natural immunity .....	61
Creating health .....	62
Building immunity .....	64
3. A parent's touch .....	67
The science of attachment.....	68
Attachment parenting .....	72
4. Natural learning.....	89
What is 'natural learning'? .....	90

The history of our schools .....	97
What research teaches us about learning .....	100
Growing without schooling .....	107
Conclusion.....	119
II. FROM SOCIETY TO COMMUNITY .....	123
5. Collaboration or competition? .....	125
Competition for life .....	126
Born collaborators.....	130
6. Gift economy .....	139
What is gift economy? .....	139
Living in the gift.....	146
Gifts that keep on giving.....	154
7. The need for community.....	157
The atomization of society.....	157
Social animals .....	164
The care of community .....	168
8. Starting your own community.....	183
Inner work.....	184
Integrity .....	192
Clear agreements.....	197
9. Development as community building .....	205
Our experience .....	206
The long run .....	213

10. Veganism .....	221
An expression of love .....	222
Human(e?) industries.....	227
A sustainable solution .....	232
Afflictions of affluence .....	238
Conclusion .....	243
EPILOGUE: Integral sustainability .....	245
Notes .....	255

# Preface

*May there be many more forests to grow people*

Katharina Hani

This book has grown for a large part out of the experience that I had creating and running an experimental community with my family. In 2003 my wife Yorit, my daughter Osher and I started Sadhana Forest on a barren piece of land in Auroville, Tamil Nadu (South India). It is a community practicing reforestation, water conservation and sustainable living. Today there are 8 Sadhana Forest centers, in India, Haiti, Kenya and Namibia, regenerating arid lands and ensuring water and food security for local people.<sup>1</sup> We host over 1,500 volunteers, and welcome over 15,000 visitors a year.

Compassion is the guiding principle in Sadhana Forest. We ‘engineer’ compassion and manifest it in a concrete way through the many different aspects of our lives. We aspire to bring consciousness into our every action. Our compassion is expressed towards people, animals, plants, soil, air and all elements of nature. We practice community living. We live off the grid in huts made of natural local materials. The food in Sadhana Forest is vegan and minimally processed. We offer meals, tea and

healthy sweets to our neighbors and visitors all in the spirit of gift economy. We have a small vegan cow sanctuary and a playground for local children, and so on. Compassion is the common denominator in everything we do.

Sadhana Forest is part of Auroville, a universal township founded in 1968 by Mira Alfassa, known to her followers as 'The Mother'. The purpose of Auroville is "to realize human unity, in diversity." It is an "ongoing experiment in human unity and transformation of consciousness, also concerned with - and practically researching into - sustainable living and the future cultural, environmental, social and spiritual needs of mankind." <sup>2</sup>

### A forest to grow people

*Sadhana Forest* did not begin as the big international volunteer community it is now. My wife and I just started it as a place to live for us and our children. We wanted to live in an environment that was completely in line with our values and vision of compassionate living. After we considered joining a few communities, we realized that the place where we wanted to live did not yet exist. We would have to create it ourselves. We never had the

intention of having so many people join us and starting Sadhana Forest centers across the world.

We were quite surprised when, after a few days, volunteers started to come and join us. We did not think many people would be interested in living in huts in a forest in the Indian countryside, far away from the conveniences of modern life, practicing natural learning, veganism and living substance free living. Yet somehow people felt attracted to the values of Sadhana Forest. Many of them told us their time here was life changing. They felt that being here enabled them to increase their awareness and realize their potential, more than any experience they had before. This made me wonder: What makes this environment so conducive to the growth of consciousness? What conditions nourish this transformative process? Can this be a model for a new humanity?

In the present book I have tried to answer these questions. It is an attempt to distill the essential ingredients of the Sadhana Forest experience, so we can use them to enable further personal and societal evolution. This is not a book about Sadhana Forest. These answers I have found go way beyond the setting of our forest. They are about how we can meet the inborn

expectations we have as human beings and how we can live together compassionately. In this book, Sadhana Forest will occasionally serve as an example of how some of the principles I discuss, can be put into practice. But it is definitely not the only possible way. I hope this book may inspire you to be the change you want to see in the world, and may help create the society that people really need. As Katharina Hani, one of our volunteers in Sadhana Forest, said: “May there be many more forests to grow people.”

### Writing this book

I wrote this book with the help of my dear friend Jazz (Gijs Van den Broeck). I want to express my deepest gratitude to him, as he has given it his wit and wisdom, creativity and depth of introspection. Without the amazing amount of energy and the countless hours he put in to transcribe, write and edit, this book could never have manifested. Jazz did extensive research for over two years to make sure that the ideas expressed in this book are backed up by solid scientific research. Together, Jazz and I had so many moments of deep introspections and laughter creating this book. I hope you will enjoy reading it as much as we did creating it.



## Acknowledgments

I owe special thanks to my friend and mentor Roland Katz, who inspired me to write this book. In fact, he tirelessly pushed me to do it, until I felt ready. Without him, I would never have started working on this book. He is a man of amazing intelligence and humility, yet very aware of his own strengths and limitations. He knows how to ask the right questions and help me find the answers. He is not afraid to tell me the truth, even if it is very difficult for me to listen to.

I feel so much gratitude to Fatima da Silva for asking me the original questions that grew into this book. For one week she and I locked ourselves up in a beautiful house in the French countryside for an extensive in-depth interview. Fatima is like a sister to me. Her emotional support and insights created the right atmosphere for me to be able to start the writing process. I am also thankful to Marie Josephine Grojean for hosting us at her beautiful ancient house in Sauve, southern France, with endless generosity and patience.

My family supported me all along and reassured me that I could actually write a book. They have slowly but surely helped me increase my confidence and go through

this process. Their love is what enables me to pursue this demanding path I have chosen in life.

I would like to thank my dear friend Omananda for his guidance, support and for our illuminating conversations deep into the night.

Furthermore, I am grateful to all the many thousands of volunteers who have stayed with us at Sadhana Forest throughout the years. I lived together with them, experiencing their highs and lows and supported their growth. Many times, I even met and spoke with their families in order to do so. This has enriched my life in so many ways I never thought possible. Without them, I would have little to write about. Interacting and working with them over the past 20 years, has brought me where I am now. Seeing them come and grow helped me develop many of the insights of this book.

Moreover, I am thankful to the volunteers who have helped transcribing for the book: Alba Koolenbrander, Alice Carbonnelle, Johanna Merten, Marieke Avermaete, Mélissa Nemry, Neha Hirve, Sarah Stroh, Tristram Gardner and Yuki Nishimura. Thanks to Catherine Estas, Mélissa Peymans, and Rob Van den Broeck for providing valuable feedback in their respective fields of expertise and Jef and Ben Van den Broeck for helping us find all

the valuable research for the book. Another special thanks goes out to Jef Van den Broeck for copy editing the book and to my dear friend Mike Roy for helping. And thank you very much Michel Granger for generously allowing us to use your beautiful artwork for the front cover.

So many people have inspired me in my life and I would like to mention just a few of them:

Dr. Edgar Ray Sanabria & Dr. Hector Martinez from Colombia, inventors of the Kangaroo Mother Care for Premature Infants. Their love for children and their genuine care for them are with me all the time. Dr. Nathalie Charpak, who developed the Kangaroo Mother Program in Colombia, did amazing research and helped spread Kangaroo Mother Care around the world.

Rabbi Chananya Chollak, founder of Ezer Mizion and his wife Lea. Rabbi Chananya was my friend, mentor and boss for many years. Professor Aron Weller, who guided me in my first steps in research and deeply influenced my approach to any academic subject. And Kedarnath Swami, my beloved Guru, whose guidance and blessings are always with me.



# Introduction

*Inclusion is not bringing people into what already exists  
It is making a new space, a better space for everyone*

George Dei<sup>3</sup>

What does *Humanity 2.0* look like? What are the guiding principles of a compassionate society, and how can we collectively evolve towards it? What kind of environment do human beings need in order to feel happy, healthy, complete and connected? This has been the question of my life in many ways and I would like to share whatever answers I have found up to now, in the book you have at hand.

The present book is meant to give an outline of the elements which, in my opinion, constitute healthy individuals and societies. It can serve as an inspiration for people to build communities, create social change and grow towards a healthier future. Simply said: If all the principles mentioned in this book would be implemented in a society it will by default be a compassionate society. I meet many people who would like to change humanity. Maybe this book can provide them with some tools and ideas to create new ways of living together.

Before we continue, I would like to briefly explain how I understand the word ‘compassion’. I see compassion not just as a feeling or an intention. Compassion is born out of a sense of empathy for others, which then leads to concrete action to overcome suffering and create well-being. Compassion is something very practical for me. It is not something casual, but a foundational principle of my life and of the society I envision. Not only individual acts can be compassionate, but also the way we structure our lives together. A compassionate society is a society that – by its very nature – will give rise to compassionate behavior.

Compassion needs to be based on understanding. If we want to help others, we have to deeply understand them first. Without deep understanding, we may act with the best intentions, but cause harm. Understanding arises from deep listening and observation. If we do not take time to deeply listen to others, we may act from our own preconceptions, which might not be very helpful. Solutions are born out of dialogue. They are not one-size-fits-all. We work together to create ways to support them best.<sup>4</sup>

Hence, this book is not just about compassion, but also an attempt to try and understand human (and animal)

nature. To begin our journey of better understanding human nature, we start with the Continuum Concept.

### The Continuum Concept

One of the key ideas for this book comes from the 1975 Jean Liedloff book *The Continuum Concept*.<sup>5</sup> Liedloff spent two and a half years with an indigenous tribe in the Amazon. This turned her view of how we are supposed to live as humans upside down. She came to the conclusion that as a species we are born with a set of innate expectations which came about through evolution.<sup>6</sup> These genetic expectations she calls the 'continuum'. As human beings we are born with certain expectations.<sup>7</sup> We are 'programmed' to be treated in a certain way. For instance, a baby expects to be held in its mother's arms, to get its mother's milk and so on. If these innate expectations are met, it will lead to happiness, good health and well-being. If they are not met, it will inevitably lead to challenges in the development of the child.<sup>8</sup>

While Liedloff mostly talks about infants and young children, I want to take this idea of the 'continuum' one step further, and see what expectations we have for the entire span of our lives. An example of such an

expectation could be to receive emotional support from our community or not to be in constant competition. On the one hand, I want to reflect upon how our inborn expectations nowadays are often not met, and how this creates suffering for many of us. On the other hand, I want to think about solutions. How can we change our society to fulfill our innate expectations, nourish compassion, and enable us to live emotionally and physically healthy lives?

If we want to reflect on our innate expectations, we have to look at the environment that shaped them. John Bowlby, who laid the foundations for the attachment theory which we will discuss later, already realized in the 1960s that we can only understand the human psyche in the context of – what he called – our ‘environment of evolutionary adaptedness’. It is our history as hunter-gatherers that molded us into who we are as a species and defined our continuum. He writes:

*We can therefore be fairly sure that none of the environments in which civilised, or even half-civilised, man lives today conforms to the environment in which man's environmentally stable behavioural systems were evolved and to which they are intrinsically adapted. This leads to the conclusion that the environment in terms of*



*which the adaptedness of man's instinctive equipment must be considered is the one that man inhabited for two million years until changes of the past few thousand years led to the extraordinary variety of habitats he occupies today.*<sup>9</sup>

I do not mean to say that everything used to be better in the past, yet we cannot just assume that our current society meets our needs better. We have to critically compare modern and traditional ways of living. Of course, modern society has made some advancements in terms of technology, health care, democracy, human rights and so on. Traditional societies should not be overly romanticized. They have many horrible practices, like female genital mutilation or elder strangling. I am happy we left such practices behind. Yet, I do believe we can learn things from cultures that are quite different from our modern Westernized way of living. Our way is but one of many. It has its advantages, but also its disadvantages. Other cultures show us other possibilities. They can be a useful source of inspiration in trying to heal the afflictions of our society and in our search for alternatives.<sup>10</sup>

## The structure of this book

Taking the idea of the continuum as a starting point, I want to delve into different topics. We start with some preliminary considerations about the self-reliance we will need in order to start choosing a different path, and about the sense of abundance that will come from fulfilling our continuum. The body of the work consists of ten chapters divided into two parts. The first part of the book looks at children. We talk about birth, immunity, babies and education. The second part of the book will look at the overarching structures of our entire society: our drive for competition, the economy and our sense of community. We will look at what brings us closer together as a species, how we can start our own communities, and how we can bring a sense of community and cooperation into our notion of development. The final chapter brings animals into the equation, as they – to me – are also part of our community. The book ends with a reflection on how sustainability connects all these topics as an underlying thread.

The book you have at hand contains many references to literature for further reading and to scientific studies. There was not enough space to go into every topic in depth. We are ‘standing on the shoulders of giants,’ as the

saying goes. Therefore, in the endnotes, we have tried to include references to the most relevant literature. The values discussed have also been rigorously studied using scientific methodology. It is important for me to include the most important studies in order to make the book accessible to many of us who see great value in modern science.



# PROLOGUE

Before we dive into the subject matter ahead, we will have a look at the attitudes that underpin the various aspects of this book. The first one is an attitude of self-reliance. This book should be read as a declaration of independence. More than anything, it is about encouraging you to have a critical mindset and create your own independent view of things, also about this book. Secondly, the book is about moving away from an attitude of scarcity to an attitude of abundance, weaving through the different aspects of our lives.

## Go your own way

*I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I –  
I took the one less traveled by,  
And that has made all the difference.*

Robert Frost<sup>11</sup>

*There is one thing I really want to encourage you to do: Start carving your own path. Do not just take the road less travelled, as Frost says, but make a new road and live a life that is truly*

*yours. If you want to change the world, you have to be able to overcome your fear of facing the unknown and ignore the pessimists, critics and naysayers. If a new society is to come, it has to be one where people do not follow what others tell them to do. It ought to be a society where people feel free to go for their own passion and interest, take up responsibility for their own lives and – as 19<sup>th</sup> century philosopher Ralph Waldo Emerson puts it – “nothing is at last sacred but the integrity of your own mind.”<sup>12</sup> The qualities we will need for this are consciousness, responsibility, courage, hope and trust. This book should also be read with that very same attitude. It should not be followed blindly, but rather be seen as a source of inspiration for you to imagine a new path for yourself.*

### Ingredients for independence

I would like you, reader of the book, to read it with a critical mind. If something does not resonate with you, go and do your own research and come to your own conclusion. Start your own journey. I have included plenty of references, which can assist you in your own research. Do not be afraid to think out of the box and come to entirely different conclusions.

If we want to live our own authentic lifestyles, we will have to take responsibility for the choices we make. There

exists a trend in our world today to give away the responsibility of our lives to the institutions of society. We do what society expects of us, for example, give birth in hospitals and send our children to school.<sup>13</sup> If this does not turn out well, we won't have to feel responsible since we just did what everyone else was doing. We can always blame society. However, if we decide to give birth naturally or support the natural learning of our children, we will have ourselves to blame if things go wrong. In addition, we risk being shamed and frowned upon by those around us.

Therefore, we will need courage. If we do things differently, we will have to be able to withstand the doubts and criticisms of others (and of ourselves). Emerson writes: "For nonconformity the world whips you with its displeasure."<sup>14</sup> So, we must take a firm stance for what we believe in and do it wholeheartedly. Many of us are afraid to do this. When we follow what everyone else is doing, it is often out of fear. We lack the courage to be different. We are afraid to fail, and therefore we are reluctant to try new things.

We have to live a life based on hope, not on fear. We will reap as we sow. We end up manifesting what we believe in and work for. Henry David Thoreau, a friend of

Emerson and fellow writer, decided at one point in his life to go against the stream and live a simple, solitary life in the woods.<sup>15</sup> He puts it very beautifully:

*If one advances confidently in the direction of his dreams, and endeavors to live the life which he has imagined, he will meet with a success unexpected in common hours. He will put some things behind, will pass an invisible boundary; new, universal, and more liberal laws will begin to establish themselves around and within him [...] and he will live with the license of a higher order of beings.<sup>16</sup>*

And so lastly, you will need trust. If you choose your own path, the destination will be uncertain. If you do what everyone else does, you will sacrifice some of your freedom, but you will get a certain security. You will go to school, get a degree, a steady job, a medical insurance, a pension plan, a retirement home and so on. You will know more or less where you will end up, that is, where everyone around you ends up. If you choose to create your own way, the outcome of your choices is less certain. You are taking a new road or a 'road less traveled by'. If you do not school your children, rely on gift economy and so on, you will not have a clear map of where you are going. There will have to be a lot of trust, that things will be alright, and that these principles are guiding you to where you need to go.



### Off the beaten track

In 1998, my wife and I visited India for the first time. We traveled all the way from south to north, but we decided to go off the beaten track. We took a travel guide of the country, and decided not to go to any place that was mentioned in this travel guide. We called it 'travel guide negative' planning. We did not go to any tourist places, yet we had the most amazing experience. We avoided all the nuisances of tourist places like busy crowds, pushy vendors or people trying to overcharge you for their services. Instead, we had lunch with local people, stayed in their homes and worked their farms. It might well have been the most beautiful trip of our lives.

I hope this book can encourage you to go to places you might never have thought of going, and that you may find this surprisingly rewarding. This book is the result of my and my family's journey up to now and the insights I gained from it. It sure was a bumpy ride – and still is a lot of the time. Yet, ultimately it is definitely worth it. In order to live a truly fulfilling life we must create our own path. And if I have one wish for you, it is that you all may live deeply fulfilling lives.

## Abundance or scarcity?

*It's a mystery to me  
We have a greed with which we have agreed  
And you think you have to want more than you need  
Until you have it all, you won't be free*

Eddie Vedder<sup>17</sup>

*One of the key themes in this book will be the contrast between abundance and scarcity. Many of the things that go wrong in today's world originate out of a feeling of scarcity. This feeling seems to be deeply rooted in the way we think,<sup>18</sup> and gives rise to many of our psychological problems. A lot of people just feel they do not have enough. They do not feel safe. They are afraid they might run out. This keeps them looking after their own interests and competing for resources. You can see these dynamics at play very well in our economic system. If you live from an attitude of abundance, though, you may feel you have more than enough and you can freely share your resources. You are confident that life will take care of you.<sup>19</sup> A healthy society therefore, should try and cultivate a feeling of abundance.*

### Wants vs. needs

These feelings of abundance and scarcity are created entirely in our own heads. You can have an income of 500

euros a month and feel that you have enough. Or you can have an income of 10,000 euros a month and still not feel satisfied. You can fly economy class and think you are the richest person on the planet. But some people fly business, yet they are upset because they do not own a private jet. I myself spent all my savings on *Sadhana Forest*. I still remember the day I emptied my savings account, about half a year into the project. I thought this would be a really difficult moment. I thought I would feel afraid and would wonder how I would survive. Yet I felt so happy. I did not have to worry about that money anymore. I was free.

Let me tell you a story. Before starting *Sadhana Forest*, I was managing a medical device company. So, I used to do job interviews. At the time there was a big demand for engineers in companies, as there were not many engineers available in the market. Whenever engineers would come for an interview, they would already have a few offers from other companies. So, they would try and bargain with me in order to get a better offer.

A few times, rather than asking them what minimum wage they wanted, I asked them what the maximum was they were willing to earn. If they were asking for minimum 6,000 euros per month, I asked them if they

were willing to accept 100,000 euros. Was there any limit to their asking? And then I went on asking them how much they were willing to commit for that kind of money. If I doubled their wage, would they work double hours? And if I tripled it, would they be willing to be my slave 24 hours a day?

This got them really confused. You cannot imagine the looks I got! People thought I was crazy. They would accept any offer. There was no limit to their asking. And neither was there a limit to the extent they were willing to sell themselves. They would do anything for the right amount of money. They would even sacrifice their freedom. However, this made some of them really think. It opened their eyes.

Our society has got us confusing our needs and our wants.<sup>20</sup> With 'needs' I mean what we need in order to survive and live a healthy life. And 'wants' I define as the things we desire but do not really need. This confusion comes out of the prevailing feeling of scarcity. If we wake up in the morning feeling we do not have enough, we will try to satisfy our every craving, thinking we really need all the things we want. It may seem like a paradox, but a feeling of scarcity will stimulate our greed. If, on the other hand, we wake up in the morning feeling

abundant, we will only try to get what we need and we will be content with less.

In Auroville, the universal township where I live, there is an amazing project called *Pour Tous* ('for everyone' in French) *Distribution Center*. It is a food cooperative where all the members pay a fixed amount per month. In return they can take whatever they need from the shop. There are no price tags on anything, so when you leave the shop, you do not know how much you spent and whether you have taken goods beyond the value of your monthly contribution or not. This makes people really think about what is a real need and what is merely a 'want'.

### The economics of scarcity

The feeling of scarcity is the foundation of our economic system. Modern day economy takes scarcity of resources and unlimited wants as its starting point. It argues that all wants cannot possibly be met, because resources are limited. Therefore, humans are forever in a state of scarcity, trying to maximize what they can achieve with their limited resources.<sup>21</sup> Economist Lionel Robbins, famously wrote:

*Scarcity of means to satisfy given ends is an almost ubiquitous condition of human behaviour. [...] Economics is the science which studies human behaviour as a relationship between ends and scarce means.*<sup>22</sup>

Recent studies even show that economic education increases students' greed.<sup>23</sup> We will further discuss the scarcity and competition embedded in our economic system in chapters 5 and 6.

Because of this emphasis on scarcity, our economy always has to keep growing.<sup>24</sup> Progress is defined in terms of growth of *Gross Domestic Product* (GDP). GDP is the total production of a country. If GDP rises, we are producing more. So, an increase in GDP just means that people feel a greater scarcity and their wants have increased.<sup>25</sup> If people would feel abundance, the GDP would go down every year, because people would realize they need less and less. But if you want the GDP to grow, you have to stimulate this feeling of scarcity and make people follow their wants and not their needs. As psychologist Paul Wachtel notes: "An economy primarily driven by growth must generate discontent. We cannot be content or the entire economic machine would grind to a halt."<sup>26</sup>

So, growth in GDP does not mean we are better off at all. Simon Kuznets, the inventor of GDP himself, already warned us about this.<sup>27</sup> What is good for GDP is not

necessarily good for us (and in fact many alternative indicators for welfare have been proposed).<sup>28</sup> Take war for instance. War is fantastic for GDP. It makes you produce huge amounts of resources that are consumed at a very high rate: bombs, fuel, tanks... The same thing goes for cancer. Cancer comes with huge expenses on research, machines and chemotherapy. War and cancer make us produce lots more, and in that way, they drive the economy. In fact, it would be much better for GDP if you would be in a hospital or in a war zone right now, instead of reading this book. The latter contributes very little to GDP. And why do we have war in the first place? Again, out of this feeling of scarcity. One group feels that they do not have enough land or resources, so they try and conquer their neighbor's land and resources.<sup>29</sup>

Another way is possible though. There are societies that do not seem to be subject to such feelings of scarcity. Ancient hunter-gatherer societies lived with minimal material comfort. People often call them 'primitive'. Yet in his famous essay *The Original Affluent Society* anthropologist Marshall Sahlins argues that these communities probably experienced more abundance than we do. Hunter-gatherer groups could meet basic needs for food and shelter with only a few hours of work per

day, effectively allowing everyone to experience abundance.<sup>30</sup>

Another illustrious example comes from Ladakh. Ladakh is a mountainous area in the Indian Himalayas. Until the mid '70s of the past century Ladakh had hardly been influenced by Western, industrialized society. People lived in small agricultural communities as they had done for the past centuries. Researcher Helena Norberg-Hodge arrived in Ladakh in 1975 and saw the rapid change in Ladakhi culture and environment after Ladakh was opened up to tourism and started undergoing a rapid process of urbanization and so-called 'progress'. In her book *Ancient Futures*, she tells the story of Ladakh's 'development'.<sup>31</sup>

Norberg-Hodge recounts how there was a sense of abundance in the people when she first arrived there. During her first visit, a local villager told her there were no poor people in his village. Just eight years later she saw the same villager lamenting to some foreign tourists how poor the Ladakhi were.<sup>32</sup> She even heard a development commissioner say: "If Ladakh is ever going to be developed we have to figure out how to make these people more greedy. You just can't motivate them otherwise."<sup>33</sup> His case seems to be clear: 'Development'



and a Westernized society go hand in hand with feelings of scarcity and greed.

### The way towards abundance

So where does this feeling of scarcity come from? And how do we develop a mind of abundance? This is the question this book will revolve around. Scarcity develops because for many of us, from early age onwards, our needs are not fulfilled. The innate expectations we have as a species are not met. This leaves us feeling unsafe and insecure. It creates in us an emptiness we fruitlessly try to fill up for the rest of our lives with things like money, sex, fame or drugs. But no amount of those can ever be enough to fill up the emptiness we feel.

Our society keeps glorifying the most famous and wealthy people. But are they really better off? It is a cliché as old as time, but money cannot buy you happiness. In fact, it might lead us to the contrary. Materialistic and consumerist tendencies seem to be on the rise in our society as we become more and more wealthy.<sup>34</sup> This can leave us unfulfilled and just leads us to spend more.<sup>35</sup> Psychological research shows that as we grow wealthier, we soon get accustomed to our new level of wealth. This principle has been called 'hedonic adaptation'.<sup>36</sup> We do

generally not grow happier as we get richer, neither on a personal nor on a national level.<sup>37</sup> Beyond an income level that meets basic needs, there is no correlation between material wealth and emotional well-being.<sup>38</sup> External factors only account for about 10% of our happiness.<sup>39</sup> Our mental and emotional well-being is much more dependent on our state of mind.<sup>40</sup>

If we grow up in an environment that fulfills all the genetic expectations of the continuum, we will feel content and abundant, safe and confident. We will not feel the need to keep accumulating resources. Psychologist Tim Kasser writes:

*When people experience situations that do not support the satisfaction of their basic psychological needs, the resultant feelings of insecurity may lead them to adopt a more materialistic outlook on life as a way to compensate for these feelings. [...] and this tendency is especially heightened under the current clime of cultural consumerism.*<sup>41</sup>

Research indicates for example that children in erratic environments grow up to be more greedy and self-centered than those that grow up in warm and caring families.<sup>42</sup> The goal of this book is to try and describe the factors that can contribute to this feeling of abundance. How do we create a community or society where children can grow feeling secure and adults can feel

emotionally stable and happy, freely sharing what they have without needing to compete with each other?

### Depression and mental disorders on the rise

We are living in a time of unparalleled material wealth in the Global North, yet at the same time we are increasingly unhappy and lonely.<sup>43</sup> Psychologists talk about a 'crisis of the modern psyche'.<sup>44</sup> Could it be that our current way of living is setting us up for misery? Already in the 1950s psychoanalyst Erich Fromm considered modern Western society to be fundamentally pathological.<sup>45</sup> The prevailing feeling of scarcity seems to lead millions of people worldwide into psychological problems and depression.<sup>46</sup>

Let us have a look at the numbers. People seem to be more and more affected by negative emotions worldwide. More than 1 in 3 people experience stress and worry on a daily basis.<sup>47</sup> 1 out of 5 experience a mental disorders any given year and 3 out of 10 have experienced one in their lifetime already.<sup>48</sup> Mental disorders account for one fifth to almost one third of all years lived with disability.<sup>49</sup> Rates are higher and rising in higher income countries.<sup>50</sup> Some studies estimate that in the US nearly half of the population will suffer from a

psychological disorder in their life, and in the EU nearly 40% any given year.<sup>51</sup> Long term studies on American high school and college students show a 5 times increase in mental health issues between the middle and the end of the 20th century.<sup>52</sup>

Depression is now considered to be the leading cause of disability worldwide by the *World Health Organization* (WHO).<sup>53</sup> More than 300 million people worldwide suffer from it. An added 260 million people live with anxiety disorders. The percentage of the world population suffering from depression has grown 10% since 1990 and is again higher in higher income countries.<sup>54</sup> The OECD reports that the consumption of antidepressants in its member states doubled between 2000 and 2015.<sup>55</sup> In the US alone, 11% of the population over 12 years old are taking antidepressant drugs.<sup>56</sup> The worldwide antidepressant market is valued at 13.75 billion dollars, which is the same as the GDP of the entire country of Mongolia. And the market is projected to grow even further.<sup>57</sup> Moreover around 800,000 people a year die through suicide and suicide is the second leading cause of death among 15- to 29-year-olds worldwide.<sup>58</sup> Again, suicide rates are substantially higher in high income countries.<sup>59</sup>

When Helena Norberg-Hodge would explain to Ladakhi villagers that in the West “many people were so unhappy that they had to see a doctor, their mouths would drop open, and they would stare in disbelief.”<sup>60</sup> She describes Ladakhi people as being generally happy and content. Of course, this is only anecdotal evidence. As historian Yuval Noah Harari points out, there has been no consistent research on the history of happiness. There seems to be an assumption in our society that, as technology and material welfare improve, our happiness grows accordingly, yet there is no real proof that this is actually the case.<sup>61</sup> The example of Ladakh shows that it may go both ways.

In any case, there is no other species on the planet today that shows the kind of ‘depressed’ behavior we see in large numbers in Western society today. This indicates that something has gone wrong in our development. Is our modern society the ‘niche’ that we evolved to live in? Are we meant to spend most of our waking hours day behind a desk, exposed to artificial lighting,<sup>62</sup> going home to watch TV or play with our smartphone?<sup>63</sup> “Modern civilization fails to satisfy profound needs in man,” to say it with Erich Fromm.<sup>64</sup> These unmet needs are what we will look into in the present book.



# I. A VISION FOR OUR CHILDREN

*What kind of world will we leave to our children?*

*What kind of children will we leave to our world?*

Pierre Rabhi<sup>65</sup>

This book is meant to be a vision for our children and the societies they will grow up in. We therefore start the book with a reflection on childhood. How are we putting children on this world? What are the genetic expectations of babies and young children, and how can we be more compassionate towards them? We will have a look at birth, immunization and raising infants and children. Societies often ignore their genetic expectations. We will discuss some practical ways on how to meet children's developmental needs, and how to let them grow up to be happy and healthy and well adapted to their environment.

A recurring theme of this first part will be how, in the past two centuries, we have started to intervene unnecessarily with natural processes that have been designed by millions of years of evolution. We have given birth and raised children since the beginning of time. Our bodies and brains are very well adapted to

these processes. Yet in our more recent history we have developed technological and psychological techniques that disrupt the natural flow of things. This does not mean to say that technology or psychology is always bad, definitely not. What is problematic though, is that there seems to be a deep mistrust in our society towards nature and the way we are designed. Instead of aiding natural processes, many times modern inventions seem to work against them.



# 1. Natural Birth

*All through labor, her body tells her what is happening and helps her discover what she needs to do to help. The active involvement of the laboring woman is a critical piece of nature's plan for birth, and it is the least understood. The hard work of labor is not meant to be accomplished alone.*

Julia Lothan<sup>66</sup>

*Bringing new life to this Earth is a deeply transformative and empowering experience for a mother. Women have given birth naturally for as long as humans can remember, supported by their loved ones and their community. Birthing women, and those around them, have always trusted their innate capacity to do so safely. Since the end of the 19<sup>th</sup> century however, we moved away from our natural expectations and have medicalized childbirth, making it happen in sterile hospital rooms full of medical equipment and drugs, directed by doctors and hidden from the welcoming presence of the community at large. So already before we draw our first breath, the expectations of our continuum are not met and our minds are imprinted with scarcity. In this chapter we will have a look at a few ways of how we can move towards a more natural form of childbirth where the physical and emotional well-being of mother, father, baby and community go hand in hand.*

### *From home to hospital and back*

Before the beginning of the 20<sup>th</sup> century, most births happened at home. Giving birth was an intimate process, which happened in a familiar environment. The pregnant mother and her baby were the main actors in the birth process and they were supported by people close to them. The twentieth century saw a rapid medicalization of childbirth. Very few women in Western countries still give birth at home.<sup>67</sup> The place of birth moved from people's homes to hospitals. The main birth attendants became doctors instead of midwives, who performed an increasing number of medical interventions.

Nowadays, birth is seen less as a natural process, but rather as a medical issue that requires the 'patient' to be hospitalized and subjected to 'treatment'. Interventions that were designed for high-risk births are becoming more and more routine. There is a rising trend of unnecessary medical treatments that can do more harm than good, disrupting the natural flow of child birth and ignoring the physiology of the female body.<sup>68</sup> The female body has a wisdom in it that has developed over millions of years of evolution, yet we are increasingly putting our trust in technologies that are altering the natural functioning of her body.

Not only are these obstetric procedures not beneficial for the mother's physical health, her psychological wellbeing is equally compromised.<sup>69</sup> In our current paradigm the woman stands (or rather lies) disempowered. Her role has become passive. It is the responsibility of the (often male) doctor to ensure safe delivery.<sup>70</sup> Moreover, hospitals focus on reducing mortality rather than on the mother's emotional security. The efficiency of the medical staff is prioritized over the mother's comfort.<sup>71</sup> As the *World Health Organization* (WHO) writes: "This increasing medicalization of childbirth processes tends to undermine the woman's own capability to give birth and negatively impacts her childbirth experience."<sup>72</sup>

It seems as if the rise of this interventionist approach might not have happened for pure medical reasons. Home births are as safe as hospital births for low-risk pregnancies.<sup>73</sup> Socio-cultural factors might have been more decisive in the shift, which happened in the wake of an increased public trust in doctors, medical institutions and technological advancement. More drugs and treatments were developed, which could only be performed by specialists in hospitals. People eagerly put their faith in these new technologies. Their application might not have been based on actual statistical proof that

they have led to safer births.<sup>74</sup> It seems to have been part of the wider tendency in society – as mentioned in the prologue – to outsource many of our personal and family responsibilities to public or state institutions.

Moving towards birthing in accordance with our genetic expectation does not mean that we have to ignore the latest scientific discoveries. We can find a natural way to satisfy our genetic expectations while supplementing this with modern technology when really necessary. Midwife Ina May Gaskin writes:

*The most trustworthy knowledge about women's bodies combines the best of what medical science has offered over the past century or two with what women have always been able to learn about themselves before birth moved into hospitals.*<sup>75</sup>

Since the 1930s, there have been midwives and doctors that have advocated for a more natural childbirth.<sup>76</sup> Some of their suggestions are included below. The past decades have seen a rising interest from the scientific community in natural birth, which we will try to review in the upcoming paragraphs.<sup>77</sup> This book does not intend to be an in-depth book about childbirth. We will focus on two topics: birth position and caesarean section. However, this does not mean that there are no other areas of concern.

### **Birth position**

In hospitals today women give birth lying down on their back with their legs up. This is not the natural choice for women. It is a relatively new way which became routine only with the medicalization of childbirth. Anthropological research has shown that there are many different positions to give birth (squatting, standing, hands and knees, sitting on a birth stool, lying on the side...). Upright positions are more common. Women can use the help of props and midwives and move around and switch positions.<sup>78</sup>

The lying down position is used in hospitals simply because it is more convenient for doctors. It makes it easier for them to observe the progress of the labor and to intervene in case of emergency. In modern hospitals, even in low-risk pregnancies and deliveries, the heart rate of the baby is constantly monitored. This requires wiring and would be impossible if the mother were allowed to move around. Even more so, the frequent use of anesthesia for deliveries makes moving around nearly impossible.

The *World Health Organization* recommends giving women the freedom to move around and adopt a position of their choice, including upright positions. Research has shown that labor is shorter and there are fewer operative deliveries when women can stand or sit up and move around, while adverse side effects are minimal. Blood flow in the abdominal area is improved and the pelvic opening is wider in an upright position, and also gravity can do its work. If the mother can move, she can feel which position is easiest for the baby to pass through at a certain moment. Her pain guides her in finding the way of the least resistance.<sup>79</sup>

### *Caesarean Section*

A medical intervention that is definitely applied too routinely is caesarean section. The WHO writes: “There is growing concern that caesarean section is performed too soon in many cases, without due consideration for less invasive interventions that could lead to vaginal birth.”<sup>80</sup> The worldwide ratio of caesarean deliveries was 21% in 2015 and is rising sharply. Outside of Sub-Saharan Africa (5%) and South Asia (18%) rates are above 25%, up to 44% in Latin America. In Brazil more than half of the

children (55%) today is born with a C-section.<sup>81</sup> In 1990 the worldwide rate of C-section was only 6.7%.<sup>82</sup>

At the same time the WHO estimates that caesarean section is only needed in 1 out of 10 births. In 90% of births there is no direct health benefit. Rather, C-section is a major surgery and comes, like any other surgery, with a set of health risks.<sup>83</sup> Moreover, it increases the risk of complications in subsequent births. One recent meta-analysis reports:

*CS is associated with an increased risk of uterine rupture, abnormal placentation, ectopic pregnancy, stillbirth, and preterm birth [in subsequent births] [...] Short-term risks of CS include altered immune development, an increased likelihood of allergy, atopy, and asthma, and reduced intestinal gut microbiome diversity. The persistence of these risks into later life is less well investigated, although an association between CS use and greater incidence of late childhood obesity and asthma are frequently reported.*<sup>84</sup>

Caesarean birth also seems to lead to worse psychosocial outcomes. Women undergoing them feel more helpless. They experience the birth as more stressful and less satisfactory. They tend to breastfeed less and may show less attachment behavior towards their children.<sup>85</sup> There is some evidence that children that are born vaginally grow up with higher emotional intelligence.<sup>86</sup>

The majority of C-sections in developed countries are elective C-sections. They are not done for medical reasons, but for convenience's sake, for the comfort of either doctor or mother, or both. Doctors can choose caesareans out of fear of being sued. People erroneously believe C-section to be safer, so if anything goes wrong, they are more likely to sue their doctor if they choose vaginal birth. Another 'advantage' of C-sections is you can plan them during working hours. In some places doctors simply do not have enough experience anymore with vaginal deliveries to be confident enough to assist them.<sup>87</sup>

Women can go for caesarean out of fear of labor pain, or because of the belief that CS is safer and involves less complications. Some women opt for CS because it is easier to plan and combine with their work and family life.<sup>88</sup> All together "birth by elective CS tends to be presented as controllable, convenient, fashionable, and modern."<sup>89</sup>

Let me end this chapter with an anecdote. I once saw a documentary on caesarean section. There was a lady in it who said she was very career-minded. She did not want to waste too much time on giving birth. Therefore, she had scheduled her C-section right before the weekend, so



she could start working from home again right after the weekend. I cannot imagine the amount of scarcity this baby will feel. Already three days after its birth their mother has higher priorities.

### **Other interventions**

There is a long list of unnecessary birthing interventions that is performed routinely. On the other hand, there are many simple things that could be easily implemented to make the birth process more natural. Here is a brief overview of the recommendations of the *World Health Organization*.<sup>90</sup>

The WHO says there is no need for the following interventions during labor:

- Early labor acceleration by oxytocin or C-section. Labor might not naturally start to accelerate until the cervix (the uterus entrance) has reached an opening of 5 centimeters.
- ‘Pelvimetry’ (measuring up the shape of the mother’s pelvis). Any healthy mother should be given a try at natural labor, regardless of the size of the pelvis. Pelvimetry is an unnecessary

inconvenience that can lead to unneeded C-sections and has no proven benefits.<sup>91</sup>

- ‘Cardiotocography’ (continuous recording of the fetal heart rate via an ultrasound transducer placed on the mother’s abdomen). It is not routinely needed for healthy women, and can lead to other unnecessary interventions and C-sections. It prevents women from being able to move around during childbirth. In some countries this intervention is done by doctors to give an impression of safety and to protect themselves from litigation.
- ‘Enema’ (injection of fluid via the rectum). This is not proven to accelerate labor or have any other clinical benefits. “It is considered invasive and associated with discomfort for women.”<sup>92</sup>
- Routinely disinfecting the vagina. “The use of an additional intervention with no clinical benefit further undermines the natural process of birth.”<sup>93</sup>
- Amniotomy (artificial rupture of membranes) in order to accelerate labor. The potential benefits outweigh the harms. Again, it gives unnecessary discomfort to mothers.

- Similarly antispasmodic drugs, pain relief nor intravenous fluids are recommended in order to prevent delay of labor.
- Routine use of episiotomy (making an incision in the perineum in order to enlarge the opening for the baby to pass through). There is no proof of its effectiveness and it may have adverse side-effects.<sup>94</sup>
- After birth there is – under normal circumstances – no need to give antibiotic treatment to the mother, this includes women receiving episiotomy.<sup>95</sup>

There are a number of simple interventions that could be done to create a more comfortable, natural atmosphere for birth. Beyond the practices discussed in the two previous paragraphs, the WHO also recommends things like:

- Allowing mothers a companion of choice during labor and birth
- Having a midwife (or group of midwives) support the mother throughout pregnancy, birth and nursing. In order to make this possible, the community should have enough well-trained midwives available.<sup>96</sup>

- Relaxation techniques for pain relief during labor such as progressive muscle relaxation, breathing, music, mindfulness, massage and warm packs.<sup>97</sup>
- Allowing women to follow their own natural urge to push during labor, instead of doctors telling them when to push.
- Massage, warm compresses and 'hands on' guarding in order to prevent the perineum from tearing.

## 2. Natural immunity

*We can be exposed to HIV many times without being chronically infected.*

*If you have a good immune system, it will get rid of the virus within a few weeks.*

Luc Montagnier<sup>98</sup>

*Our bodies have an inborn expectation to live in an environment that will keep them healthy and strong. Our immune system plays a crucial role in maintaining optimum health. As long as we maintain a healthy lifestyle, our immune system should be able to ward off major infectious diseases. Immunity is a natural process. From the moment we are born, we should be naturally exposed to different threats. Our immune system is programmed to learn how to deal with the germs that it is confronted with. It uses this experience to grow and become stronger. Already at the time of birth we start deviating from our natural expectation. The newborn baby has fewer opportunities to develop a rich immune library since the environments in the hospital and at home have become increasingly sterile.*

## *Creating health*

What are the genetic expectations we have from our environment in order to be healthy? Or, what conditions do our bodies need to function optimally? That is the question we are looking into in this chapter. This approach is somewhat different from modern ‘allopathic’ medicine, which focuses on how to cure disease and combat specific threats. Allopathic medicine excels at treating what has already gone wrong. It gives less attention to what our body needs from its surroundings in order to function well.

If we want optimal health, we should put our efforts in creating a healthy environment to live in, both physically and emotionally. When talking about public health, we should promote clean air, clean water<sup>99</sup> and healthy organic food.<sup>100</sup> These are very much part of the expectations of our *continuum* and have an enormous impact on our physical health. Studies show that at least 9 million people die every year because of the effects of pollution. This is 16% of all deaths worldwide and comes at a cost of 4.6 trillion USD, more than 6% of the global GDP.<sup>101</sup> The lifestyle diseases that form the major causes of death in the Global North today, have been strongly

linked to diet. We will discuss what constitutes a healthy, natural diet in the last chapter.

Emotionally supportive,<sup>102</sup> stress-free environments are equally important. Stress has a major impact on the well-being of the population. It is responsible for a substantial amount of sick leaves and costs companies billions of dollars every year.<sup>103</sup> Prolonged stress is a major risk factor for disease. Stress in itself is not bad. It is a way your body reacts to an emergency. It ramps up your defenses, increasing your blood pressure, heart rate and the amount of energy available to the body, in order to find a way out of a dangerous situation. That is why the stress-response has also been called our *fight-or-flight* response. As useful as stress is in our defense against acute threats, it can cause damage to the body if active over a prolonged period of time. Because stress is designed to react to short-term threats, it suppresses more long-term oriented processes such as digestion, reproduction and tissue repair. Chronic stress keeps the body in a constant state of emergency. A continuous release of stress hormones makes it hard for the body to regain its balance. This eventually wears the body out, makes it accumulate damages over time, causing or facilitating chronic diseases like cancer or heart disease.<sup>104</sup>

## **Building immunity**

In the second part of this chapter, we will focus on immunity. Our immune system is one of our key defenses against disease. If we have strong immunity, we can be exposed to many diseases, but we will not fall sick, as Nobel Prize for Medicine laureate Luc Montaignier pointed out at the beginning of this chapter. So how do we create strong immunity? What genetic expectations does our immune system have? And how do we fail to meet its needs?

In order to have a well-functioning immune system, we should live healthy lives and maintain a healthy diet.<sup>105</sup> As long as we take good care of ourselves, we will not easily fall sick, and if we do, it will be less serious. The *Harvard Medical School* writes:

*Your first line of defense is to choose a healthy lifestyle. Following general good-health guidelines is the single best step you can take toward naturally keeping your immune system strong and healthy. Every part of your body, including your immune system, functions better when protected from environmental assaults and bolstered by healthy-living strategies. [...] People who live in poverty and are malnourished are more vulnerable to infectious diseases.*<sup>106</sup>



This has also been my personal experience. For my work I have traveled to places that were infested with the worst tropical diseases: dengue, tuberculosis, malaria, chikungunya, typhoid... As long as I was in good shape, I never got sick. The one time that I did, I was not taking proper care of myself. I was overtired and hence weakened my immune system.

Avoiding stress is also very important for immunity. Research<sup>107</sup> indicates that acute stress can boost the immune response temporarily, preparing the body for a challenge. Chronic stress however suppresses the immune response. Studies show for example that simply watching a funny video, decreases stress and by doing so improves immune activity. Chronic stress therefore makes one more vulnerable for infections and influences the course and outcome of disease. It can also cause autoimmune disease, as it deregulates our immune system and prevents the body from reaching 'homeostasis', its optimal fine-tuning.<sup>108</sup>

Let us take a look at how our immune system naturally develops. From the moment we are born, we are meant to be exposed to different threats in our environment. This is how our immune system learns to defend itself. It builds up an 'immune library', recognizing different

germs and learning to respond to them. However, in today's world newborns have less chance to grow their immune library in a natural way. Our environment is increasingly sterile. The hospitals where we are born, the procedures we are born with and the urban homes we live in, are very clean and lack a natural diversity of pathogens. Research shows that reduced exposure to micro-organisms and infectious agents at birth and early age leads to more allergies and autoimmune diseases. Breastfeeding has been linked to improved immunity as well. For instance, C-section and administration of antibiotics within the first year of life have been linked to allergies. Consequently, allergies and autoimmune disease are more prevalent and on the rise in Western countries.<sup>109</sup>

One study concludes:

*[R]apidly declining contact to the natural environment might lead to a decreased biodiversity in the surroundings of humans. The development of a Westernized, urban lifestyle parallels an increasing prevalence of allergic and autoimmune diseases. It is tempting to speculate that inadequate stimulation of the human immune system and consecutive impairment of regulatory pathways might be a result of reduced contact to environmental stimuli.<sup>110</sup>*

### 3. A parent's touch

*Attachment parenting has been around as long as there have been mothers and babies.*

*It is, in fact, only recently that this style of parenting has needed a name at all, for it is basically the common-sense parenting we all would do if left to our own healthy resources.*

Bill & Martha Sears<sup>111</sup>

*Human beings are born quite helpless. They require the presence and care of their parents for a long time before they can be independent. A child's early years are very important for its development. It needs to grow in a warm and compassionate environment if it is to turn into a well-functioning and well-balanced adult. A healthy bond of attachment with the parent is quintessential. For this we need to give a lot of close physical presence to young children. Our child rearing practices today are too isolationary. We are taking babies and young children away from their parents at the time they need them the most. We are ignoring their genetic expectation and in doing so condemning them to a life-long feeling of scarcity. Before we look at different practices that can create a more intimate bond between infants and their caretakers, we will have a look at*

*what is probably the major theoretical framework underpinning the infant-parent bond: John Bowlby's 'attachment theory'.*

### **The science of attachment**

The psychologist who has done the most formative research with regard to parent-infant bonding is probably John Bowlby. He was a big advocate for a close relationship between parents and children. The Englishman developed his *attachment theory* in the second half of the 20th century.<sup>112</sup> He had been sent to boarding school as a young child. Later on, he worked with delinquent children and children that got separated from their parents during World War II. This led him to believe that “the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment.”<sup>113</sup>

This might sound like common sense for many people today, but in the 50s it was wildly controversial. The Industrial Revolution in the late 18<sup>th</sup> century had started shaking up traditional family patterns, separating children more and more from their parents.<sup>114</sup> In the first half of the 19<sup>th</sup> century ideas of behaviorist psychologists

such as John B. Watson<sup>115</sup> were fashionable in the West. They believed we should not give our babies much care and affection. This might spoil them and make them dictate our lives. Instead, they should learn to be independent. Moreover, hospitals and nurseries were obsessed with hygiene. Children were rarely touched or allowed visitors. L. E. Holt, one of the leading pediatricians of the time, believed for instance it was better not to kiss kids:

*There are many serious objections [to kissing infants]. [...] Many grave diseases may be communicated in this way. The kissing of infants upon the mouth [...] should under no circumstances be permitted. Infants should be kissed, if at all, upon the cheek or forehead, but the less even of this the better.*<sup>116</sup>

Many of the children raised in these settings grew up socially and intellectually disturbed (and, interestingly, were also more prone to disease).<sup>117</sup>

*Attachment theory* posits that the young child needs its parent (or primary caregiver) as a safe base from where it can explore the world and can return to in case of emergency. It emphasizes that if anything goes wrong in the development of secure attachment early on in life – for instance if the caregiver is not present when needed, or if the caregiver is overprotective – this will have severe

consequences for the child's development. Bowlby's ideas, though controversial, were highly influential in the child care institutions of the day.<sup>118</sup> There was a move towards caring for infants and children in smaller groups. Foster care and hospital visiting hours for children were increased. Many of these practices have become the norm today.

Bowlby saw attachment as an evolutionary strategy that evolved to ensure the survival of helpless human babies. Compared to other animal species, human beings are born quite underdeveloped. A newborn calf can stand on its legs and walk almost straight after birth. Little *homo sapiens* on the other hand need many years before they can take care of themselves. This is believed to be because of our evolutionary history. We evolved to walk on two legs, which made our hips, and women's birth canals smaller. On the other hand, our brains evolved to be bigger and bigger. In order for increasingly bigger heads to pass through increasingly smaller birth canals, humans needed to be born earlier, when their brains were less developed and smaller.<sup>119</sup>

Bowlby's ideas were tried and tested in a series of well-known experiments by Harry Harlow.<sup>120</sup> He took infant monkeys and put them together in a cage with surrogate

mothers made of cloth and wire. Invariably the monkeys formed a bond of attachment with their surrogate mother, repeatedly clinging to it and retreating to it when afraid. He then let monkeys choose between two mothers, one metal wire one that provided food, and one cloth-padded one that did not give any food. The infant monkeys always preferred clinging to the wire mother.<sup>121</sup>

Harlow's experiments gave an experimental foundation to Bowlby's theory of attachment. The behaviorists had thought that children bonded mostly with their mothers because they provided food. Harlow clearly showed that attachment patterns are inborn. They are not about food, but rather about providing a feeling of safety and what Harlow called 'contact comfort'. His experiments clearly illustrated the importance of the presence and comforting touch of the caregiver.

More sinister support for Bowlby's assumptions, came late in the 80s. In 1989 the regime of Romanian dictator Nicolae Ceaușescu was overthrown. This exposed the world to the abysmal conditions of tens of thousands of children in Romanian orphanages. Many of them had been severely neglected and showed major developmental problems often persisting unto a much later age.

The main cause of this was not physical abuse, but rather complete emotional and social neglect.<sup>122</sup>

In a less extreme context, the past decades have seen plenty of research confirming that children need care and independence. Parents who are not supportive or overly controlling, will raise children who are less healthy and less kind and will have more psychological problems.<sup>123</sup>

### *Attachment parenting*

We have come a long way since the time of John Bowlby. Many of the practices that were common practice a century ago would now be frowned upon in most places. Since the second half of the last century some have called to move away from the sterile and unemotional behaviorist treatment of infants and toddlers.<sup>124</sup> Just as with birth there are people advocating to follow our instincts.

Yet, we still have a long way to go if we want to create secure attachment and give infants the care they direly need. Our child-rearing practices are still very isolationary. We tend to separate young children from their parents, only holding them occasionally, often denying them breastfeeding, ignoring their crying and



letting them sleep alone. When they get a little bit older, we leave them with nannies, send them away to nurseries, kindergartens and then schools. In this way we disturb bonding mechanisms that have been carefully crafted by millions of years of evolution. We will have a look at schooling in the next chapter.

So how can we put this into practice and create secure attachment? How to take care of infants and young children in a way that their needs are being met? How do we fulfill the infant's genetic expectation for its comfort, security, and its parents' presence? We need a parenting style that fulfills the infant's need for attachment, follows our natural instincts and gives infants a lot of close physical contact.<sup>125</sup> This has been called 'attachment parenting' by pediatrician William Sears and his wife Martha.<sup>126</sup> Research has shown that this parenting style reduces stress for the child and has both physical and psychological benefits.<sup>127</sup> Attachment parenting entails being "highly responsive to the child, which especially includes behaviors that help children better regulate emotional states such as distress, fear and anger."<sup>128</sup> In this chapter we will discuss four practices: babywearing, breastfeeding, responding to a baby's crying and co-

sleeping. There are many other topics that could be considered, but they fall beyond the scope of this book.<sup>129</sup>

### Babywearing and Kangaroo Care

Babies need to be close to their mother. The *World Health Organization* recommends in its postnatal care guidelines to not separate newborns from their mothers.<sup>130</sup> Babies come into this world helpless and need her reassuring presence, her taste, her touch, her smell, her warmth, even her heartbeat.<sup>131</sup> Therefore it is natural for human babies to be in continuous close physical contact with their caregivers.<sup>132</sup> Hunter-gatherer tribes are known to nearly constantly carry their babies on them.<sup>133</sup> Other primates' babies constantly cling to the mother's body hair. Humans have lost most of their body hair throughout their evolution and so the parents need to hold them. In fact, human babies still show instinctive grasping reflexes, which is speculated to be an evolutionary relic of our hairier past.<sup>134</sup> In mammals in general there seem to be two 'parenting' styles: there are species that carry their young around and species that leave their young in the nest while they venture out looking for food. Humans show characteristics of the former group.<sup>135</sup>

In modern Westernized societies, infants experience relatively little physical contact with their parents. This goes against our nature. It results in increased crying and even colic, excessive crying without apparent reason, which is unique to humans.<sup>136</sup> We start to take babies away from their mothers soon after their birth. This became the norm with the medicalization of birth in the past century.<sup>137</sup> The separation continues after they leave the hospital: we put them in separate beds, in separate rooms, in separate institutions (nurseries) and push them around in strollers, all of which minimize contact. Instead of keeping them near us, we use baby monitors to know how they are doing. And instead of stimulating them through direct contact we use colorful sensory toys to keep them entertained.

There is little scientific research on the benefits of babywearing as such. However, there is a vast body of research on skin-to-skin contact between mothers and babies,<sup>138</sup> the benefits of which might well apply to baby wearing.<sup>139</sup> This research was inspired by the *Kangaroo Mother Care* (KMC) program, which started in the late 1970s with Colombian doctors Dr. Edgar Rey Sanabria and Dr. Hector Martinez. They were facing a scarcity of incubators to treat preterm infants and often had to host

two infants in the same incubator. While treating these infants they observed the ability of mothers to provide for the diverse needs of infants through skin-to-skin contact. This inspired them to try an alternative to incubators and have the mothers carry their babies with constant skin-to-skin contact.<sup>140</sup> Their method proved to be a huge success.

Today *Kangaroo Care* is recommended by the *World Health Organization* as an equal alternative to incubators to treat premature and low birth weight babies that are stable and do not have immediate health problems. Skin-to-skin contact has many benefits. It prevents hypothermia, makes babies less susceptible to infections and makes them gain weight faster. Mothers are generally more satisfied with this way of taking care of their premature and underweight babies.<sup>141</sup>

These benefits extend to full term and normal birth weight babies. Scientific research shows that skin-to-skin contact, especially right after birth, helps stabilize the baby's body temperature, breathing and heartbeat. It is calming for both mother and child and improves their bonding. It speeds up the expulsion of the placenta. Moreover, it facilitates breastfeeding. Right after birth the baby will instinctively look for the mother's breast, and if

left uninterrupted will attach to it and continue to nurse more effectively. KMC may even improve cognitive development of the newborn.<sup>142</sup> Similar benefits seem to apply for father skin-to-skin contact.<sup>143</sup> The WHO therefore recommends placing babies in skin-to-skin contact with their mothers during the first hour after birth. Failure to do so will increase the risk of the baby dying by 33% to 50%.<sup>144</sup>

### Breastfeeding

Mother's milk is the most natural and nutritious food for a baby. Through millions of years of evolution, it has been perfectly adapted to the developmental and digestive needs of the newborn. Its composition changes over time, attuning to the changing needs of the growing infant.<sup>145</sup> It is therefore far superior to formula. The *World Health Organization* recommends nursing to be initiated within one hour after birth. Babies should be breastfed on demand, as often as they want, day and night.<sup>146</sup>

Babies should be exclusively breastfed for the first six months of their lives and partially breastfeed up until at least two years old. There is no maximum age for breastfeeding. The young child will naturally stop drinking mother's milk. In hunter-gatherer societies,

weaning happens at around 3 years of age and is often gradual and child-led.<sup>147</sup> My eldest daughter breastfed until the age of 4 and then made it clear she did not want to anymore.

And so breastfeeding has many benefits. It protects against malnutrition, intestinal infections and diarrhea. It is notably cheaper than formula or other options, and also the environmental impact is much lower as mother's milk is 100% natural and self-produced.<sup>148</sup> On the long term it helps prevent obesity and diabetes and even benefits cognitive, social and emotional development. For mothers it reduces the risk of ovarian and breast cancer. It can even prevent menstruation from happening, naturally helping to space pregnancies.<sup>149</sup>

One researcher concludes:

*An infant suckling at his or her mother's breast is not simply receiving a meal, but is intensely engaged in a dynamic, bidirectional, biological dialogue. It is a process in which physical, biochemical, hormonal, and psychosocial exchange takes place, designed for the transfer of much needed nutrients, as well as for building a lasting psychosocial bond between the mother and her infant. Among mammals, breastfeeding has evolved over millions of years as a multitiered interaction to meet the biological and psychosocial needs of the progeny, enhancing its well-being and survival chances, as well as complementing the nurturing role of the mother. Thus, this unique, dynamic process benefits both the mother and her*

*infant. Breastfeeding needs to be considered quintessentially as a continuation of the more intense, intrauterine dialogue, mediated through the placenta and the umbilical cord between the mother and her fetus.*<sup>150</sup>

However, many do not hold breastfeeding in such high esteem. When people on the street saw my wife breastfeeding my daughter at the age of 1, they would stop in shock and ask us until when we intended to breastfeed her. I became so tired of these discussions I ended up answering them we would breastfeed her until 18! After that, people would leave us alone, thinking we were crazy. This shows how far removed we are from our natural expectations. People fear that if they will have nature have its way, people will still breastfeed when they are adults!

Despite its obvious advantages, only 40% of children worldwide are exclusively breastfed for the first six months,<sup>151</sup> and at 2 years of age only 45% receive mother's milk.<sup>152</sup> Adequate breastfeeding could save over 800,000 children's lives every year.<sup>153</sup> The decrease in intelligence alone causes an estimated yearly loss of \$300 billion worldwide, 0.5% of the world's total *Gross National Income*.<sup>154</sup>

Over the course of the 20<sup>th</sup> century breastfeeding rates went down in high-income countries and in the upper

classes of lower income countries. “Breastmilk substitutes were perceived as modern and prestigious, and breastfeeding was associated with being poor and unsophisticated.”<sup>155</sup> I was born in 1965. When my mom tried breastfeeding me, the pediatrician told her breastfeeding was for primitive people. The past decades, after scientific studies showed the advantages of breastfeeding, governments and NGOs such as *La Leche League*<sup>156</sup> and the *World Alliance for Breastfeeding Action*,<sup>157</sup> started promoting breastfeeding.<sup>158</sup> Interest grew in a more natural way of nursing. Today breastfeeding rates seem to be rising, but progress is slow and “the world is still not a supportive and enabling environment for most women who want to breastfeed”<sup>159</sup> as one recent study puts it.<sup>160</sup>

There are several factors that are holding back people from breastfeeding. One is the sales and marketing of breast milk substitutes. Even though in the early 1980s the *World Health Organization* already adopted a resolution to curb the marketing,<sup>161</sup> implementation is lacking<sup>162</sup> and sales are still going up. The entire market was estimated to be worth over \$70 billion in 2019. Another major contributing factor are work environments. Many workplaces are not particularly welcoming



for breastfeeding mothers. And only half the countries in the world allow the minimum of 14 weeks of maternity leave commended by the *International Labour Organization* (which is still only half of the 6 months that the mother is supposed to give exclusive breast-feeding).<sup>163</sup>

Let me end this paragraph with another personal experience that clearly demonstrates how disconnected we are from our genetic expectation. When our first daughter was 9 months old, we went to a clinic to get her weighed. The nurse asked us how she was sleeping. We told her she was sleeping fine, only waking up a few times to nurse and then falling asleep again. The nurse was astonished and asked: 'So she is using the breast as a substitute for the pacifier?' I answered her: 'I think the pacifier is a substitute for the breast, not the other way around. Women are born with breasts for a reason.' Babies have an innate drive to suckle on them. This just goes to show, we still have a long way ahead before all our genetic needs can be met!

### A baby's cry

Our babies cry a lot. In modern Westernized cultures it is normal for infants to cry up to almost 3 hours a day. This causes a lot of distress to parents and many sleepless

hours. Many think there is just no way around this and they stop responding to the baby's crying. Or even worst, they purposely start ignoring it, in order to reduce the crying. This was the course of action advocated by the behaviorist educators and followed by many a parent up until today. The behaviorists considered crying to be a random behavior that did not convey any meaning. They believed comforting babies when they were crying, was a way of rewarding them for doing so. It would reinforce the crying behavior,<sup>164</sup> eventually creating 'spoiled' children. As one child rearing pamphlet from the 1920 writes: "Crying will get him what he wants, sufficient to make a spoiled, fussy baby, and a household tyrant whose continual demands make a slave of the mother."<sup>165</sup> Therefore one should just let babies 'cry it out', no matter how long that would take.<sup>166</sup>

A baby's crying, however, is not random, nor is it unavoidable. If you keep your baby close and give it the right care, it will hardly cry. We need to properly understand crying. Crying takes a lot of energy from the baby; it would be wasteful to do so for no reason. Rather, it is one of the most important ways for newborns to communicate their needs. According to Bowlby's attachment theory, it is meant to attract the attention of

the caregiver. The baby cries because it is hungry, in pain, or lonely. It is unpleasant for us to hear a baby cry, and so we naturally respond to it. In this way secure attachment can be formed. From this perspective, a baby should never be left to 'cry it out'. It will disturb the attachment process and will leave the baby feeling lost and insecure.<sup>167</sup>

Research shows that holding crying babies reduces their crying instead of increasing it.<sup>168</sup> As mentioned in the paragraph on babywearing, human infants are meant to be in close contact with their caregiver. Traditional hunter-gatherer tribes carry their infants most of the time, allowing them to nurse whenever they want. Their young hardly cry, and if they cry it is mostly because they are separated from their parents. The same goes for primates. In prehistoric times, crying would have exposed us to predators. It would not make any sense to leave a baby to cry alone. Rather crying was meant to urgently reunite us with our caregivers.

Why do our babies cry so much then? As mentioned before, this is because we ignore their need for close physical contact. Most of the time babies are separated from their parents, and their crying is not immediately attended to. Because they are separated, they are fed less

frequently, which also leads to more crying. Moreover, it does not allow parents to pick up earlier clues of the baby's distress like fussing and whimpering. This leads the baby to start crying as its last resort. It would not start crying if it had other options, because crying is – as mentioned before – an energy intensive and – in a hunter-gatherer setting – dangerous behavior.<sup>169</sup>

We have to note that babies who are routinely ignored, indeed cry less. However, research shows they are still equally anxious. Their distress has not disappeared, they just grew accustomed to being ignored and gave up asking for help.<sup>170</sup> This is a form of 'learned helplessness'. If someone is in a painful situation repeatedly and cannot find a way out, they will start to believe they have no power to help themselves and will stop trying to get out of painful situations all together. They learn to be helpless. This state of 'learned helplessness' has been associated with depression.<sup>171</sup>

So, the behaviorists' belief that crying babies should be ignored is clearly not supported by scientific research, nor by looking at tribal societies and related species. Our instincts clearly tell us to give all the care we can to a helpless crying infant. If we fail to do so, this can lead to lasting trauma and a deep feeling of scarcity.

### Bed sharing

Infants and children have been sleeping together with their parents since time immemorial.<sup>172</sup> Primates, our evolutionary siblings and cousins, also sleep together with their offspring.<sup>173</sup> The Industrial Revolution in the 19<sup>th</sup> century drastically changed sleeping patterns and started to require children to sleep separate, usually much to their dislike.<sup>174</sup> One historian notes: “All available historical and cross-cultural evidence suggests that solitary sleeping for children is an anomaly of the modern industrialized West.”<sup>175</sup> As mentioned earlier, babies are quite helpless creatures. They do not enjoy being left alone. So, it is natural for them to sleep with their parents and enjoy their comforting presence. If a few basic safety measures are attended to – like not sleeping in modern bedding that is too soft – there can be no harm in this.<sup>176</sup>

Babies wake up regularly at night to nurse. Sleeping together gives them easy access to the breast. The baby can nurse when it needs to and the mother does not even need to fully wake up. Bed sharing therefore encourages breastfeeding. If the child does not sleep together with the mom but is hungry, it will have to resort to crying in

order to attract her attention and be fed. This disrupts everyone's sleep. As a solution, some will use a baby monitor to make sure their baby is doing well, while the natural way is just to have the baby in bed with the mother.

Many Western families will even regularly ignore a baby's nightly crying, as mentioned in the previous paragraph. Parents hope the baby will learn to sleep through the night, or may even actively try and train it to do so.<sup>177</sup> As discussed earlier, ignoring the baby does not have the intended consequences. It is natural for babies to wake up at night and they can and should not be taught to do otherwise. Wanting your baby to sleep through the night is not based on the baby's physical and emotional needs, but more on the parents' own wish for uninterrupted sleep.<sup>178</sup>

Many parents are unsure until what age they should let their children sleep with them. If they keep sleeping together, they are afraid their children might fail to become independent. However, the child will naturally feel when they are ready to sleep alone and want more independence. Going against the child's instincts, will create a feeling of scarcity. It may well cause the very problems of insecurity and emotional dependence

parents so want to avoid. Letting a child sleep with his parents promotes rather than obstructs independence and self-confidence.<sup>179</sup> Parents also may feel their privacy is jeopardized and fear that their child may be harmed if they are exposed to their sexual activity.<sup>180</sup> Judging from the number of children that are born in co-sleeping cultures, it seems that parents have found ways to overcome this challenge, by finding another space or discretely having sex while their children are fast asleep.

So, to conclude: co-sleeping with your child is more emotionally healthy for them. This is also what scientific research is starting to show. Putting your infant in a separate bed or room goes against its genetic expectations and can be traumatizing.<sup>181</sup> Of course, this is but a general recommendation, and might not work for your personal situation. Every adult is different and every child is different. Suppose you have a very stressful job and you are restless at night. In that case you could disturb your child's sleep, and it will be better for them to sleep separately. As I said before: it is good to make your own informed decision.





## 4. Natural learning

*Your children are not your children.  
They are the sons and daughters of Life's longing for itself.  
They come through you but not from you,  
And though they are with you yet they belong not to you.*

*You may give them your love but not your thoughts,  
For they have their own thoughts.*

*You may house their bodies but not their souls,  
For their souls dwell in the house of tomorrow,  
which you cannot visit, not even in your dreams.*

*You may strive to be like them,  
but seek not to make them like you.  
For life goes not backward nor tarries with yesterday.*

*You are the bows from which your children  
as living arrows are sent forth.  
The archer sees the mark upon the path of the infinite,  
and He bends you with His might  
that His arrows may go swift and far.  
Let your bending in the archer's hand be for gladness;  
For even as He loves the arrow that flies,  
so He loves also the bow that is stable.*

Kahlil Gibran – *The Prophet*<sup>182</sup>

*Curiosity is children's main motivation to learn. Curiosity will lead them to know everything they need to know. When we send children to a kindergarten or school and impose teaching upon them, we suppress this curiosity. They are taught content*

*that may not interest them at that specific time, or maybe not at all. Sitting in a classroom a few hours day, obeying the teacher's instructions, does not fulfill their genetic expectations. In this chapter I would like to put forward a different approach called 'natural learning' or 'unschooling'.*

### **What is 'natural learning'?**

Unschooling or natural learning, sometimes also called 'child-led learning' or 'self-directed education', is an approach to learning and raising children that is based on curiosity. The term 'unschooling' was coined by John Holt.<sup>183</sup> Holt was a primary school teacher in the US in the second half of the 20<sup>th</sup> century. Throughout his career he grew disillusioned with the school system. He observed how schools inhibited learning<sup>184</sup> and gradually came to the conclusion that an entirely different approach was needed.<sup>185</sup>

### **Learning as a natural process**

Learning is a natural process. It happens spontaneously and, in fact, starts already in the womb.<sup>186</sup> We learn to talk and walk, and pick up all the information and skills we need in order to live, survive and thrive. Learning

does not need to be induced or imposed. The word 'school' comes from the ancient Greek σχολή which means 'leisure'.<sup>187</sup> For the ancient Greeks learning happened spontaneously when one is free to explore.

Learning can often hardly be distinguished from play. In fact, play is probably how children learn most things in life in traditional tribal societies. They play at the activities that adults do – like cooking, gathering or building – until their play is no longer distinguishable from the real thing. Their learning is inseparable from life.<sup>188</sup> Similarly in medieval times in the West, children's lives were still barely separated from adults' lives.<sup>189</sup> Anthropologist Colin Turnbull says:

*For children, life is one long frolic. [...] And one day they find that the games they have been playing are not games any longer, but the real thing, for they have become adults. [...] It happens so gradually that they hardly notice the change at first, for even when they are proud and famous hunters their life is still full of fun and laughter.*<sup>190</sup>

So, our main job as an adult is to trust in the child's innate ability to learn. If we are afraid that they will not learn, this may reduce their confidence to explore. Children need to feel that, even though they may be inexperienced and make mistakes, they are innately able to learn. In schools however children are not accepted

unconditionally. Rather, they are controlled, evaluated and confronted with their mistakes.

In schools learning is initiated and organized by teachers in a rigid way. John Holt writes: "Most people now seem to believe that learning is separate from the rest of life, that we only do it or do it best when we are not doing anything else, and best of all in a place where nothing else is done."<sup>191</sup> Schools assume that, if children are left to their own devices, they will 'waste' their time playing and learn very little. In order to enforce their teaching, schools need a system of punishment and reward. Yet learning and growth are inner processes, one should not try to force them to happen from the outside.

### Learning is driven by curiosity

Children are naturally curious to the world around them. They want to see, touch and feel everything, and probably smell and taste it too. We are born with the desire to understand our environment. Therefore, learning is a self-rewarding and intrinsically motivating endeavor. When we are curious, it means we are ready to learn something. Curiosity signals our brain is neurologically mature to take in certain information or develop certain skills. When we are ready, learning

happens effortlessly. If we are forced to learn something at the wrong moment, we will have difficulties. This may even be the cause of learning disorders. At Sudbury Valley School, where children learn to read and write when they want to, there has never been a case of dyslexia.<sup>192</sup>

In schools we are simply not allowed to follow our curiosity. We have to learn what the teacher tells us and when he or she tells us to, whether we are curious about it or not. Albert Einstein puts it very distinctly:

*It is, in fact, nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wreck and ruin without fail.*<sup>193</sup>

Learning becomes a chore in school. Schools put us at risk of losing our joy of learning. Homework and exams definitely do not improve upon this. In fact, in schools enjoyment is often even thought to get in the way of learning.<sup>194</sup> Schools curtail and systematize learning. We all have to learn the same thing at the same time in the same way. However, everybody is different and develops along a different path and at a different pace.<sup>195</sup>

## Adult supremacy

Underlying the convictions of modern schooling, is the idea that adults are superior to children and therefore should have authority over them. Children do not know what is good for them and cannot be free to find out. John Holt writes:

*[The educator] tells us, in effect, that we cannot be trusted even to think, that [...] we must depend on others to tell us the meaning of our world and our lives, and that any meaning we may make for ourselves, out of our own experience, has no value.*<sup>196</sup>

I call this 'adult supremacy'. Others have called it 'adulthood'.<sup>197</sup> It is a form of discrimination similar to racism and sexism. Just like racism and sexism it designates a different value to and allows different behavior towards a group of people based on them belonging to a certain social group: race, gender or age. We allow ourselves to treat children in ways which we, adults, would never want to be treated. If I would force you to sit in a classroom and listen to me all day, having to ask permission to talk and to go to the toilet, you would be upset. However, doing this to children seems to be business as usual.

It is hard for me to believe we know better than children just because we are older. If anything, we know worst.

We were born in a different time. Our children will live in a future we cannot even begin to imagine. “[Children’s] souls dwell in the house of tomorrow, which [we] cannot visit,” as Kahlil Gibran writes. We simply cannot look inside our children’s heads. They know best what their needs are, and we should give them the space to express those needs. Hunter-gatherer tribes seem to hold the same idea and never tell children what to do:

*At the risk of overgeneralizing, one could say that hunter-gatherers are fiercely egalitarian, and that they don’t tell anyone, not even a child, to do anything. Generalizing or overgeneralizing further, small-scale societies appear to be not nearly as convinced as are we [...] of the idea that parents are responsible for a child’s development, and that they can influence how a child turns out.<sup>198</sup>*

I think adult supremacy can be counterproductive. When you try to control people, they will try and rebel against you. Nobody likes being told what to do, including children. Having a sense of autonomy is extremely important for a child’s development (and for anyone else for that matter).<sup>199</sup> If we curtail their freedom, they will often throw tantrums. That is how they express their feelings, definitely at an early age. They are not yet able to express their needs in a more articulate way. Yet often we do not take their cries seriously, and overrule them by virtue of our authority and physical superiority.

I believe our role is like the bow in Gibran's poem. We are just here to support children to find their own path, not to force anything on them. I myself, for instance, am vegan and have been for many years. Even though veganism is very important to me, I never told my children they should be vegan. I do not want them to be vegan, I only want them to be one thing and that is: themselves. If one of my daughters would open a steak house, I would gladly come to the opening to support her in realizing her dreams, and eat a salad.

### Innate Goodness

At the bottom of all this, natural learning starts from a belief in the innate goodness of the child. We can have trust in the natural tendencies of the child, because we are designed by nature to learn. We can trust our inner nature. Children are like seeds that already have all the biological programming in them to grow into mature beings. They just need a compassionate and caring environment to bring out these innate qualities. It may be a cliché, but love and acceptance are what our children need the most.<sup>200</sup>

Our modern school system however, was based on religious Christian schools whose principals believed that



our nature was sinful and our desires needed to be controlled and corrected,<sup>201</sup> as is evidenced by this quote of Lutheran theologian Hermann Francke.

*Youth do not know how to regulate their lives, and are naturally inclined toward idle and sinful behavior when left to their own devices. For this reason, it is a rule in this institution that a pupil never be allowed out of the presence of a supervisor. The supervisor's presence will stifle the pupil's inclination to sinful behavior, and slowly weaken his willfulness.*<sup>202</sup>

The schools founded by Francke in early 18<sup>th</sup> century Prussia would become a model for later mass education systems.

### ***The history of our schools***

The modern school system is a relatively recent invention. Compulsory mass education only came up in the 19<sup>th</sup> century in the West and spread to the rest of the world in the 20<sup>th</sup> century.<sup>203</sup> Before that, nearly everyone learned what they needed for their lives through their interactions with their family and community members. Up until the beginning of the 20<sup>th</sup> century, for instance, a significant number of professions were learned through a system of apprenticeship.<sup>204</sup>

If we want to understand our educational system, we have to take a look at how exactly it came into being.<sup>205</sup> The advent of mass education was closely tied to the changing political and economic environment of the time. The power of religious institutions and monarchy was waning. The 19<sup>th</sup> century witnessed the rise of a new political and economic order through the modern nation-state, capitalism and the Industrial Revolution.

From the beginning, the education system was meant to serve this new order. Children had to be molded into its willing servitors. Emphasis was put on obedience and conformity. Education served to make the state more powerful and prosperous, not to fulfill the psychological needs of children, let alone to help them find their own path and be happy, independent and creative.<sup>206</sup>

We just need to take a look at the writings of some early educational reformers to understand their drive for conformity.<sup>207</sup> To quote Hermann Francke again:

*It is necessary to break the natural willfulness of the child. [...] [The schoolmaster's most important task [is] that of making the will obedient.*<sup>208</sup>

Jean-Jacques Rousseau, one of the most influential philosophers of the time, wrote in *Emile, or on Education*, his seminal work on education:

*Good social institutions are those that best know how to denature man, to take his absolute existence from him in order to give him a relative one and transport the I into the common unity.*<sup>209</sup>

And Thomas Jefferson, founding father and 3<sup>rd</sup> president of the USA said:

*Education would have raised the mass of the people to the high ground of moral respectability necessary to their own safety, and to orderly government.*<sup>210</sup>

Their vision is clear: education is a tool of law and order, rather than self-development.<sup>211</sup>

Critics today still argue that the education system preserves the status quo and produces professionals that do not question the political and economic system.<sup>212</sup>

Social critic Paul Goodman writes:

*It is in the schools and from the mass media [...] that the mass of our citizens in all classes learn that life is inevitably routine, depersonalized, venally graded; that it is best to toe the mark and shut up [...] This education is, miseducation, socializing to the national norms and regimenting to the national 'needs'.*<sup>213</sup>

Sociologists Samuel Bowles and Herbert Gintis call this the *correspondence principle*: the values taught and practiced in schools, such as obedience to authority and dependency on external rewards (what they call the 'hidden curriculum') correspond to the values expected of employees in the workplace.<sup>214</sup>

### *What research teaches us about learning*

There is not much research done on unschooling as such, but in the second half of the 20<sup>th</sup> century new models of learning came up in psychology and cognitive science that may provide a theoretical underpinning for it. In this paragraph we will discuss *constructivism* and *self-determination theory*. In different ways these two theories turn traditional views of learning on which the school system still heavily relies, upside down. Constructivism argues against learning as a passive knowledge transfer. Self-determination theory shows how punishment and reward are ineffective and how autonomy and intrinsic motivation are essential in learning.

#### Constructivism

In the school system, students are traditionally treated as passive and submissive receivers of knowledge. The teacher is the authority that possesses the knowledge and transfers it, while the student absorbs and reproduces.<sup>215</sup> Learning is a mechanical process that can be quantified and graded. Learning mostly happens out of context, behind closed doors, in classrooms and textbooks.

Theories are taught in abstract ways. Complex issues are broken down and sequenced into easily digestible pieces.

Constructivism, on the other hand, says that learning is an active process. The theory is based on the ground breaking work of psychologists such as Jean Piaget and Lev Vygotsky. According to constructivism the learner is not 'copy pasting' what someone else is teaching.<sup>216</sup> Learning is a dynamic process. The learner is actively creating meaning and constantly trying to make sense of the world around him or her, interpreting and reinterpreting, questioning and finding answers as he goes along. Learning happens spontaneously in interaction with people and society.<sup>217</sup> The teacher should not have an authoritarian role, but rather one of a facilitator and a guide. The teacher's goal should not be to drill the student, but rather to empower them. Moreover, learning is not an alien procedure that needs to be imposed, rather it is deeply rooted in our biological and evolutionary nature.<sup>218</sup>

Constructivism gave rise to plenty of attempts at school and curriculum reform. It brought forth pedagogies such as *authentic learning*, *active learning*, *problem-based learning* and *experiential learning*. These approaches sought to bring about change inside the classroom. None of them

questioned whether the school system itself was an appropriate environment for learning.

One could argue that unschooling takes the insights of constructivism to the next level. Just because learning is such an (inter)active process, it makes no sense to force children to sit in classrooms being told by the teacher what to do. The school system itself decontextualizes all learning and inhibits the freedom needed for a student to actively engage in his own learning and meaning making process.

### Self-Determination Theory

Another research-based argument for natural learning comes from motivation theory, more specifically from *Self-Determination Theory* (SDT). SDT started with psychologists Edward Deci and Richard Ryan in the 1970s. It is an overarching framework to understand how human beings develop and how they can flourish.<sup>219</sup> The theory sees human behavior as motivated by three basic needs: autonomy, competence and relatedness. In order to make human beings grow, their environment needs to support these basic needs. Failure to meet these needs, will lead to emotional distress and maladaptive behavior.

One of the key components of the theory is the distinction between 'intrinsic' and 'extrinsic' motivation. An intrinsically motivated behavior is something you do because you enjoy doing it. There is no need for reward here, because doing it is in itself rewarding. Curiosity for instance is an intrinsic motivation, as is play, pleasure, interest or the need for creativity or challenge. So, one could say that unschooling is more focused on intrinsic types of motivation.

An extrinsically motivated behavior, on the other hand, is performed because of the result you hope to obtain from it. You do something because you will get a reward or want to avoid punishment. You do it because of the social effects it has, such as receiving praise or fame or avoiding shame. Or you do it because you believe it is important or it corresponds to your values.<sup>220</sup> So in school for instance, we can learn in order to get a good grade, to avoid upsetting our parents, or because we believe in the importance of a diploma.<sup>221</sup> Curiosity is less in the limelight in schools as schools tend to focus more on extrinsic motivation.

One of Ryan and Deci's most surprising findings was that rewards reduce intrinsic motivation.<sup>222</sup> So school, with its system of rewarding through grades, undermines

motivation. This is something we probably all have experienced at some point in our lives. We can start out doing something, for example a certain job, because we like it. But after a while, we find that the only thing keeping us going is the money, the extrinsic reward. Or we choose to study a certain subject because it interests us, but after a while, the only thing we can think of is how to pass the next exam. Our work or study becomes a chore, something we feel we have to do, rather than something we enjoy doing.

Why does this loss of intrinsic motivation happen? As mentioned before, people have a need for autonomy and competence. External motivators undermine these needs. External motivators can be rewards like money or evaluations, but also punishments, deadlines, competition,<sup>223</sup> negative feedback and even some types of positive feedback.<sup>224</sup> They give people the feeling someone is trying to control them and that they are being forced to perform well. And so, they lose intrinsic motivation.

Why is it so important to have intrinsic motivation instead of extrinsic motivation? Rewards still motivate people, just in a different way, one could argue. Sometimes rewards may lead people to do things that



they would otherwise never have done, but that over time turn out to be intrinsically rewarding. Yet, the research shows that intrinsic motivation improves creativity, flexibility and persistence. It leads to more satisfaction, better performance and more overall well-being. With regard to learning intrinsic motivation brings about deeper and better conceptual understanding. Extrinsic motivation for learning, on the other hand, can lead to more behavioral problems in the classroom, loss of interest and dropout.<sup>225</sup>

So how does all this relate to unschooling? If we want to nourish intrinsic motivation, we have to create an environment where people feel they are autonomous, competent and related. People should feel they have some freedom to choose what to do and how to do it. And, especially with children, they should feel supported if we want them to be curious and explore. Schools with their curriculums, schedules and strict behavioral rules cannot provide such an environment.

Unschooling champions autonomy and self-directed learning. In my opinion it encourages people to face challenges and feel competent. As mentioned earlier, it starts from a position of connection and trust between children and parents. There is a fundamental trust in the

child's competence and capacity to learn. If anything, unschooling seems to be the approach to learning that may well encourage self-determination the most. Edward Deci himself writes how he started his research because he saw how schools usually destroy children's innate sense of curiosity and exploration:

*A child's curiosity is an astonishing source of energy. Children explore, manipulate, and question; they pick things up, shake them, taste them, throw them and ask: "What's this?" [...] They try things, bend things and transform one thing into another. They seek the novel and they are eager to learn. Clearly, something in them is alive and vital; something in them wants to master the challenges of their lives. [...]*

*For young children, learning is a primary occupation; it is what they do naturally and with considerable intensity when they are not preoccupied with satisfying their hunger or dealing with their parents' demands. But one of the most troubling problems we face in this culture is that as children grow older, they suffer a profound loss. In schools, for example, they seem to display so little of the natural curiosity and excitement about learning that was patently evident in those very same children when they were three or four years old. What has happened? Why is it that so many of today's students are unmotivated, when it could not be more clear that they were born with a natural desire to learn?<sup>226</sup>*

## *Growing without schooling*

Free children, supported by unconditional love, growing and flourishing independently, carving their own unique path across the universe, it may seem like a utopia to you. Yet, it does not have to be. I have seen it happen with my own children and the children of many others who chose the same path. That does not mean this is an easy road. It definitely comes with its own challenges. In this paragraph I will try to give you some concrete advice on how to put these ideals into practice and to help children learn naturally.<sup>227</sup> In general we can refer here again to the *attachment theory* explained in the previous chapter. Children mainly need support and independence if they are to grow into happy and sociable human beings.

### Let the child choose

The main thing is: do not tell your children what they should do or learn. If they feel like playing all day, they can play all day. Eventually they will get curious about something. Then just let them come to you with any questions they may have. Young children naturally ask lots of questions, and school, with all its structure, curricula and text books, does not always allow a lot of

space for this. One important remark: if children ask something, answer them only insofar as they are interested. Do not give them an entire lecture after one small question. This may annoy them and discourage them from asking questions next time.

If they want to know or learn something and you do not have the answer, you can go looking for the answer together, online or in the library. Or you can go and find someone who can explain or teach them. If they want to learn to play the guitar for instance, you can offer them a guitar teacher. Unschooling does not mean that there can be no classes or teachers. It just means that the child should decide freely if and with whom they want to take classes. If the child is self-motivated, they will be so much more passionate about what they are doing.

Unschooling does not even have to mean that children cannot go to school. They can go, but only if they want to. My oldest daughter chose to go to school at the age of 13. She was the most motivated kid in her class, because she was the only one who chose to be there.

Unschooling is not the same as homeschooling. Homeschooling usually means that you teach children more or less the same curriculum as in school. Yet, instead of doing it in school, you just do it at home. This

is not unschooling. In unschooling there can be no fixed curriculum. The children themselves can choose what to explore, when, how and with whom.

### Be available for your children

Unschooling will usually mean you spend a lot of time with your children, much more than most Western people commonly do today. In Western families, often both parents have jobs. Maternal leave lasts for a few months maximum, paternal leave – if any – much less.<sup>228</sup> After parental leave, parents usually go back to work and children are sent to nurseries, kindergartens and schools. We outsource raising our children for a large part to various institutions where they are taken care of by professionals whom we usually hardly know.

Outsourcing education can be convenient of course, but is it the best for our child? If we send our children to school, we can continue our careers and other endeavors without too much disturbance. Yet, as we noted in the previous chapter, the question is how well suited this is to our children's genetic expectations. Children need the presence and support of their parents or primary caregivers. Why do you think the first day of school is such a traumatizing event for many children? Why do we

send our kids away to be with strangers as soon as we can? Who else can love a child better and more than their own parents?

Unschooling constitutes the conscious choice to make our children central to our lives again. For many unschooling parents this involves working part time, working from home, or only one parent working. It means we may have to cut back on income, but how much does that really matter to the child? Children do not care very much whether they grow up in a palace or a hut. What they do care about, is whether they can be with their parents and receive their love and care.

Being with my children is nourishing and exciting, otherwise why would I conceive them to begin with? For many unschooling parents, children are a source of joy, not a burden. We would not want to pay someone else in order to relieve us from it. Raising self-conscious and healthy children is a natural part of life for us. “[We] are the bows from which [our] children as living arrows are sent forth,” as the poet says.

Of course, this might not be the case for everyone. Not everyone enjoys or is able to spend all this time with their children. Unschooling is not for each and every parent. Some may have career or life goals that conflict with this.

Others might not be emotionally or physically able to provide such care. For children in broken families, torn apart by abuse, violence, alcohol or drugs, it may be safer to be in school than to be with their families. I would not want to force anyone to unschool. Forcing anyone to do anything contradicts the very concept of unschooling. I just want everyone to be aware that there are alternatives to the common practices so that they can make conscious and well-informed decisions about raising their children.

Unschooling our children also requires us to do substantial work on ourselves. Agreeing with these ideas is one thing, putting them into practice and actually parenting in a non-coercive and supportive way is a whole other thing. If you want to try it, I recommend to connect to people who have experience and seek their support. We have been conditioned for so long by our own parents and by the school system that it is difficult for us to change. John Holt was quoted saying that it is easier to take a child out of school than take the school out of our heads. We will have to become aware of our habit patterns and transform them. This is not an easy job and, again, it might not be for everyone.

There is also another alternative. If you are not able to spend that much time on raising your children and

working on yourself, but you still believe in self-directed learning, your children could go to a so-called 'free school'.<sup>229</sup> Free schools are pretty much based on the same principles as unschooling. The only thing these 'schools' have in common with regular schools is that there is a school campus. All the rest is quite different. Classes are optional and students can engage in any activity they like: play, study, arts and crafts, etc. The teachers do not hold any authority over the children, they are just there to help them to learn specific things when they want to. Often these schools are organized in a democratic way (so-called 'democratic' schools<sup>230</sup>) and children and staff have an equal say in the rules and functioning of the school.

### Communicate and compromise

We should treat children as fully responsible members of our community. In Sadhana Forest, the community where I live, we usually advise the following to newcomers: treat children the way you would treat adults or, even better, treat them like you would want to be treated yourself. We believe that, from an early age on, we can have mature conversations with children<sup>231</sup> and give them independence.<sup>232</sup> If we want children to grow up to



be responsible, we have to give them responsibility. If we want them to learn to make their own choices, we have to give them the freedom to choose and explore on their own. Hunter-gatherer tribes seemed to have similar attitudes toward children. As one anthropologist writes about a tribe in the Amazon:

*The Pirahas' view that children are equal citizens of society means that there is no prohibition that applies to children but does not equally apply to adults and vice versa... They have to decide for themselves to do or not to do what their society expects of them. Eventually they learn that it is in their best interests to listen to their parents a bit.<sup>233</sup>*

So, for instance, when a child engages in a behavior we do not enjoy or we find dangerous, we do not try to stop them by force. Rather, we engage in a conversation with them. We try to sit down with them and explain how we feel about what they are doing and why we would like them to do otherwise. We do not try to command or force them to obey however. We also take their needs and emotions seriously. Therefore, we always try to look for a compromise. Instead of saying 'no', we try to offer an alternative that can satisfy everyone's needs.

I will tell you a story of my own daughter. When she was one year old, she was very inquisitive and would crawl to the electricity socket with a fork, wanting to explore it.

My friends told me to beat her on the hand so she would stop doing this. This just did not feel right to me. So, I rushed to the nearest hardware store and I bought a new electricity socket that was identical to the one in the wall. I gave the new socket to my daughter and explained her this one was safer to play with as it was not connected to electricity. She was just as happy playing with the new socket, and she never crawled to the socket in the wall again!

If we try to force children, they may obey us, but they will probably do it out of fear, guilt or shame. It does not encourage them to empathize with our emotions or listen to our needs.<sup>234</sup> If we want children to listen to our needs and feelings, we have to share those with them and give them the freedom to act out of empathy and understanding. We also have to show empathy towards their needs and feelings. Bullying them into a behavior may seem very efficient at first, but it usually does not lead to the emotional sensitivity and moral uprightness we want to achieve.

### What will become of them?

When people consider unschooling, one fear always comes up: what will become of our children? Will they

learn how to read and write? Will they find a job? It is normal for this insecurity to come up. You are choosing not to go down the beaten path. You are going down a road and you do not know where it leads. Once again, it is important to have trust in the capacity of your child. It is built to learn.

Luckily, you are not the first one to choose this path, and there are some indications that unschooled children usually end up well. Nearly all the unschooled children I have met, were very passionate and motivated learners and did not have difficulties finding their way into adulthood. And yes, they all learned how to read and write, be it at different ages. A few surveys of unschooled children have been carried out.<sup>235</sup> These indicate they are generally happy with their learning experience, and do not have significant difficulties getting into college or finding a job.<sup>236</sup> Researchers Gina Riley and Peter Gray write: "They claimed that their experiences as unschoolers prepared them well for further education and employment by promoting a high degree of self-motivation, continued enjoyment of learning, capacity for self-direction, and sense of personal responsibility."<sup>237</sup>

Another indication comes from reports from aforementioned 'free schools'.<sup>238</sup> The two perhaps most

famous free schools, *Summerhill School* in the UK, and *Sudbury Valley School* in the US, both report that the majority of their students were happy with their education and quite easily found themselves doing a wide variety of jobs.<sup>239</sup> A *Sudbury Valley* alumni research paper reads:

*Although these individuals educated themselves in ways that are enormously different from what occurs at traditional schools, they have had no apparent difficulty being admitted to or adjusting to the demands of traditional higher education and have been successful in a wide variety of careers. Graduates reported that for higher education and careers, the school benefited them by allowing them to develop their own interests and by fostering such traits as personal responsibility, initiative, curiosity, ability to communicate well with people regardless of status, and continued appreciation and practice of democratic values.*<sup>240</sup>

## Conclusion

Let it be clear: it is possible to raise independent and happy children that learn joyfully out of their own motivation. Children can learn and explore the world around them in a way that fulfills their genetic expectations. And all this can be done without (forced) schooling or other forms of coercion. It may not be the easiest way to raise your kids, but for me it is the most rewarding. A lot more is to be said on the topic of

growing up, learning and unschooling. In the space of this book, we can only touch upon the tip of the iceberg.<sup>241</sup>



## Conclusion

In the first part of this book, we spoke about raising children. We did not speak so much about how to do things, but more about how to *undo* things. A recurring theme was to have a critical look at many of the technical inventions and interventions that have come to dominate birthing and raising children in the past two centuries or so. They often seem to get in the way of the natural flow of things. We seemed to have lost faith in our biological make-up, which is how millions of years of evolution have adapted us for survival. The pundits might say we need more, more science, more medicine, more education, I think – without denying the advances modern technology has brought – we mainly need less. We need to do less and reconnect with our instincts.

We need to make raising children less clinical and reinvigorate it with some human warmth, compassion and common sense. Giving birth is not a medical procedure, but a life changing experience in which the mother's and the baby's comfort and emotional well-being is as important as their medical well-being. Immunity is something we build naturally. Raising infants is not something sterile we do from a distance or outsource to others, but it requires a close, warm and

loving presence. Learning is not some technical intervention that needs to be done by professionals in institutions. It happens naturally in a warm and supportive environment.

The latest scientific research is now beginning to confirm what we have always known deep inside, and what our ancestors have always practiced. In the past decades a counter-movement of natural birthing, natural immunity, attachment parenting and natural learning has come up. We hope these chapters can further that movement and make you want to reconsider the way we have been conditioned by our environment. This may make us more apt at respecting our *continuum*, and will help us grow happier and healthier children, and will probably provide parents with more happiness too.

We will end this first part of the book with the words of anthropologist Jared Diamond, who came to a very similar conclusion observing traditional small-scale societies:

*Westerners who have lived for years in hunter-gatherer societies [...] are struck by the emotional security, self-confidence, curiosity, and autonomy of members of small-scale societies, not only as adults but already as children. We see that people in small-scale societies spend far more time talking to each other than we do, and they spend no time at all on*



*passive entertainment supplied by outsiders, such as television, video games, and books.*

*We are struck by the precocious development of social skills in their children. These are qualities that most of us admire, and would like to see in our own children, but we discourage development of those qualities by ranking and grading our children and constantly telling them what to do. The adolescent identity crises that plague American teenagers aren't an issue for hunter-gatherer children.*

*The Westerners who have lived with hunter-gatherers and other small-scale societies speculate that these admirable qualities develop because of the way in which their children are brought up: namely, with constant security and stimulation, as a result of the long nursing period, sleeping near parents for several years, far more social models available to children through allo-parenting, far more social stimulation through constant physical contact and proximity of caretakers, instant caretaker responses to a child's crying, and the minimal amount of physical punishment.<sup>242</sup>*



## II. FROM SOCIETY TO COMMUNITY

*No man is an island*

John Donne<sup>243</sup>

In the second half of this book, we will widen our scope from children to society in general. We will consider a few organizing principles of modern society and suggest ways of living and working together that better fulfill our genetic expectation and are based on compassion. We will have a look at some of the assumptions underlying our modern society and see how they create scarcity and discrimination. We will include reflections on economics, development and inclusivity. A recurring theme will be our social nature and the need for connection. Modern society often seems to go against these genetic expectations. How do we go from modern *society*, characterized by loose, impersonal and indirect social ties to *community*, with warm, close-knit social relationships?<sup>244</sup> In short, how do we create a new humanity and live together in harmony?



## 5. Collaboration or competition?

*[The ideal community] would be  
a place where human relationships,  
which are normally based almost  
exclusively on competition and strife,  
would be replaced by relationships  
of emulation in doing well,  
of collaboration and real brotherhood.*

Mira Alfassa ('The Mother')<sup>245</sup>

*If we feel abundant, we will freely share our resources and will have no problem working together with others. However, the prevalent feeling of scarcity in the world leads us to compete rather than collaborate with each other. If we feel we do not have enough, we will try to have more or be better than others. If there is an apparent scarcity of resources, we have to compete for them. In this chapter we will have a closer look at the nature of competition and its counterpart, cooperation, and how both affect us. The fundamental question is: Are we humans by nature cooperative or competitive? And how do we drop competition and create a compassionate society where everyone is a winner?*

## Competition for life

Competition is omnipresent in our society today. We call life a 'rat race' and 'loser' is one of our most common insults. We give a huge value to being better than the rest. Our media constantly glorify the most successful, the richest and the most beautiful. Psychoanalyst and cultural critic Erich Fromm sums it up quite poignantly:

*Everybody [is] struggling for the best places, even though only a few were chosen to attain them. In this scramble for success, the social and moral rules of human solidarity [break] down; the importance of life [is] in being first in a competitive race.<sup>246</sup>*

Competition starts in schools where students compete for the best grades and continues in the workplace where people compete for the best position and the highest income in a company and companies then compete for higher profits. And even in our free time we continue to compete playing competitive games or watching sports. Twenty-two people running after a ball capture millions of people's attention. Why would it be so important that this ball ends up in a net on either side? It is just sports. Yet we give huge respect and privilege to these twenty-two people and they inspire countless kids all over the world to try and achieve the same.

We seem to think that winning in this competition will give us lasting happiness, but that is not true. As we discussed in the introduction, external factors are only a minor determinant of our happiness. When we win, we feel temporarily happy, but soon revert back to our previous mental state. This has been shown for instance with lottery winners.<sup>247</sup> Moreover, as we learned in the last chapter, competition undermines our intrinsic motivation. Scientists have even linked competition to depression.<sup>248</sup> If our prevailing mental state is a state of scarcity, we can forever try to fill it up, but it will be to no avail. It is like trying to fill a bottomless pit. As long as we feel scarcity, we will feel the need to compete. What will bring us lasting happiness is changing to a mindset of abundance, and drop competing altogether.

Our preoccupation with competition is unfortunate, because I believe it does not lead us to the best expression of our human potential. Competition makes us waste lots of resources. We spend our energy comparing ourselves with others, trying to do better than them or find their weak spots. I know people who spend their energy trying to hurt other people's projects, so that if they will not succeed themselves, at least the others will not either. Or just look at how countries are competing to have a better

economy<sup>249</sup> or military supremacy. So many resources are wasted in the process. Just imagine a world where everybody's goal would be to collaborate better. How different things would be!

Instead of comparing ourselves with others, we better turn our look inside and try to understand ourselves more deeply. This way we can improve ourselves and be the best version of ourselves we can possibly be. When we compete, our sense of accomplishment comes from beating someone else. When we stop competing, our accomplishment can be to express ourselves in the most authentic and profound way. Being true to ourselves and realizing our inner potential is much more rewarding.

I believe that human beings, as a species, reach their highest potential only if they collaborate. It is through collaboration that we get the best out of each other and achieve the most. If we work together, we can find a way that everyone can contribute to the best of their abilities. The whole is greater than the sum of its parts. As Bill Mollison, founder of the *Permaculture* movement writes: "Cooperation, not competition, is the very basis of existing life systems and of future survival."<sup>250</sup> Psychological research shows that companies that encourage teamwork and cooperation thrive, while



individual incentives and bonus schemes which create competition, undermine overall productivity.<sup>251</sup>

We humans are and always have been a social species. We cannot achieve anything without the help of others. From the day we are born, we are dependent on others. It is through others we learn to walk, talk and do everything we need in order to survive and thrive on this planet. We cannot achieve anything by ourselves. In chapter 7 we will explore humankind's social nature more in depth.<sup>252</sup>

### No competitive games

In *Sadhana Forest*, we try to create an environment which supports collaboration as one of its core values and has no competition. One of the ways we do this is by not allowing any competitive games. We do not need to try and be better than others in order to entertain ourselves. At first, this can be hard for the volunteers to understand. Yet, after a while they realize that when they cooperate and help each other out, they can also have a good time and everyone actually performs much better. It can be so much more rewarding to try and get the best out of yourself and others, instead of trying to be better. Interestingly, hunter-gatherer and small farming societies

also do not have any competitive games, and their members only play in cooperative ways.<sup>253</sup>

Our volunteers at Sadhana Forest find it especially hard to understand why they cannot play chess. Chess is a 'gentleman's' game, highly intellectual and good for the brain, they say. But it does not matter whether you use your brain or not, what matters is what you use it for. Chess was originally a war game.<sup>254</sup> Bobby Fischer, one of the game's most revered players of all time reportedly said: "Chess is war over the board. The object is to crush the opponent's mind."<sup>255</sup> Chess is about trying to identify your opponent's weaknesses and attacking them. You try to attack your opponent where it hurts most, the king. And this is how it usually goes in society. We use our brains to try and outsmart others. We identify others' weak points and attack them. That is all part of our scarcity driven competitive mindset.

### **Born collaborators**

This pervasive competitiveness seems to be based on the idea that humans are naturally selfish and are purely interested in their own pleasure at the expense of others. 'Homo homini lupus', man is a wolf to man, as the saying

goes. This idea seems to be deeply rooted in modern Western culture. In the present paragraph we will give a brief overview of some of the philosophical and scientific theories that brought selfishness to the center stage over the past few centuries. We will also have a brief look at some recent research that has begun to question the premise of universal selfishness. In the past decades, many researchers in various fields have come to realize what spiritual traditions have always known: We were born to be our brother's and sister's keepers. In the words of the Dalai Lama: "If we look at the very pattern of our existence from an early age until our death, we can see the way in which we are fundamentally nurtured by other's affection."<sup>256</sup> Love and compassion are as natural to us as anger and selfishness.<sup>257</sup>

Modern **philosophers** have tried to convince us for a long time that we are a self-centered animal running solely after our own interests. Altruism, according to them, would be a fiction, or – even worst – immoral. Modern champions of selfishness include Thomas Hobbes,<sup>258</sup> Jeremy Bentham,<sup>259</sup> Friedrich Nietzsche,<sup>260</sup> Sigmund Freud,<sup>261</sup> Herbert Spencer and more recently Ayn Rand.<sup>262</sup> However, thinkers as early as Joseph Butler<sup>263</sup> and David Hume have made a case for the

altruistic nature of mankind. In the mid-18<sup>th</sup> century Hume wrote:

*The most obvious objection to the selfish hypothesis is, that, as it is contrary to common feeling and our most unprejudiced notions, there is required the highest stretch of philosophy to establish so extraordinary a paradox. To the most careless observer there appear to be such dispositions as benevolence and generosity; such affections as love, friendship, compassion, gratitude.*<sup>264</sup>

**Sociologists** such as Georg Simmel have questioned whether a society could really be based on the idea of 'everyone to themselves'<sup>265</sup> and even **historians** like Rutger Bregman are now rewriting history in terms of kindness and cooperation.<sup>266</sup>

In modern science, **evolution theory**, and notably its *survival of the fittest*, have often been seen as evidence for ruthless competition in nature.<sup>267</sup> But in fact Charles Darwin, the father of evolution theory, argued that collaboration was probably one of humankind's strongest assets and ensured its survival as a species. Darwin saw sympathy as a basic social instinct:

*[Sympathy] is of high importance to all those high animals that aid and defend each other. It will have been increased through natural selection. For those communities which included the greatest number of the most sympathetic members, would flourish best, and rear the greatest number of offspring.*<sup>268</sup>

We did not achieve our success as a species through extraordinary speed, muscular strength or sharp teeth. On their own, humans cannot withstand the forces of nature or wild animals. *Homo sapiens* became what it is today because of its ability to collaborate with others.

The more pessimistic interpretation of Darwin came about through social Darwinists such as Thomas Huxley and Herbert Spencer, who actually coined the term *survival of the fittest*. They applied Darwin's theory of evolution to human society and believed only the 'fittest' competitors in society would survive. In this way they believed the population would improve. In the 1960s the work of George C. Williams<sup>269</sup> and Richard Dawkins' famous book *The Selfish Gene*<sup>270</sup> further propagated the 'selfish' interpretation of evolution. More recently, however, evolutionary scientists like David Sloan Wilson, Elliott Sober, and Martin Nowak have brought Darwin's vision of cooperation in groups improving natural selection back in the limelight.<sup>271</sup> **Ethologists** have also found cooperation to be essential in the animal realm, most notably primatologist Frans de Waal.<sup>272</sup> 'Ecosopher' Arne Naess writes:

*[T]he so-called struggle of life, and survival of the fittest, should be interpreted in the sense of ability to coexist and*

*cooperate in complex relationships, rather than ability to kill, exploit, and suppress.*<sup>273</sup>

**Psychological** research of the past decades has started to emphasize the basic empathic<sup>274</sup> and collaborative<sup>275</sup> nature of our species. As one researcher puts it: "Ours is the only species where one observes cooperation that is strong, regular, diverse, risky, extensive [...] between individuals who share no familial ties."<sup>276</sup> Psychologists have found that children as early as one year old already exhibit spontaneous behavior of mutual aid<sup>277</sup> and six-month-olds already can show preference for cooperative behavior.<sup>278</sup> The conclusion is clear: United we stand, divided we fall. It is cooperation that makes us thrive as a species. We achieve our best results only if we cooperate.

**Neurologists** have now identified the nerve cells, hormones and parts of our brain responsible for empathic<sup>279</sup> and cooperative<sup>280</sup> behavior. The hormone oxytocin for instance has been associated with empathy, cooperation and generosity. And when we see someone go through an experience, so-called 'mirror neurons' in our brain make us feel as if we are going through the exact same experience.<sup>281</sup>

### The economy of cooperation

The mainstream 'neoclassical' economy of the 20<sup>th</sup> century saw our species as a 'homo economicus', a rational self-centered actor, interested only in maximizing their own profit.<sup>282</sup> As mentioned before, our economy takes competition on scarce resources as its starting point. Adam Smith, founding father of modern economics believed that if everyone ran after their own interest, this would eventually benefit the whole of society, more so even than when people would try to help each other out. Their behavior would be guided by what he famously called an 'invisible hand'.<sup>283</sup> One of his contemporaries puts it quite succinctly: "private vices, public benefits."<sup>284</sup> In other words: people are intrinsically greedy and that is not such a bad thing.

Today these thoughts are still very much alive. Economists talk about the 'axiom of greed'.<sup>285</sup> Main character *Gordon Gekko* in the movie *Wall Street* famously exclaimed that 'greed is good'.<sup>286</sup> And what about Economics Nobel Prize laureate Milton Friedman:

*Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible.*<sup>287</sup>

Yet these ideas have also begun to be questioned in the past decades.<sup>288</sup> Do we really take decisions in such a rational,<sup>289</sup> egotistical<sup>290</sup> way? Amartya Sen, another Economics Nobel Prize laureate writes:

*Why should it be uniquely rational to pursue one's own self-interest to the exclusion of everything else? [...] To argue that anything other than maximizing self-interest must be irrational seems altogether extraordinary.*<sup>291</sup>

Research now proves that people generally do take ethical considerations into account when making economic decisions and often actually prefer to behave cooperatively.<sup>292</sup> Game theory experiments by economist Ernst Fehr and others have shown that people will generally trust each other and cooperate for a greater benefit, even if by doing so they may be putting themselves at risk of losing their own investment. Cooperation only breaks down if 'free riders', people who profit without contributing, can get away without being exposed or held accountable. But people are known to let go of part of their profit to prevent this from happening.<sup>293</sup>

One famous example of the debate around human cooperation is the so called 'tragedy of the commons'. In 1968 Garret Hardin coined this term in a famous article in *Science*.<sup>294</sup> He believed that if you let a group of people



jointly manage common resources, they will try to take advantage of each other and overexploit those commons. For a long time, this was the main line of thinking in economics. However, historic research by Economics Nobel Prize winner Elinor Ostrom and others has proven this to be a myth. Communities are perfectly capable, and can be in fact very good at, governing common resources jointly, and have done so throughout human history.<sup>295</sup> Think about it: Do small communities really overexploit resources, or is it more likely that big private landowners and companies do so?



## 6. Gift economy

*A single act of giving throws out roots in all directions,  
and the roots spring and make new trees*

Amelia Earhart<sup>296</sup>

*How can we envision an economy that is based on cooperation rather than competition? In the previous chapter we mentioned that scarcity and competition are at the basis of our economic system. It may seem like they are unavoidable. Yet there are alternatives. Our economic model is not set in stone. It was made by humans, so humans can also change it. We can distribute resources in ways that make us feel abundance rather than scarcity, compassion instead of selfishness, and create community rather than separation. I believe an important part of an alternative economic solution will be 'gift economy'.*

### **What is gift economy?**

Gift economy is the opposite of a barter or market economy. In a barter or market economies you exchange goods and services for other goods and services or for money respectively. In a gift economy you do or give things without expecting anything in return. You just share what you have, and give your time and service to others, without expecting anything in return. All goods

and services are simply gifts. Let us have a look at the (opposing) underlying principles of both models.

As mentioned earlier, our modern market economy is based on a sense of scarcity. There are scarce resources (money, time, precious metals, oil...) and we have to compete to earn them. This scarcity goes hand in hand with feelings of fear and greed. There is a deeply rooted fear of not having enough, of being left out, which drives our actions and keeps us in want. This stimulates greed, the desire to keep accumulating more, even though technically, we may have enough to fulfill our basic needs. The best 'players' are those who win in the competition and amass the greatest amount of wealth.

Gift economy does the exact opposite. It starts from a feeling of abundance. I feel I have enough, therefore I happily share my time and resources with others. Gift economy thus revolves around cooperation rather than competition. It is not based on fear and greed, but on trust and contentment. You trust that if you serve and take care of others, something or someone will also take care of you. Gift economy does not support unchecked greed. It is based on fulfilling our needs and being content with what we have. The 'champions' of traditional societies based on gift culture are not the ones

that accumulate the most, but the ones that give the most. Generosity is the highest value. "The gift must always move," as Lewis Hyde notes in his analysis of traditional gift cultures.<sup>297</sup>

Our modern market economy separates us. It assumes we are all separate entities and we have to compete with one another in order to survive. The system is based on the idea that we are self-centered. It is everyone to themselves. Gift economy on the other hand connects us and builds community. I help someone. This person might not help me back in return, but others will. And if everyone takes care of one another in this way, we will all be fine. So, gift economy is altruistic instead of self-centered.

Moreover, our modern economy objectifies products and relationships. Goods and services are reduced to their monetary value. Everything becomes interchangeable. Money creates rational, impersonal relationships that reduce everyone and everything to numbers. Already 100 years ago, Georg Simmel wrote:

*Money is concerned only with what is common to all: [...] it reduces all quality and individuality to the question: How much? All intimate relations between persons are founded in their individuality, whereas in rational relations, man is reckoned with like a number, like an element that is in itself*

*indifferent. Only the objective measurable achievement is of interest.*<sup>298</sup>

Gifts work very differently. If I give you something for your birthday, this will feel entirely different from when you would just buy the exact same thing yourself. Rather than impersonal and interchangeable, gifts are personal and unique. They create and express a relationship between people. Finally, gift economy is fundamentally egalitarian, while a market economy discriminates. When everything has a price, there are always people who cannot afford something and the world is divided into 'haves' and 'have-nots'. If everything is given freely, nobody has to feel left out.

Gift economies in a way resemble natural ecosystems. They start from abundance. Resources such as rain, water, air and sunshine are freely available. Ecosystems are made of a web of intricate and unique relationships. Every being in that web of life takes the resources it needs in order to contribute what it can, all without thought of reward. A tree takes only the water it needs, not more. In return it produces as many fruits as it can, which are freely available to all. Those you receive from and those you give to are not necessarily one and the same, but in the end, everything is interconnected and a careful balance keeps everything in place.<sup>299</sup>

## A history of gifts

Gift economy is nothing new. We all practice it with our family and friends. In fact, gift economy is much older than our modern capitalist economy. Research shows that in hunter-gatherer societies generosity is usually the norm. Food is commonly shared among all members of the group, regardless of whom acquires it.<sup>300</sup> One anthropologist writes:

*Probably everywhere in Aboriginal Australia the highest secular value is generosity. Readiness to share with others is the main measure of a man's goodness, and hospitality an essential source of his self-esteem.*<sup>301</sup>

For the larger part of our history, our economy was mainly a gift economy. Hunter-gatherers and early agricultural communities were self-sufficient. They mostly relied on internally sharing their resources. Barter happened only occasionally and was used to acquire rare goods that could not be found locally.<sup>302</sup> In rural villages life remained pretty much like this up until the advent of the Industrial Revolution. Historian Yuval Noah Harari notes: "Less than 10 per cent of commonly used products and services were bought in the market. Most human needs were taken care of by the family and the community."<sup>303</sup> Helena Norberg-Hodge writes:

*In the traditional subsistence economy, money played a minor role, used primarily for luxuries – jewelry, silver, and gold. Basic needs – food, clothing, and shelter – were provided for without money. The labor one needed was free of charge, part of an intricate web of human relationships.<sup>304</sup>*

### The role of work

Practicing gift economy does not mean that we will all be lazy and food will just rain down from heaven. We still work, but our relationship towards work is transformed. We do not work as part of our struggle to survive. Rather, gift economy is an opportunity to work from our hearts and to see our work as a real service.

In our market economic system, we need a job in order to sustain ourselves. There is a scarcity of resources, so we have to compete to make ends meet. We have to work, otherwise we may not be able to get food and shelter. This threat is implicit in the system. It is a matter of life and death, or at least, that is how it feels like. We are under pressure to find a paid position. We do not have much of a choice. Therefore, we will more easily compromise on our values and do something that does not fully align with the work we want to do.

In a gift economy on the other hand, we work selflessly and wholeheartedly. We do not start from scarcity. We are



not afraid that we will die of hunger or cold. We feel abundant and overflowing and this opens up a whole new range of possibilities. We just want to share our gifts with the world and make it a more beautiful place. As *The Mother* writes: “[W]ork would not be a way to earn one’s living but a way to express oneself and to develop one’s capacities and possibilities while being of service to the community as a whole.”<sup>305</sup> Our work is not a ‘job’ or a chore. Rather it is a service or an offering.

In our market economy the motivation to work is *extrinsic*. People are pushed into working with the old carrot and stick. It is almost as if our society believes that deep down humans are lazy and do not want to contribute anything. They need to be pressured to perform anything. In a gift economy, we can shift to an *intrinsic* motivation. We work because we really want to. Humans are not seen as lazy and selfish, but as endlessly creative and supportive.

In a market economy, work is sustained because you can make money with it. This does not necessarily mean it is doing the world any good. Your work can be harmful towards the environment or disturb social relationships; as long as someone is willing to pay for it, you can continue doing it. In a gift culture, such things are

sustained which the community considers to be valuable. Nobody is under any obligation to give you money, so they will support you if they feel you are bringing an added value.

When our work is a gift, we do not get a paycheck at the end of the month. We do not sign any contract. We trust that, if we work in this selfless way, the support we need will come to us. Instead of having ‘professional’ relationships, our work will create more authentic relationships with other people. These people (or at least some of them) will then feel inspired and will want to support us. This may sound out of this world, but it is for example how artists often work.<sup>306</sup>

### *Living in the gift*

The idea of gift economy sounds beautiful, but it may seem daunting to put into practice. I would like to share with you how I came to practice gift economy and how my experience has been. From the beginning, we decided to build *Sadhana Forest*, our community, on the principles of gift economy. It has not always been easy, but it has been an amazing journey so far.

### Having no business with business

I used to be a business man. When I wanted to start my own community, I knew I was done doing business. I wanted to do things differently. I wanted to give without expecting anything in return. I was living in Auroville, an area that had suffered greatly from deforestation. When I told a friend about my aspiration not to do business, he said: “You can do indigenous reforestation. Don’t worry, you won’t make any money!” He was joking actually, but I took his joke very seriously. I decided to start my community based on gift economy, not making any profit, working with volunteers, not selling any products and just using my own savings. And when I ran out of savings, donations started to come in without me even ever asking for them!

And so, the forest we are planting here does not make us any money. The forest is a gift to the community around us: the humans, animals and plants. The forest provides them with shade, clean air, food, shelter and water. These benefits are freely available for all living beings around us. We are not selling anyone clean air nor the water that has replenished in the aquifer below. Doing reforestation is a long-term process. It takes decades for a forest to grow back. I will probably no longer be around to see the

final result of our tree planting efforts. We are not doing it for ourselves, but for future generations.

Those who are planting the forest, are also not making any money. We work only with volunteers and practice selfless service, or *seva* as we like to call it, using an old Sanskrit word. We are not here to get paid. In fact, we avoid using the term ‘work’ as this implies the old mindset of monetary gain and ‘tit for tat’. Many people wonder why we insist on working with volunteers. The volunteers stay with us here in the community. They come to this place from many different backgrounds and often with different expectations. It requires a lot of people skills and management to keep everyone happy and to make sure everybody is on the same page. Using our donations to hire local labor could solve those issues. Yet, we feel this would have much less impact, as doing *seva* is often a transformative experience. Volunteers often leave here as different people.

To further avoid any ‘market’ tendencies coming in, we make it a point not to sell anything inside our community. Everything here is offered as a gift.<sup>307</sup> Apart from our ecological restoration work, we host vegan meals, guided tours, documentary screenings, a children’s playground, workshops and give away food

trees and many other things.<sup>308</sup> Sometimes people tell me we should not offer things this way, because people will take advantage of us. But the truth is, you cannot take advantage of me, because I just love to give. The more I can give, the better!

Often people have tried to convince us to start making money. They told us that if we would just sell some natural products, or rent out some of the huts where our volunteers are staying, we would have a steady flow of income. This would make it easier to plan expenses and make our lives a bit more predictable. But every single time we refuse to give in to this logic. The moment you start doing business, a different logic starts working. It becomes harder to hold on to your ideals. Money can cloud your vision. I know several communities which have started in a very egalitarian way practicing gift economy, but at one point, they lost faith that they could sustain themselves in this way. Now these communities are businesses, restaurants, guest houses or (expensive) training centers. The community aspect is all but gone.

### What it takes to give

Living of gift economy requires great trust. Trust has been a recurring theme throughout this book, but it is all

the more relevant here. When you sustain yourself through gift economy, you really do not know what tomorrow might bring. You do not get a wage at the end of the month. You cannot make a business plan. The donation you so dearly need might come today, next month, or never. So, gift economy is not for control freaks. You cannot practice gift economy if you are too attached to material comfort, or if you get stressed easily. Rather, you need to be able to let go and have trust that someone or something will want you to continue the work you are doing. It requires a leap of faith. You do not wait until you have everything planned and sorted out. Rather, you just start giving, and trust that others will give as well.

And so has been our experience in Sadhana Forest. In 20 years, we never failed to fulfill any financial commitment. Many times, we were in dire financial need, even on the verge of bankruptcy. But help always came, often in the last minute. I could tell you many stories of how we had big expenses but no money to pay for them, the solar inverter that broke down, an event that turned out to be much more expensive than planned... And within an hour someone just randomly walked in donating us exactly the amount of money that was needed! Gift

economy is not for the faint of heart. It can be a real roller coaster ride.

Practicing gift economy allows for deep learning and inner transformation. It forces you to live in the moment, look your existential fears straight in the eye and overcome them. Through the years, I have learned not to worry too much about money. Whether I worry or not, it does not affect whether or when the money comes, so I might as well let go.

The spirit of gift economy is contagious. Once you start giving, a different mindset starts working in people. We no longer see each other as competitors in the economic rat race. We are no longer interested in making profit out of each other. We start to see each other as a family, as a community, and we just want to help each other out. So, giving encourages others to give and pay it forward. And, eventually, gifts come back to you, in one form or another. We do our work selflessly and without expecting a reward for it. Paradoxically, this is why people want to sustain it.

Living of gift economy will require you to live simply. As mentioned before, gift economy can sustain our need, not our greed. If you drive around in a fancy car and have a big house with a swimming pool, people will probably

not be so eager to give to you. If you get a big bonus at the end of the year, why would people give you more? If they see you are living simply, volunteering, taking only what you need, they will more easily sympathize with you. This is also how in many Eastern traditions monastics and spiritual seekers have been supported by the community throughout the ages.

One last remark: gift economy does not mean begging for money. If people feel pressured to donate to you, it is no longer gift economy. In that case you still come from a perspective of scarcity and not abundance. You truly should give without expecting anything in return. Gift economy relies on giving from heart to heart, without any form of pressure, guilt or coercion. The only thing you have to do, is to communicate your needs. You have to make it clear to people that you do need certain things, and what you need in order to achieve which goals. Then it is up to them whether they feel like supporting or not. Obviously, there is a thin line between communicating your needs and asking for money. Personally, I always try to be very cautious not to make anyone feel pressured to give back. My volunteers had to argue with me for a long time before I agreed to put something as simple as a donation box in our community.



## Gift stories

My story is definitely not the only one. Across the world countless acts of selfless service and altruistic giving are happening every day. This very book was written using software that is open source<sup>309</sup> and is under a *Creative Commons* license.<sup>310</sup> And we have often used Wikipedia, as a point of entry to orient ourselves for the research on the different topics of this book. Many spiritual organizations,<sup>311</sup> charities and NGOs rely entirely on gifts. Hundreds of millions of people engage in volunteering worldwide. In the EU 22% of the population participates in informal volunteer activities on a yearly basis and 19% in formal volunteer activities.<sup>312</sup> In the US, estimates of the yearly number of volunteers rise up to almost 60%.<sup>313</sup> There are gift economy networks,<sup>314</sup> gift restaurants<sup>315</sup> and free stores<sup>316</sup> or websites where people give away things for free.<sup>317</sup> There are even a handful of courageous people in recent times who consciously have given up the usage of money!<sup>318</sup>

There are even clear examples of cases where gift economy works better than regular market economic approaches. In his classic work *The Gift Relationship* social scientist Richard Titmuss compared the functioning of

blood banks in the US and the UK. He came to the conclusion that the British system, which relied on voluntary donations, functioned far better than the American one, where people gave blood for money.<sup>319</sup> Giving material rewards has been shown to reduce altruistic behavior.<sup>320</sup> One can only wonder what the effect of this is in a society where the main reward for most activities is money. The fact that so much selfless giving still happens today, might well be proof of just how strong our innate tendency to give is.

### *Gifts that keep on giving*

The latest scientific research seems to confirm the benefits of giving. It shows that giving can make us happier, healthier and more likely to give. Prosocial behavior<sup>321</sup> has been shown to improve both mental and physical health.<sup>322</sup> Giving and helping others leads to what has been called a 'warm glow' effect<sup>323</sup> or a 'helper's high'. Worldwide studies show spending money on other people makes you happier than spending it on yourself.<sup>324</sup> When we give to charity, the same reward system is activated in our brain as when we earn a reward.<sup>325</sup> Other studies show how volunteering improves both emotional and physical well-being. This is

believed to be because helping others increases social integration and reduces stress. Volunteering can also improve feelings of self-efficacy, because people feel they are making a difference.<sup>326</sup>

Giving is not only healthy; it is also contagious. Our own experience here is beginning to be paralleled by scientific studies. Giving has a 'ripple effect'. If someone gives altruistically, the receiver will be more likely to give to others as well. In one experiment, this effect was observed up to three degrees of separation. (A gave to B, who was more likely to give to C, who was more likely to give to D, who was more likely to give to E.)<sup>327</sup>

When you give to others without getting anything in return, you are also more likely to receive gifts from third parties. This principle has been called 'indirect reciprocity'.<sup>328</sup> Game theorists and evolutionary scientists have made models of indirect reciprocity and calculated under which conditions it can function and bring a group to flourish.<sup>329</sup> In experiments where people can donate to one another, people who give more donations also tend to receive more donations. People are more inclined to give to people they perceive as altruistic.<sup>330</sup>

The conclusion is clear to me: we are made to give. Giving is hard-wired into our biological make-up. It is

our genetic expectation to give and cooperate. These altruistic behaviors might not seem to give us any profit at first sight. However, our nervous systems reward these behaviors. Evolution has selected individuals who seem to enjoy giving. This implies that giving improves our chances of survival and reproduction and benefits our society as a whole.

## 7. The need for community

*Humans are by nature community animals*

Aristotle<sup>331</sup>

*We are a social species. We have a great need for connection and are at our best when we connect well with each other. Modern society, however, often works against this need and separates us from each other. It makes us believe that we are separate entities and that success is achieved through independence. This has been a recurring theme throughout this book. We separate children from their parents and build an economic system based on competition and scarcity. In this chapter we will look in more detail at just how separated we are in modern society and why this is not beneficial to us. We really need social connection. I propose community living as a way to nourish compassion, close personal relationships and fulfill our social needs.*

### *The atomization of society*

It seems that in today's world we are less and less connected. As one author remarks: "We've been all the way to the moon and back, but have trouble crossing the street to meet the new neighbor."<sup>332</sup> Political scientist Francis Fukuyama talks about 'the great disruption' of

our social values.<sup>333</sup> We are living less in small communities where everyone knows one another. With the advent of industrialization,<sup>334</sup> urbanization, globalization<sup>335</sup> and modern information and communication technology<sup>336</sup> we have become more and more part of large, impersonal networks. Much of our daily interactions are with people whom we do not know, do not have any close relationships with, or – with online services on the rise – with people we cannot even see. Norberg-Hodge writes:

*In the traditional economy, you knew that you had to depend on other people, and you took care of them. But in the new economic system, the distance between people has increased so that it now appears that you no longer need one another.*<sup>337</sup>

In this paragraph we will try to get a deeper understanding of this tendency and its origin. Afterwards we will have a look at some numbers that are indicative for this trend.

We could say Western society has been ‘atomized’. One of the fundamental beliefs of our modern culture seems to be that we are all separate selves.<sup>338</sup> The story of modernity is a ‘story of separation’, to use the words of philosopher Charles Eisenstein.<sup>339</sup> We are all discrete entities, rather than an interconnected, organic whole. And if we are all separate, all we can do is compete and

run after our own interests. This explains our preoccupation with competition and selfishness discussed in chapter 5.

Modern Western society is very individualistic. Individualism has deep roots in our cultural history.<sup>340</sup> Emile Durkheim, one of the founding fathers of sociology, already spoke more than a century ago of a cult of the individual in modern society.<sup>341</sup> Research in cross-cultural psychology confirms the individualistic bias of the West.<sup>342</sup> Individualism is at the core of our modern institutions of capitalism and the nation state,<sup>343</sup> as French diplomat and historian Alexis de Tocqueville already noted in the mid-19th century.<sup>344</sup> In chapter 6 we discussed how our economic system separates and objectifies us.

Look, for instance, at ‘social contract theory’, one of the founding philosophies of our modern states. *Social contract theory*, famously postulated by Thomas Hobbes<sup>345</sup> and John Locke,<sup>346</sup> assumes we are all self-interested individuals. We give up part of our freedom to listen to a higher (political or legal) authority, only because that serves our own well-being, eventually. For if there would be no laws, there would be chaos and conflict, and that would not benefit anyone. Hobbes writes: “[T]he natural

state of men, before they entered into society, was a mere war [...] of all men against all men.”<sup>347</sup> According to Locke and Hobbes, we are clearly all very separate. Why else would we need a contract so we can live together?

Recent research shows with clear numbers how individualistic tendencies are increasing and our community fabric is falling apart. Political scientist Robert Putnam showed in his seminal work, *Bowling Alone*, how membership of social organizations in the US has declined since the second half of the last century.<sup>348</sup> Over the past 20 years there has been a steady decline in social engagement and an increase in social isolation in the US. The time Americans spent alone each day in 2019 was 24 minutes longer than in 2003.<sup>349</sup> They spend less time with their neighbors and trust less that people try to be fair.<sup>350</sup> More than 1 in 10 people in the EU meet up with friends less than once a month, and 15% meet their relatives less than once a month.<sup>351</sup> A study done in the UK indicated that 18% of adults always or often feel lonely,<sup>352</sup> prompting the UK government to appoint a minister for loneliness.<sup>353</sup> In the US about half of the population reports feeling lonely, and young adults seem to be the most affected. Just as recently as 2023 the US



Surgeon General issued an advisory on 'our epidemic of loneliness and isolation'.<sup>354</sup>

Some studies show antisocial behavior increases from the countryside to towns to bigger cities. Sociologists already remarked more than a century ago how people in cities are more distant and indifferent.<sup>355</sup> City-dwellers are less likely to trust<sup>356</sup> and help<sup>357</sup> strangers. They are also less inclined to make eye contact and start a conversation.<sup>358</sup> Again we can refer to Helena Norberg-Hodge's study of development in Ladakh. She observed how the urbanization in Ladakh started to tear apart community fabric.<sup>359</sup> Meanwhile urbanization is rapidly increasing across the globe, with already more than half of the world's population living in cities today and this is expected to rise to two thirds by 2050.<sup>360</sup>

As large parts of the world are more and more drawn towards Western values, surveys now show individualism is on the rise across the globe.<sup>361</sup> Trust in other people has declined worldwide in the past 20 years.<sup>362</sup> Household size is shrinking globally and single person households are already the norm in Europe and North America.<sup>363</sup> The situation of elderly people here is especially precarious, and I will devote a separate paragraph to this.

### Elders on the outside<sup>364</sup>

As life expectancy continues to grow worldwide, the number of elderly people in the world grows. And as birth rates continue to decline, the elderly constitute a larger and larger part of the total population. Currently 9% of the world population is over 65 years old, by 2050 this is estimated to be 16%.<sup>365</sup> People are growing older, yet they do not experience their old age in better health than their parents. Access to adequate long-term care is limited even in high-income countries. Neglect of the elderly is a widespread problem. The *World Health Organization* estimates that at least 1 out of 6 people over 60 living in community settings experiences abuse. 2 out of 3 elderly care staff admit to abusing elderly people living in institutions.<sup>366</sup>

Older people are living alone more than ever. In fact, they are so isolated it is shocking to people from other cultures.<sup>367</sup> In Western families children move out of the house and establish their own household once they are old enough. Different generations do not commonly live together, which is quite unusual from an anthropological perspective.<sup>368</sup> Families are growing smaller and women participate more actively in the workforce, which makes

it more difficult to take care of ageing parents. There seems to be less respect and responsibility for the elderly. Elderly people therefore are at an increased risk of loneliness and depression. Some studies indicate almost 40% of aged people feel lonely, which can have detrimental effects on their health and general well-being.<sup>369</sup> In response to this, some countries have even introduced legislation to force children to visit and support their ageing parents.<sup>370</sup>

There is widespread discrimination and prejudice against older people in many cultures. This 'ageism' may well be as pervasive as other forms of discrimination such as racism and sexism. Older people are often sidelined in society. Western society glorifies youth and looks down upon old age. Sociologist Donald Cowgill writes: "We associate old age with loss of usefulness, decrepitude, illness, senility, poverty, loss of sexuality, sterility, and death."<sup>371</sup> Older people have a lot to contribute, yet communities fail to include them and draw out their full potential.<sup>372</sup> The elder are often considered to be a burden, yet research shows that investing in their health and well-being pays off. The contributions they make to society outweigh the costs they impose.<sup>373</sup>

## *Social animals*

In the previous chapters we already had a closer look at some of our social instincts. We saw how children need their parents and how we are at our best when we collaborate and give to each other. It seems that we are deeply connected to each other. We need each other to thrive and survive. This is also what all the major religious traditions of the world have been teaching us for centuries. We 'inter-are', to use the words of Vietnamese Zen teacher, Thich Nhat Hanh.<sup>374</sup>

In chapter 5 we already had a look at some of the science that shows our basic altruistic and cooperative nature. In this paragraph we will dig a little deeper into this 'social' science and look at some exciting new research that is starting to demonstrate our basic social nature. We will continue with some scientific arguments that show it may be better for us to live in community.

## Social science

Scientists from different fields are now coming to see how our social instincts are deeply ingrained into our psychological, neurological and biological make-up.<sup>375</sup> Across different fields of study new scientific approaches

are emerging such as 'relationship science',<sup>376</sup> 'social neuroscience',<sup>377</sup> 'social (neuro)endocrinology'<sup>378</sup> and 'interpersonal neurobiology'.<sup>379</sup> They all seem to confirm that our need for connection drives much of our behavior. Social relationships are part of what makes us who we are and are key to both our success as a species<sup>380</sup> and our individual well-being.<sup>381</sup>

Failure to meet our social needs can have devastating effects. Social pain is processed in the brain much in the same way as physical pain.<sup>382</sup> Loneliness has a negative effect on our emotional and physical well-being and distorts our social relationships.<sup>383</sup> It obstructs our immune functioning and increases our risk for high blood pressure, inflammation, depression, suicide<sup>384</sup> and dementia.<sup>385</sup> Loneliness is estimated to be worse for your health than smoking 15 cigarettes per day.<sup>386</sup> Some authors claim increased individualism has led to a rise in depression and mental disorders because in an individualized society there is pressure on people to find their way all by themselves.<sup>387</sup>

### Community wisdom

In my opinion, it is part of our genetic expectation to be part of small communities with strong social ties. As

mentioned before, the human species has lived most of its existence in small bands of independent hunter-gatherers. Only after the agricultural revolution some 10,000 years ago did we start to organize ourselves in larger structures.<sup>388</sup> Sociological and anthropological research has suggested that up to 150 people is a natural size for a community.

150 seems to be the number of people that we can have genuine social relationships with. It is the maximum group size where we can not only keep track of our own relationships, but also the relationships that other members have with one another, which is essential for successful community building. If the group size exceeds this number, social control and peer pressure can no longer guarantee the cooperative behavior of community members and hierarchies must be installed to maintain social order.

This community size has been found not only in ancient hunter-gatherer societies<sup>389</sup> and the earliest agricultural settlements, but also in groups as diverse as spiritual sects and army platoons. It also happens to be the number of offspring of an average prehistoric great-great-grandmother. These are all the relatives that your

grandparents have personally known and can be sure of they are related to.<sup>390</sup>

I believe therefore that being part of close-knit communities will meet our social needs. One community specialist writes:

*[Community] is in our DNA. We need one another, plain and simple. Community shapes our identity and quenches our thirst for belonging. [...] [It] has the capacity to improve our physical, mental, and economic health, as well as our overall sense of happiness and fulfillment. It has the power to unite us all in a common bond as we work together for a better world.*<sup>391</sup>

‘Community’ here means a relatively small group of people who interact frequently and know and care for each other. Community can take many forms, which can be residential or not, on or off line. People can come together around common interests or because they happen to live in the same area.<sup>392</sup>

Community gives us a sense of belonging. Without a sense of belonging, it is hard to feel truly fulfilled. Psychologists say it is “one of the major bases for self-definition.”<sup>393</sup> This ‘sense of community’ has been defined as:

*A feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared*

*faith that members' needs will be met through their commitment to be together.*<sup>394</sup>

### *The care of community*

So, it seems we are social beings in need of community. I would like to talk a bit more about my vision for community. What are the benefits of community life and how can it help overcome the atomization of our society? More specifically, I would like to talk about 'intentional communities'. These communities are residential communities where people choose to live together based on a set of shared values, often ecological, ethical or spiritual.<sup>395</sup> I am part of the intentional community of Auroville and have started a small community myself, Sadhana Forest. In the process, I have visited communities all over the world. Much has already been said about community life, but I would like to highlight a few things based on my own experience.

### Small is beautiful

Society today is structured in such a way, that it can hardly meet our social needs. We are governed by cities, states and countries, which try to take care of thousands



or millions of people at the same time. They cannot possibly take everyone's needs into account. We hardly have any personal connection with the people who rule over us. "Today, we suffer from an almost universal idolatry of gigantism. It is therefore necessary to insist on the virtues of smallness," writes E. F. Schumacher, a famous proponent of small-scale solutions in society.<sup>396</sup>

We cannot expect governments to meet all our needs, and especially not our need for social wellbeing. Governments do have their role to play. E. F. Schumacher continues: "For his different purposes man needs many different structures, both small ones and large ones."<sup>397</sup> So I believe our lives will be more fulfilling if we live together in small groups.

In intentional communities, we have more agency over many aspects of our life. In society, governments look after our health care, education, safety, security, etc. We outsource the care for the environment we live in to professional politicians. Living in intentional community means taking matters into our own hands. Building a community, we consciously craft the way we live, take care of ourselves and relate to those around us. We try to carve out a small ecological niche where we will experience a sense of ownership over our lives. We stop

going with the masses and find or construct communities in order to better address our needs and reflect our vision.

I would love to see a world where there is an abundance of intentional communities and people could freely choose the one they want to live in. Or if they cannot find one that really resonates with them, they should be encouraged to start their own community, just like I did. In this way people would be able to choose the environment they want to live in and which they believe suits them best. In our current world of nation states, we do not have that option. We are born into a certain country, and we have to follow the laws and rules of that country. We cannot choose the country we are born into, and it is not so easy to change our nationality. Even though national governments have their function, if we have lots of communities, we would have more freedom to live a life that is really our own and is beneficial to us.<sup>398</sup>

The aspect of choice is important here. If we are not free to choose our own community, the community that we are part of can become oppressive. Traditional extended families for instance, can be quite restrictive and

demanding, and not suit everyone's needs, even though they do involve communal living.

### It takes a village

One of the important aspects of community life for me is living together with people of all generations. I think this is part of our genetic expectation. Modern society can be quite ageist and splits us into age groups. We spend large parts of our lives in institutions. Babies go to nurseries, toddlers to kindergarten, children to primary school, adolescents to secondary and high school. Throughout school they are split up by birth year. Young adults go to college and adults go to work. Elder people retire, sometimes end up in elderly homes and are often sidelined in our society, as discussed earlier.

Allow me to tell a short story. In 1998, my wife and I spent a few months in a remote mountain village in Nepal. Life was very different there. All generations lived closely together. Our neighbor in the village used to bring his elderly mother to her native village every week. He carried her in a basket on his back, walking for 14 km over mountainous terrain, so she could go and pray in her ancestral temple. The whole trip would take him almost an entire day. What an abundance must this old

lady have experienced! Which seniors in the West today know such care and commitment from their children?

I believe there are many benefits to living together with all ages, and I think it is possible even in today's society.<sup>399</sup> (In fact, in the wake of the economic crisis of 2008, the number of multigenerational households seemed to have been rising, as young adults are leaving the nest later and later.<sup>400</sup>) If we live together with all generations, we can learn from the playfulness and curiosity of children and from the experience of elders. Looking after the younger and elder will nourish our capacity to care for others. In *Sadhana Forest*, for instance, many of our younger volunteers do not have children of their own. This is often the first time they live together with small children, apart from their own siblings. It is not always easy for them to deal with children, but it is a great learning opportunity.

Young and old can also contribute to the community if they are not separated from it. In the Nepali village, it was common to see children help with household chores, and even taking care of younger children. Research shows that children in non-industrialized societies regularly help out in this way, contrary to their Western peers who show much more self-centered behavior.<sup>401</sup>

Furthermore, children can enjoy and benefit from the presence of elders and vice versa. It is an opportunity for children to learn about life and for the elders it is a great and reinvigorating way to connect.<sup>402</sup>

Another thing that struck me in the Nepali village was that, with all ages living closely together, life's turning points were very visible. Birth, sickness, old age and death happened pretty much in front of everyone's eyes. Women gave birth at home, and the other women in the village would come and attend. In our society, birth happens mostly in hospitals, as discussed in chapter 1. Similarly, sickness and death are often dealt with in hospitals. In the past, people used to die at home, surrounded by family and friends. Now death has, just like birth, become a medical event. Many of my friends have never seen anyone die. We are afraid of death. Over time death has increasingly become a taboo in Western society.<sup>403</sup>

In my opinion it is natural for us to witness birth, sickness and death in a familiar environment. In this way we can come to accept them as natural parts of the life course. When we try to hide these events, we are easily thrown off balance when they do happen, and we might not know how to deal with them in a graceful way.

Moreover, it seems equally important to me that we experience these decisive life events while being supported by the wider community. When these things happen behind closed doors, they become more difficult to bear.

Living in a multigenerational community setting also changes the way in which children are raised. In the village it involved pretty much the entire community. As the saying goes: 'It takes a village to raise a child.' Anthropological research shows that for most of our human history and prehistory children were probably taken care of by a group of people.<sup>404</sup> The nuclear family, existing only of parents and their children, is a Western invention of the past one or two centuries.<sup>405</sup> Primatologist Sarah Hrdy even goes so far as to argue that communal child rearing was essential in the development of the deeply interlinked sociality that makes our species unique.<sup>406</sup> For me these are clear indications that this is part of our genetic expectation.

### Integrated care

This brings me to a next point: communities are caring. What I mean by that is that communities promote care for our neighbor. Communities have, to a large extent, the

ability to look after their own members. I observed in the Nepali village how the village children were raised with the support of the community, and how the villagers helped each other out in times of need. Historian Yuval Noah Harari writes about pre-industrial villages:

*The family was also the welfare system, the health system, the education system, the construction industry, the trade union, the pension fund, the insurance company, the radio, the television, the newspapers, the bank and even the police. When a person fell sick, the family took care of her. When a person grew old, the family supported her, and her children were her pension fund. When a person died, the family took care of the orphans. If a person wanted to build a hut, the family lent a hand. If a person wanted to open a business, the family raised the necessary money. [...] But if a person's illness was too grave for the family to manage, or a new business demanded too large an investment [...] the local community came to the rescue.<sup>407</sup>*

In modern society we tend not to take care of our neighbor as much. Those in need of care are often marginalized.<sup>408</sup> There exists a trend to outsource care. Those that cannot take care of themselves, the young, the old, the sick and disabled, are often taken care of by professionals in institutions: nurses, teachers, therapists in nursery homes, hospitals etc. I do not mean to say that professional care is never needed. The way our society is structured today, it is not easy to find other solutions.

We should not underestimate the amount and quality of care that communities can offer and we cannot just substitute that for institutional care. Compassion is often difficult to provide in institutional care settings, and the lack of compassion has detrimental health effects.<sup>409</sup> The relationship between staff and patients is a professional relationship and a hierarchical one for that matter. The one in need of help is not on an equal footing with the caregiver and tends to be seen in the light of their condition, disability or other perceived shortcomings.<sup>410</sup> Doctors, nurses and therapists are trained to see people as problems that need to be 'fixed'. Moreover, even though the staff can definitely be very kind and well intentioned, they usually perform their services not only out of loving kindness but also for money.

In a community though, relationships are naturally more loving and caring. In community, one can be seen as an equal, and can be loved and accepted as one is. I believe there is something profoundly healing about being accepted the way you are.<sup>411</sup> Community has the power to embrace everyone and make them feel valued. In community (or at least in the communities I envision in this book) you are not your disease or your disability, you are first and foremost a human being and as fully a



member of the community as everyone else. That is why older people for instance generally prefer to keep living in their community and stay connected.<sup>412</sup> The UN *Convention on the Rights of Persons with Disabilities* acknowledges the need of disabled people to be included in and receive the necessary support from the community,<sup>413</sup> and governments worldwide are encouraging community-based rehabilitation programs.<sup>414</sup>

Communities are not only well suited for offering care, I believe that offering care makes the communities themselves stronger. If we learn how to take care of those that are different or have different needs, it will make us more resilient. If we expose ourselves to life's challenges, supported by the community, we will grow stronger through this experience. We have to open our eyes to the suffering in the world. We should not close ourselves off from those that are differently abled or psychologically challenged.

The inclusivity and diversity that communities can offer, are a form of wealth. By opening ourselves up to the experience of those who are different, we are enriched by different ways of experiencing the world. We gain a lot of insight and wisdom from seeing the world through other

people's eyes. If we live in a protected environment with only similar people, we are simply not facing the reality of our human predicament. We will just stay in our comfort zone. And when challenges come knocking on the door, we will not know how to deal with them. We will be limited in our understanding of how we can transform as a species.

We can see the same principle at work in nature. Healthy ecosystems are always the ones that are more diverse. Diversity is strength. Natural ecosystems consist of a careful balance between dozens if not hundreds of species that all take care of each other in different ways.<sup>415</sup> Evolution has fine-tuned these processes over the course of hundreds of thousands of years. In this way, the system is very stable, and it is hardly disrupted by pests or even natural disaster. Monocultures on the other hand, can be wiped out by pests in an instant, because they do not have the same resilience that comes with diversity.

In order to achieve such resilience, I believe communities should indiscriminately welcome people of all abilities, ages and walks of life. Even more so, they should make a conscious effort to achieve this diversity. In *Sadhana Forest*, where I live, everybody who wishes can come and

visit or stay with our community for a while. There are no prior requirements. We do not ask people for their resume; we do not even ask them to register ahead of time. In fact, we do not even have a door! Anyone can walk in and will be welcomed. We regularly have groups of disabled children coming to visit and we support people with psychological difficulties. We are always trying to be more open and bring in more diverse groups of people.

### Space for work

Another benefit of intentional communities is their different approach to work. What stands out here is, again, that communities can value everyone for who they are and what they do. A good functioning community will try to find good use for everyone. In society it is the other way around. Organizations look for people to fill up specific spots. They write out a job description and look for someone who fits that description and has the right qualifications. The way I see it, communities should welcome all, regardless of their resume. There should be a spot for everyone. A community should look at the personality and capacities of each person and see how they can best contribute to the community. In this way, all

are valued equally. The person doing the management, is as essential as the one cleaning the toilets or keeping the books.

Society looks at how much money you make. Community on the other hand, should not look at the numbers, but at your values. How you act should matter more than how much you achieve. If you act with integrity and care, people will really appreciate this, even if the result is less visible. In *Sadhana Forest* for instance, it does not matter so much who can plant the most trees. Somebody who provides a lot of emotional support and care to others, without planting any trees themselves, is as valuable as an effective tree planter.

In modern society, we can become very disconnected from our work, or – using Karl Marx’s words – ‘estranged’ from our work.<sup>416</sup> Since the Industrial Revolution our jobs have become increasingly specialized. We are often only responsible for small niches in large anonymous networks. This can make it hard for us to see the impact of our work and to become aware of the bigger picture. We just do our job and after that we go home, enjoy time off and dissociate from our work. Author Wendell Berry writes:

*A system of specialization requires the abdication to specialists of various competences and responsibilities that were once personal and universal. [...] This supposedly fortunate citizen is therefore left with only two concerns: making money and entertaining himself. He earns money, typically, as a specialist, working an eight-hour day at a job for the quality or consequences of which somebody else – or, perhaps more typically, nobody else – will be responsible. And not surprisingly, since he can do so little else for himself, he is even unable to entertain himself, for there exists an enormous industry of exorbitantly expensive specialists whose purpose is to entertain him.*

*What happens under the rule of specialization is that, though society becomes more and more intricate, it has less and less structure. It becomes more and more organized, but less and less orderly. The community disintegrates because it loses the necessary understandings, forms, and enactments of the relations among materials and processes, principles and actions, ideals and realities, past and present, present and future, men and women, body and spirit, city and country [...] just as the individual character loses the sense of a responsible involvement in these relations.<sup>417</sup>*

In an intentional community, on the other hand, we are clearly connected to our work and the results are visible. If the chef does not practice proper hygiene, the entire community will get sick. It is hard to distance yourself from your work because everyone around you is directly affected by it. And you cannot just leave your job and go home. You live in that same community, so you have to deal with all the issues your work raises.

So, go and find yourself a suitable community. And if you cannot find one that suits you, feel free to start your own! The next chapter will provide you with some guidelines on how to approach that.

## 8. Starting your own community

*We but mirror the world.  
All the tendencies present in the outer world  
are to be found in the world of our body.  
If we could change ourselves,  
the tendencies in the world would also change.*

Mahatma Gandhi<sup>418</sup>

*So far for my insights into the benefits of community. We need many more communities and I sincerely hope you feel inspired to build community. Many people have come to the same conclusion and have tried their hand at it. However, the sad truth is that, even though they start with the best intentions, many of these newly started communities fail and fall apart.<sup>419</sup> The vision I described in the past chapter sounds very beautiful and natural. However, it is not so easily achieved. In this chapter, I would like to give some advice to those dreamers out there who want to turn their dream into reality. This advice is based on my twenty year long hands-on experience with intentional communities.<sup>420</sup>*

*Starting a community is a combination of both inner and outer work. It is a work of both the head and the heart. You need to dream, but you also need to take the necessary practical steps to manifest the dream. Your head should be in the clouds, but*

*your feet firmly on the ground. Vision and ideals need to be combined with the practical and technical actions to anchor these ideals into reality. Where it often goes wrong is that people focus only on one side of the spectrum: either they are dreamers that have wonderful visions and can speak beautifully, but they forget about the practical side. Or people are very practical and have a lot of technical knowledge and skills but lack the sense of direction that can hold people together.*

*In this chapter I would like to focus on two aspects. The first one is cultivating the right mindset, attitudes and emotional availability. These are the foundations for your community. Next, I want to talk about working together with other people, making clear agreements and having the right legal framework for your community.*

## **Inner work**

### **Personal transformation**

In Auroville, the universal township where I live, we receive a lot of young visitors who wonder what they should do with their lives. They have a sense that the world is not going in the direction they would like it to go, yet they are not sure how to change anything about it.



I always tell them to change themselves first. You can only directly change yourself. You are the only tool you have to create change. So, first of all you should make that tool as good as you can. Whatever you end up creating, a community or any other project, will be an exact reflection of who you are. You reap what you sow. As the modern sage Jiddu Krishnamurti is reported to have said:

*What you are the world is. And without your transformation, there can be no transformation of the world. [...] Unless in the very essence of our being there is a revolution, a mutation, I do not see how a good society can come about.*<sup>421</sup>

Whatever unresolved personal issues you have, whether psychological, social or other, will come in the way of your work. Starting a community is an intense process. You will need to be fully present for it. It will not work out if part of your mind is occupied by lingering personal issues. This is all-encompassing work. Whatever difficulties you have, they will be triggered. Once you start setting up your community, it will be very hard to find the time and space to work on them. If you do not come prepared, you might end up being burnt out. Unfortunately, this is the fate of many people who start communities.

So, work on yourself. Do any kind of therapeutic practice that will help you transform those issues. Go do psychotherapy, change your diet, meditate or find another way to make the changes in your life you need to do.<sup>422</sup> I did the same thing. Before I started *Sadhana Forest* I went through years of psychotherapy and intensive meditation practice. Only then did I feel solid enough to start my own project. Of course, this does not mean I am perfect in any way. I make mistakes, yet most of the inner obstacles I had, are no longer debilitating me and preventing me from doing the outer work I need to do.<sup>423</sup>

This inner work will take time, you cannot force yourself to change overnight. Maybe you aspire to imbibe certain qualities or values. Let us say you want to be a vegan natural learner living a simple life in the forest. – What a crazy idea, who would want to do something like that? – Do not force it onto yourself. You might not be ready for it. I see a lot of people who take on certain practices and then struggle a lot trying to hold on to them. This is because their decision comes from a purely mental space. They think it is a good idea and then use all their willpower to stick to it. When you are ready for a certain change, it will happen naturally and effortlessly. You will not try and hold on forcibly. Your heart and soul will be

ready to surrender to it. So, until that happens, just bide your time, meditate, and contemplate on what you would like to manifest. You will know intuitively when the time is ripe.

This work of transformation, is the work of *yoga*. ‘Yoga’ means connection.<sup>424</sup> To me it means, more specifically, the connection between what we believe in and what we actually do. *Yoga* is about aligning our ideals with our reality. We might believe in community, love and compassion, yet if we behave in a way that is not very compassionate, that means we still have some *yoga* to do. If we want to build community but we throw tantrums when we cannot have things our way, it will become an issue. So, before you start your project, start closing the gap between what you would like to see in the world and what you actually manifest.

### The right mindset

Working on yourself and creating emotional availability is the first step. Once you feel physically and emotionally stable, you need to start cultivating the mindset that will help you set up a project. There are a few attitudes that are essential for starting a functional and long-lasting community, or any other major life project, for that

matter: you need a strong vision, a willingness to take risks, boundless optimism, self-knowledge, humility and everlasting endurance and perseverance.

First you need a clear **vision**. I start any project with meditation and reflection. Reflect long and deeply on what exactly you want to create and how it is going to function. Your vision needs to be rock solid. Before I started my own community, Sadhana Forest, I had a period of almost a year where I would obsessively write down all the ideas for the community I had in mind. I worked everything out in detail. This became the foundation for our community and most of the principles and protocols I thought of back then are still in place today, twenty years later.

You need to be willing to **take risks**. Do not be afraid to fail. If you want to do something as out of the ordinary as starting a community, the path toward your goal will not be clearly marked. There is no guarantee for success. You will have to take risks and try out new things. At times, you will just need to have to trust in your gut feeling and go for it. Even if things do not work out – and believe me, they not always do – you must see it as an opportunity to learn and carry on with renewed energy and inspiration. If you are risk averse, if you are afraid of making

mistakes, it may be better for you to join someone else's project instead of setting up your own.

This goes hand in hand with everlasting **optimism**. If you want to start a project, you should never lose direction, no matter what the circumstances. Whatever happens, good or bad, you should always see the opportunities and do not allow yourself to get demoralized. You always have to look on the positive side of things. If you give in to negative thinking, you might lose courage. As an orthodox saint once said: Be a bee and not a fly. Flies are attracted to shit, but bees are attracted to honey.<sup>425</sup>

On the other hand, you also have to **know your limits**. We are all human, so we have limited time and energy. We cannot get so carried away by our work that it consumes us. Burn-out is always a risk in an environment focused on the service to others. In fact, burn-out was first described and studied in the human service field.<sup>426</sup> If you burn out, it is not only bad for you, the whole community will suffer. So proper self-care cannot be neglected. Find a balance between taking care of yourself and taking care of others.

Creating a successful community is a **labor of love**. For a community to thrive, the motivation to start it, has to be a benevolent one rather than a selfish one. A community

creates such an intimate closeness that your true motivations will quickly be exposed. Prepare and attune yourself to the task, be clear and transparent and persevere through the highs and lows of living together in a diverse environment.

By now, starting a community might sound like a Herculean task. If you do not want to succumb to all these different pressures, you should not feel like all the responsibility of the world rests on your shoulders. **Be humble.** You are just an instrument, through which the change you are aiming for is manifesting. You are not changing the world on your own, rather, you should see yourself more like a medium. You are not the origin of things, nor the end. You can see it as a higher force: the divine, justice, equality – whatever you want to call it – working through you. When you find yourself in difficulty, this attitude will help you to stay calm and collected. If change is bound to happen, it will happen. It does not only depend on you. You are a simple servant. Just make yourself available for whatever this force wants to be done and have trust in it.

This brings me to my final point: **Never give up!** Be ready to stick to your dream at all cost. Starting a community is very beautiful, yet it is definitely not all flowers and

sunshine. Hard times come, and when they come you need the strength to carry on. Being fully emotionally available and having the right mindset will provide you with the inner resources to do so. I lost count of how many times we almost closed down our own community, and where other people who are less persistent might have done so. We were hit twice by a cyclone that destroyed half of our structures, we had financial difficulties so many times and many other challenges. Yet we never let our heads hang down.

The person who inspired me most to never give up was probably Victor Frankl. Frankl was a Jewish psychiatrist who survived the horrors of the Nazi concentration camps during World War II. In his book *Man's Search for Meaning* he describes that the ones better fit to survive the horrendous conditions, were the ones who found a purpose in life: reuniting with loved ones, finishing an unfinished project, fighting for peace in the world...<sup>427</sup> He realized that human beings can endure any suffering, as long as they can find a meaning in it and "life holds a potential meaning under any condition, even the most miserable ones."<sup>428</sup> We only lose hope when we no longer have a meaning for our lives. "D=S-M. Despair is Suffering without Meaning," he says.<sup>429</sup> So as long as you

can keep faith in your dreams and ideals, you will be able to carry on. The way I think about it is  $H=S+M$ , Happiness is Suffering with Meaning.

### *Integrity*

Once you have laid the inner foundations and started your community, one of the most important things you will need in order to keep everything together, is integrity. Integrity follows from the work of *yoga*: practice what you preach. If you stick to your vision, it will give you the energy to continue. It will also help your project to carry on. It will attract the right people to you. If you have integrity, people will trust you and believe in you. It will make your project stand out and encourage others to give their time and resources to you. Integrity might seem to be a bit of an elusive quality. Yet let me try and give you some practical advice on how to nourish it.

### Stick to your values

First of all: never compromise on your values. You can compromise on practical matters, but never let go of the core principles of your vision. Follow your heart and make your project exactly what you believe in. Start your



community with all the values you would like to see in it and do not water them down. If you dream of a vegan or gift economy project, start it as such and do not change it, no matter the circumstances. Your values, your belief in what is true and right, is what will fuel you in your journey.

Let me give you an example. In the early days of Sadhana Forest, a wealthy couple came to us, wanting to join our then small community. They were willing to invest half a million dollars in the community, which was way beyond what we had ever been able to invest. They had only one condition: they were vegetarians, and would only join the community if it became vegetarian instead of vegan. I turned them down. People thought I was crazy. With this money we could have scaled up the project easily and built up the best possible infrastructure.

Why did I turn them away? Do not get me wrong. It is not that I do not want to have anything to do with people who are not vegan. It is just that, if the project would not be vegan, I would not believe in it. And then I would not have the energy to wake up in the morning to devote my entire day to it. I need the project to be exactly what I believe in if I am to find the energy to carry it through. And I would not be able to muster that kind of

motivation for a project where people consume eggs and dairy.

This is where I see many new communities stumble. They start out with amazing values, but then they encounter some challenges and they lose faith. They start compromising on the values in the hope of fixing the situation. For example, I knew a community that was practicing gift economy. At one point they were in great financial difficulty and decided to compromise on the value of gift economy. So, they started charging for workshops and seminars. This decision led them to become a great new age business, but many of the founding members miss the original spirit of the community. Other communities compromise on their values because of an opportunity that comes their way like in the story about the vegetarian couple above. I know many communities that began very beautifully, but lost their community vibe and ended up being ordinary guest houses, restaurants or retreat centers.

### Do your *sadhana*

If you want integrity, your goal should not be any form of 'worldly' success. You should not want to be the biggest or most famous project or to receive the most donations.

Do not measure success in any quantitative way. Rather, integrity is a goal in and of itself. Success is being able to be true to what you stand for. Like we said before, it is about doing the work of *yoga*, realizing your values. That is why I called the community I started *Sadhana Forest*. ‘Sadhana’ is a Sanskrit term. It is sometimes translated as ‘spiritual practice’ but its original meaning is ‘focus on the truth’. Success is about living your truth.

So, when I started *Sadhana Forest*, I honestly did not care whether other people would be interested in joining. What mattered to me was that I lived the life I believed in. And so, I started a vegan, natural learning, gift economy community that was entirely substance free and volunteer-run. People said I was crazy and nobody would want to join such a place. But funnily enough, on the fourth day the first volunteer showed up, and volunteers have been coming ever since. You might be tempted to tone down on your values to attract people or funds more easily, but your integrity will also attract people and it may well make people relate with you on a deeper, more authentic level.

Integrity means to lead by example. Like I said before, whatever you create will end up reflecting who you are. So always behave ethically, even when nobody notices.

Do not cheat, lie, bribe or play dirty, even when the people you are dealing with are cheating. You always have to play fair. Do not lower yourself to the level of the cheater, always keep the moral high ground. Always treat people respectfully, even if they do not do it themselves. ‘Hate the sin, but love the sinner,’ as the saying goes.

Playing fair might come at a prize. Sometimes, in certain bureaucracies for instance, cheating will get you there faster. It can allow you to arrange things more easily, but will cost you your integrity. Moreover, it reinforces the cheating behavior and sends out the message that it is OK to cheat. And again, our goal is not ‘worldly’ success, but rather, to stick to our *sadhana*, our focus on the truth.

Integrity also comes with humility. When you focus your life around certain values, there is a risk of starting to feel morally superior and of wanting to lecture or convert others. You do not need to preach. Do not feel superior. As I said before, you are just a humble servant. Everybody is on a different path, and we should not judge others. We should treat everyone with respect, no matter how different they are. We should try to understand and support others, instead of trying to change them. We can only change ourselves, and then hopefully this might inspire others to change as well.

Maybe now we live by certain values like community and sustainability, but we were probably not born like this. So, we can relate to people who do not hold the same values in high esteem as we do, because we may have been just like them at some point.

Similarly, when people disagree with you, criticize you or leave your community, you might take it personally. Do not be offended if people are not on the same frequency as you. This was a real challenge for me in the beginning years of my community. Yet gradually I learned that, beautiful as my community may be, I do not hold the ultimate answers to life's questions. I am just doing an honest attempt to live and love in a wholesome way. And there may be many ways to do this. You can only hope people will come to your community and get something out of it. But maybe it is just not for them. You cannot and do not need to please everyone.

### *Clear agreements*

So far, the idealistic principles and beautiful words. Important as they may be, you also need rock solid policies if you want to start a community together. This is another stumbling block for many beginning

communities. They start off with the most amazing ideas, but then fall apart because people start quarreling over ‘worldly matters’ such as money and authority. Often people think that just having good intentions and loving one another is enough. Yet, as I have said before, hard times will come, and conflicts will arise. When this happens, you need rules and a legal background to fall back to. As the prophet Muhammad once exclaimed: “Trust in God, but tie your camel.”<sup>430</sup>

So, make clear agreements, written, signed and notarized. I would contract a lawyer to make the contracts legally binding. If your agreements are written and signed, you can easily enforce them and hold people accountable. This may sound harsh, and some people will feel it is not necessary. They will say you can just live together as friends and friends do not need contracts. I do not think so. In fact, often it is the people who insist that contracts are not needed, who will end up giving you the most trouble. Rather than documents obstructing friendship, “good documents make good friends,” as one community founder says.<sup>431</sup> Strict and clear contracts will ensure that the right people join you. Those who are rebellious and immature will refrain from signing the contracts and will save you lots of trouble in the future.

You want people to respect and abide by the rules of the community for many years to come. Therefore, you want to create strong deterrents so people will not violate the rules. If they do end up breaking the rules, you want to ensure that firm action is taken. So, in the initial contract you should define the consequences for breaking the rules. Determine the fines and sanctions for breaking certain rules. Some violations could even lead to being expelled from the community.

Even if you write these rules in a contract, people may still not obey the contract. This may sound pessimistic, but I have heard many such stories. People may refuse or not be able to pay fines or refuse to leave the community when asked to. So, you should also stipulate fines people have to pay in case they do not obey sanctions. Moreover, in order to ensure the contract is effectively enforced, people should sign it with guarantors.<sup>432</sup> If someone refuses to obey the sanctions, the guarantors will be legally accountable and made to pay the fines instead. If the amounts specified in the contract are high enough, the guarantors obviously would not want to pay, so they will do their best to persuade the violator to obey the rules.

For instance, suppose one community member harasses other community members, and is asked to leave. They may refuse to leave. In that case, the contract could state that they have to pay a 10,000 USD fine and another 250 USD for every day they stay until they effectively leave. They will probably not pay this either. In this case, a legal notice can be sent to the guarantors, who could be, for example, the parents of the community member in case. The parents would obviously not want to pay these fines, and would rush down to the community to come and drag the violator out of there!

Requiring guarantors will also greatly help you to select the right people for your community. If a person cannot find guarantors, it means that none of the people close to them trust them and wants to take responsibility for them. And if their own friends and family don't believe that they will follow the rules, then why should you?

Legal agreements are also important when it comes to the financial aspects of the community. If people invest financially in your community, it has to be very clear what will happen with that money when they leave. Can they get it back? Suppose they invested money in building their house. If they leave, would they get that money back, and if so, who would pay for it? Could they



sell the house to someone who is not a member of the community? Etc.

Another thing you need to have on paper is your entry and exit policy. Who gets to enter the community and who decides over this? And when is a person asked to leave and what is the procedure for this? Do not be overconfident. It is very likely that at some point a member of the community will stir up trouble. If you do not have clear procedures at that point, it can make the whole community fall apart.

More in general, the entire decision-making process of the community should be clear in the contract from the beginning. Who is in charge? How are decisions made? Where do people go with complaints or new ideas?

### Compassionate leadership

This brings us to our next point: decision making and leadership. One way to make decisions is through consensus: Everyone has an equal say and the entire community needs to be on board before certain changes can be made.<sup>433</sup> This consensus model is popular in many communities, but personally, I am not a proponent of it. I think the process of including everyone is very beautiful,

but it takes a lot of time and energy. Consensus-based communities can spend hours in meetings without covering a lot of ground. I have seen entire communities turn into battlefields trying to reach consensus.

I personally favor clear hierarchical leadership. If the leader is conscious, inclusive and competent the community will be a great place to live in. Such a leader listens carefully to everyone, takes time to reflect, and then takes decisions that imbibe deep compassion.<sup>434</sup> Hierarchical leadership can take decisions quickly and move forward swiftly, without having to spend hours in meetings. One leader can create a clear vision and take very coherent decisions. This then can attract the people who are the right fit for this particular community. If people subscribe to the same vision and have trust in the leader, collaboration can be smooth and efficient.

If you do not align with the leadership, maybe it is not the right community for you. You are free to leave and find another community, or to start your own. Like I said earlier, I hope to see many intentional communities in the world with many different leaders and leadership styles, so it would be easy to choose the one that suits you best.<sup>435</sup>

I think strong leadership only becomes problematic if you cannot choose the community you belong to. This is the case with countries. You cannot choose your nationality freely. You were born into a certain country and usually it is quite hard to change your nationality. So, if you do not like the leadership of your country, there is often not so much you can do about it apart from waiting until the next elections, voting for the opposition and hoping the current government does not get re-elected. If you are in an intentional community and you do not like the leadership, you can always quit and find or start another one.

Being inclusive is about making people feel valued and supported. By listening deeply to people, compassionate leaders can include everyone in their decision-making process. So hierarchical leadership can be very inclusive. Community members can sense very quickly if leaders are genuinely interested in their well-being or see them as means to an end.

A good leader encourages people to grow and succeed. I make sure the responsibilities I give people are not too easy for them. This encourages people to live up to the expectation. Many leaders are afraid to encourage the people around them too much. They are afraid they

might become more successful and overshadow them. They are afraid of talented people. I am happy to be surrounded by the most brilliant people, to encourage them to rise above themselves, and carry the organization to new heights.

Your duty as a leader is to make people feel loved, appreciated and safe. Try to create such an atmosphere around you that people feel comfortable sharing anything that is on their mind with you (although this should not keep you from clearly expressing your own needs as well). You should always try to be aware of people's needs and emotional and physical state. It is best to stay ahead of things and offer people support before they even ask for it. Often people ask only for support when things are getting out of hand.

Another way to create a safe environment is by always taking responsibility for your team. When things go wrong, always be the first to assume responsibility. And when dangerous situations occur, you should be the first one to put yourself at risk.

## 9. Development as community building

*Work from the bottom up,  
and trust the intelligence of the people*

Joanna Macy<sup>436</sup>

*In this chapter we will have a look at communities in the Global South<sup>437</sup> whose basic needs are not met. We will have a look at how we can support these communities to flourish. If we want to be really compassionate in the way we build community and restructure society, we have to find ways to transform for communities which are struggling to make ends meet.*

*The process of helping the Global South grow is usually called ‘development’ or ‘aid’. Yet, I do not like these terms very much. Instead of ‘developing’ those that are ‘underdeveloped’, or ‘aiding’ the needy, I prefer thinking in terms of inclusive community building, together with the Global South. In line with the rest of the book, I want to reflect in this chapter how a stronger sense of social connection can benefit our relationship with the Global South. Based on my 20 years of experience working with communities in India, Haiti, Kenya and Namibia, I would like to share my insights on how to collaborate with them in the most effective way.*

## *Our experience*

As mentioned before, I started a reforestation project on a barren piece of land in Auroville, South India more than 20 years ago. In the villages around us, basic needs such as food and shelter were mostly being met. After a few years, I felt called to 'export' our model and recreate it in other places in the world. Many places in the world have been deforested and would benefit from tree planting. I wanted to focus on places where people lacked access to basic resources and where there was malnutrition.

Our experience was in water conservation and reforestation on degraded lands in (semi)arid areas. So, we decided to work in barren lands in the Global South, in remote rural areas where people are unable to practice agriculture, and are confronted with repeated droughts and the effects of climate change. As a result, they suffer from food insecurity. Our approach is to implement water conservation measures and plant indigenous, drought-resistant, food-producing trees together with people around their homes. In this way, we can restore the local ecosystem and create long-term food security with local communities.

And so, in 2010, we started a Sadhana Forest in Haiti, in a small town called Anse-à-Pitres in the southeast corner of

the country.<sup>438</sup> In 2014 we started a Sadhana Forest in Samburu County in the north of Kenya, working with the Samburu tribe.<sup>439</sup> In 2020 we started a mobile reforestation project covering 25 villages in Meghalaya, northeast India. Our team stayed for 3 months in each of 5 different village clusters, working with local communities. In 2023, our intervention in Meghalaya evolved into three permanent centers, one in each tribal region of the state (Khasi, Garo and Jaintia). Also in 2023 we started a small center in a very poor village in Virudhunagar district, in the south of Tamil Nadu, South India. Finally, in the latter half of 2023, we set up a Sadhana Forest in Kunene Region, in the north of Namibia, working with the local Himba tribe.

In these centers, we have nurseries where we grow saplings of indigenous food-bearing trees. Our teams of volunteers live on-site at the centers. Every day they go around in the local villages to do water conservation work and plant trees together with local people. They also train them in water conservation and reforestation techniques, so that they will be able to take care of their trees. Our teams visit the planting sites regularly to provide support and follow-up. In Haiti, Kenya and Namibia we also have free drinking water taps where

people can come and take water for household use and watering the trees.

After a few years the trees start producing nutritious nuts, fruits and leaves, and they do not need much water and care anymore. If a family has a few trees planted around their house, this will provide them with food security for the rest of their lives. The communities we work with have very poor diets that consist mainly of empty calories without much fresh fruits or vegetables. They are lacking in many key nutrients, which leads to various diseases. When we plant trees, we try to focus on planting those indigenous trees that have exactly the nutrients the local population is lacking.

For instance, in Kenya, we are planting a lot of *Moringa stenopetala*. The leaves of this tree are very rich in iron. Many local people, especially women, suffer from iron deficiency and are subsequently anemic. This is leading to premature births, low birth weight of babies and childhood stunting. After families plant Moringa around their homes with Sadhana Forest and the mothers start consuming its leaves daily, iron deficiency disappears, and the health of newborn babies and infants improves markedly. The trees provide a vital supplement to the diet.



The fact that we are planting food-producing trees that will feed their families, gives people an incentive to protect the trees. Because we plant around people's homes, they are able to protect them. Without protection, the trees cannot survive. In Haiti many trees are cut to make charcoal, which creates a livelihood for many people. In Kenya and Namibia, we are working with semi-nomadic pastoralist tribes. If the trees would not be protected, the cattle would graze the saplings to ground. Similarly, in India, free roaming cattle can eat all the green leaves on its way.

In the process of starting and running these projects, we learned a lot about working with local communities in the Global South. We went to Haiti in 2010, in the aftermath of the devastating earthquake that happened earlier that year. We wanted to create a sustainable solution to the food scarcity. Initially, the local people did not understand the purpose of our project nor our way of working. Let me give you an example. We came as a team of 14 volunteers from all over the world. The fact that we were all volunteers, and we were not being paid for our efforts, was very difficult to understand for the local Haitians. Haiti has a history of slavery and for Haitians, working without getting paid, amounts to slavery.

Moreover, Haiti, especially after the earthquake, had been flooded by NGOs and aid agencies, and many Haitians were left frustrated. They felt none of the NGOs had fundamentally changed their predicament. Outsiders who came to help them were often welcomed with apprehension and skepticism. It took us many years before we could really win their trust and they started believing in our vision. These and similar challenges helped us learn a lot about how to collaborate with communities in the Global South.

Four years later we started our project in Kenya, and we used the lessons learned in Haiti. There was a long process before we started the project. We wanted to first present our project to the local community and see whether they would be interested in having us. If they would not have been interested, we would have been happy to go a different area where our solution would be relevant and needed.

For three years we paid regular visits to Samburu County and we had lots of meetings with the Samburu. We wanted to understand their vision for their community and their land, as they were facing poverty, malnutrition and increasingly frequent droughts. We learned that their vision was to stay on their land in spite of the difficulties

they were facing. They were looking for practical solutions in order to survive there. Their vision fit perfectly with ours. The indigenous, drought-resistant food forests that we could plant with them could become a major component of their survival strategy. As we explained them our rudimentary plan, they became increasingly enthusiastic. After three years of fine tuning our plans together with them, we started our work. All the preparation paid off. The implementation went much more smoothly than in Haiti.

This extensive experience helped us incredibly when we started 5 new Sadhana Forest in one year, in 2023. For instance, in Namibia, we wanted to start a Sadhana Forest in a very remote tribal hamlet, two hours' drive from the nearest village. The Himbas in this hamlet still live very traditionally and are very weary of any outsider influence. Before starting the project, we came and presented it to the entire community, and had two days of intense discussions with them. After these two days, the community approved our project, and invited us to come and start a Sadhana Forest to plant trees with them. They even offered us some of their community land to build the center!

The fact that we establish permanent centers and our teams live on site, creates a very strong relationship with the local community. We live very humbly. The campuses are off-grid and made from simple sustainable materials. Our management team consists of full-time volunteers. We go out into the surrounding villages every day. This makes us very accessible to the locals. They come and visit us every day. Moreover, the fact that we have permanent centers gives a very strong message to the community: we are committing ourselves to work together with you and we are in it for the long run!

Being on-site enables us to be responsive to the needs of the local people. One day in Kenya a local woman saw our solar panels and asked me if she could charge her phone. I told her she could and asked her how she would normally charge her phone. She told me she did not have electricity in her house. She would go to the market and pay 30 shilling (0.3 USD) to charge it. She could not do this regularly, because that would be too expensive. So, I pulled out an extension cord and we started charging phones from our solar system right then and there. Nowadays, dozens of locals come to Sadhana Forest every day to charge their phones, free of charge. When we started the project in Namibia, we set up a charging

station as well. There is no electricity in the area and people were charging their phones using small, low quality solar chargers, which were not very reliable.

Local people come to trust us and see us as part of their community. They do not see us in the same way as they see other development agencies or NGOs. I once overheard someone in Anse-à-Pitre Haiti saying there were two NGOs active in his area. When his friend told him he forgot to count Sadhana Forest, he told him: "Sadhana Forest is not an NGO. Sadhana Forest is part of our community." It made me very happy to hear that. Integration with the local community is exactly what we are trying to achieve. And in Kenya the Samburu tribe even invited me into their council of elders. That is how much they see us as part of their community!

### *The long run*

So how can we have the most impact when working with communities in the Global South? What are effective ways to engage in development work? It is not an easy task, and there are many obstacles on the way. Many projects do not succeed in creating a long-lasting change for the good. And even if there are positive outcomes,

there can be negative side effects as well.<sup>440</sup> Here are a few things that I keep in mind when working with communities.

**Real change takes time** and lasts a long time. The problems we are dealing with are multi-layered and complex. There are no quick fixes. Change can happen only when everyone involved changes. And people do not change overnight. It is an organic process that happens by building trust and strong relationships. Effective change should last a long time as well. Focus on sustainable solutions that equip people to face the challenges of today and tomorrow. When difficulties arise – and they will! – don't give up. Make sure you have the inner resources to tackle obstacles head on and persevere. This is a marathon and not a sprint!

Change starts **from the grassroots**. It requires close collaboration with the local community, deep understanding and mutual respect. Listen, learn, adapt and innovate. Do not come with prefabricated or generic solutions. Sustainable solutions are tailor made, not mass produced. Keep an open mind and integrate into the local community. See the world through their eyes. Be present on the ground. Ideally, you and your team live on site and interact daily with the local community. Without

their support, you cannot achieve anything. Develop the solution together with them.<sup>441</sup>

**Empower people.** Focus on their strengths and capacities, rather than on what they are lacking. To return to one of the key points of this book: start from a sense of abundance. If we start from a sense of scarcity, all we can do is keep trying to fill that void. Our goal is to support people to become self-sufficient. Come with a humble attitude of service and co-create solutions which will increase their independence. Do not just come to deliver goods or services. As the saying goes: ‘Give someone a fish and you feed them for a day; teach someone to fish and you feed them for a lifetime.’

Find **the right donors** who believe in you. Donors should have a profound understanding of your vision and implementation model. Ideally, they should come and visit the project site. This is the most effective way to educate them about your intervention. Relationships based only on presentations, reports and numbers will not lead to sustainable results.<sup>442</sup> There should be deep trust between you and your donors. Work with donors who want to support long-term projects, value quality over quantity and allow for flexibility and innovation. Change cannot be reduced to numbers. Keep the focus on

the actual work in the field and the change created in people's lives.

If you would like to read more on this topic, I recommend going over the report of *The Listening Project*.<sup>443</sup> *The Listening Project* is a study carried out by more than 400 researchers over the course of 4 years. In-depth interviews were conducted with over 6,000 recipients of aid in 20 different countries. Out of these interviews clear lessons were distilled on what kind of aid interventions can be effective. They are proposing a model called 'collaborative aid'.<sup>444</sup>

### 10 steps to change

Based on 20 years of experience in the field, these are the 10 steps I follow to co-create effective and sustainable interventions. My approach centers on creating a long-term vision with the local community and implementing it together over a very long period of time. While living and working with the community we constantly receive feedback and improve our *modus operandi*. The goal is to restore the resilience which communities have lost due to the long-term impact of colonialism and climate change. The collaboration should enable them to stay on their land and move toward a better future.



1. Before starting the project, spend a long time (at least a few months!) with the community. Learn firsthand about their history and their vision for the future. I always try to ask open questions like: Where do you see yourself 20 years from now? How would you want your children to live?
2. Together with the community, identify their main present and future challenges. Co-design an intervention strategy which addresses the challenges for the long-term. If the community is active in the design of the intervention, it will address its needs better. The community members will feel greater ownership, and will be more invested in the implementation and its success.
3. Assess when the relationship you have created with the community, is open enough and there is enough mutual trust to enable a successful implementation.
4. Once you are ready to start the implementation, do so on a very small scale for at least one year. Take the time to learn and constantly rethink the strategy and try to improve even the smallest details of the operation.

5. Evaluate together with the local community when the intervention is fully mature and ready for scaling up. When it is, scale it up dramatically to increase the impact. Recruit self-motivated and able staff, and provide them with quality training, infrastructure and equipment.
6. Your local team should be hired directly from the beneficiary villages. Intelligent and practical people from the area are better suited to implement the project than university graduates from major cities. Local people have a closer connection with the community and they naturally relate to the local challenges.
7. Supervise the scaling up very closely and make sure that it does not reduce the quality of the intervention. The phase of scaling up is very critical. The leadership should invest maximum effort in supporting the team to maintain the attention to detail which characterized the small-scale implementation.
8. Engage your local and international team members for at least 5 years at the same implementation site. Such a long period will enable them to learn the local language if needed,

build strong relationships with the local community, and perfect their technical skills. The community will learn to trust them and to collaborate with them very efficiently.

9. Make sure the follow-up continues regularly far beyond the duration of the project funding cycle. This will ensure that the impact of the intervention is very substantial. For example, if the project includes planting fruit trees, the follow-up should be at least until the trees are all producing. A follow-up of two or three years is not sufficient in this case.
10. Scale the implementation up and down, depending on the funds available, but never stop implementing. The community may lose trust in your type of intervention if you completely stop your operations and leave the area. Before starting the intervention, make sure you have funding available other than project funding, such as recurring small private donations. This will enable you to continue implementing on a small scale even when there is no project funding until the next project funding comes in.



## 10. Veganism

*A human being is part of the whole, called by us 'universe,' a part limited in time and space. He experiences himself, his thoughts and feelings, as something separate from the rest — a kind of optical delusion of consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.*

Albert Einstein<sup>445</sup>

*Throughout this book, we have been trying to be inclusive of ever more groups that are regularly neglected in society. In this chapter we will widen our circle of compassion further, to include animals as well. In this book, we do not want to look only at the innate needs of humans, but we will equally consider those of animals. This process is called 'veganism'. Vegans abstain from using any animal products or services. At its core, to me, veganism is an expression of love.*

*Veganism is compassion towards animals. It means to refrain from using any animal products and to not contribute to the suffering or exploitation of animals. In this chapter we will first explore the moral and spiritual considerations behind veganism. Next, we will have a brief look at how animals are*

*farmed in today's day and age, followed by the environmental and health benefits of adopting a vegan diet.*<sup>446</sup>

### **An expression of love**

To me, veganism is a practical expression of my love for all beings. I see veganism as part of a wider process I would call the 'expansion of the self', or – to use Einstein's words – 'widening our circle of compassion'. In a way, all of the present book is about this process of expansion. We started out talking about scarcity. When we are caught up in a feeling of scarcity, we are mostly worried about our physical self. This whole book describes a movement towards opening up that sense of self to include babies, young children, community members, people in our society, people globally, and animals. I am deeply saddened when I think about the suffering that farm animals go through, being tied, impregnated, separated from their offspring, milked, mutilated, killed, and eaten.

The 'expansion of the self' is a spiritual journey. We question our sense of identity. Where does our 'self' end? At our skin? Are we just this physical body? Or can our consciousness include other people around us, all people

on this planet, or even all forms of life? In the end – though I am not claiming I am there yet in any way – we become so all-inclusive that we could let go of the sense of self entirely. This could be the ultimate goal on our spiritual journey, to become one with all creation and to live from that understanding.

### Overcoming speciesism

Behind the production and consumption of meat, dairy and other animal products, lies the belief that animals are less important than humans. There is an assumption that humans have the right to decide over animals' lives and to use them for their own purposes. This belief is called 'speciesism'. Speciesism limits our capacity for compassion and loving kindness. Veganism, at its core, means to overcome the limitation of speciesism and to care equally about the rights of animals.

'Speciesism' is a term popularized by philosopher Peter Singer in his book *Animal Liberation*, a classical work in the history of animal rights activism.<sup>447</sup> Vegans consider 'speciesism' to be a form of discrimination just like racism, ageism or sexism. The discrimination is not based on race, age or gender, but rather on the species a creature belongs to.

Veganism means to care equally about humans and non-human animals. It recognizes that animals have innate needs and instincts. They have a genetic expectation, just like us. And just like us, they do not want to suffer.<sup>448</sup> They want to be happy and free and live long and healthy lives. They have social needs and want to interact with their species' members. Moreover, they have central nervous systems, just like us. So, they are conscious, intelligent and able to experience pleasure, pain and a range of other emotions.<sup>449</sup> We therefore have no right to limit their freedom or take their lives. As vegans, we want to allow animals to live their natural lives as much as possible. We have no 'dominion'<sup>450</sup> over them and want to live together in peace. They have just as much right as we do to be here on Earth.

To me, veganism, is a moral choice. I do not see it as a diet, or a lifestyle. Veganism means being a voice for the voiceless and to speak for those creatures who cannot speak for themselves. Veganism is valuing life deeply, and not participating in killing and exploitation. It is an expression of *ahimsa*, non-violence.<sup>451</sup> I would daresay veganism is a prerequisite to my spiritual growth. I personally cannot have deep inner transformation if I



continue to eat meat and dairy and am complicit in cruelty and abuse towards animals on a daily basis.

I see veganism as an essential building block of a conscious society, and a necessary condition for the evolution of humankind. The greatness of a society and its moral progress can be judged by the way its animals are treated.<sup>452</sup> As long as the seeds of violence and discrimination are present, we cannot progress as a society. If we allow the systematic discrimination of animals, this discrimination could easily spread towards other members of society. If we slaughter and (ab)use animals, we could become violent towards others because of their race, gender and so on. I come from a Jewish family. My ancestors were part of some of the worst acts of violence and discrimination in history during the *holocaust*. Therefore, I feel I have to be vegan. I cannot be part of any such form of systemic violence.<sup>453</sup>

That being said, I do not think veganism is the final goal. The fact that we are vegan does not make us morally superior. Most of us were not vegan all our lives. We should therefore have understanding and empathy for people who eat meat and dairy. We used to be just like them. Veganism is about being compassionate. If it makes

us intolerant towards people who have other opinions, this would defeat the purpose.

Acting as if we are superior will not help progress the case of veganism, either. People generally do not react very positively to this. We communicate veganism in *Sadhana Forest* just by offering people delicious (free) vegan food. Everybody likes to be offered food. We want people to associate veganism with kindness and generosity. Receiving a vegan meal in this way, may plant a seed. If they are ready for it, they may start questioning their dietary choices.<sup>454</sup>

### A deeply rooted belief

To me, animals are like friends and family. I just love them and want them to be happy. However, when many people see an animal – especially a farm animal – they see a product, they see something they can ‘use’. I will give you an example from my own daily experience. In *Sadhana Forest India*, we have a *gaushala*, a small farm sanctuary where we take care of rescued cows. These cows would have been culled or abandoned in the street if we would not have taken care of them. They are not producing milk anymore, or they are bulls, and therefore unwanted.

When we look at our cows in Sadhana Forest, we see friends. We do not think of how we can use them. We do not see an object or a machine. It would be improper to think of your friends in such a way. They are members of our community just like us, and that is why we take care of them. So, veganism is not just about not eating animals. It is about changing the way we relate to all life on earth and where we see our place on this planet.

People who come and visit our *gaushala*, often ask us what we use our cows for. At first, they may think we milk them. When we tell them they do not produce milk, they think we must have some other use for them. People are usually quite surprised when we tell them we do not use them for anything. To make this point clear, we do not even use their manure!<sup>455</sup> This idea can be quite strange to people. They do not see cats, dogs or wild animals in this way, yet when they look at a cow, they immediately think of how they can use her.<sup>456</sup>

### **Human(e?) industries**

Meat and dairy are being produced today at an ever larger scale using more and more industrialized production processes. We will briefly look into the size of

these industries and some of the issues associated with them.

### Factory farming

In the middle of the previous century, meat and dairy production increased drastically. This was the advent of what is now commonly called ‘factory farming’. Small family farms started disappearing and were taken over by big farming businesses that rear ever larger numbers of animals in ever shrinking spaces at ever increasing speed. Factory farms in industrialized countries adapted a conveyor belt style production process aimed at minimizing costs and maximizing efficiency and ‘output’.<sup>457</sup>

Needless to say, this did not increase the wellbeing of the animals involved. They often live in extremely confined, unsanitary and unhygienic conditions, unable to live out any of their natural instincts or social behaviors. In fact, these animals are so sickly that they consume four times more antimicrobial medicine<sup>458</sup> than humans, which also creates a big threat of antimicrobial resistance.<sup>459</sup> The problems farmed animals face are too many to discuss in the underlying volume. There are plenty of extensive accounts available both in print and video.<sup>460</sup>

According to the *Food and Agriculture Organization* (FAO) of the United Nations, about 83 billion animals were slaughtered for food worldwide in 2022.<sup>461</sup> That is over 2,500 chicken, cows, pigs, ducks etc. per second.<sup>462</sup> This number is rising steadily. It is 10 times more than it was 60 years ago, while world population only increased by 2.6 times.<sup>463</sup> Meat production is projected to keep growing, especially in developing countries.<sup>464</sup> Yearly 1.75 trillion eggs are produced and over 900 billion liters of milk, respectively 6.25 and 2.7 times more than in 1961.<sup>465</sup>

It is important to note that animals are also slaughtered in the dairy industry. Some people think that, if they are vegetarian and do not consume any meat, they do not contribute to the killing of animals. This is not true. Indirectly milk and eggs kill lots of animals. So being vegetarian in order to stop animals from being killed does not make much sense to me. It will save some lives, but definitely not all. In the industry a dairy cow is usually 'culled' (removed and normally killed) around five years of age as her milk production or fertility decreases or the intensive milking makes her sick or disabled.<sup>466</sup> Under natural circumstances though, cows can live up to 20 years.

The male calves of the dairy cows live an even shorter life. They cannot produce milk and therefore are not useful for the farmer. They are separated from their mothers soon after birth, like all dairy calves, for the mother's milk is intended for human consumption. The bulls are usually kept in extreme confinement, in narrow crates where they are unable to move, and are given an iron-free diet. In this way they cannot develop their muscles and produce the soft, white veal meat that consumers covet. After a few months they are sent to slaughter.<sup>467</sup>

The life of layer hens is equally miserable. In industrial farms, the egg production of layer hens starts to decline after one year, and they are usually 'culled' around two years old.<sup>468</sup> Under normal circumstances, however, chickens grow up to twelve years old.<sup>469</sup> The male siblings of the layer hens are even worse off. They cannot lay eggs, and they are suitable for meat production.<sup>470</sup> So the male chicks born to layer hens are usually killed right after hatching, in giant grinders or gas chambers.<sup>471</sup> Every year a few billion male chicks are culled in this way.<sup>472</sup>

### Factory fishing

Similar to the amount of land animals, the amount of fish we kill for food has increased dramatically over the past 50 years. Global fish and aquatic animal production stood at 182 million tonnes in 2021 according to the FAO. Fish capture globally went from 17 million tonnes in 1950 to over 90 million in the mid '90s, and it has been stable since. Recent increase in fish production has come from the exponential increase in aquaculture ('farmed fish'), which went from little over half a million tonnes in 1950 to 91 million tonnes in 2021.<sup>473</sup>

The entire amount of fish caught and killed is higher still.<sup>474</sup> FAO statistics do not include fish that is caught illegally, unreported or unregulated ('IUU'), which is estimated to range between 10 and 25 million tonnes.<sup>475</sup> Neither does the FAO include so-called 'discard', fish that is caught unintentionally and is not retained by fishers and thrown back overboard. Fish are discarded because they are too small, not commercially viable, not allowed to be fished, etc.<sup>476</sup> Many of these fish do not survive the catch due to injuries and stress sustained during the process.<sup>477</sup> Some fish escape the catch but still get injured by it and die. Worldwide yearly discard estimates range from 7 to 22.5 million tonnes.<sup>478</sup>

All statistics are in metric tons, so it is very hard to gauge the actual number of fish and seafood killed for food yearly. Only a few incomplete approximations are available. We calculated the total must be around a few trillion, or roughly 1 to 2 marine animals per person per day.<sup>479</sup> Most of these animals die slow and painful deaths as they are either crushed by the weight of their peers or suffocate outside the water. Needless to say that fishing in these massive amounts is hardly sustainable. Around one third of fish stocks worldwide are overfished, up from only 10% in 1975, causing fish populations to decline and disrupting ecosystems. 60% of fish stocks are fished at a maximum sustainable level, and all of them could collapse by the mid-21<sup>st</sup> century.<sup>480</sup>

### **A sustainable solution**

Next to the moral argument of not hurting our friends, there is another reason to be vegan: the huge environmental impact of meat and dairy.<sup>481</sup> Globally, 1.6 trillion metric tons of animal products are processed every year, over 200 kg per person.<sup>482</sup> Huge amounts of resources are needed to keep this production going and significant ecological hazards are created. The FAO writes:



*The livestock sector emerges as one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global [...] land degradation, climate change and air pollution, water shortage and water pollution and loss of biodiversity.*<sup>483</sup>

The Intergovernmental Panel on Climate Change (IPCC) the UN's scientific panel on climate change recommends more plant-based diets.<sup>484</sup> The *Alliance of World Scientists*<sup>485</sup> published an open letter signed by more than 11,000 scientists worldwide. In this letter they call for urgent action to combat climate change. One of their main recommendations is to move towards a vegan diet:

*Eating mostly plant-based foods while reducing the global consumption of animal products, especially ruminant livestock, can improve human health and significantly lower [greenhouse gas] emissions [...] Moreover, this will free up croplands for growing much-needed human plant food instead of livestock feed, while releasing some grazing land to support natural climate solutions.*<sup>486</sup>

So, let us have a brief look at the (in)sustainability of animal husbandry. The industry produces vast amounts of greenhouse gases. It also requires an astonishing amount of natural resources like feed, water and land as animal food uses these resources much less efficiently than plant food. Thereby it puts ever more pressure on ecosystems that are already being stretched to their limits.<sup>487</sup>

According to some estimates, meat and dairy are responsible for around 50% of our global **greenhouse gas** (GHG) emissions.<sup>488</sup> A vegan diet produces approximately 5 times less GHG than an average Northern European diet.<sup>489</sup> Some scientists say it is the only diet that could reduce emissions sufficiently in order to limit global warming to 2°C.<sup>490</sup>

How come these numbers are so high? First of all, there is just an enormous number of animals that we are rearing for food. At any one moment there are over 34 billion farm animals alive.<sup>491</sup> Their biomass is over 10 times larger than all wild mammals and birds combined.<sup>492</sup> All these animals breathe, accounting for nearly as much CO<sub>2</sub> as all direct industry emissions worldwide.<sup>493</sup> Livestock needs to be housed, processed and transported, all of which produces greenhouse gas.

Feeding livestock is responsible for a huge amount of emissions. Growing feed crops often requires forests to be cut down, which releases the carbon that soil and vegetation are holding and stops these forests from taking carbon dioxide out of the atmosphere.<sup>494</sup> Production of feed requires fertilizer, the production of which is a source of nitrous oxide (N<sub>2</sub>O)<sup>495</sup> and carbon dioxide. Digestion of feed is also a major source of

greenhouse gas output. Ruminants such as cows, goats and sheep produce methane (CH<sub>4</sub>) during their digestion, a greenhouse gas 80 times more powerful than CO<sub>2</sub>.<sup>496</sup> The livestock sector is responsible for almost half of all human-induced methane release,<sup>497</sup> contributing more to global warming than the entire transport sector.<sup>498</sup> After digestion, livestock produces manure, the processing of which is a source of more methane and nitrous oxide.<sup>499</sup>

Our livestock requires huge amounts of **food** to live and grow. Cows, chicken and other farm animals eat nearly 5 times more plant material than all humans combined.<sup>500</sup> Moreover, the majority of feed a farmed animal consumes, is not turned into food for humans. The animal just uses this food to live and survive. Calculations of the so-called 'feed conversion ratio', the amount of feed an animal needs in order to produce 1 kg of food, range from 5 to 25 kg.<sup>501</sup> To produce one calorie, an animal needs to eat 8 to 27 calories.<sup>502</sup> Livestock mainly eats grass, hay and crop residues.<sup>503</sup> However, they also eat almost half of the world's total grain production,<sup>504</sup> which could feed 3 to 3.5 billion people.<sup>505</sup> At the same time over 700 million people in the world are hungry and this number is on the rise.<sup>506</sup> We might be headed towards a global food crisis by mid-century

because of the combined effect of population growth, rising demand for meat and environmental degradation.<sup>507</sup>

According to the FAO “the livestock sector is by far the single largest anthropogenic user of **land**.”<sup>508</sup> It occupies 20 to 45% of the (ice-free) land on earth and 50 to 80% of all agricultural land.<sup>509</sup> At the same time, it provides less than 20% of the calories we consume.<sup>510</sup> This is not a very efficient use of land.<sup>511</sup> A vegan diet requires about 8 times less land than an omnivorous diet.<sup>512</sup> Animal agriculture therefore puts a huge pressure on land, and is a key factor in deforestation and soil degradation. 60 to 70% of deforestation is happening in the tropical forests of South America.<sup>513</sup> The large majority of this deforestation (over 70%) is for pastures.<sup>514</sup> Similarly, over 70% of rangelands in dry areas have been degraded because of livestock activity.<sup>515</sup> If the world would switch to a vegan diet, huge amounts of land would be freed up. If these areas would return to their native vegetation, this alone might remove up to half of the greenhouse gases we currently produce from the atmosphere.<sup>516</sup>

Livestock uses a considerable amount of **water**. Agriculture is the biggest water consumer, accounting for 90% of our fresh water use.<sup>517</sup> One third to half of that

water is used for animal agriculture, producing only one fifth of our calories as mentioned before. Animal products generally require larger amounts of water to produce, because of the water needed to grow feed for these animals.<sup>518</sup> One of the biggest water consumers is beef. On average 15,400 liters is needed to produce one kilogram. This can go up to 200,000 liters in open rangelands.<sup>519</sup> Livestock is also a major source of water pollution. Meanwhile, because of increasing population, consumption and climate change, water is becoming an ever scarcer resource.<sup>520</sup> Already between half and two thirds of the world's population experience severe water scarcity for at least one month a year and this situation is unlikely to improve.<sup>521</sup>

There is still much more to be said about the environmental impact of the meat and dairy industry.<sup>522</sup> One can look up its impact on soil acidification, eutrophication or biodiversity loss.<sup>523</sup> We do not have the space to go deeper into this here. But let it be clear: raising animals for food poses an enormous challenge to our natural environment, being one of the main sources of greenhouse gas emissions, land degradation and water scarcity amongst other things.

## *Afflictions of affluence*

The moral and environmental arguments are, on their own, sufficient to be vegan. Yet, there is a third argument that attracts people to a plant-based diet: the health aspect. For me personally, this is not the most important reason. In fact, I think I would still be vegan if it would turn out to be bad for my health. Yet, in order to be complete, we shall include a brief discussion of the health aspect of vegan diets.

First of all, we need to get one thing straight: a plant-based diet provides you with all the nutrients we need. This includes protein. There seems to be somewhat of an obsession with animal protein in our culture, and people often wonder if vegans get enough protein. This is largely a myth. Vegans do get enough protein, in fact, if you consume enough calories, it is very hard to be protein-deficient. Most Westerners actually consume way too much protein. Moreover, plant-based protein is healthier for you than animal protein.<sup>524</sup>

There is an increasing body of research indicating that meat and dairy have a negative effect on our health.<sup>525</sup> A plant-based diet and more specifically a 'whole food' plant-based diet seems to be much healthier than the standard Western diet. A whole foods plant-based diet is

a diet that not only excludes animal products but also processed and refined foods. It consists mainly of whole grains, fresh fruits and vegetables, legumes, nuts and seeds.<sup>526</sup>

In more affluent countries, the leading causes of death are now largely chronic diseases like cancer, heart disease, dementia, stroke and diabetes.<sup>527</sup> These are non-communicable diseases that are linked to our lifestyle: smoking, drinking, physical activity and – maybe more than anything else – diet. According to a recent report “unhealthy diets pose a greater risk to morbidity and mortality than does unsafe sex, and alcohol, drug, and tobacco use combined.”<sup>528</sup> There is more and more research showing that eating meat, dairy and processed food significantly increases the risk of attracting these top killer diseases and also other chronic afflictions like osteoporosis, cataract, chronic lung disease, kidney problems and autoimmune disorders like type 1 diabetes, rheumatoid arthritis, multiple sclerosis and lupus.

As countries become wealthier, their consumption of meat and dairy increases and so do rates of chronic disease. There are lots of documented cases where a switch to a whole food plant-based diet has led to reversing many of the named conditions as such a diet is

high in antioxidants and fibers and low in saturated fats and cholesterol amongst other benefits. A whole food plant-based diet can slow down the aging process and reduce obesity and hypertension, which greatly increase one's risk of chronic disease. So, as the saying goes, 'let food be thy medicine'.<sup>529</sup>

Different health institutions are now beginning to speak out about the dangers of meat and dairy. The *World Health Organization* has classified processed meat as carcinogenic and red meat as 'probably carcinogenic',<sup>530</sup> and the *World Cancer Research Fund* says consumption of wholegrains, vegetables and fruits protects against a variety of cancers.<sup>531</sup> The *American Academy of Nutrition and Dietetics* states that vegan diets are adequate for all stages of life and can reduce the risk of many a chronic disease.<sup>532</sup> And one of the US's biggest health care providers now recommends a whole-food plant-based diet.<sup>533</sup>

It is estimated that switching to a vegan diet could save over 8-14 million lives<sup>534</sup> per year and 129 million life years.<sup>535</sup> By 2050 it would save about 1 trillion dollars in health care costs. The entire economic benefit of the life years saved could amount up to 30 trillion dollars, which is 13% of the global GDP.<sup>536</sup> Yet, it seems our current



medical system is more geared towards treating symptoms than underlying causes and underestimates the importance of diet.<sup>537</sup>

### Zoonotic diseases

Meat and dairy are not only linked to lifestyle disease, but also to infectious disease. Livestock production greatly increases the risk of zoonotic disease. A zoonotic disease or 'zoonosis' is a contagious disease that spreads from animals (either wild or domesticated) to humans. 75% of emerging infectious diseases are zoonotic in origin and the number is rising steadily.<sup>538</sup> Zoonotic diseases cause an estimated 2.5 billion cases of sickness every year and kill 2.7 million.<sup>539</sup> Spanish flu, avian flu, swine flu, HIV, SARS, MERS, Ebola and COVID-19 are all zoonoses. Even common illnesses like measles, influenza, mumps and the cold originated from the domestication of livestock.<sup>540</sup>

The rise in demand for meat and dairy, which makes us cram huge amounts of animals together in unsanitary conditions, is a major risk factor for the continuing emergence of zoonotic disease. So is the destruction of habitats that accompanies it, bringing us into closer

contact with wild animals and the diseases they carry.<sup>541</sup>

The FAO writes:

*[T]he rapid growth in livestock production and supply chains is creating public health threats associated with an animal-to-human pathogen shift, which implies pandemic risks, food safety hazards and high burdens of zoonotic diseases.*<sup>542</sup>

It is even speculated that a strain of avian flu could develop that would be many times more deadly than the corona virus and could kill millions of humans.<sup>543</sup>

## Conclusion

The second part of this book looked at community building. It offers a bold vision to move towards a new humanity and a new way of relating to each other. How can we structure our economy, our communities, our North-South relationships and our relationships with animals in a way that is cooperative and meets our and their innate needs? At the core of all this lies a view of humans (and animals) as deeply compassionate social beings, hard-wired to connect, collaborate and build strong mutual ties. I believe in a world where cooperation and generosity are the norm, where we live in small intentional communities, have meaningful collaboration between Global North and South and include animals in our circle of compassion. In this way, we will be able to fulfill our genetic expectation and reach our highest potential.

The late South African archbishop Desmond Tutu illustrates this principle very beautifully in his discussion of the concept of 'ubuntu', Bantu for 'humanity'. Hopefully the present publication may have brought you to look at our shared humanity in a new way, with more 'ubuntu'.

*My humanity is caught up, is inextricably bound up, in yours. We belong in a bundle of life. [...] A person is a person through other persons. It is not: "I think therefore I am." It says rather: "I am human because I belong. I participate, I share." A person with ubuntu is open and available to others, affirming of others, does not feel threatened that others are able and good, for he or she has a proper self-assurance that comes from knowing that he or she belongs in a greater whole.<sup>544</sup>*

I wish you good luck on your journey and hope these insights will help you on the road to much needed social change.

## EPILOGUE: Integral sustainability

*This sister [Mother Earth] now cries out to us because of the harm we have inflicted on her by our irresponsible use and abuse of the goods with which God has endowed her. We have come to see ourselves as her lords and masters, entitled to plunder her at will. The violence present in our hearts, wounded by sin, is also reflected in the symptoms of sickness evident in the soil, in the water, in the air and in all forms of life. This is why the earth herself, burdened and laid waste, is among the most abandoned and maltreated of our poor; she “groans in travail”. We have forgotten that we ourselves are dust of the earth; our very bodies are made up of her elements, we breathe her air and we receive life and refreshment from her waters.*

Pope Francis<sup>545</sup>

*In the past 10 chapters I have discussed a wide variety of topics. Though at first these topics can look disparate, I hope I was able to make clear that they are building blocks of compassion and part of our genetic expectation. There is a very pressing matter for our society, which I have not yet explicitly shed much light on. It is, however, definitely not absent from my vision. I am talking about the environment. As we are all probably aware, our blue planet is facing a dire situation where “natural systems are being degraded to an extent unprecedented in human history,” as one report writes.<sup>546</sup> I started to touch upon climate issues in the last chapter, but it is inherently present throughout the book. If we re-envision*

*humanity based on the principles laid out in this book, I believe our society will be integrally sustainable.*

### The inconvenient truth

We are emitting ever more greenhouse gases, which is causing climate change and global warming. GHG concentration is at its highest in almost a million years. As a result, oceans are acidifying, ice caps are melting, sea levels are rising and weather patterns are thoroughly destabilized. We are seeing, and are very likely to continue to see, more extreme weather events such as heat waves, wildfires, droughts, floods and storms. Even if we stop emitting greenhouse gases today, many of these changes might not be so easily reversible. If we do not undertake drastic action right now, global warming might exceed a critical threshold of 2°C and consequences will be unpredictable and possibly catastrophic. The IPCC writes:

*Climate change is a threat to human well-being and planetary health. There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all.* <sup>547</sup>

*Risks and projected adverse impacts and related losses and damages from climate change escalate with every increment of global warming. Climatic and non-climatic risks will*

*increasingly interact, creating compound and cascading risks that are more complex and difficult to manage.*<sup>548</sup>

Many lives (of both human and non-human animal) could be destroyed and we might see mass migration of climate refugees whose environment will become unlivable.<sup>549</sup> Future prospects are not very uplifting:

*The climate crisis has arrived and is accelerating faster than most scientists expected. It is more severe than anticipated, threatening natural ecosystems and the fate of humanity. Especially worrisome are potential irreversible climate tipping points and nature's reinforcing feedbacks (atmospheric, marine, and terrestrial) that could lead to a catastrophic "hothouse Earth."*<sup>550</sup>

We are depleting the Earth's resources at unprecedented rates. Livestock and fish consumption, deforestation and habitat destruction, land degradation, water scarcity and desertification are on the rise. This might cause food production to decline and create a 25% food shortage and 50% increase in food prices in the coming decades.<sup>551</sup> Biodiversity is plummeting: the past 50 years vertebrate populations have shrunk by 60%.<sup>552</sup> We are facing a sixth mass species extinction. 25% of species are threatened and extinction rates are tens to hundreds of times higher than what is common.<sup>553</sup> Ecosystems are shaken to their core and all of these problems are exacerbated by the

effects of climate change.<sup>554</sup> One report comes to the conclusion:

*Human activity is putting such strain on the natural functions of Earth that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted.*<sup>555</sup>

### Deep ecology

It is clear that, in order to avert these dangers, systemic change is needed. We will have to address the root causes of these problems. The *Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (IPBES) writes:

*Since current structures often inhibit sustainable development and actually represent the indirect drivers of biodiversity loss, such fundamental, structural change is called for.*<sup>556</sup>

We cannot be content with superficial mitigation and adaptation. Having a more fuel-efficient car or stopping to use plastic straws alone will not save us. We will have to find a fundamentally different way of relating to our environment. We need a 'deep ecology'.<sup>557</sup> I believe we have to think of sustainability in an *integral* way, permeating every aspect of our lives.



This kind of integral sustainability is what my proposals have been hinting at all along. We started with a discussion of our scarcity-driven mindset that leads us to produce and consume ever more, make GDP grow and deplete natural resources. The *Living Planet Report* writes: “exploding human consumption is the driving force behind the unprecedented planetary change we are witnessing.”<sup>558</sup>

If we would live from a sense of abundance and if the genetic expectations of our *continuum* would be fulfilled, we would be content with much less. We would produce and consume only what we need and stop endangering the wellbeing of future generations for the sake of short-term gain. Moreover, medical production would go down as we would need less antidepressants and other psychopharmaceutical medication.<sup>559</sup> Natural childbirth practices would lead to decreased medical costs related to caesarean sections, and the like.

In a society based on cooperation rather than competition, the harm we do to the environment would melt away like snow under the sun. If we stop competing to be bigger, greater and more powerful, we would use up so much less natural capital. Moreover, the one thing we need to counteract climate change is strong global

cooperation. We all know how difficult it has been to reach climate agreements. If everyone had as their primary goal to cooperate in the best possible way, we could reach more ambitious agreements in a much easier way. Similarly, gift economy would limit consumption and pollution. If we give and share freely, without piling up wealth, we use much less.

The sense of individualism that separates us from each other, as we discussed in chapter 7, also separates us from nature. We see ourselves as distinct from nature. This makes us believe we can control and manipulate nature to our own benefit. We see nature as a commodity we can freely exploit for profit. Key to saving our precious planet is a holistic view, where we see ourselves as an integrated part of the web of life. Arne Naess, who coined the term 'deep ecology' talks about a "relational, total-field image."<sup>560</sup> Charles Eisenstein writes:

*The essence of the Story of Separation is the separate self in a world of other. Since I am separate from you, your well-being need not affect mine. In fact, cast into an objective external universe, more for you is less for me; naturally then we are in competition with each other. If I can win the competition and dominate you, I'll be better off and you worse. The same goes for humanity generally vis-à-vis nature. The more control we can exercise over the impersonal forces of nature, the better off we will be. The more intelligence we can impose upon a random, purposeless universe, the better the world will be.*

*Our destiny, then, is to ascend beyond nature's original limits, to become its lords and masters.*<sup>561</sup>

Next, small-scale communities – as we discussed in chapters 7 and 8 – are inherently more efficient in their use of resources. *Blueprint for Survival*, one of the foundational texts of the modern ecological movement, already recommended living in small, decentralized communities.<sup>562</sup> In communities people share and pool resources. Not everyone needs to have their own fully equipped kitchen, you can share one with a few families. Communities also provide scale advantages. Buying food in bulk and cooking for a group of people is less wasteful than buy and cook just for yourself. And then we are not even mentioning the amazing work that is being done in ecovillages around the world.<sup>563</sup>

In chapter 9 we argued how our current development model is inherently wasteful. Finally, in chapter 10, we had a look at the animal farming industry, which is one of the single largest contributors to climate change and environmental degradation worldwide. So, let it be clear, even though the topic might seem absent, sustainable living is deeply rooted in every single aspect of the future communities I envision.

So, if it were not apparent before, I hope it is now, sustainability is an integrated part of the new humanity I envision. It has been with us all along the journey we have made through the different aspects of our human condition. Meeting the genetic needs of our own nature and living from a sense of abundance will bring us in harmony with nature surrounding us and help us address our environmental challenges in a holistic way. Another quote from Charles Eisenstein illustrates this very principle.

*We seek through growth to meet other needs, needs that, because they are fundamentally qualitative, growth can never meet. Basic human desires for connection, community, beauty, sacredness, and intimacy are met with faux substitutes that temporarily numb but ultimately heighten the longing. The trauma of our deprivation drives our collective addictions. Ecological healing therefore requires our society to look beneath its consumptive symptoms and reorient toward qualitative development. To do so requires significant reprogramming, since our guiding narratives, from economic to scientific, embody quantitative thinking.<sup>564</sup>*

That's it. These are the learnings I would like to share. I encourage you to experiment with them, to take from it what you wish, and to start on your own journey of growing ever more compassionate and fulfilling your genetic expectations. Even if not everything in this book

is relevant for you, you won't know unless you give it an honest try. I wish you all the best and hope it may lead you and those around you to a more fulfilling life!



# Notes

## Preface

<sup>1</sup> In chapter 9 I will talk more about our work with rural communities in the other Sadhana Forest centers outside of Auroville.

<sup>2</sup> Auroville. (2017). Auroville in brief. Retrieved from <https://auroville.org/contents/95>

More information on Auroville on its website [www.auroville.org](http://www.auroville.org)

## Introduction

<sup>3</sup> Dei, G. (2016). Decolonizing the university: The challenges and possibilities of inclusive education. *Socialist Studies*, 11(1), 23. <https://doi.org/10.18740/S4WW31>

<sup>4</sup> Gabor Maté calls this the ‘compassion of understanding’. Maté, G., & D. Maté. (2022). *The Myth of normal: Trauma, illness & healing in a toxic culture*. New York, NY: Penguin Random House, pp. 384-385.

<sup>5</sup> Liedloff, J. (1975). *The continuum concept: In search of happiness lost* (Rev. ed.). Reading, MA: Addison Wesley.  
Another book, written around the same time as the present book, that takes the ‘continuum concept’ as one of its starting points for its analysis of society and its widespread mental health problems, is Gabor Maté’s *The Myth of Normal*.  
Maté & Maté. (2022). *Op cit*.

<sup>6</sup> A similar idea can be found in the work of Frank Shepard.  
Shepard, P. (1998). *Coming home to the Pleistocene*. F. R. Shepard (Ed.). Washington, DC: Island Press.

<sup>7</sup> Our inborn expectations probably begin already while we are still in the uterus, as Thomas Verny's groundbreaking research on the effect of the intra-uterine period on our wellbeing shows.

Verny, T., & Kelly, J. (1981). *The secret life of the unborn child: How you can prepare your baby for a happy, healthy life*. New York, NY: Dell.

<sup>8</sup> For a more recent, multidisciplinary scientific approach to our 'environment of evolutionary adaptedness' and how our deviation from it is leading to a rise in mental health problems, see:

Narvaez, D., Panksepp, J., Schore, A., & Gleason, T. (Eds.). (2012). *Evolution, early experience and human development: From research to practice and policy*. Oxford, UK: Oxford University Press.

<https://doi.org/10.1093/acprof:oso/9780199755059.001.0001>

<sup>9</sup> Bowlby, J. (1982). *Attachment and loss volume 1: Attachment* (2nd ed.). New York, NY: Basic Books, p. 58.

<sup>10</sup> Further reading: Diamond, J. (2012). *The world until yesterday: What can we learn from traditional societies?* New York, NY: Penguin Group.

## **Prologue**

<sup>11</sup> Robert, F. (1916). The road not taken. In *Mountain interval*. New York, NY: Holt.

<sup>12</sup> Emerson, R. W. (1907). Self-reliance. In *Essays* (pp. 79-116). New York, NY: Charles Merrill, p. 84. Retrieved from <http://www.gutenberg.org/ebooks/16643>



<sup>13</sup> French philosopher Michel Foucault uses the term 'biopower' to refer to this increasing influence of modern governments on "the administration of bodies and the calculated management of life."

Foucault, M. (1978). *The history of sexuality, volume 1: An introduction* (R. Hurley, Trans.). New York, NY: Pantheon Books, pp. 133-159.

Another interesting commentary on our modern reliance on institutions we find in Ivan Illich's working:

Illich, I. (1970). *Deschooling society*. New York, NY: Harper & Row.

<sup>14</sup> Emerson. (1907). *Op. cit.*, p. 88.

<sup>15</sup> He is also the originator of the term 'civil disobedience'. Both Thoreau and Emerson belonged to the philosophic school of transcendentalism, which believed in the inherent goodness of people, which was corrupted by conformity to institutions. They stressed the importance of people being self-reliant and independent.

Goodman, R. (2019). Transcendentalism. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy*. Retrieved from <https://plato.stanford.edu/archives/win2019/entries/transcendentalism/>

Thoreau, H. D. (1866). Civil disobedience. In *A yankee in Canada, with anti-slavery and reform papers*. Boston, MA: Ticknor and Fields.

<sup>16</sup> Thoreau, H. D. (1990). *Walden*. Philadelphia, PA: Courage, p. 190. (Original work published 1854)

<sup>17</sup> Hannan, J. (2007). Society [Recorded by Eddie Vedder]. On *Into the wild* [CD]. Seattle, WA: J Records.

<sup>18</sup> Achterhuis, H. (1988). *Het rijk van de schaarste* [The empire of scarcity]. Rotterdam, Netherlands: Lemniscaat.

Eisenstein, C. (2014). A beautiful world of abundance. *Resurgence & Ecologist*, 286. Retrieved from <https://www.resurgence.org/magazine/article4233-a-beautiful-world-of-abundance.html>

<sup>19</sup> Castle, V. (2007). *The trance of scarcity: Stop holding your breath and start living your life*. San Francisco, CA: Berrett-Koehler.

<sup>20</sup> Marianne Gronemeyer argues that in our 'welfare society' the more apparent material abundance there is, the bigger we think our needs are.

Gronemeyer, M. (2002). *Die Macht der Bedürfnisse: Überfluss und Knappheit* [The power of needs: Abundance and scarcity]. Darmstadt, Germany: Wissenschaftliche Buchgesellschaft.

<sup>21</sup> Bronfenbrenner, M. (1962). The scarcity hypothesis in modern economics. *The American Journal of Economics and Sociology*, 21(3), 265-270.

Esteva, G. (2010). Development. In W. Sachs (Ed.), *The development dictionary: A guide to knowledge as power* (2nd ed.) (pp. 1-23). London, UK: Zed Books.

<sup>22</sup> Robbins, L. (1932). *An essay on the nature & significance of economic science*. London, UK: MacMillan, p. 15. Retrieved from <https://mises.org/library/essay-nature-and-significance-economic-science>

<sup>23</sup> Wang, L., Malhotra, D., & Murnighan, J. K. (2011). Economics education and greed. *Academy of Management Learning & Education*, 10(4), 643-660.

<sup>24</sup> This leads to another problem: infinite growth on a finite planet is impossible. This has been the main idea of the so-called 'degrowth' movement. The term 'degrowth' (French: *décroissance*) was coined by French philosopher André Gorz in 1972, and this formed the inspiration for, amongst other things, the landmark *Limits to growth* report published shortly after.

D'Alisa, G., Demaria, F., & Kallis, G. (Eds.). (2015). *Degrowth: A vocabulary for a new era*. New York, NY: Routledge.

Latouche, S. (2009). *Farewell to growth* (D. Macey, Trans.). Cambridge, UK: Polity.

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). *The limits to growth: A report for the Club of Rome's project on the predicament of mankind*. New York, NY: Universe Books.

<sup>25</sup> Charles Eisenstein writes: "We can see economic growth [...] as reflecting an escalation of neediness, an intensification of the state of being in want."

Eisenstein, C. (2013). *The ascent of humanity: Civilization and the human sense of self*. Berkeley, CA: Evolver Editions, pp. 182.

<sup>26</sup> Wachtel, P. (1989). *The poverty of affluence: A psychological portrait of the American way of life*. Philadelphia, PA: New Society Publishers.

<sup>27</sup> Upon first presenting the concept the later Economics Nobel Prize winner stated: “The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income as defined above.”

United States Bureau of Foreign and Domestic Commerce, & Kuznets, S. (1934). *National Income, 1929-1932*. Washington, DC: US Government Printing Office, pp. 6-7. Retrieved from <https://fraser.stlouisfed.org/title/971>

Later he added: “Distinctions must be kept in mind between quantity and quality of growth, between its costs and return, and between the short and the long term. Goals for more growth should specify more growth of what and for what.”

As cited in Cavagnaro, E., & Curiel, G. (2017). *The three levels of sustainability*. London, UK: Routledge, p. 71.

The idea that growth in production does not necessarily lead to better living conditions can be traced back to Robert Malthus’ historical essay ‘On the Principle of Population’.

Malthus, R. (1798). *An essay on the principle of population, as it affects the future improvement of society with remarks on the speculations of Mr. Godwin, M. Condorcet, and other writers*. London, Great Britain: Johnson.

<sup>28</sup> Three well known examples for instance are Bhutan's 'Gross National Happiness' index, the OECD's 'Better Life Index' and the 'Happy Planet Index'. These efforts have been encouraged by both EU and UN.

European Commission. (2013). *Progress on 'GDP and beyond' actions*. Brussels, Belgium: Author. Retrieved from [https://ec.europa.eu/environment/enveco/pdf/SWD\\_2013\\_303.pdf](https://ec.europa.eu/environment/enveco/pdf/SWD_2013_303.pdf)

OECD. (2017). *How's life? 2017: Measuring well-being*. Paris, France: Author. [https://dx.doi.org/10.1787/how\\_life-2017-en](https://dx.doi.org/10.1787/how_life-2017-en)

UN General Assembly. (2011). Happiness: Towards a holistic approach to development [PDF file]. Retrieved from <https://digitallibrary.un.org/record/715187>

Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *An extensive analysis of GNH Index*. Thimphu, Bhutan: The Centre for Bhutan Studies. Retrieved from <http://www.grossnationalhappiness.com/wp-content/uploads/2012/10/An%20Extensive%20Analysis%20of%20GNH%20Index.pdf>

<sup>29</sup> Arguments against GDP are numerous. GDP does not take into account factors such as income inequality, people's health and happiness, political freedom, harm to the environment, etc. Well-known critics of GDP include Economics Nobel Prize laureates Joseph Stiglitz and Amartya Sen.

de Graaf, J., Wann, D, & Naylor, T. H. (2014). *Affluenza: How overconsumption is killing us and how we can fight back* (3rd ed.). San Francisco, CA: Berrett-Koehler.

Stiglitz, J. E., Sen, A., & Fitoussi, J. P. (2010). *Mismeasuring our lives: Why GDP doesn't add up. The report by the commission on the measurement of economic performance and social progress*. New York, NY: The New Press.

<sup>30</sup> Sahlin, M. (1972). *Stone age economics*. New York, NY: Aldine de Gruyter. Retrieved from <http://www.primitivism.com/original-affluent.htm>

- <sup>31</sup> Norberg-Hodge, H. (1991). *Ancient futures: Lessons from Ladakh for a globalizing world* [E-reader version]. San Francisco, CA: Sierra Club Books.
- <sup>32</sup> Norberg-Hodge. (1991). *Op cit.*, p. 66.
- <sup>33</sup> Norberg-Hodge. (1991). *Op cit.*, p. 88.
- <sup>34</sup> Schor, J. B. (1998). *The overspent American: Why we want what we don't need*. New York, NY: Harper Perennial.
- Schor, J. B. (2004). *Born to buy: The commercialized child and the new consumer cult*. New York, NY: Scribner.
- Trentmann, F. (2016). *Empire of things: How we became a world of consumers, from the fifteenth century to the twenty-first*. New York, NY: Harper Perennial.
- <sup>35</sup> Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: MIT Press.
- McGowan, T. (2016). *Capitalism and desire: The psychic cost of free markets*. New York, NY: Columbia University Press.
- <sup>36</sup> Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: foundations of hedonic psychology* (pp. 302-339). New York, NY: Russell Sage Foundation.
- <sup>37</sup> This has been called the 'Easterlin' paradox, after Richard Easterlin, the economist who first described it.
- Easterlin, R. A. (1995). Will raising the incomes of all increase the happiness of all? *Journal of Economic Behavior and Organization*, 27, 35-47.
- Easterlin, R. A. (2001). Income and happiness: Towards a unified theory. *The Economic Journal*, 111, 465-484.
- <sup>38</sup> Frey, B. S., & Stutzer, A. (2002). What can economists learn from happiness research? *Journal of Economic Literature*, 40, 402-435.

<sup>39</sup> Lyubomirsky, S. (2007). *The how of happiness. A new approach to getting the life you want*. New York, NY: Penguin Books.

<sup>40</sup> Dalai Lama, H. H., & Cutler, H. C. (1998). *The art of happiness: A handbook for living*. New York, NY: Riverhead Books.

<sup>41</sup> Kasser, T., Ryan, R. M., Couchman, C. E., & Sheldon, K. M. (2004). Materialistic values: Their causes and consequences. In T. Kasser & A. D. Kanner (Eds.), *Psychology and consumer culture: The struggle for a good life in a materialistic world* (pp. 11–28). Washington, DC: American Psychological Association, pp. 15-16. <https://doi.org/10.1037/10658-002>

<sup>42</sup> Chaplin, N., & Roedder John, D. (2010). Interpersonal influences on adolescent materialism: A new look at the role of parents and peers. *Journal of Consumer Psychology*, 20(2), 176-184. <https://doi.org/10.1016/j.jcps.2010.02.002>

Chen, B. (2018). An evolutionary life history approach to understanding greed. *Personality and Individual Differences*, 127, 74-78. <https://doi.org/10.1016/j.paid.2018.02.006>

Kasser et al. (2004), Op cit.

Liu, Z., Sun, X., Guo, Y., & Luo, F. (2023). Mindful parenting inhibits adolescents from being greedy: The mediating role of adolescent core self-evaluations. *Current Psychology*, 42, 15991–16000. <https://doi.org/10.1007/s12144-019-00577-3>

Maranges, H. M., Hasty, C., Maner, J. K., & Conway, P. (2021). The behavioral ecology of moral dilemmas: Childhood unpredictability, but not harshness, predicts less deontological and utilitarian responding. *Journal of Personality and Social Psychology*, 120(6), 1696–1719. <https://doi.org/10.1037/pspp0000368>

<sup>43</sup> Hidaka, B. H. (2012). Depression as a disease of modernity: Explanations for increasing prevalence. *Journal of Affective Disorders*, 140(3), 205–214. <https://doi.org/10.1016/j.jad.2011.12.036>

Lane, R. E. (2000). *The loss of happiness in market democracies*. New Haven, CT: Yale University Press.

Myers, D. G. (2000). *The American paradox: Spiritual hunger in an age of plenty*. New Haven, CT: Yale University Press.

According to the *Gallup World Poll* happiness has decreased worldwide over the past 10 years.

Helliwell, J. F, Layard, R., Sachs, J. D., & De Neve, J. (Eds.) (2020). *World Happiness Report*. New York, NY: Sustainable Development Solutions Network, pp. 24-31. Retrieved from <https://worldhappiness.report/>

Another study shows a steep decline in mental well-being since the COVID pandemic:

Sapien Labs. (2024). *The mental state of the world in 2023: A perspective on internet-enabled populations* {PDF file}. Retrieved from <https://sapienlabs.org/wp-content/uploads/2024/03/4th-Annual-Mental-State-of-the-World-Report.pdf>

<sup>44</sup> Sloan, T. (1996). *Damaged life: The crisis of the modern psyche*. London, UK: Routledge.

Verhaeghe, P. (2014). *What about Me? The struggle for identity in a market-based society* (J. Hedley-Prole, Trans.). Melbourne, Australia: Scribe.

<sup>45</sup> Fromm, E. (1991). *The sane society* (2nd ed.). London, UK: Routledge. (Original work published 1956)

<sup>46</sup> For an interesting discussion of how modern society creates increased levels of mental illness see:

Levine, B. E. (2001). *Commonsense rebellion: Taking back your life from drugs, shrinks, corporations, and a world gone crazy*. New York, NY: Continuum.



<sup>47</sup> Gallup. (2017). *Gallup 2017 global emotions*. Washington, DC: Author.

Further reading:

Drapeau, A., Marchand, A., & Beaulieu-Prévost, D. (2011). Epidemiology of psychological distress. In L. L'Abate (Ed.). *Mental illnesses: Understanding, prediction and control* (pp. 105-134). Rijeka, Croatia: InTech.

<sup>48</sup> Steel, Z., Marnane, C., Iranpour, C., Chey, T., Jackson, J. W., Patel, V., & Silove, D. (2014). The global prevalence of common mental disorders: A systematic review and meta-analysis 1980–2013. *International Journal of Epidemiology*, 43(2), 476–493. <https://doi.org/10.1093/ije/dyu038>

<sup>49</sup> Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet Psychiatry*, 3(2), 171-178. [https://doi.org/10.1016/S2215-0366\(15\)00505-2](https://doi.org/10.1016/S2215-0366(15)00505-2)

<sup>50</sup> Institute for Health Metrics and Evaluation. (2018). Global mental disorders. In *Global burden of disease study compare* [Data file]. Retrieved from <http://ihmeuw.org/4p4n>

<sup>51</sup> Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 593–602. <https://doi.org/10.1001/archpsyc.62.6.593>

Wittchen, H. U., Jacobi, F., Rehm, J., Gustavsson, A., Svensson, M., Jönsson, B., ... Steinhausen, H. C. (2011). The size and burden of mental disorders and other disorders of the brain in Europe 2010. *European Neuropsychopharmacology*, 21(9), 655-679. <https://doi.org/10.1016/j.euroneuro.2005.04.012>

<sup>52</sup> The researchers contribute this change to a declining cultural focus on community, relationships and meaning in life and an increasing focus on materialism and status.

Twenge, J. M., Gentile, B., DeWall, C. N., Ma, D., Lacefield, K., & Schurtz, D. R. (2010). Birth cohort increases in psychopathology among young Americans, 1938–2007: A cross-temporal meta-analysis of the MMPI. *Clinical Psychology Review*, 30, 145–54.

For a more recent study showing declining mental health of youth, see:

Sapient Labs. (2025). *The youth mind: Rising aggression and anger* [PDF file]. Retrieved from <https://sapientlabs.org/wp-content/uploads/2025/01/Sapient-Labs-Report-The-Youth-Mind-Rising-aggression-and-anger-1.pdf>

<sup>53</sup> Depression caused 7.5% of all years lived with disability in 2015.

<sup>54</sup> Institute for Health Metrics and Evaluation. (2018) Global depressive disorders. In *Global burden of disease study compare* [Data file]. Retrieved from <http://ihmeuw.org/571m>

More on the prevalence of depression: Hidaka. (2012). *Op cit*.

More on the prevalence of anxiety disorders:

Ruscio, A. M., Hallion L. S., Lim, C.C., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J. W, ... Scott, K. M. (2017). Cross-sectional comparison of the epidemiology of DSM-5 generalized anxiety disorder across the globe. *JAMA Psychiatry*, 74(5), 465–475. <https://doi.org/10.1001/jamapsychiatry.2017.0056>

<sup>55</sup> Consumption now stands at 60 doses per 1,000 people daily. OECD (2017). *Health at a Glance 2017: OECD Indicators*. Paris, France: Author. [http://dx.doi.org/10.1787/health\\_glance-2017-en](http://dx.doi.org/10.1787/health_glance-2017-en)

- <sup>56</sup> Pratt, L. A., Brody, D. J., & Gu, Q. (2011). Antidepressant use in persons aged 12 and over. United States, 2005–2008, *NCHS data brief*, 76. Retrieved from <https://www.cdc.gov/nchs/data/databriefs/db76.pdf>
- <sup>57</sup> Kunsel, T., & Sumant, O. (2019). *Global antidepressant drugs market: Global opportunity analysis and industry forecast, 2017-2023*. Portland, OR: Allied Market Research. Available from <https://www.alliedmarketresearch.com/antidepressants-drugs-market>
- International Monetary Fund. (2019). World economic outlook database [Data file]. Retrieved from <https://www.imf.org/external/pubs/ft/weo/2019/02/weodata/index.aspx>
- <sup>58</sup> WHO. (2017). *Depression and other common mental disorders: Global health estimates*. Geneva, Switzerland: Author. Retrieved from [https://www.who.int/mental\\_health/management/depression/prevalence\\_global\\_health\\_estimates/en/](https://www.who.int/mental_health/management/depression/prevalence_global_health_estimates/en/)
- <sup>59</sup> Institute for Health Metrics and Evaluation. (2018) Self-harm. In *Global burden of disease study compare* [Data file]. Retrieved from <http://ihmeuw.org/57lo>
- <sup>60</sup> Norberg-Hodge. (1991). *Op cit.*, p. 85.
- <sup>61</sup> Harari, Y. N. (2014). *Sapiens: A brief history of humankind*. Toronto, ON: McClelland & Stewart, pp. 319-322.

<sup>62</sup> Exposure to artificial light at night can disrupt circadian rhythms and contribute to psychological problems. Navara & Nelson write: “The increasing prevalence of exposure to light at night has significant social, ecological, behavioral, and health consequences that are only now becoming apparent.”

Navara, K. J., & Nelson, R. J. (2007). The dark side of light at night: Physiological, epidemiological, and ecological consequences. *Journal of Pineal Research*, 43(3), 215-224. <https://doi-org/10.1111/j.1600-079X.2007.00473.x>

Walker, W. H., Walton, J. C., DeVries, A. C., & Nelson, R. J. (2020). Circadian rhythm disruption and mental health. *Translational psychiatry*, 10(1), 28. <https://doi.org/10.1038/s41398-020-0694-0>

<sup>63</sup> For an interesting account of how the modern urban lifestyle does not meet our evolutionary needs and how we can change it, read:

Milbrath, L. W. (1987). Pathologies of giant cities: Leading edge of the pathologies of modern civilization. *International Journal of Sociology and Social Policy*, 7(1), 48-67. <https://doi.org/10.1108/eb013029>

<sup>64</sup> Fromm. (1991). *Op cit.*, p. 11.

## **1. Natural birth**

<sup>65</sup> Fonds de Dotation Pierre Rabhi. (2018). Pierre Rabhi. Retrieved from <https://www.fonds-pierre-rabhi.org/en/pierre-rabhi/>

<sup>66</sup> Lothian, J. A. (2000). Why natural childbirth? *Journal of Perinatal Education*, 9(4), 44-46. <https://doi.org/10.1624%2F105812400X87905>

<sup>67</sup> Less than 1% in the US and just over 2% in England and Wales. One notable exception is the Netherlands where almost 13% of women gave birth at home in 2017.

MacDorman, M. F., Mathews, T. J., & Declercq, E. (2012). Home Births in the United States, 1990–2009. *National Center for Health Statistics Data Brief*, 84. Retrieved from <https://www.cdc.gov/nchs/data/databriefs/db84.htm>

National Health Service. (2018). Where to give birth: The options. Retrieved from <https://www.nhs.uk/conditions/pregnancy-and-baby/where-can-i-give-birth/>

Perined. (2019). Perinatale zorg in Nederland 2017 [Perinatal care in the Netherlands 2017]. Retrieved from <http://www.perinatreg-data.nl/JB2017/Jaarboek2017.html>

<sup>68</sup> WHO. (2018). *WHO recommendations: Intrapartum care for a positive childbirth experience*. Geneva, Switzerland: Author. Retrieved from <https://www.who.int/reproductivehealth/publications/intrapartum-care-guidelines/en/>

<sup>69</sup> Research shows that more than one-third of women experience mistreatment during childbirth.

Bohren, M., Mehrtash, H., Fawole, B., Maung, T., Balde, M., Maya, E., Thwin, S., ... Tunçalp, O. (2019). How women are treated during facility-based childbirth in four countries: A cross-sectional study with labour observations and community-based surveys. *The Lancet*, 394 (10210), 1750 – 1763.

<sup>70</sup> Gupta, J. K., & Nikodem, C. (2000). Maternal posture in labour. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 92, 273–277.

<sup>71</sup> WHO. (2018). *WHO recommendations: Intrapartum care for a positive childbirth experience*. *Op cit*.

<sup>72</sup> *Ibid.*, p. 8.

<sup>73</sup> Quick access to a nearby hospital in case of emergency is a must though.

Olsen, O. (1997). Meta-analysis of the safety of home birth. *Birth*, 24(1), 4-13.

Springer, N. P., & Van Weel, C. (1996). Home birth. *British Medical Journal*, 313, 1276.

<sup>74</sup> (Male) doctors did their best to convince the broader public that they were more competent than (female) midwives, even though their claims were largely unsubstantiated.

Tew, M. (1995). *Safer childbirth? A critical history of maternity care* (2nd ed.). Springer. London, UK: Chapman & Hall.

<sup>75</sup> Gaskin. (2008). *Op cit.*, p. vii.

<sup>76</sup> Gaskin, I. M. (1975). *Spiritual midwifery*. Summertown, TN: Book Publishing Company.

Grantley, D. R. (1942). *Revelation of childbirth: The principles and practice of natural childbirth*. London, UK: Heinemann.

Karmel, M., (1959). *Thank you, Dr. Lamaze*. New York, NY: Harper & Row.

Lamaze, F. (1958). *Painless childbirth: Psychoprophylactic method*. London, UK: Burke.

Leboyer, F. (1975). *Birth without violence*. New York, NY: Knopf.

Odent, M. (1994). *Birth Reborn: What childbirth should be* (2nd ed.). London, UK: Souvenir Press.

<sup>77</sup> Romano, A. M., & Lothian, J. A. (2008). Promoting, protecting, and supporting normal birth: A look at the evidence. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 37(1), 94-105. <https://doi.org/10.1111/j.1552-6909.2007.00210.x>

<sup>78</sup> Engelmann, G. J. (1883). *Labor among primitive peoples* (2nd ed.). St. Louis, MO: Chambers.

Jarcho, J. (1934). *Postures & practices during labor among primitive peoples*. New York, NY: Hoeber.

<sup>79</sup> Albers, L. L., Anderson, D., Cragin, L., Moore Daniels, S., Hunter, C., Sedler, K. D., & Teaf, D. (1997). The relationship of ambulation in labor to operative delivery. *Journal of Nurse-Midwifery*, 42(1), 4-8. [https://doi.org/10.1016/S0091-2182\(96\)00100-0](https://doi.org/10.1016/S0091-2182(96)00100-0)

Desseauve, D., Fradet, L., Lacouture, P., & Pierre, F. (2017). Position for labor and birth: State of knowledge and biomechanical perspectives, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 208, 46–54. <https://doi.org/10.1016/j.ejogrb.2016.11.006>

Gupta & Nikodem. (2000). *Op cit.*

WHO. (2014). *WHO recommendations for augmentation of labour*. Geneva, Switzerland: Author. Retrieved from [https://who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/augmentation-labour/en/](https://who.int/reproductivehealth/publications/maternal_perinatal_health/augmentation-labour/en/)

WHO. (2018). *WHO recommendations: Intrapartum care for a positive childbirth experience*. *Op cit.*

<sup>80</sup> WHO. (2014). *WHO recommendations for augmentation of labour*. *Op cit.*, p. 6.

<sup>81</sup> Boerma, T., Ronsmans, C., Melesse, D. Y., Barros, A. J., Barros, F. C., Juan, L., ... Temmerman, M. (2018). Global epidemiology of use of and disparities in caesarean sections. *The Lancet*, 392(10155), 1341-1348. [https://doi.org/10.1016/S0140-6736\(18\)31928-7](https://doi.org/10.1016/S0140-6736(18)31928-7)

<sup>82</sup> Betrán, A. P., Ye, J., Moller, A. B., Zhang, J., Gülmezoglu, A. M., & Torloni, M. R. (2016). The increasing trend in caesarean section rates: Global, regional and national estimates: 1990-2014. *PLoS ONE*, 11(2), e0148343. <https://dx.doi.org/10.1371/journal.pone.0148343>

<sup>83</sup> WHO. (2015). Statement on Caesarean Section Rates [PDF file]. Retrieved from [https://who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/cs-statement/en/](https://who.int/reproductivehealth/publications/maternal_perinatal_health/cs-statement/en/)

<sup>84</sup> Sandall, J., Tribe, R. M., Avery, L., Mola, G., Visser, G. H., Homer, C. S., ... Temmerman, M. (2018). Short-term and long-term effects of caesarean section on the health of women and children. *The Lancet*, 392, 1349-1357, p. 1349. [https://doi.org/10.1016/S0140-6736\(18\)31930-5](https://doi.org/10.1016/S0140-6736(18)31930-5)

<sup>85</sup> Benton, M., Salter, A., Tape, N., Wilkinson, C., & Turnbull, D. (2019). Women's psychosocial outcomes following an emergency caesarean section: A systematic literature review. *BMC Pregnancy Childbirth*, 19, 535. <https://doi.org/10.1186/s12884-019-2687-7>

Lobel, M., & DeLuca, R. S. (2007). Psychosocial sequelae of cesarean delivery: Review and analysis of their causes and implications. *Social Science & Medicine*, 64(11), 2272-2284. <https://doi.org/10.1016/j.socscimed.2007.02.028>

<sup>86</sup> Makhlogh, M., Mohammadi, B, Molavi, S. H., Simi, Z., & Aghayousefi, A. R. (2020). Comparison of emotional intelligence, attachment styles, and resilience among teenagers born with two methods of cesarean section and vaginal delivery. *Nursing and midwifery journal*, 18(1). pp. 58-68.

<sup>87</sup> Betrán, A. P., Temmerman, M., Kingdon, C., Mohiddin, A., Opiyo, N., Torloni, M. R., ... Downe, S. (2018). Interventions to reduce unnecessary caesarean sections in healthy women and babies. *The Lancet*, 392, 1358-68. [https://doi.org/10.1016/S0140-6736\(18\)31927-5](https://doi.org/10.1016/S0140-6736(18)31927-5)

<sup>88</sup> *Ibid.*

<sup>89</sup> *Ibid.*, p. 1359.

<sup>90</sup> WHO. (2014). *WHO recommendations for augmentation of labour*. *Op cit.*

WHO. (2018). *WHO recommendations: Intrapartum care for a positive childbirth experience*. *Op cit.*



<sup>91</sup> Blackadar, C.S., & Viera, A.J. (2004). A retrospective review of performance and utility of routine clinical pelvimetry. *Family Medicine*, 36(7), 505-507.

Pattinson, R. C., Cuthbert, A., & Vannevel, V. (2017). Pelvimetry for fetal cephalic presentations at or near term for deciding on mode of delivery. *The Cochrane database of systematic reviews*, 3(3), CD000161.

<https://doi.org/10.1002/14651858.CD000161.pub2>

<sup>92</sup> WHO. (2018). *WHO recommendations: Intrapartum care for a positive childbirth experience*. *Op cit*, p. 68.

<sup>93</sup> WHO. (2015). *WHO recommendations for prevention and treatment of maternal peripartum infections*. Geneva, Switzerland: Author, p. 15. Retrieved from

[https://apps.who.int/iris/bitstream/handle/10665/186171/9789241549363\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/186171/9789241549363_eng.pdf?sequence=1)

<sup>94</sup> American College of Obstetricians and Gynecologists' Committee on Practice Bulletins – Obstetrics. (2016). Practice bulletin no. 165: Prevention and management of obstetric lacerations at vaginal delivery. *Obstetrics & Gynecology*, 128(1), e1-e15. <https://doi.org/10.1097/AOG.0000000000001523>

Jiang, H., Qian, X., Carroli, G., & Garner, P. (2017). Selective versus routine use of episiotomy for vaginal birth. *Cochrane Database of Systematic Reviews*, 2, CD000081. <https://doi.org/10.1002/14651858.CD000081.pub3>

<sup>95</sup> WHO. (2015). *WHO recommendations for prevention and treatment of maternal peripartum infections*. *Op cit*.

<sup>96</sup> WHO. (2016). *WHO recommendations on antenatal care for a positive pregnancy experience*. Geneva, Switzerland: Author. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf>

<sup>97</sup> Other techniques, which the WHO did not consider in its research, are for example water immersion, hypnobirthing, acupuncture and different cultural and traditional practices.

## **2. Natural immunity**

<sup>98</sup> Co-discoverer of the AIDS virus

Rowan, U. (Producer), & Leung, B. (Producer & Director). (2009). *House of numbers: Anatomy of an epidemic*. US: Knowledge Matters.

<sup>99</sup> In 2011 11% of the world's population still did not have access to clean drinking water, and 36% lacked access to proper sanitation.

WHO & UNICEF. (2013). *Progress on sanitation and drinking-water: 2013 update*. Geneva, Switzerland: Author. Retrieved from [https://www.who.int/water\\_sanitation\\_health/publications/jmp\\_report-2013/en/](https://www.who.int/water_sanitation_health/publications/jmp_report-2013/en/)

<sup>100</sup> I believe organic food to be better for health. There is not a lot of scientific research done in this field yet. Proper long-term comparative studies are lacking. There are some promising indications however. Studies suggest organic food may reduce the risk of allergies and overweight. There might even be a direct influence on the body's immune system. Exposure to the chemicals in non-organic food could harm children's cognitive development. Organic agriculture uses much less pesticides, so non-organic food contains significantly more chemicals. These chemicals have all been individually tested for side effects. However, there are no proper studies done for the long-term effects of the mixture of chemical residues present in non-organic food.

Kortenkamp, A., Faust, M., Scholze, M., & Backhaus, T. (2007). Low-level exposure to multiple chemicals: Reason for human health concerns? *Environmental Health Perspectives*, 115, Supplement 1. <https://doi.org/10.1289/ehp.9358>

Mie, A., Andersen, H. R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembiałkowska, E., ... Grandjean, P. (2017). Human health implications of organic food and organic agriculture: A comprehensive review. *Environmental Health*, 16(111). <http://doi.org/10.1186/s12940-017-0315-4>

<sup>101</sup> Pollution can cause cardiovascular and heart disease, stroke, chronic lung disease, lung cancer and many other illnesses. 6.5 million people die because of air pollution every year, 1.8 because of water pollution and 1.8 because of other forms of pollution. The real number could be much higher still, as not all effects of pollution are fully understood by the scientific community.

Landrigan, P. J., Fuller, R., Acosta, N. J., Adeyi, O., Arnold, R., Basu, N., ... Zhong, M. (2018). The *Lancet* Commission on pollution and health. *The Lancet*, 391, 462–512. [http://dx.doi.org/10.1016/S0140-6736\(17\)32345-0](http://dx.doi.org/10.1016/S0140-6736(17)32345-0)

<sup>102</sup> In chapter 7 we will discuss the relationship between social support and health.

<sup>103</sup> In the US the consequences of stress are estimated to cost 50 to 300 billion USD to industries. In the EU it is 20 billion EUR. One million Americans are estimated to be absent from work every day because of stress-related reasons. In England up to 40% of sick leave can be linked to stress.

Brun, J. P., & Lamarche, C. (2006). *Assessing the costs of work stress*. Quebec, QC: Université Laval. Retrieved from [www.mtpinnacle.com/pdfs/Assessing-Costs-of-WorkStress.pdf](http://www.mtpinnacle.com/pdfs/Assessing-Costs-of-WorkStress.pdf)

<sup>104</sup> Maté, G. (2003). *When the body says no: Exploring the stress-disease connection*. Hoboken, NJ: Wiley.

Sapolsky, R. M. (2004). *Why zebras don't get ulcers: The acclaimed guide to stress, stress-related diseases and coping* (3rd ed.). New York, NY: Owl.

<sup>105</sup> According to the *Harvard Medical School*, healthy diets that will strengthen our immunity are rich in vegetables and fruits.

Harvard Medical School. (2020). How to boost your immune system: Helpful ways to strengthen your immune system and fight off disease. Retrieved from <https://www.health.harvard.edu/staying-healthy/how-to-boost-your-immune-system>

Further reading: Fuhrman, J. (2011). *Super immunity: The essential nutrition guide for boosting your body's defenses to live longer, stronger, and disease free*. New York, NY: HarperOne.

<sup>106</sup> Harvard Medical School. (2020). *Op cit*.

<sup>107</sup> The field of *psychoneuroimmunology* studies the connection of our psyche and our immune system.

<sup>108</sup> Bennett, M. P., Zeller, J. M., Rosenberg, L., & McCann, J. (2003). The effect of mirthful laughter on stress and natural killer cell activity. *Alternative Therapies in Health and Medicine*, 9(2), 38-45.

Glaser, R., & Kiecolt-Glaser, J. K. (Eds.). (1994). *Handbook of human stress and immunity*. San Diego, CA: Academic Press.

Maddock, C., & Pariante, C. M. (2011). How does stress affect you? An overview of stress, immunity, depression and disease. *Epidemiology and Psychiatric Sciences*, 10(3), 153-162.

Sapolsky. (2004). *Op cit.*, pp. 31-38.

Witek-Janusek, L., & Mathews, H. L. (2000). Stress, immunity and health outcomes. In V. H. Rice (Ed.), *Handbook of stress, coping, and health: Implications for nursing research, theory and practice* (pp. 47-68). Thousand Oaks, CA: Sage.

109 Medical scientists call this the 'hygiene hypothesis'.

Bach, J. F. (2002). The effect of infections on susceptibility to autoimmune and allergic diseases. *New England Journal of Medicine*, 347, 911-920. <https://doi.org/10.1056/NEJMra020100>

Bateson, P., Barker, D., Clutton-Brock, T., Deb, D., D'Udine, B., Foley, R. A., ... Sultan, S. E. (2004). Developmental plasticity and human health. *Nature*, 430(6998), 419-421.

Bendiks, M., & Kopp, M. V. (2013). The relationship between advances in understanding the microbiome and the maturing hygiene hypothesis. *Current Allergy and Asthma Reports*, 13(5), 487-94. <http://doi.org/10.1007/s11882-013-0382-8>

Ege, M. J., Mayer, M., Normand, A. C., Genuneit, J., Cookson, W. O., Braun-Fahrlander, C., ... von Mutius, E. (2011). Exposure to environmental microorganisms and childhood asthma. *New England Journal of Medicine*, 364, 701-709. <https://doi.org/10.1056/NEJMoa1007302>

Enders, G. (2015). *Gut: The inside story of our body's most underrated organ*. Vancouver, BC: Greystone Books.

Gomez de Agüero, M., Ganai-Vonarburg, S. C., Fuhrer, T., Rupp, S., Uchimura, Y., Li, H., ... Macpherson, A. J. (2016). The maternal microbiota drives early postnatal innate immune development. *Science*, 351(6279), 1296–1302. <https://doi.org/10.1126/science.aad2571>

Kalbermatter, C., Fernandez Trigo, N., Christensen, S., & Ganai-Vonarburg, S. C. (2021). Maternal microbiota, early life colonization and breast milk drive immune development in the newborn. *Frontiers in immunology*, 12, 683022. <https://doi.org/10.3389/fimmu.2021.683022>

Pendse, M., & Hooper, L. (2016). Mum's microbes boost baby's immunity. *Nature* 533, 42–43 (2016). <https://doi.org/10.1038/nature17895>

Rakoff-Nahoum S. (2016). Another reason to thank mom: Gestational effects of microbiota metabolites. *Cell host & microbe*,

<sup>110</sup> Bendiks & Kopp. (2013). *Op cit.*, p. 492.

### **3. A parent's touch**

<sup>111</sup> Sears, W., Sears, M., Sears, R., & Sears, J. (2013). *The baby book: Everything you need to know about your baby from birth to age two* (Rev. ed.). New York, NY: Little, Brown and Company, p. 2.

<sup>112</sup> Bowlby, J. (1969). *Attachment and loss*. London, UK: Hogarth Press.

Bowlby, J. (1973). *Separation: Anxiety and anger*. London, UK: Hogarth Press.

Bowlby, J. (1980). *Loss: Sadness and depression*. New York, NY: Basic Books.

<sup>113</sup> Bowlby, J. (1952). *Maternal care and mental health* (2nd ed.). Geneva, Switzerland: WHO, p. 11.

<sup>114</sup> Siegel, C. (2001). *What's wrong with daycare? Freeing parents to raise their own children*. New York, NY: Teachers College Press.

<sup>115</sup> Watson, J. B. (1928). *Psychological care of infant and child*. New York, NY: Norton.

<sup>116</sup> Holt, L. E. (1907). *The care and feeding of children: A catechism for the use of mothers and children's nurses* (4th ed.). New York, NY: Appleton. Retrieved from <http://www.gutenberg.org/files/15484/15484-h/15484-h.htm>

<sup>117</sup> Karen, R. (1998). *Becoming attached: First relationships and how they shape our capacity to love*. Oxford, UK: Oxford University Press, pp. 13-25.

<sup>118</sup> Ainsworth, M. D., Andry, R. G., Harlow, R. G., Lebovici, S., Mead, M., Prugh, D. G., & Wootton, B. (1962). *Deprivation of maternal care: A reassessment of its effects*. Geneva, Switzerland: WHO. Retrieved from <http://www.who.int/iris/handle/10665/37819>

Karen. (1998). *Op cit.*, pp. 252-258.

<sup>119</sup> Small, M. F. (1999). *Our babies, ourselves: How biology and culture shape the way we parent*. New York, NY: Anchor Books.

<sup>120</sup> Harlow, H. (1958). The nature of love. *American Psychologist* 13, 673-685. Retrieved from <http://psychclassics.yorku.ca/Harlow/love.htm>

<sup>121</sup> It needs to be noted that Harlow's experiments were not quite vegan, to say the least. He took infant monkeys away from their mothers, strongly disturbing their socialization. In some experiments, trying to study depression, he even put infant monkeys in dark isolation chambers for months at a time. All of the monkeys came out severely deranged. Harlow's methods gave rise to a lot of criticism and led to the creation of ethical regulations for animal testing.

Stephens, M. L. (1986). *Maternal deprivation experiments in psychology: A critique of animal models*. Jenkintown, PA: The American Anti-Vivisection Society. Retrieved from <https://aavs.org/maternal-deprivation-experiments-psychology>

<sup>122</sup> Rutter, M., Beckett, C., Castle, J., Kreppner, J., Stevens, S., & Sonuga-Barke, E. (2009). *Policy and practice implications from the English and Romanian adoptees (ERA) study: Forty five key questions*. London, UK: British Association for Adoption & Fostering.



<sup>123</sup> Enns, M., Cox, B., & Clara, I. (2002). Parental bonding and adult psychopathology: Results from the US national comorbidity survey. *Psychological Medicine*, 32(6), 997-1008. <http://doi.org/10.1017/S0033291702005937>

Malonda, E., Llorca, A., Mesurado, B., Samper, P., & Mestre, M.V. (2019). Parents or peers? Predictors of prosocial behavior and aggression: a longitudinal study. *Frontiers in Psychology*, 10, 2379.

<http://doi.org/10.3389/fpsyg.2019.02379>

Parker, G., Hadzi-Pavlovic, D., Greenwald, S. & Weissman, M. (1995). Low parental care as a risk factor to lifetime depression in a community sample. *Journal of Affective Disorders*, 33(3), 173-180. [https://doi.org/10.1016/0165-0327\(94\)00086-O](https://doi.org/10.1016/0165-0327(94)00086-O)

Shaw, B. A., Krause, N., Chatters, L. M., Connell, C. M., & Ingersoll-Dayton, B. (2004). Emotional support from parents early in life, aging, and health. *Psychology and Aging*, 19(1), 4-12. <http://doi.org/10.1037/0882-7974.19.1.4>

<sup>124</sup> Spock, B. (1946). *The common sense book of baby and child care*. New York, NY: Duell, Sloan and Pearce.

<sup>125</sup> Longitudinal research shows that babies who had very affectionate mothers grow up to be significantly less anxious and distressed.

Maselko, J., Kubzansky, L., Lipsitt, L., & Buka, S. (2011). Mother's affection at 8 months predicts emotional distress in adulthood, *Journal of Epidemiology & Community Health*, 65, 621-625. <https://doi.org/10.1136/jech.2009.097873>

<sup>126</sup> Sears et al. (2013). *Op cit*.

<sup>127</sup> Miller, P. M., & Commons, M. L. (2010). The benefits of attachment parenting for infants and children: A behavioral developmental view. *Behavioral Development Bulletin*, 16(1), 1–14. <https://doi.org/10.1037/h0100514>

Narvaez, D. (2014). *Neurobiology and the development of human morality: Evolution, culture, and wisdom*. New York, NY: Norton.

<sup>128</sup> Miller & Commons. (2010). *Op cit*.

<sup>129</sup> Further reading:

Heller, S. (1997). *The vital touch: How intimate contact with your baby leads to happier, healthier development*. New York, NY: Henry Holt.

Liedloff. (1975). *Op cit*.

Sears, W., & Sears, M. (2001). *The attachment parenting book: A commonsense guide to understanding and nurturing your baby*. New York, NY: Little and Brown.

Small. (1998). *Op cit*.

Solter, A. (2001). *The aware baby* (Rev. ed.). Goleta, CA: Shining Star Press.

<sup>130</sup> WHO. (2022). *WHO recommendations on maternal and newborn care for a positive postnatal experience*. Geneva, Switzerland: Author, p. 149. Retrieved from <https://iris.who.int/bitstream/handle/10665/352658/9789240045989-eng.pdf>

<sup>131</sup> Salk, L. (1973). The role of the heartbeat in the relations between mother and infant. *Scientific American*, 228(5), 24–29.

<sup>132</sup> Psychologist Donald Winnicott emphasizes the importance of a mother holding her child and the creation of what he calls a ‘holding environment’.

Winnicott, D. W. (1987). *Child, the family and the outside world*. Boston, MA: Da Capo Press.

- 133 Diamond. (2012). *Op cit.*, pp. 183-186.  
Hewlett, B. S., & Lamb, M. E. (Eds.). (2005). Hunter-gatherer childhoods: Evolutionary, developmental & cultural perspectives. London, UK: Routledge.
- 134 Futagi, Y., Toribe, Y., & Suzuki, Y. (2012). The grasp reflex and moro reflex in infants: hierarchy of primitive reflex responses. *International Journal of Pediatrics*, 191562. <http://doi.org/10.1155/2012/191562>
- 135 Babies cry when separated from the mother (see below). Their feeding sessions are long and slow; their milk is low-fat, and their thermoregulation is poor.  
Liedloff. (1975). *Op cit.*  
Zeifman, D. (2001). An ethological analysis of human infant crying: Answering Tinbergen's four questions. *Developmental Psychobiology*, 39, 265-285.
- 136 Zeifman. (2001). *Op cit.*
- 137 Thulier, D. (2009). Breastfeeding in America: A history of influencing factors. *Journal of Human Lactation*, 25(1), 85-94, p. 89. <https://doi.org/10.1177/0890334408324452>
- 138 Montagu, A. (1986). *Touching: The human significance of the skin* (3rd ed.). New York, NY: Perennial Library.  
Moore, E. R., Anderson, G. C., Bergman, N., & Dowswell, T. (2014). Early skin-to-skin contact for mothers and their healthy newborn infants. *Cochrane Database of Systematic Reviews*, 5, CD003519. <https://doi.org/10.1002/14651858.CD003519.pub3>
- 139 Reynolds-Miller, R. L., (2016). Potential therapeutic benefits of babywearing. *Creative Nursing*. 221(1), 17-23.
- 140 Rey, E. S., & Martinez, H. G. (1983), Manejo racional del niño prematuro [Rational management of the premature child]. In: Universidad Nacional, *Curso de Medicina Fetal*. Bogotá, Colombia: Author.

<sup>141</sup> WHO. (2003). *Kangaroo mother care: A practical guide*. Geneva, Switzerland: Author. Retrieved from <http://whqlibdoc.who.int/publications/2003/9241590351.pdf>

Charpak, N., Ruiz, J. G., Zupan, J., Cattaneo, A., Figueroa, Z., Tessier, ... Worku, B. (2005). Kangaroo Mother Care: 25 years after. *Acta Paediatrica*, 94, 514-522.

Conde-Agudelo, A., Díaz-Rossello J. L. (2017). Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. *Cochrane Database of Systematic Reviews*, 8, CD002771.

<https://doi.org/10.1002/14651858.CD002771.pub4>

<sup>142</sup> Charpak et al. (2005). *Op cit.*; Moore et al. (2014). *Op cit.*; Romano et al. (2008). *Op cit.*

<sup>143</sup> Shorey, S., Hong-Gu, H., & Morelius, E. (2016). Skin-to-skin contact by fathers and the impact on infant and paternal outcomes: An integrative review. *Midwifery*, 40, 207-217. <https://doi.org/10.1016/j.midw.2016.07.007>

<sup>144</sup> WHO. (2012). *Recommendations for management of common childhood conditions*. Geneva, Switzerland: Author, pp. 24-26. Retrieved from [http://apps.who.int/iris/bitstream/10665/44774/1/9789241502825\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44774/1/9789241502825_eng.pdf)

WHO & UNICEF. (2018). *Capture the Moment: Early initiation of breastfeeding, the best start for every newborn*. New York, NY: Author, p. 8. Retrieved from

[https://www.unicef.org/publications/files/UNICEF\\_WHO\\_Capture\\_the\\_moment\\_EIBF\\_2018.pdf](https://www.unicef.org/publications/files/UNICEF_WHO_Capture_the_moment_EIBF_2018.pdf)

WHO. (2022). *WHO recommendations on maternal and newborn care for a positive postnatal experience*. *Op cit.*

Further reading on babywearing:

Blois, M. (2005). *Babywearing: The benefits and beauty of this ancient tradition*. Amarillo, TX: Praeclarus Press.

<sup>145</sup> The initial breast milk, called *colostrum*, is especially nutritious. Moreover, it is rich in antibodies, acting as a natural vaccination, and adapted to the sensitive digestive system of the newborn.

<sup>146</sup> WHO. (2023). Infant and young child feeding. Retrieved from <https://www.who.int/en/news-room/fact-sheets/detail/infant-and-young-child-feeding>

<sup>147</sup> Diamond. (2012). *Op cit.*, pp. 179-181.

Fouts, H. N., & Lamb, M. E. (2005). Weanling emotional patterns among the Bofi foragers of Central Africa: The role of maternal availability and sensitivity. In Hewlett & Lamb, *op cit.* (pp. 309-321).

<sup>148</sup> It is estimated it takes 4000 liters of water to produce 1 kg of formula for instance.

Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., ... Victora, C. G. (2016). Why invest, and what it will take to improve breastfeeding practices? *The Lancet*, 387, 491-504, p. 499.

<sup>149</sup> Horta, B. L., & Victora, C. G. (2013). *Long-term effects of breastfeeding: A systematic review*. Geneva, Switzerland: WHO. Retrieved from

[https://www.who.int/maternal\\_child\\_adolescent/documents/breastfeeding\\_long\\_term\\_effects/en/](https://www.who.int/maternal_child_adolescent/documents/breastfeeding_long_term_effects/en/)

Kennedy, K. I., & Visness, M. (1992). Contraceptive efficacy of lactational amenorrhoea. *The Lancet*, 339, 227-230. [https://doi.org/10.1016/0140-6736\(92\)90018-X](https://doi.org/10.1016/0140-6736(92)90018-X)

Krol, K. M., & Grossmann, T. (2018). Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, 61(8), 977–985.

<https://doi.org/10.1007/s00103-018-2769-0>

WHO. (2018). Infant and young child feeding. *Op cit*.

Victora, C. G., Bahl, R., Barros, A. J., França, G. V., Horton, S., Krasevec, J., ... Rollins, N. C. (2016). Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. *The Lancet*, 387, 475-490. [https://doi.org/10.1016/S0140-6736\(15\)01024-7](https://doi.org/10.1016/S0140-6736(15)01024-7)

<sup>150</sup> Raju, T. N. (2011). Breastfeeding is a dynamic biological process, not simply a meal at the breast. *Breastfeeding Medicine*, 6(5), 257-259. <https://doi.org/10.1089/bfm.2011.0081>

<sup>151</sup> Similarly, it is estimated that 3 out of 5 babies are not breastfed in the first hour of their life. One of the reasons for this is the rise in elective caesarean sections.

WHO & UNICEF. (2018). *Capture the moment*. *Op cit*. p. 10.

<sup>152</sup> Global Breastfeeding Collective, UNICEF, & WHO. (2018). Enabling women to breastfeed through better policies and programmes: Global breastfeeding scorecard, 2018 [PDF file]. Retrieved from

<https://www.who.int/nutrition/publications/infantfeeding/global-bf-scorecard-2018/en/y>

<sup>153</sup> And it could prevent another 20,000 mothers dying from breast cancer.

- 154 Rollins et al. (2016). *Op cit.*
- 155 *Ibid.* p. 491.
- 156 More info on [www.lli.org](http://www.lli.org).
- 157 More on [www.waba.org.my](http://www.waba.org.my).
- 158 Other initiatives include the *Baby-friendly Hospital Initiative* ([www.who.int/nutrition/topics/bfhi/en/](http://www.who.int/nutrition/topics/bfhi/en/)), the *Global Breastfeeding Collective* ([www.who.int/nutrition/topics/global-breastfeeding-collective/en/](http://www.who.int/nutrition/topics/global-breastfeeding-collective/en/)) and the *International Baby Food Action Network* (<https://www.ibfan.org/>).
- 159 Rollins et al. (2016). *Op cit.*, p. 491.
- 160 Grayson, J. (2016). *Unlatched: The evolution of breastfeeding and the making of a controversy*. New York, NY: Harper Collins.
- Martucci, J. (2015). *Back to the breast: Natural motherhood and breastfeeding in America*. Chicago, IL: University of Chicago Press.
- Rollins et al. (2016). *Op cit.*; Victora et al. (2016). *Op cit.*; WHO & UNICEF. (2018). *Capture the Moment*. *Op cit.*
- 161 WHO. (1981). *International code of marketing of breast-milk substitutes*. Geneva, Switzerland: Author.
- 162 WHO. (2018). *Marketing of breast-milk substitutes: National implementation of the international code, status report 2018*. Geneva, Switzerland: Author.
- 163 International Labour Organization. (2000). *Maternity protection convention*, art. 4.1. Retrieved from [http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_ILO\\_CODE:C183](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C183)
- Rollins et al. (2016). *Op cit.*
- 164 Behaviorists call this a form of ‘operant conditioning’.

- <sup>165</sup> In a 1924 pamphlet from the American *Children's Bureau*.  
As cited in Bell, S. M., & Ainsworth, M. D. (1972). Infant crying and maternal responsiveness. *Child Development*, 43, 1171-1190, p. 1172. <http://doi.org/10.2307/1127506>
- <sup>166</sup> Bell & Ainsworth. (1972). *Op cit.* Diamond. (2012). *Op cit.*, pp. 190-192.
- <sup>167</sup> Bell & Ainsworth. (1972). *Op cit.*; Bowlby. (1969). *Op cit.*; Zeifman. (2001). *Op cit.*
- <sup>168</sup> Bell & Ainsworth. (1972). *Op cit.*  
Diamond. (2012). *Op cit.*, pp. 190-192.  
Bernal, J. (1972). Crying during the first 10 days of life, and maternal responses. *Developmental Medicine & Child Neurology*, 14(3), 362-372.  
Hunziker, U. A., & Barr, R. G. (1986). Increased carrying reduces infant crying: A randomized controlled trial. *Pediatrics*, 77(5), 641-648.
- <sup>169</sup> Barr, R. G. (1990). The early crying paradox: A modest proposal. *Human Nature*, 1, 355-389. <https://doi.org/10.1007/BF02734051>  
Diamond. (2012). *Op cit.*, pp. 183-192.  
McKenna, J. J., & McDade, T. (2005). Why babies should never sleep alone: A review of the co-sleeping controversy in relation to SIDS, bedsharing and breast feeding. *Paediatric Respiratory Reviews*, 6, 134-152. <http://doi.org/10.1016/j.prrv.2005.03.006>  
Small. (1998). *Op cit.*; Zeifman. (2001). *Op cit.*
- <sup>170</sup> Zeifman. (2001). *Op cit.*
- <sup>171</sup> Peterson, C., Maier, S. F., & Seligman, M. E. (1995). *Learned helplessness: A theory for the age of personal control*. Oxford, UK: Oxford University Press.



<sup>172</sup> In this paragraph we will discuss the practice of children sleeping in the same bed with their parents, which is commonly called 'bed sharing'. A related term is 'co-sleeping' which sometimes refers to bed sharing, or sometimes more generally to children sleeping in the same room with their parents.

<sup>173</sup> "In every known society of human hunter-gatherers and of higher primates, mother and infant sleep immediately nearby, usually in the same bed or on the same mat."

Diamond. (2012). *Op cit.*, p. 184.

<sup>174</sup> Reiss, B. (2017). *Wild nights: How taming sleep created our restless world*. New York, NY: Basic Books.

<sup>175</sup> *Ibid.*, p. 157.

<sup>176</sup> Bed sharing with a baby when smoking or under the influence of drugs or alcohol can be dangerous. When under influence parents might accidentally roll on their child and suffocate it. Falling asleep in the sofa or sleeping on mattresses that are too soft or bedding that can slip over the baby's head is equally dangerous. The baby might suffocate. Traditional bedding was not as soft as ours, so this problem did not exist historically.

<sup>177</sup> For this they will use the methods of pediatricians such as Dr. Ferber and Dr. Weissbluth.

Ferber, R. (1985). *Solve your child's sleep problems*. New York, NY: Simon & Schuster.

Weissbluth, M. (2005). *Healthy sleep habits, happy child: A step-by-step program for a good night's sleep* (3rd ed.). New York, NY: Ballantine Books.

<sup>178</sup> Ball, H. L. (2009). Bed-sharing and co-sleeping: Research overview. *New digest*, 48, 22-27.

Diamond. (2012). *Op cit.*, pp. 181-183.

Durham Infancy & Sleep Centre. (n.d.). Baby sleep info source. Retrieved from <https://www.basisonline.org.uk>

McKenna & McDade. (2005). *Op cit.*

Unicef UK. (2016). Co-sleeping and SIDS: A guide for health professionals [PDF file]. Retrieved from <https://unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2016/07/Co-sleeping-and-SIDS-A-Guide-for-Health-Professionals.pdf>

UNICEF UK. (2018). Caring for your baby at night: A guide for parents [PDF file]. Retrieved from <https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2018/08/Caring-for-your-baby-at-night-web.pdf>

<sup>179</sup> Keller, M. A., & Goldberg, W. A. (2004). Co-sleeping: Help or hindrance for young children's independence? *Infant and Child Development*, 13(5), 369-388.

McKenna & McDade. (2005). *Op cit.*

<sup>180</sup> This idea can be traced back to Sigmund Freud. He believed that a so-called 'primal scene', a child's witnessing of his or her parents' sexual activity, leads to disturbed development. It was echoed in influential parenting books such as Benjamin Spock's.

Freud, S. (2010). *The wolfman* (L. A. Hulsh, Trans.). London, UK: Penguin Books. (Original work published 1918).

Reiss. (2017). *Op cit.*, pp. 150-157.

Spock. (1946). *Op cit.*

- <sup>181</sup> Further reading:  
Durham Infancy & Sleep Centre. (n.d.). *Op cit.*  
Jackson D. (2003). *Three in a bed: The benefits of sleeping with your baby*. London, UK: Bloomsbury.  
Sears, W. (1999). *Nighttime parenting: How to get your baby and child to sleep* (Rev. ed.). New York, NY: Plume.

#### **4. Natural learning**

- <sup>182</sup> Gibran, K. (1923). *The Prophet*. New York, NY: Knopf, pp. 17-18.

<sup>183</sup> The term might have been derived from philosopher Ivan Illich's concept of 'deschooling', which served as an inspiration for the young Holt. Another precursor is the author Paul Goodman.

Goodman, P. (1964). *Compulsory miseducation*. New York, NY: Horizon Press.

Illich. (1970). *Op cit.*

- <sup>184</sup> Holt, J. (1964). *How children fail*. New York, NY: Dell.

- <sup>185</sup> Holt, J. (1967). *How children learn*. New York, NY: Dell.

Holt, J. (1972). *Freedom and beyond*. New York, NY: Dell.

Holt, J. (1974). *Escape from childhood*. New York, NY: Dutton.

Holt, J. (1976). *Instead of education: Ways to help people do things better*. New York, NY: Dutton.

Holt, J. (1981). *Teach your own: A hopeful path for education*. New York, NY: Delacorte Press.

Holt, J. (1989). *Learning all the time*. Reading, MA: Addison Wesley.

<sup>186</sup> Kumar, N., Kamath, S., Kumar, G., Vaishali, K., Sinha, Mukesh K., ... Rao, M. (2023). Prenatal learning and memory: Review on the impact of exposure. *Current Pediatric Reviews*, 19(2), 108-120.

<https://doi.org/10.2174/1573396318666220601160537>

<sup>187</sup> Liddell, H. G., Scott, R., Jones, H. S., & Mckenzie, R. (1940). *A Greek-English lexicon* (9th ed.). Oxford, UK: Oxford University Press. Retrieved from <http://archimedes.fas.harvard.edu/pollux/>

Merriam Company. (1976). School. In P. Babcock Gove (Ed.), *Webster's third new international dictionary* (p. 2031). Springfield, MA: Author.

<sup>188</sup> Brown, S., & Vaughan, C. (2009). *Play: How it shapes the brain, opens the imagination, and invigorates the soul*. New York, NY: Avery.

Diamond. (2012). pp. 202-206.

Gray, P. (2013). *Free to learn: Why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life*. New York, NY: Basic Books.

<sup>189</sup> Ariès, P. (1962). *Centuries of childhood: A social history of family life* (R. Baldick, Trans.). New York, NY: Knopf.

<sup>190</sup> Colin Turnbull, as cited in Diamond. (2012). *Op cit.*, pp. 205-206.

<sup>191</sup> Holt. (1976). *Op cit.*, p. 10.

<sup>192</sup> More on Sudbury Valley in the final paragraph of this chapter.

Greenberg, D. (1995). *Free at last: The Sudbury Valley school*. Framington, MA: Sudbury Valley School Press, p. 19.

<sup>193</sup> Einstein, A. (1949, November). Notes for an autobiography (P. Schilpp, Trans.). *The Saturday Review of Literature*, 26, 11. Retrieved from <https://archive.org/details/EinsteinAutobiography/>

<sup>194</sup> Kohn, A. (2011). Feel-bad education: The cult of rigor and the loss of joy. In *Feel-bad education and other contrarian essays on children and schooling* (pp. 147-151). Boston, MA: Beacon Press.

Noddings, N. (2003). *Happiness and education*. New York, NY: Cambridge University Press.

<sup>195</sup> A beautiful illustration of the danger of standardized curricula is the modern fable The Animal School. It probably first appeared in the *Journal of Education* in 1899 under the title An Educational Allegory written by 'Aesop Jr.' a pen name of Amos Dolbear, a physicist from Tufts College. It became more well-known in the 1940s in the version of George Reavis, assistant superintendent of Cincinnati Public Schools.

Aesop, J. (1899). An educational allegory. *Journal of Education*, 1(14), 235. Retrieved from

Reavis, G. H. (1999). *The animal school: The administration of the school curriculum with references to individual differences*. Peterborough, NH: Crystal Springs Books.

<sup>196</sup> Holt. (1976). *Op cit.*, p. 4.

<sup>197</sup> The term 'adultism' comes from Jack Flasher. Flasher, J. (1978). Adultism. *Adolescence*, 13(51), 517-523.

<sup>198</sup> Diamond. (2012). *Op cit.*, p. 197.

<sup>199</sup> Stixrud, W., & Johnson, N. (2019). *The self-driven child: The science and sense of giving your kids more control over their lives*. New York, NY: Viking.

<sup>200</sup> Kohn, A. (2005). *Unconditional parenting: Moving from rewards and punishments to love and reason*. New York, NY: Atria Books.

Research of parenting styles stresses the importance of a loving, caring attitude towards children. Based on Diana Baumrind's theory, there are thought to be four parenting styles: authoritarian, authoritative, permissive and uninvolved. Authoritative parenting is characterized by a warm and nurturing attitude towards the child, and is generally thought to lead to the best developmental outcomes for the child. Baumrind adds that setting clear expectations of mature behavior is also very important.

Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development*, 37(4), 887–907. <https://doi.org/10.2307/1126611>

Baumrind, D. (2012). Authoritative parenting revisited: History and current status. In R. E. Larzelere, A. S. Morris, & A. W. Harrist (Eds.), *Authoritative parenting: Synthesizing nurturance and discipline for optimal child development* (pp. 11–34). Washington, DC: American Psychological Association. <https://doi.org/10.1037/13948-002>

Maccoby, E. E. & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen, & E. M. Hetherington (Eds.), *Manual of child psychology, Vol. 4: Social development* (pp. 1–101). New York: John Wiley and Sons.

<sup>201</sup> For a better understanding of the philosophical and psychological underpinning of early mass education reforms, one can read the work of John Taylor Gatto.

Gatto, J. T. (2000). *The underground history of American education: An intimate investigation into the prison of modern schooling*. New York, NY: Oxford Village Press.

Gatto, J. T. (2009). *Weapons of mass instruction: A schoolteacher's journey through the dark world of compulsory schooling*. Gabriola Island, BC: New Society Publishers.

<sup>202</sup> As cited in Gray. (2013). *Op cit.*, p. 59.

<sup>203</sup> Meyer, J. W., Ramirez, F. O., & Soysal, Y. N. (1992). World Expansion of Mass Education, 1870-1980. *Sociology of Education*, 65(2), 128-149.

Soysal, Y. N., & Strang, D. (1989). Construction of the first mass education systems in nineteenth century Europe. *Sociology of Education*, 63, 277-288.

The fact that the West took its education system and exported it all across the world has also been the subject of criticism. In this way Western ideas and culture were spread, at the expense of local culture and traditional society, all under the banner of 'development'. For further discussion, watch the documentary *Schooling the World*. We will have a deeper look at the development paradigm and its critiques in chapter 9.

Marlens, N., Hurst, J., Grossan, G. (Producers), & Black, C. (Director). (2010). *Schooling the world: The white man's last burden*. US: Lost People Films.

<sup>204</sup> Encyclopaedia Britannica. (2020). Apprenticeship. Retrieved from <https://www.britannica.com/topic/apprenticeship>

<sup>205</sup> Boli, J., Ramirez, F. O., & Meyer, J. W. (1985). Explaining the origins and expansion of mass education. *Comparative Education Review*, 29(2), 145-170.

Bowles, S., & Gintis, H. (2011). *Schooling in capitalist America: Educational reform and the contradictions of economic life* (Rev. ed.). Chicago, IL: Haymarket Books.

Gatto. (2000). *Op cit*.

Gray. (2013). *Op cit*, pp. 42-65.

Katz, M. B. (1976). The origins of public education: A reassessment. *History of Education Quarterly*, 16(4), 381-407. <https://doi.org/10.2307/367722>

Meyer et al. (1992). *Op cit*.

Van Horn Melton, J. (1988). *Absolutism and the eighteenth-century origins of compulsory schooling in Prussia and Austria*. Cambridge, UK: Cambridge University Press.

206 As Peter Gray writes:

*Secular leaders in education promoted the idea that if the state controlled the schools, and if children were required by law to attend those schools, then the state could shape each new generation of citizens into ideal patriots and workers. [...] Schooling came to be seen as a state function that was essential for national security, not unlike the army. The state's power to forcibly conscript children into schools was understood as comparable to the state's power to conscript young men into the army.*

Gray. (2013). *Op cit.*, pp. 60-61.

207 Educational reformer John Dewey wrote for example: "Every teacher should realize he is a social servant set apart for the maintenance of the proper social order and the securing of the right social growth."

Dewey, J. (2008). *The early works of John Dewey, 1882-1898, volume 1: 1882-1888, early essays and Leibniz's new essays*. J. A. Boydston (Ed.). Carbondale, IL: Southern Illinois University Press, p. 95.

208 As cited in Gray. (2013). *Op cit.*, p. 59.

209 Rousseau, J. J. (1979). *Emile, or on education* (A. Bloom, Trans.). New York, NY: Basic Books, p. 40. (Original work published 1762)

210 Jefferson, T. (1959). Thomas Jefferson to John Adams: 28 October 1813. In L. J. Cappon (Ed.), *The Adams-Jefferson letters: The complete correspondence between Thomas Jefferson and Abigail and John Adams* (Vol. 2, pp. 387-392). Chapel Hill, NC: University of North Carolina Press. Retrieved from <http://press-pubs.uchicago.edu/founders/documents/v1ch15s61.html>



<sup>211</sup> It is no coincidence that possibly the strongest rejection of the school system in the 19<sup>th</sup> century came from the anarchist movement, which opposed state influence altogether. Anarchist thinkers and educators such as William Godwin, Leo Tolstoy and Francisco Ferrer heavily opposed the upcoming mass education systems.

Spring, J. (1975). *A primer of libertarian education*. New York, NY: Free Life Editions.

Tolstoy, L. (2008). On education. In M. Hern (Ed.), *Everywhere all the time: A new deschooling reader* (pp. 1-6). Chico, CA: AK Press.

<sup>212</sup> Gatto. (2009). *Op cit*.

Goodman. (1964). *Op cit*.

Schmidt, J. (2000). *Disciplined minds: A critical look at salaried professionals and the soul-battering system that shapes their lives*. Lanham, MD: Rowman & Littlefield.

This is one of the main criticisms of the education system from a Marxist perspective. Education serves to keep the class system in place. Its role is to disseminate and reinforce the ideology of the ruling class and produce an obedient working class. Similarly, Paulo Freire's *critical pedagogy* argues that education keeps systems of oppression in place.

Althusser, L. (1971). Ideology and ideological state apparatuses. In *Lenin and philosophy and other essays* (B. Brewster, Trans.) (pp. 121-176). London, UK: New Left Books.

Bowles & Gintis. (2011). *Op cit*.

Freire, P. (1970). *Pedagogy of the oppressed* (M. Ramos, Trans.). New York, NY: Herder & Herder.

<sup>213</sup> Goodman. (1964). *Op cit*, p. 60.

<sup>214</sup> Bowles & Gintis. (2011). *Op cit*.

<sup>215</sup> Paulo Freire calls this the *banking model* of education. Students are like piggy banks that are filled by the teachers.

Freire. (1970). *Op cit*.

<sup>216</sup> This idea in itself is not new. Think for instance of Socrates (c. 470 – 399 BC) and his ‘Socratic method’. In Plato’s *Theaetetus* Socrates compares his role to that of a midwife: he does not transfer any knowledge to anyone, he just helps to get the knowledge out that is already present. In Plato’s *Symposium* he explicitly argues against learning as a passive knowledge transfer: “How fine it would be [...] if wisdom were a sort of thing that could flow out of the one of us who is fuller into him who is emptier, by our mere contact with each other, as water will flow through wool from the fuller cup into the emptier.”

Plato. (1921). *Plato in Twelve Volumes* (H. N. Fowler, Trans.) (Vol. 12). Cambridge, MA: Harvard University Press, 148e-151d.

Plato. (1925). *Plato in Twelve Volumes* (H. N. Fowler, Trans.) (Vol. 9). Cambridge, MA: Harvard University Press, 175d. Retrieved from

<http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0174%3Atext%3DSym.%3Asection%3D175d>

<sup>217</sup> Another learning theory which emphasizes that learning happens in context and is an active result of constant interaction with the environment, is *situated cognition*.

Brow, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.

<sup>218</sup> Fosnot, C. T. (Ed.). (2005). *Constructivism: Theory, perspectives and practice* (2nd ed.). New York, NY: Teachers College Press.

<sup>219</sup> Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York, NY: Guilford Press.

<sup>220</sup> Another distinction Ryan and Deci make is between ‘autonomous’ and ‘controlled’ types of motivation. An autonomous motivation is one that is self-determined, that comes from inside. Controlled behavior is when one feels pressured by outer factors to do something. Autonomous and controlled motivation form a continuum, with certain behaviors being more on the control or on the autonomy side. Intrinsic motivation is the most autonomous type of motivation. Extrinsic motivation can be both. The examples in the text are ordered from less to more autonomous and correspond to what SDT calls ‘external’, ‘introjected’, ‘identified’ and ‘integrated’ motivation respectively.

<sup>221</sup> Levesque, C., Copeland, K. J., Pattie, M. D., Deci, E. L. (2010). Intrinsic and extrinsic motivation. In P. Peterson, E. Baker, & B. McGaw (Eds.), *International encyclopedia of education* (3rd ed.) (pp. 618-623). Oxford: Elsevier. <https://doi.org/10.1016/B978-0-08-044894-7.00612-6>

<sup>222</sup> This has been called the ‘overjustification’ effect.

See also: Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes*. Boston, MA: Houghton Mifflin.

<sup>223</sup> More on competition in the next chapter.

<sup>224</sup> Positive feedback (praise) can go either way. Whether it increases or decreases motivation depends on whether it enhances autonomy and competence or not. If the praise is informational, it increases intrinsic motivation. If the feedback is evaluative or controlling it does the opposite. Often, we use praise as a trick to motivate children. This therefore does not have a positive effect on their intrinsic motivation.

<sup>225</sup> Deci, E. L. (2015). Intrinsic motivation and self-determination. In ScienceDirect, *Reference module in neuroscience and biobehavioral psychology*. <https://doi.org/10.1016/B978-0-12-809324-5.05613-3>

226 Deci, E. L., & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. New York, NY: Penguin Books, pp. 18-19.

227 Further reading:

Arnall, J. (2018). *Unschooling to university: Relationships matter most in a world crammed with content*. Calgary, AB: Professional parenting.

Llewellyn, G. (1998). *The teenage liberation handbook: How to quit school and get a real life and education* (2nd ed.). Eugene, OR: Lowry House.

Some more inspiring stories from unschoolers:

Bellar, C. (Producer & Director). (2014). *Being and becoming* [Motion picture]. France: Pourquoi Pas Productions.

Stern, A. (2015, September 8). *Ecology of childhood: The power of enthusiasm* [Video file]. Retrieved from <https://youtube.com/watch?v=PCZ0yXbfQ8g>

228 Addati, L., Cassirer, N., & Gilchrist, K. (2014). *Maternity and paternity at work: Law and practice across the world*. Geneva, Switzerland: International Labour Organization.

229 Two of the most famous and long-standing free schools are *Summerhill School* founded in 1921 and *Sudbury Valley School*, founded in 1968.

Greenberg, D. (1991). *Free at last: Sudbury Valley School*. Framington, MA: Sudbury Valley School Press.

Neill, A. S. (1960). *Summerhill school: A radical approach to child rearing*. New York, NY: Hart.

230 Although a ‘democratic school’ is not necessarily a ‘free school’ and vice versa, some overlap exists. More information on ‘democratic schooling’ can be found on the website of the *International Democratic Education Network* (<http://www.idenetwork.org>).

<sup>231</sup> A practical guide for communicating with our children in a way that respects their and our needs is:

Faber, A., & Mazlish, E. (2001). *How to talk so kids will listen & listen so kids will talk* (Rev. ed.). London, UK: Piccadilly Press.

<sup>232</sup> For more on how to give children independence, see: Stixrud & Johnson. (2019). *Op cit.*

<sup>233</sup> Daniel Everett, as cited in Diamond. (2012). *Op cit.*, p. 197.

<sup>234</sup> Marshall Rosenberg's model of *Non-Violent Communication* gives us a good understanding of how such negative communication invokes a response that comes out of fear, guilt or shame.

Rosenberg, M. (2003). *Nonviolent communication: A language of life* (2nd ed.). Encinitas, CA: PuddleDancer Press.

<sup>235</sup> Unschoolers are not registered anywhere, so it is not so easy to survey them.

<sup>236</sup> Gray, P., & Riley, G. (2013). The challenges and benefits of unschooling, according to 232 families who have chosen that route. *Journal of Unschooling and Alternative Learning*, 7(14), 1-27.

Gray, P., & Riley, G. (2015). Grown unschoolers' evaluations of their unschooling experiences: Report I on a survey of 75 unschooled adults. *Other Education: The Journal of Educational Alternatives*, 4(2), 8-32.

Riley, G., & Gray, P. (2015). Grown unschoolers' experiences with higher education and employment: Report II on a survey of 75 unschooled adults. *Other Education: The Journal of Educational Alternatives*, 4(2), 33-53.

<sup>237</sup> Riley & Gray. (2015). *Op cit.*, p. 47.

<sup>238</sup> There is also a large body of research available on homeschooled children, especially in the US, where the homeschooling movement is quite substantial. This research shows homeschoolers also have no significant problems getting into college, often even perform better in higher education and appear to be more independent, open-minded, social and stress-free than their schooled peers. As mentioned earlier, however, homeschooling is not necessarily the same as unschooling, so it is unclear in how far this research is relevant.

Kunzman, R., & Gaither, M. (2013). Homeschooling: A comprehensive survey of the research. *Other Education: The Journal of Educational Alternatives*, 2(1), 4-59. Retrieved from <https://www.othereducation.org/index.php/OE/article/download/10/55>

Ray, B. (2010). Academic achievement and demographic traits of homeschool students: A nationwide study. *Academic Leadership Journal*, 8(1), 7. Retrieved from <https://scholars.fhsu.edu/alj/vol8/iss1/7>

<sup>239</sup> Greenberg, D., & Sadofsky, M. (1992). *Legacy of trust: Life after the Sudbury Valley School experience*. Framington, MA: Sudbury Valley School Press.

Neill. (1960). *Op cit*.

<sup>240</sup> Gray, P., & Chanoff, D. (1986). Democratic schooling: What happens to young people who have charge of their own education? *American Journal of Education*, 94(2), 182-213, p. 182.

<sup>241</sup> Websites with further resources: *The Alliance for Self-Directed Education* ([www.self-directed.org](http://www.self-directed.org)), *John Holt: Growing without schooling* ([www.johnholtgws.com](http://www.johnholtgws.com)).

## **Conclusion**

<sup>242</sup> Diamond. (2012). *Op cit.*, p. 208.

## **II. From society to community**

<sup>243</sup> Donne, J. (1624). Meditation XVII. In *Devotions upon emergent occasions and several steps in my sickness*. London, England: Thomas Jones. Retrieved from <http://www.gutenberg.org/files/23772/23772-h/23772-h.htm>

<sup>244</sup> This distinction between *society* ('Gesellschaft') and *community* ('Gemeinschaft') is a classical dichotomy in sociology and originates from the work of Ferdinand Tönnies.

Tönnies, F. (1957). *Community & society* (C. P. Loomis, Trans.). East Lansing, MI: Michigan State University Press. (Original work published 1887)

## **5. Collaboration or competition?**

<sup>245</sup> Mirra Alfassa, whose followers call her 'The Mother', is the founder of the universal township Auroville where I live.

The Mother. (1954). A Dream. Retrieved from <https://www.auroville.org/contents/197>

<sup>246</sup> Fromm. (1991). *Op cit.*, p. 86.

<sup>247</sup> Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: is happiness relative? *Journal of Personality and Social Psychology*, 36(8), 917-927. Retrieved from [http://pages.ucsd.edu/~nchristenfeld/Happiness\\_Readings\\_files/Class%203%20-%20Brickman%201978.pdf](http://pages.ucsd.edu/~nchristenfeld/Happiness_Readings_files/Class%203%20-%20Brickman%201978.pdf)

Kuhn, P. J., Kooreman, P., Soetevent, A., & Kapteyn, A. (2011). The own and social effects of an unexpected income shock: Evidence from the Dutch Postcode Lottery. *American Economic Review*, 101(5), 2226 – 2247. Retrieved from <https://www.nber.org/papers/w14035.pdf>

<sup>248</sup> According to the *social rank theory of depression*, depression evolved as a strategy to accept loss of position in social competition.

Price, J. S., Sloman, L., Gardner, R. J., Gilbert, P., & Rohde, P. (1994). The social competition hypothesis of depression. *The British Journal Of Psychiatry*, 1994, 164(3), 309-315.

<sup>249</sup> Many political leaders seem to think of countries as businesses trying to outplay each other in a competitive global economy. Economics Nobel Prize winner Paul Krugman believes this is an illusion and actually leads to less welfare for a country's constituents.

Krugman, P. (1994). Competitiveness: A dangerous obsession. *Foreign Affairs*, 73(2), 28.

<sup>250</sup> Mollison, B. (1988). *Permaculture: A designers' manual* (2nd ed.). Sisters Creek, Australia: Tagari, p. 2.

<sup>251</sup> Carpenter, J. P., Matthews, P. H., & Schirm, J. (2007). Tournaments and office politics: Evidence from a real effort experiment. *IZA Discussion Papers*, 2972.

DeMatteo, J. S., Eby, L. T., & Sundstrom, E. (1998). Team-based rewards: Current empirical evidence and directions for future research. *Research in organizational behavior*, 20, 141-183.



252 Further reading on the nature and disadvantages of competition:

Kohn, A. (1986). *No contest: The case against competition*. Boston, MA: Houghton Mifflin.

253 Diamond. (2012). *Op cit.*, p. 204.

254 Murray, H. J. (1913). *A history of chess*. Oxford, UK: Oxford University Press.

255 Shenky, D. (2007). *The immortal game: A history of chess or how 32 carved pieces on a board illuminated our understanding of war, art, science, and the human brain*. New York, NY: Anchor Books.

256 Dalai Lama & Cutler. (1998). *Op cit.*, p. 20.

257 A brief introduction can be Tom Shadyac's 2010 film *I Am*. For an elaborate overview one can read *Altruism* by Buddhist monk and former scientist Mathieu Ricard.

Abbott, J., Handy, D. (Producers), & Shadyac, T. (Director). (2010). *I am* [Motion Picture]. US: Shady Acres.

Dalai Lama & Cutler. (1998). *Op cit.*, pp. 20-24.

Ricard, M. (2015). *Altruism: The power of compassion to change yourself and the world*. New York, NY: Little and Brown.

258 More on Hobbes in chapter 7.

259 Bentham is the father of utilitarianism. According to him humans are solely motivated by their desire for pleasure.

Bentham, J. (1789). *An introduction to the principles of morals and legislation*. London, Great Britain: Payne and Son.

260 In *The Gay Science* he states for instance: "You shall seek your advantage even at the expense of everything else."

Nietzsche, F. (2001). *The gay science*. B. Williams (Ed.) (J. Nauckhoff, Trans.). Cambridge, UK: Cambridge University Press, p. 45. (Original work published 1882)

<sup>261</sup> Freud believed altruism leads to neurotic imbalance and that it would be better to fully accept one's natural selfishness. He held quite a gloomy view of humankind:

*[Men's] neighbor is for them not only a potential helper or sexual object, but also someone who tempts them to satisfy their aggressiveness on him, to exploit his capacity for work without compensation, to use him sexually without his consent, to seize his possessions, to humiliate him, to cause him pain, to torture and to kill him. Homo homini lupus [man is wolf to man].*

Freud, S. (1961). *Civilization and its discontents* (J. Strachey, Trans.). New York, NY: Norton, p. 58. (Original work published 1930)

<sup>262</sup> Rand was probably the biggest philosophical advocate of egoism of the past century. She called egoism rational and ethical and goes so far as to say altruism is immoral. She was a proponent of *laissez-faire* capitalism and had a great influence on American conservatives, most notably former president Ronald Reagan as well as long-time head of the US Federal Reserve Alan Greenspan.

Rand, A. (1943). *The fountainhead*. Indianapolis, IN: Bobbs Merrill.

Rand, A. (1957). *Atlas shrugged*. New York, NY: Random House.

Rand, A. (1964). *The virtue of selfishness: A new concept of egoism*. New York, NY: New American Library.

<sup>263</sup> Garrett, A. (2018). Joseph Butler's moral philosophy. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy*. Retrieved from <https://plato.stanford.edu/entries/butler-moral>

<sup>264</sup> Hume, D. (1751). *An enquiry concerning the principles of morals*, Appendix II. London, Great Britain: Millar Retrieved from <https://www.gutenberg.org/files/4320/4320-h/4320-h.htm>

<sup>265</sup> Lewis, J. D., & Weigert, A. J. (1985). Social atomism, holism, and trust. *Sociological Quarterly*, 26(4), 455-471.

- <sup>266</sup> Bregman, R. (2020). *Humankind: A hopeful history* (E. Manton, & E. Moore, Trans.). New York, NY: Little, Brown and Company.
- <sup>267</sup> Eisenstein, C. (2013). *Op cit.*, pp. 151-159.
- <sup>268</sup> Darwin, C. (1871). *The descent of man: And selection in relation to sex*. London, UK: Murray, p. 82. Retrieved from [http://darwin-online.org.uk/converted/pdf/1871\\_Descent\\_F937.1.pdf](http://darwin-online.org.uk/converted/pdf/1871_Descent_F937.1.pdf)
- <sup>269</sup> Williams, G. C. (1966). *Adaptation and natural selection: A critique of some current evolutionary thought*. Princeton, NJ: Princeton University Press.
- <sup>270</sup> Dawkins, R. (1976). *The selfish gene*. Oxford, UK: Oxford University Press.
- <sup>271</sup> Fehr, E., & Fischbacher, U. (2003). The nature of human altruism. *Nature*, 425, 785-791.
- Nowak, M., & Highfield, R. (2011). *Supercooperators: Altruism, evolution, and why we need each other to succeed*. New York, NY: Free Press.
- Sober, E., & Wilson, D. S. (1998). *Unto others: The evolution and psychology of unselfish behavior*. Cambridge, MA: Harvard University Press.
- See also:
- <sup>272</sup> de Waal, F. B. (1996). *Good natured: The origins of right and wrong in humans and other animals*. Cambridge, MA: Harvard University Press.
- de Waal, F. B., Wright, R., Macedo, S., & Ober, J. (2006). *Primates and philosophers: How morality evolved*. Princeton, NJ: Princeton University Press.
- de Waal, F. B. (2009). *The age of empathy: Nature's lessons for a kinder society*. New York, NY: Three Rivers Press.
- <sup>273</sup> Naess, A. (1973). The shallow and the deep, long-range ecology movement: A summary. *Inquiry*, 16, 95-100, p. 96.

<sup>274</sup> The research is abundant. A selection of some key authors and works:

Batson, C. D. (1991). *The altruism question: Toward a social-psychological answer*. Hillsdale, NJ: L. Erlbaum.

Batson, C. D. (2011). *Altruism in humans*. Oxford, UK: Oxford University Press.

Eisenberg, N., & Strayern J. (Eds.). (1990). *Empathy and its development*. Cambridge, MA: Cambridge University Press

Gilbert, P. (2009). *The compassionate mind: A new approach to life's challenges*. Oakland, CA: New Harbinger.

Kohn, A. (1990). *The brighter side of human nature: Altruism and empathy in everyday life*. New York, NY: Basic Books.

Stanford University even opened up the *Centre for Compassion and Altruism Research and Education* (CCARE) (<http://ccare.stanford.edu/>).

<sup>275</sup> Bowles, S., & Gintis, H. (2011). *A cooperative species: Human reciprocity and its evolution*. Princeton, NJ: Princeton University Press.

Henrich, N., & Henrich, J. P. (2007). *Why humans cooperate: A cultural and evolutionary explanation*. Oxford, UK: Oxford University Press.

Kappeler, P. M., & van Schaik, C. P. (2005). *Cooperation in primates and humans. Mechanisms and evolution*. New York, NY: Springer.

Tomasello, M. (2010). *Why we cooperate*. Cambridge, MA: MIT Press.

<sup>276</sup> Candau, J. (2012), Pourquoi coopérer [Why Cooperate]. *Terrain*, 58, 4-25, p.6. Retrieved from <https://journals.openedition.org/terrain/14604>

<sup>277</sup> Tomasello. (2010). *Op cit*.

<sup>278</sup> Hamlin, J. K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature*, 450(7169), 557-559.

For an extensive theory of the development of empathy in children, you can have a look at the work of Martin Hoffman.

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge, UK: Cambridge University Press.

<sup>279</sup> Decety, J., & Ickes, W. J. (Eds.). (2009). *The social neuroscience of empathy*. Cambridge, MA: MIT Press.

Singer, T., & Lamm, C. (2009). The social neuroscience of empathy. *Annals of the New York Academy of Sciences*, 1156(1), 81-96. Retrieved from [https://greatergood.berkeley.edu/images/uploads/Singer\\_2009.pdf](https://greatergood.berkeley.edu/images/uploads/Singer_2009.pdf)

<sup>280</sup> Decety, J., Jackson, P. L., Sommerville, J. A., Chaminade, T., & Meltzoff, A. N. (2004). The neural bases of cooperation and competition: An fMRI investigation. *NeuroImage*, 23(2), 744-751. <https://doi.org/10.1016/j.neuroimage.2004.05.025>

<sup>281</sup> Rizzolatti, G., & Sinigaglia, C. (2006). *Mirrors in the brain: How our minds share actions, emotions, and experience*. Oxford, UK: Oxford University Press.

<sup>282</sup> One of its principal theorists writes: "The first principle of economics is that every agent is actuated only by self-interest."

Edgeworth, F. Y. (1881). *Mathematical psychics. An essay on the application of mathematics to the moral sciences*. London, UK: Kegan Paul, p. 16. Retrieved from <https://socialsciences.mcmaster.ca/econ/ugcm/3ll3/edgeworth/mathpsychics.pdf>

283 Smith, A. (1759). *The theory of moral sentiments*. London, Great Britain: Millar.

Smith, A. (1977). *An inquiry into the nature and causes of the wealth of nations* (Vols. 1-2). E. Cannan (Ed.). Chicago, IL: University of Chicago Press, p. 477. (Original work published 1776)

Smith in his own words:

*[B]y directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was not part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.*

Smith. (1977). *Op cit*. Vol. 1, p. 477.

284 Mandeville, B. (1924). *Fable of the bees: Or, private vices, public benefits*. Oxford, England: Clarendon Press. (Original work published 1714)

285 Simmons, P. J. (1974). *Choice and demand*. London, UK: Macmillan.

286 *[G]reed, for lack of a better word, is good. Greed is right, greed works. Greed clarifies, cuts through, and captures the essence of the evolutionary spirit. Greed, in all of its forms; greed for life, for money, for love, knowledge has marked the upward surge of mankind. And greed, you mark my words, will not only save Teldar Paper, but that other malfunctioning corporation called the USA.*

Pressman, E. R. (Producer), & Stone, O. (Director). (1987). *Wall Street* [Motion Picture]. United States: Twentieth Century Fox.

287 Friedman, M. (1962). *Capitalism and freedom*. Chicago, IL: University of Chicago Press, pp. 133-134.

<sup>288</sup> Take Thomas Piketty's work for instance. In his magnum opus *Capital in the Twenty-First Century*, he analyzes hundreds of years of data and concludes that the rich generally just get richer and their wealth does not 'trickle down' to benefit the poor.

Piketty, T. (2014). *Capital in the twenty-first century* (A. Goldhammer, Trans.). Cambridge, MA: Harvard University Press.

<sup>289</sup> In the discipline of 'behavioral economics', with Daniel Kahneman and Amos Tversky as its most famous exponents. Kahneman and Tversky proved that we are not as rational as we might think when making economical decisions. Kahneman was the first psychologist to receive the Nobel Prize in Economic Sciences.

Kahneman, D. (2011). *Thinking fast and slow*. New York, NY: Farrar, Straus and Giroux.

<sup>290</sup> Collard, D. (1978). *Altruism and economy: A study in non-selfish economics*. New York, NY: Oxford University Press.

Singer, T. & Ricard, M. (Eds.). (2015). *Caring economics: Conversations on altruism and compassion, between scientists, economists, and the Dalai Lama*. New York, NY: Picador.

Also have a look at 'From Homo Economicus towards a Caring Economics', a research project at the Kiel Institute for the World Economy at [www.caring-economics.org](http://www.caring-economics.org).

<sup>291</sup> Sen, A. (1987). *On ethics and economics*. Oxford, UK: Blackwell, p. 15.

<sup>292</sup> Axelrod, R. (1984). *The evolution of cooperation*. New York, NY: Basic Books.

Chaudhuri, A. (2008). *Experiments in economics: Playing fair with money*. London, UK: Routledge.

Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., & Gintis, H. (Eds.). (2004). *Foundations of human sociality: Economic experiments and ethnographic evidence from fifteen small-scale societies*. Oxford, UK: Oxford University Press.

<sup>293</sup> Fehr, E., Fischbacher, U., & Gächter, S. (2002). Strong reciprocity, human cooperation, and the enforcement of social norms. *Human Nature*, 13(1), 1-25.

Fehr, E., & Gächter, S. (2002). Altruistic punishment in humans. *Nature*, 415(6868), 137-140.

Rand, D. G., Dreber, A., Ellingsen, T., Fudenberg, D., & Nowak, M. A. (2009). Positive interactions promote public cooperation. *Science*, 325(5945), 1272-1275.

<sup>294</sup> Hardin, G. (1968). The tragedy of the commons. *Science*, 162(3859), 1243-1248.

<sup>295</sup> Buck, S. J. (1985). No Tragedy on the Commons. *Environmental Ethics*, 7(1), 49-61.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge, UK: Cambridge University Press.

## **6. Gift economy**

<sup>296</sup> Jones, V. G. (2009). *Amelia Earhart: A life in flight*. New York, NY: Sterling, p. 10.

<sup>297</sup> Hyde, L. (1979). *The gift: Imagination and the erotic life of property*. London, UK: Vintage, p. 4.

<sup>298</sup> Simmel, G. (1950). The metropolis and mental life. In K. H. Wolff (Ed. & Trans.), *The sociology of Georg Simmel*. Glencoe, IL: The Free Press, p. 411. (Original work published 1903). Retrieved from

<https://archive.org/details/sociologyofgeorg030082mbp/page/n483>



- <sup>299</sup> Further reading on the nature of gift economy:  
 Boyle, M. (2012). *The moneyless manifesto: Live well, live rich, live free*. Hampshire, UK: Permanent.  
 Eisenstein, C. (2011). *Sacred economics: Money, gift, and society in the age of transition*. Berkeley, CA: North Atlantic Books.  
 Jain, M., & Jain, S. (Eds.). (2009). *Reclaiming the gift culture*. Udaipur, India: Shikshantar.
- <sup>300</sup> Kaplan, H., & Gurven, M. (2005). The natural history of human food sharing and cooperation: A review and a new multi-individual approach to the negotiation of norms. In H. Gintis, S. Bowles, R. Boyd & E. Fehr (Eds.), *Moral sentiments and material interests: The foundations of cooperation in economic life* (pp. 75-114). Cambridge, MA: MIT Press.  
 Peterson, N. (1993). Demand sharing: Reciprocity and the pressure for generosity among foragers. *American Anthropologist*, 95(4), 860-874.  
 Shepard. (1998). *Op cit.*, pp. 72-74.
- <sup>301</sup> Hiatt, L. (1982). Traditional attitudes to land resources. In R. M. Berndt (Ed.), *Aboriginal sites, rites and resource development* (pp. 13-26). Perth, Australia: University of Western Australia, p. 14.
- <sup>302</sup> Harari. (2014). *Op cit.*, p. 152.
- <sup>303</sup> Harari. (2014). *Op cit.*, p. 303.
- <sup>304</sup> Norberg-Hodge. (1991). *Op cit.*, p. 63.
- <sup>305</sup> The Mother. (1954). *Op cit.*
- <sup>306</sup> Many people are afraid to choose gift economy because they fear they will run out of money. An interesting read on how our insecurity about money is blocking us from following our inner calling and how to start living a life of abundance is Kyle Cease's *The Illusion of Money*.  
 Cease, K. (2019). *The illusion of money: Why chasing money is stopping you from receiving it*. Carlsbad, CA: Hay House.

307 I prefer not to use the term 'for free'. This still implies the old economic world view, where we try to bargain and get the best 'bang for our buck'. In a market economy 'free' is good, because it saves us money and makes us wealthier. In a gift economy, that is irrelevant.

308 Our volunteers get room and board. We only ask for a fee of 600 rupees (approx. 8 USD / 7.5 EUR) to pay for the food and biodegradable toiletries, as we do not have sufficient funds to feed all of them. More info on our website [www.sadhanaforest.org](http://www.sadhanaforest.org)

309 We mostly used LibreOffice Writer on a Linux operating system.

For more information on the success of the Open Source movement read: von Krogh, G., & von Hippel, E. (2006). The promise of research on open source software. *Management Science*, 52(7), 975-983.

310 More info on their website <https://creativecommons.org/>

311 One illustrious example are the worldwide 'Vipassana' courses, started by S. N. Goenka. There are over 200 centers worldwide, offering thousands of 10-day meditation courses every year. There is no charge for these courses, they are made possible only by the generous gifts of those that have completed courses and want to give others the opportunity to do the same. More info <https://dhamma.org>.

312 Eurostat. (2017). Social participation and integration statistics. Retrieved from [https://ec.europa.eu/eurostat/statistics-explained/index.php/Social\\_participation\\_and\\_integration\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php/Social_participation_and_integration_statistics)

<sup>313</sup> National Opinion Research Center at the University of Chicago. (2018). In past 12 months, r has participated in charitable or religious volunteer orgs. In *General Social Survey Data Explorer*. Retrieved from [https://gssdataexplorer.norc.org/variables/7243/vshow](https://gssdataexplorer.norc.umd.edu/variables/7243/vshow)

<sup>314</sup> E.g. Service Space, a worldwide network with more than half a million active members ([www.servicespace.org](http://www.servicespace.org)). Hear the inspiring story of its co-founder Nipun Mehta on:

Mehta, N. (2012, February 26). *Designing for generosity* [Video file]. Retrieved from <https://www.youtube.com/watch?v=kpyc84kamhw>

<sup>315</sup> E.g. Karma Kitchen, a worldwide ‘chain’ of gift economy restaurants which has been active in more than 20 countries ([www.karmakitchen.org](http://www.karmakitchen.org)).

<sup>316</sup> There are also free markets which are commonly called ‘Really Really Free Markets’.

<sup>317</sup> This has been called ‘freecycling’. Examples of such websites are *Freecycle* ([www.freecycle.org](http://www.freecycle.org)), *Freegle* ([www.ilovefreegle.org](http://www.ilovefreegle.org)) and *Ziilch* (<https://au.ziilch.com/>) or just search on Facebook for a *freecycle* group near you.

<sup>318</sup> A few well-documented inspiring stories are those of Mark Boyle, Heidemarie Schwermer and Daniel ‘Suelo’ Shellabarger respectively:

Boyle, M. (2010). *The moneyless man: A year of freeeconomic living*. Oxford, UK: Oneworld.

Dalchow, J., Pallavidino, P. (Producers), & Halvorsen, L. (Director). (2010). *Living without money* [Motion picture]. Norway: NRK.

Sundeen, M. (2012). *The man who quit money*. New York, NY: Riverhead Books.

<sup>319</sup> Titmuss, R. M. (1972). *The gift relationship: From human blood to social policy*. New York, NY: Random House.

<sup>320</sup> This is in fact an example of the ‘overjustification effect’, as discussed in chapter 4: extrinsic rewards reduce intrinsic motivation.

Batson, C. D., Coke, J. S, Jasnoski, M. L & Hanson, M. (1978). Buying kindness: Effect of an extrinsic incentive for helping on perceived altruism. *Personality and Social Psychology Bulletin*, 4(1), 86-91.

Fabes, R. A., Fultz, J., Eisenberg, N., May-Plumlee, T., & Christopher, F. S. (1989). Effects of rewards on children's prosocial motivation: A socialization study. *Developmental Psychology*, 25(4), 509-515.

<http://dx.doi.org/10.1037/0012-1649.25.4.509>

Warneken, F., & Tomasello, M. (2014). Extrinsic rewards undermine altruistic tendencies in 20-month-olds. *Motivation Science*, 1, 43-48. <http://dx.doi.org/10.1037/2333-8113.1.S.43>

<sup>321</sup> ‘Prosocial behavior’ is behavior intended to benefit others or society as a whole, such as giving, sharing, helping, donating or volunteering.

<sup>322</sup> Post, S., & Neimark, J. (2008). *Why good things happen to good people: How to live a longer, healthier, happier life by the simple act of giving*. New York, NY: Broadway Books.

Rudd and Aaker found that happiness increases mostly when we set ourselves concrete goals of helping rather than abstract ones (e.g. making someone smile instead of making someone happy).

Rudd, M., Aaker, J., & Norton, M. (2014). Getting the most out of giving: Concretely framing a prosocial goal maximizes happiness. *Journal of Experimental Social Psychology*, 54, 11-24.

<sup>323</sup> Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal*, 100(401), 464-477. <http://doi.org/10.2307/2234133>

<sup>324</sup> Aknin et al. write: “Our findings suggest that the reward experienced from helping others may be deeply ingrained in human nature, emerging in diverse cultural and economic contexts.”

Aknin, L. B., Barrington-Leigh, C. P, Dunn, E. W., Helliwell, J. F., Burns, J., Biswas-Diener, R., ... Norton, M. I. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology*, 104(4), 635-652.

Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, 319(5870), 1687–1688. Retrieved from <http://www.people.hbs.edu/mnorton/dunn%20aknin%20norton.pdf>

<sup>325</sup> Areas related to social attachment also light up when we engage in giving.

Moll, J., Krueger, F., Zahn, R., Pardini, M., de Oliveira-Souza, R., & Grafman, J. (2006). Human fronto-mesolimbic networks guide decisions about charitable donation. *PNAS*, 103(42), 15623–15628.

<sup>326</sup> According to researcher Allan Luks this effect is only there when the volunteers have personal contact with those they help.

Luks, A., & Payne, P. (2001). *The healing power of doing good: The health and spiritual benefits of helping others*. Lincoln, NE: iUniverse.com.

Wilson, J., & Musick, M. (1999). The effects of volunteering on the volunteer. *Law and Contemporary Problems*, 62(4), 141-168.

<sup>327</sup> Fowler, J. H., & Christakis, N. A. (2010). Cooperative behavior cascades in human social networks. *PNAS*, 107(12), 5334-5338.

<sup>328</sup> Alexander, R. D. (1987). *The biology of moral systems*. London, UK: Routledge.

<sup>329</sup> Hammerstein, P., & Leimar, O. (2001). Evolution of cooperation through indirect reciprocity. *Proceedings of the Royal Society B: Biological Sciences*, 268(1468). <https://doi.org/10.1098/rspb.2000.1573>

Nowak, M. A., & Sigmund, K. (1998). Evolution of indirect reciprocity by image scoring. *Nature*, 393, 573-577.

Nowak, M. A., & Sigmund, K. (2005). Evolution of indirect reciprocity. *Nature*, 437, 1291-1298.

Ohtsuki, H., & Iwasa, J. (2006). The leading eight: Social norms that can maintain cooperation by indirect reciprocity. *Journal of Theoretical Biology*, 239(4), 435-444.

<sup>330</sup> Milinski, M., Semmann, D., & Krambeck, H. (2002). Donors to charity gain in both indirect reciprocity and political reputation. *Proceedings of the Royal Society B: Biological Sciences*, 269(1494). <https://doi.org/10.1098/rspb.2002.1964>

Seinen, I., & Schram, A. (2006). Social status and group norms: Indirect reciprocity in a repeated helping experiment. *European Economic Review*, 50(3), 581-602. <https://doi.org/10.1016/j.eurocorev.2004.10.005>

Wedekind, C., & Milinski, M. (2000). Cooperation through image scoring in humans. *Science*, 288(5467), 850-852.

## **7. The need for community**

<sup>331</sup> Aristotle (1957). *Aristotle's Politica*. W. D. Ross (Ed.). Oxford, UK: Clarendon Press, 1253a, 1. Retrieved from <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0057%3Abook%3D1%3Asection%3D1253a>

<sup>332</sup> Moorehead, B. (1995). *Words aptly spoken*. Kirkland, WA: Overlake Christian Press.

(This quote has been erroneously attributed to, amongst others, the Dalai Lama.)

333 Fukuyama, F. (1999). *The great disruption: Human nature and the reconstitution of social order*. London, UK: Profile Books.

334 Historian Yuval Noah Harari writes: “Prior to the Industrial Revolution, the daily life of most humans ran its course within three ancient frames: the nuclear family, the extended family and the local intimate community.”

Harari. (2014). *Op cit.*, p. 302.

335 For a discussion of how economic globalization and trade agreements are tearing apart our community fabric, and what the alternative could look like, see:

Goldsmith, E., & Mander, J. (Eds.). (2001). *The case against the global economy and for a turn towards localization*. Oxon, UK: Earthscan.

Norberg-Hodge, H. (2019). *Local is our future: Steps to an economics of happiness*. Hardwick, VT: Local Futures.

336 For an insight into how advanced communication technologies might disturb our social lives, read:

Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. New York, NY: Basic Books.

337 Norberg-Hodge. (1991). *Op cit.*, p. 77.

338 There have been some other voices as well, though. Romantic philosophers such as Rousseau and Hegel were more inclined to see human beings as interconnected.

Pettit, P. (1998). Defining and defending social holism. *Philosophical Explorations*, 3, 169-184.

339 Eisenstein. (2013). *Op cit.*

340 Siedentop, L. (2014). *Inventing the individual: The origins of Western liberalism*. London, UK: Allen Lane.

341 He writes in one of his major works:

*But today [the individual] has acquired a kind of dignity which places him above himself as well as above society. So long as his conduct has not caused him to forfeit the title of man, he seems to us to share in some degree that quality sui generis ascribed by every religion to its gods which renders them inviolable by everything mortal. He has become tinged with religious value; man has become a god for men.*

Durkheim, E. (1952). *Suicide: A study in sociology* (J. A. Spaulding & G. Simpson, Trans.). London, UK: Routledge & Kegan Paul, p. 299. (Original work published 1897)

342 Harry Triandis, one of the pioneers of the field, provides a good comparison of individualist and collectivist societies. He found Europe and North America to be more individualistic. This finding is confirmed by Geert Hofstede, another pioneer of the same field, who was one of the first to quantitatively measure individualistic mindsets of people on a large scale.

Hofstede, G. (2000). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. London, UK: Sage.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.

343 In the words of sociologist Ulrich Beck:

*Both the democracy of the nation-state and entrepreneurial capitalism are based on the principle of the free individual who represents his own enlightened self-interest, while simultaneously claiming the right to make his political views known (and of course his right to private property), and who defends these rights in the arenas of the democratic polis.*

Beck, U. (2012). Individualism. In *The Wiley-Blackwell encyclopedia of globalization*. Hoboken, NJ: Wiley & Sons.  
<https://doi.org/10.1002/9780470670590.wbeog292>



<sup>344</sup> In *Democracy in America*, his analysis of the success of democracy in the United States, he writes:

*As social equality spreads there are more and more people who [...] have gained and kept enough wealth and enough understanding to look after their own needs. Such folk owe no man anything and hardly expect anything from anybody. They form the habit of thinking of themselves in isolation and imagine their whole destiny is in their own hands.*

de Tocqueville, A. (2000). *Democracy in America* (G. Lawrence, Trans.). New York, NY: Harper Collins, p. 508. (Original work published 1840)

<sup>345</sup> Hobbes, T. (1651). *Leviathan or the matter, form and power of a common-wealth ecclesiastical and civil*. London, England: Crooke.

<sup>346</sup> Locke, J. (1689). *Two treatises on government*. London, England: Churchill.

<sup>347</sup> Hobbes, T. (1841). *Philosophical rudiments concerning government and society*. London, UK: Bohn, p. 11. (Original work published 1642)

<sup>348</sup> Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.

<sup>349</sup> Kannan, V. D., & Veazie, P. J. (2023). US trends in social isolation, social engagement, and companionship: Nationally and by age, sex, race/ethnicity, family income, and work hours, 2003-2020. *SSM - Population Health*, 21, 101331. <https://doi.org/10.1016/j.ssmph.2022.101331>.

Some more statistics:

A 2004 survey found that more than one in five Americans does not have any close friends or relatives with whom they can discuss important matters, more than twice as many as 20 years before. In the EU matters seem to be better: only 6% of the people indicate not having anyone to discuss personal matters with and nobody to ask for help.

Eurostat. (2017). *Op cit*.

McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review*, 71, 353–75.

McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2008). Erratum: Social isolation in America: Changes in core discussion networks over two decades (American Sociological Review (2006) Vol. 71 (353-375)). *American Sociological Review*, 73(6), 1022.

<sup>350</sup> The number of people that never spend any time with neighbors went up by 11% in the past 45 years.

National Opinion Research Center at the University of Chicago. (2019). General Social Survey data explorer [Data file]. Retrieved from [https://gssdataexplorer.norc.org/variables/vfilter](https://gssdataexplorer.norc.uchicago.edu/variables/vfilter)

Between 1964 and 2002 the number of people who believed people try be fair went down from over 65% to around 50%.

Paxton, P. (2005). Trust in decline? *Contexts*, 4(1), 40-46.

<sup>351</sup> Eurostat. (2017). *Op cit*.

<sup>352</sup> Kantar Public, British Red Cross, & Co-op. (2016). Trapped in a bubble: An investigation into triggers for loneliness in the UK [PDF file]. Retrieved from <https://www.redcross.org.uk/-/media/documents/about-us/research-publications/health-social-care-and-support/co-op-trapped-in-a-bubble-report.pdf>

<sup>353</sup> Yeginsu, C. (2018, January 17). U.K. Appoints a minister for loneliness. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/01/17/world/europe/uk-britain-loneliness.html>

Campaigns have been launched to try and tackle loneliness, for instance the *Campaign to End Loneliness* in the UK ([www.campaigntoendloneliness.org](http://www.campaigntoendloneliness.org)) and *Connect 2 Affect* in the US ([www.connect2affect.org](http://www.connect2affect.org)).

<sup>354</sup> Some surveys find up to 60% of Americans feels lonely. Cigna (2021). The loneliness epidemic persists: A post-pandemic look at the state of loneliness among U.S. adults. <https://newsroom.thecignagroup.com/loneliness-epidemic-persists-post-pandemic-look>

Murthy, V. (2023). *Our epidemic of loneliness and isolation: The U.S. surgeon general's advisory on the healing effects of social connection and community*. Washington, DC: US Public Health Service. Retrieved from <https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf>

<sup>355</sup> Ferdinand Tönnies, one of the founding fathers of modern sociology, said that in larger networks of people relationships become less emotional and more impersonal, less driven by a sense of moral obligation and more by rational self-interest. Louis Wirth spoke of “the reserve, the indifference and the blasé outlook which urbanites manifest in their relationships” and “the superficiality, the anonymity, and the transitory character of urban social relations.”

Simmel. (1950). *Op cit.*

Tönnies. (1957). *Op cit.*

Wirth, L. (2013). Urbanism as a way of life. In J. Lin & C. Mele (Eds.), *The urban sociology reader* (2nd ed., pp. 32-41). Oxon, UK: Routledge, p. 35. (Original work published 1938)

<sup>356</sup> Trust declines as one goes from rural areas to suburbs to towns and is lowest in cities.

Pew Research Center. (2010). Americans and social trust: Who, where and why [PDF file]. Retrieved from <https://www.pewresearch.org/wp-content/uploads/sites/3/2010/10/SocialTrust.pdf>

<sup>357</sup> Milgram, S. (1970). The experience of living in cities. *Science* 167(3924), 1461-1468.

Stebly, N. M. (1987). Helping behavior in rural and urban environments: A meta-analysis. *Psychological Bulletin*, 102(3), 346-356.

<sup>358</sup> Amato, P. R. (1980). City size, sidewalk density, and friendliness toward strangers. *Journal of Social Psychology*, 111(1), 151-152.

Newman, J., & McCauley, C. (1977). Eye contact with strangers in city, suburb, and small town. *Environment and Behavior*, 9(4), 547-558.

<sup>359</sup> Norberg-Hodge. (1991). *Op cit.*

<sup>360</sup> Urbanization has grown rapidly over the past century. The UN estimates that worldwide urban population rose from 30% in 1950 to 55% in 2018 and will reach 68% in 2050.

Goldewijk, K. K., Beusen, A., & Janssen, P. (2010). Long-term dynamic modeling of global population and built-up area in a spatially explicit way: HYDE 3.1. *The Holocene* 20(4), 565-573.  
<https://doi.org/10.1177/0959683609356587>

UN Department of Economic and Social Affairs. (2019). *World urbanization prospects: The 2018 revision*. New York, NY: Author.

<sup>361</sup> Santos, H. C., Varnum, M. E., & Grossmann, I. (2017). Global increases in individualism. *Psychological Science*, 28(9), 1228-1239.  
<https://doi.org/10.1177/09567976177006>

<sup>362</sup> Between 1999 and 2014 the number of people that said most people can be trusted went down from 27% to 24%.

Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., ... Puranen, B. (Eds.). (2014). *World Values Survey* [Data file]. Retrieved from  
<http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>

<sup>363</sup> Over 30% of households there are single person households.

Euromonitor International. (2014). The rising importance of single person households globally. Retrieved from <https://blog.euromonitor.com/the-rising-importance-of-single-person-households-globally/>

Salcedo, A., Schoellman, T., & Tertilt, M. (2012). Families as roommates: Changes in U.S. household size from 1850 to 2000. *Quantitative Economics*, 3, 133–175. <https://doi.org/10.3982/QE76>

<sup>364</sup> Unless noted otherwise, based on: WHO. (2015). *World report on ageing and health*. Geneva, Switzerland: Author. Retrieved from <https://www.who.int/ageing/publications/world-report-2015/en/>

<sup>365</sup> United Nations, Department of Economic and Social Affairs, Population Division. (2019). World Population Prospects 2019. Retrieved from <https://population.un.org/wpp>.

<sup>366</sup> WHO. (2018). Elder Abuse. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/elder-abuse>

<sup>367</sup> Anthropologist Jared Diamond recounts a Fiji islander exclaiming after visiting the United States: "You throw away your old people and your own parents!"

Diamond. (2012). *Op cit.*, p. 210.

<sup>368</sup> Only about 5% of traditional societies have so-called 'neolocal' households.

Diamond. (2012). *Op cit.*, p. 222.

<sup>369</sup> Bekhet, A. K., & Zauszniewski, J. A. (2012). Mental health of elders in retirement communities: Is loneliness a key factor? *Archives of Psychiatric Nursing*, 26(3), 214-224. <https://doi.org/10.1016/j.apnu.2011.09.007>

Singh, A., & Misra, N. (2009). Loneliness, depression and sociability in old age. *Industrial Psychiatry Journal*, 18(1), 51-55. <http://doi.org/10.4103/0972-6748.57861>

Zhao, X., Zhang, D., Wu, M., Yang, Y., Xie, H., Li, Y., ... Su, Y. (2018). Loneliness and depression symptoms among the elderly in nursing homes: A moderated mediation model of resilience and social support. *Psychiatry Research*, 268, 143-151. <https://doi.org/10.1016/j.psychres.2018.07.011>

<sup>370</sup> Meng, M., & Hunt, K. (2013, July 2). New Chinese law: Visit your parents. *CNN*. Retrieved from <https://edition.cnn.com/2013/07/02/world/asia/china-elderly-law/index.html>

<sup>371</sup> As cited in Diamond. (2012). *Op cit.*, p. 223.

<sup>372</sup> The WHO writes: “Pervasive ageist stereotypes of older people as uniformly frail, burdensome and dependent are not supported by evidence and limit society’s ability to appreciate and release the potential human and social resources inherent in older populations.”

WHO. (2015). *World report on ageing and health*. Op cit, p. 159.

<sup>373</sup> Further reading:

Cowgill, D. O. (1974). The aging of populations and societies. *The Annals of the American Academy of Political and Social Science*, 415(1), 1-18. <https://doi.org/10.1177/000271627441500102>

Diamond. (2012). *Op cit.*, pp. 217-240.

Schachter-Shalomi, Z., & Miller, R. S. (2014). *From age-ing to sage-ing: A revolutionary approach to growing older*. New York, NY: Grand Central Publishing.

<sup>374</sup> Thich Nhat, H. (2010). *Together we are one: Honoring our diversity, celebrating our connection*. Berkeley, CA: Parallax Press.

<sup>375</sup> Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529. <http://dx.doi.org/10.1037/0033-2909.117.3.497>

Cacioppo, J. T., & Patrick, W. (2008). *Loneliness: Human nature and the need for social connection*. New York, NY: Norton.

Goleman, D. (2006). *Social intelligence: The new science of human relationships*. New York, NY: Bantam Books.

Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. New York, NY: Crown.

Wheeler, G. (2000). *Beyond individualism: Toward a new understanding of self, relationship, and experience*. Cambridge, MA: GIC Press.

Even though these insights are a relatively new trend in psychology, neurology and biology, one could say that the domain of sociology has always taken our belonging to community as its starting point.

Callero, P. L. (2018). *The myth of individualism: How social forces shape our lives* (3rd ed.). Lanham, MD: Rowman & Littlefield.

<sup>376</sup> Berscheid, E., & Regan, P. (2005). *The psychology of interpersonal relationships*. Abingdon: Routledge.

Reis, H. T., Aron, A., Clark, M. S., & Finkel, E. J. (2013). Ellen Berscheid, Elaine Hatfield, and the emergence of relationship science. *Perspectives on Psychological Science*, 8(5), 558-572.

<sup>377</sup> Cacioppo, J. T., & Berntson, G. G. (Eds.). (2005). *Social neuroscience: Key readings*. New York, NY: Psychology Press.

<sup>378</sup> Ellison, P. T., & Gray, P. B. (Eds.). (2012). *Endocrinology of social relationships*. Cambridge, MA: Harvard University Press.

Schultheiss, O. C., & Mehta, P. H. (2019). *Routledge international handbook of social neuroendocrinology*. Abingdon: Routledge.



379 Cozolino, L. (2017). *The neuroscience of psychotherapy: Healing the social brain* (3rd ed.). New York, NY: Norton.

Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). New York, NY: Guilford Press.

380 Wilson, E. O. (2012). *The social conquest of Earth*. New York, NY: Liveright.

381 The UN's *World Happiness Report* considers 'social and institutional trust', 'close social support' and 'frequent meetings with friends' as some of the key determinants of well-being. Interestingly, inequalities in reported well-being in a country are associated with lower overall well-being as well. So not only our own happiness is important, but also that of those around us.

Helliwell et al. (2020). *Op cit*.

382 Lieberman. (2013). *Op cit*.

383 Cacioppo & Patrick. (2008). *Op cit*.

384 Stickley, A., & Koyanagi, A. (2016). Loneliness, common mental disorders and suicidal behavior: Findings from a general population survey. *Journal of Affective Disorders*, 197, 81-87. <https://doi.org/10.1016/j.jad.2016.02.054>

385 Holt-Lunstad, J. (2017). The potential public health relevance of social isolation and loneliness: Prevalence, epidemiology, and risk factors. *Public Policy & Aging Report*, 27(4), 127-130. <https://doi.org/10.1093/ppar/prx030>  
Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7(7), e1000316. <https://doi.org/10.1371/journal.pmed.1000316>

<sup>386</sup> Holt-Lunstad, J., Robles, T., & Sbarra, D. (2017). Advancing social connection as a public health priority in the United States. *The American Psychologist*, 72(6), 517-530. <https://doi.org/10.1037/amp0000103>

<sup>387</sup> Byung-Chul, H. (2015). *The burnout society* (E. Butler, Trans.). Stanford, CA: Stanford University Press.

Ehrenberg, A. (2010). *The weariness of the self: Diagnosing the history of depression in the contemporary age*. Montreal, QC: McGill-Queen's University Press.

<sup>388</sup> Harari. (2014). *Op cit*.

<sup>389</sup> These hunter-gatherer 'clans' sometimes group into larger 'mega-bands' of around 500. The largest groupings would be tribes of 1500-2000 people. The latter seems to be the maximum number of faces that we can remember the names of.

<sup>390</sup> Dunbar, R. (1996). *Grooming, gossip, and the evolution of language*. London, UK: Faber and Faber, pp. 69-79.

Dunbar, R., & Sosis, R. (2018). Optimising human community sizes. *Evolution and Human Behavior*, 39(1), 106-111. <https://doi.org/10.1016/j.evolhumbehav.2017.11.001>

<sup>391</sup> Born, P. (2014). *Deepening community: Finding joy together in chaotic times*. San Francisco, CA: Berret-Koehler, p. xiii.

<sup>392</sup> Community building expert Charles Vogl defines 'community' as "a group of individuals who share a mutual concern for one another's welfare." Peter Block provides a more extensive definition:

*Community [...] is about the experience of belonging. We are in community each time we find a place where we belong. The word belong has two meanings. First and foremost, to belong is to be related and a part of something. [...] The second meaning of the word belong has to do with being an owner: Something belongs to me. To belong to a community is to act as a creator and co-owner of that community.*

Block, P. (2008). *Community: The structure of belonging*. San Francisco, CA: Berret-Koehler, p. xii.

Vogl, C. (2016). *The art of community: Seven principles for belonging*. Oakland, CA: Berret-Koehler, p. 9.

<sup>393</sup> Sarason, S. B. (1974). *The psychological sense of community: Prospects for community psychology*. San Francisco, CA: Jossey-Bass, p. 157.

Further reading on community building: Mcknight, J., & Block, P. (2010). *The abundant community: Awakening the power of families and neighborhoods*. San Francisco, CA: Berret-Koehler.

<sup>394</sup> This classic psychological definition of 'sense of community' comes from McMillan & Chavis.

McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6-23, p. 14.

<sup>395</sup> The *Foundation for Intentional Community* defines ‘intentional community’ as “a group of people who live together or share common facilities and who regularly associate with each other on the basis of explicit common values.”

One specific type of intentional communities, centered around ecological values, are ecovillages. GEN, the *Global Ecovillage Network*, defines an ecovillage as:

*A rural or urban community that is consciously designed through locally owned, participatory processes in all four dimensions of sustainability (social, culture, ecology and economy) to regenerate their social and natural environments.*

Foundation for Intentional Community. (2019). About The Foundation for Intentional Community. Retrieved from <https://www.ic.org/foundation-for-intentional-community/>

Global Ecovillage Network. (2019). About GEN. Retrieved from <https://ecovillage.org/about/about-gen/>

Further reading on ecovillages:

Lifitin, K. (2014). *Ecovillages: Lessons for sustainable community*. Cambridge, UK: Polity Press.

<sup>396</sup> Schumacher, E. F. (1999). *Small is beautiful: A study of economics as if people mattered*. Point Roberts, WA: Hartley & Marks, p. 48. (Original work published 1973)

<sup>397</sup> *Ibid.*

<sup>398</sup> More info on how to find a community that is right for you:

Leafé Christian, D. (2007). *Finding community: How to join an ecovillage or intentional community*. Gabriola Island, BC: New Society Publishers.

<sup>399</sup> Cini, L. M. (2017). *Hive: The simple guide to multigenerational living*. Bloomington, IN: iUniverse.

Graham Niederhaus, S., & Graham, J. L. (2007). *Together again: A creative guide to successful multigenerational living*. Lanham, MD: Evans.

<sup>400</sup> Data for Canada, the UK and the US confirm this.

Battams, N. (2017). Sharing a roof: Multi-generational homes in Canada (2016 census update). Retrieved from <https://vanierinstitute.ca/multigenerational-homes-canada/>

Burgess, G., & Jones, M. (2017). *Multigenerational living: An opportunity for UK house builders?* Milton Keynes, UK: NHBC Foundation. Retrieved from <https://www.nhbcfoundation.org/wp-content/uploads/2017/06/NF77-WEB.pdf>

Cohn, D., & Passel, J. S. (2019). A record 64 million Americans live in multigenerational households. Retrieved from <https://www.pewresearch.org/fact-tank/2018/04/05/a-record-64-million-americans-live-in-multigenerational-households/>

<sup>401</sup> The *Six Cultures Study* compared 3- to 10-year-olds in the US, Japan, India, Mexico, the Philippines and Kenya. In the US children helped the least with household chores. The most prosocial behavior was found in the most traditional, rural setting in Kenya.

Whiting, B. B., Whiting, J. W., & Longabaugh, R. (1975). *Children of six cultures: A psycho-cultural analysis*. Cambridge, MA: Harvard University Press.

402 One recent scientific overview writes for instance:

*For young children, the opportunity to build friendships with older adults means developing empathy and understanding for older persons and better understanding of life cycle changes. Through shared experiences, young children can overcome misperceptions about older persons' characteristics and develop accurate knowledge about the contributions older adults can make.*

*Having increased opportunities for regular interactions with young children is especially critical for older adults who live in retirement communities or care facilities that are exclusively designed for people in their age group. The sense of worthlessness and isolation that some older adults experience can be offset by participation in organized [intergenerational] activities. Shared activities provide opportunities for ongoing contact and communication between children and older adults which in turn provide greater opportunities for both populations to experience positive outcomes and learn from each other.*

DeVore, S., Winchell, B., & Rowe, J. M. (2016). Intergenerational programming for young children and older adults: An overview of needs, approaches, and outcomes in the United States. *Childhood Education*, 92(3) 216-225, pp. 217-218.  
<https://doi.org/10.1080/00094056.2016.1180895>

For more information, have a look at the work *Generations United* is doing at [www.gu.org](http://www.gu.org).

403 Ariès, P. (1974). *Western Attitudes toward death: From the Middle Ages to the present* (P. M. Ranum, Trans.). Baltimore, MD: Johns Hopkins University Press.

404 Diamond. (2012). *Op cit.*, pp. 186-190.  
Hewlett & Lamb. (2005). *Op cit.*

405 Blaffer Hrdy, S. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge, MA: Harvard University Press.

406 She writes:

*I hypothesize that novel rearing conditions among a line of early hominins meant that youngsters grew up depending on a wider range of caretakers than just their mothers, and this dependence produced selection pressures that favored individuals who were better at decoding the mental states of others, and figuring out who would help and who would hurt.*

Blaffer Hrdy. (2009). *Op cit.*, p. 66.

407 Harari. (2014). *Op cit.*, p. 303.

408 We have discussed the isolation of children and elderly earlier on. The disabled also face widespread discrimination. The World Bank and the WHO write:

*Across the world, people with disabilities have poorer health outcomes, lower education achievements, less economic participation and higher rates of poverty than people without disabilities. This is partly because people with disabilities experience barriers in accessing services that many of us have long taken for granted, including health, education, employment, and transport as well as information. These difficulties are exacerbated in less advantaged communities.*

WHO & World Bank. (2011). *World report on disability*. Geneva, Switzerland: Author, p. xi. Retrieved from <http://documents.worldbank.org/curated/en/665131468331271288/Main-report>

409 Trzeciak, S., & Mazzarelli, A. (2019). *Compassionomics: The revolutionary scientific evidence that caring makes a difference*. Pensacola, FL: Studer Group.

410 One exception to this would be Carl Roger's *person-centered therapy*, a form of psychotherapy where the authentic relationship between therapist and patient and the unconditional acceptance of the patient by the therapist are central.

Rogers, C. (1995). *On becoming a person: A therapist's view of psychotherapy*. Boston, MA: Houghton Mifflin.

411 This also seems to be the core tenet of *person-centered therapy*. Empirical research shows that what Rogers called ‘unconditional positive regard’ indeed has a positive effect on therapy outcomes.

Farber, B. A., Suzuki, J. Y., & Lynch, D. A. (2018). Positive regard and psychotherapy outcome: A meta-analytic review. *Psychotherapy*, 55(4), 411-423.

412 “Older people often view their existing home or community as having the advantages of maintaining a sense of connection, security and familiarity, and as being related to their sense of identity and autonomy.”

WHO. (2015). *World report on ageing and health*. *Op cit.*, p. 36.

In elderly homes it is often difficult for them to connect and to have a satisfying social life.

Bonifas, R. P., Simons, K., Biel, B., & Kramer, C. (2014). Aging and place in long-term care settings: Influences on social relationships. *Journal of Aging and Health*, 26(8), 1320-1339.

413 The convention states:

*States Parties to the present Convention recognize the equal right of all persons with disabilities to live in the community [...] and shall take effective and appropriate measures to facilitate full enjoyment [...] of this right and their full inclusion and participation in the community, by ensuring that [...] persons with disabilities have access to [...] community support services.*

United Nations. (2006). Convention on the rights of persons with disabilities, Art. 19. Retrieved from <https://un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-19-living-independently-and-being-included-in-the-community.html>



<sup>414</sup> Landers, S., Madigan, E., Leff, B., Rosati, R. J., McCann, B. A., Hornbake, R., ... Breese, E. (2016). The future of home health care: A strategic framework for optimizing value. *Home Health Care Management & Practice*, 28(4), 262–278. <https://doi.org/10.1177/1084822316666368>

WHO & World Bank. (2011). *Op cit.*, p. 13.

<sup>415</sup> Naess. (1973). *Op cit.*

<sup>416</sup> Marx, K. (1977). *Economic and philosophic manuscripts of 1844*. Moscow, USSR: Progress Publishers.

<sup>417</sup> Berry, W. (1977). *The unsettling of America: Culture and agriculture*. San Francisco, CA: Sierra Club Books, p. 21.

## **8. Starting your own community**

<sup>418</sup> This quote is better known under the paraphrase “Be the change you wish to see in the world,” Gandhi probably never said it like this. The quote comes from a 1913 article in *Indian Opinion*.

Gandhi, M. K. (1999). *The collected works of Mahatma Gandhi* (Vol. 13). New Delhi, India: Government of India, p. 241. Retrieved from <http://gandhiashramsevagram.org/gandhi-literature/mahatma-gandhi-collected-works-volume-13.pdf>

<sup>419</sup> Intentional community expert Diana Leafe Christian estimates up to 90% of intended communities fail.

Leafe Christian, D. (2003). *Creating a life together: Practical tools to grow ecovillages and intentional communities*. Gabriola Island, BC: New Society Publishers, pp. 2-13.

<sup>420</sup> Further reading: Leafe Christian, D. (2003). *Op cit.*

<sup>421</sup> As cited in Chang, L. (Ed.). (2006). *Wisdom for the soul: Five millennia of prescriptions for spiritual healing*. Washington, DC: Gnosophia Publishers, p. 716.

<sup>422</sup> I would like to make an important side note here. I have seen people with strong trauma or psychological disorder do intense spiritual practice. At the end of the day, many of them were not helped by it. In fact, at times it made things worse. Psychologist David Treleaven has done research on negative meditation experiences and found how they often relate to psychological trauma. Spiritual practices are amazing and can be of great help, but they are not a substitute for psychotherapy. If you are experiencing psychological challenges, you may want to seek professional help.

Treleaven, D. A. (2018). *Trauma-sensitive mindfulness: Practices for safe and transformative healing*. New York, NY: Norton.

<sup>423</sup> When starting your own project, it is good to get the support of your loved ones. If your partner, child or closest friends object, you will end up being in conflict with them, and this will drain your energy for the project. But if they support you, you can focus your energy fully on the project.

<sup>424</sup> Etymologically, the Sanskrit word 'yoga' is related to the English word 'yoke'.

425 Elder Paisios of Mount Athos writes:

*If you ask a fly, "Are there any flowers in this area?" it will say, "I don't know about flowers, but over there in that heap of rubbish you can find all the filth you want." And it will go on to list all the unclean things it has been to.*

*Now, if you ask a honeybee, "Have you seen any unclean things in this area?" it will reply, "Unclean things? No, I have not seen any; the place here is full of the most fragrant flowers." And it will go on to name all the flowers of the garden or the meadow. You see, the fly only knows where the unclean things are, while the honeybee knows where the beautiful iris or hyacinth is.*

*As I have come to understand, some people resemble the honeybee and some resemble the fly. Those who resemble the fly seek to find evil in every circumstance and are preoccupied with it; they see no good anywhere. But those who resemble the honeybee only see the good in everything they see. The stupid person thinks stupidly and takes everything in the wrong way, whereas the person who has good thoughts, no matter what he sees, no matter what you tell him, maintains a positive and good thought.*

Elder Paisios of Mount Athos. (2010). *Spiritual Counsels III: Spiritual struggle* (P. Chambers, Trans.). A. Famellos & A. Masters (Eds.). Souroti, Greece: Monastery of St John the Theologian, pp. 29-30.

426 Even more so, the very first study on burn-out was done on volunteers who served in a free clinic.

Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, 30(1), 159-165.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99-113.

427 Frankl, V. E. (2006). *Man's search for meaning* (I. Lasch, Trans.). Boston, MA: Beacon Press. (Original work published 1946)

428 Frankl. (2006). *Op cit.*, p. xiv.

429 Frankl, V. E. (2011, October 28). *Finding meaning in difficult times* [Video file]. Retrieved from <https://youtube.com/watch?v=LIC2OdnhIiQ>

430 *Sunan at-Tirmidhi*, 2517. Retrieved from <https://sunnah.com/tirmidhi/37>

431 Vinnie McKenny, as cited in Leafe Christian. (2003). *Op cit.*, p. 71.

432 “Guarantor: a person or entity that agrees to be responsible for another's debt or performance under a contract if the other fails to pay or perform.”

Hill, G. N., & Hill, K. T. (2002). *The people's law dictionary: Taking the mystery out of legal language*. New York, NY: MJF, p. 189.

433 Further reading: Briggs, B. (2013). *Introduction to consensus* (Rev. ed.). Jiutepec, Mexico: International Institute for Facilitation and Change.

Hartnett, T. (2010). *Consensus-oriented decision-making: The CODM model for facilitating groups to widespread agreement*. Gabriola Island, BC: New Society Publishers.

Kanner, S., Lind, L., Toldi, C., Fisk, S., & Berger, D. (2007). *Facilitator's guide to participatory decision-making* (2nd ed.). San Francisco, CA: Jossey-Bass.

434 More literature on compassionate and mindful leadership:

Hougaard, R., & Carter, J. (2018). *The mind of the leader: How to lead yourself, your people, and your organization for extraordinary results*. Brighton, MA: Harvard Business Review Press.

West, M. A. (2021). *Compassionate leadership: Sustaining wisdom, humanity and presence in health and social care*. London, UK: Swirling Leaf Press.

- <sup>435</sup> One can find a list of intentional communities worldwide on the website of the *Foundation for Intentional Community*  
Foundation for Intentional Community. (2022). Explore Intentional Communities. Retrieved from: <http://ic.org/directory/>

## **9. Development as community building**

- <sup>436</sup> Macy, J., & Brown, M. (2014). *Coming back to life: The updated guide to the work that reconnects*. Gabriola Island, BC: New Society Publishers, p. xxiv.
- <sup>437</sup> ‘Global South’ refers to non-Western countries in Africa, Asia and Latin America. In the past the term ‘Third World’ was more common, in the wake of the Cold War.
- <sup>438</sup> More info: <https://sadhanaforest.org/haiti/>
- <sup>439</sup> More info: <https://sadhanaforest.org/kenya/>

<sup>440</sup> Hancock, G. (1992). *The lords of poverty: The power, prestige, and corruption of the international aid business*. New York, NY: Atlantic Monthly Press.

Hogan, T. (2012). *Beyond good intentions: A journey into the realities of international aid*. Berkeley, CA: Seal Press.

Krause, M. (2014). *The good project: Humanitarian relief NGOs and the fragmentation of reason*. Chicago: IL: University of Chicago Press.

Maren, M. (1997). *The road to hell: The ravaging effects of foreign aid and international charity*. New York, NY: The Free Press.

Moyo, D. (2009). *Dead aid: Why aid is not working and how there is a better way for Africa*. New York, NY: Farrar, Straus and Giroux, p. 39.

Norberg-Hodge. (1991). *Op cit*.

Rottenburg, R. (2009). *Far-fetched facts: A parable of development aid* (A. Brown & T. Lampert, Trans.). Cambridge, MA: MIT Press.

Sogge, D. (2002). *Give and take: What's the matter with foreign aid?* Dhaka, Bangladesh: University Press.

<sup>441</sup> William Easterly talks in this regard of having a 'searcher' instead of a 'planner' approach:

*A Planner thinks he already knows the answers; he thinks of poverty as a technical engineering problem that his answers will solve. A Searcher admits he doesn't know the answers in advance; he believes that poverty is a complicated tangle of political, social, historical, institutional, and technological factors. A Searcher hopes to find answers to individual problems only by trial and error experimentation. A Planner believes outsiders know enough to impose solutions. A Searcher believes only insiders have enough knowledge to find solutions, and that most solutions must be homegrown.*

Easterly, W. (2006). *The white man's burden: Why the West's efforts to aid the rest have done so much ill and so little good*. New York, NY: Penguin Press, pp. 5-6.

<sup>442</sup> Some authors call this process of getting caught up in bureaucracy 'NGOization'. Anderson et al. use the term 'proceduralization' in this context.

Anderson et al. (2012). *Op cit*.

Choudry, A., & Kapoor, D. (Eds.). (2013). *NGOization: Complicity, contradictions and prospects*. London, UK: Zed Books.

Lang, S. (2013). *NGOs, civil society, and the public sphere*. Cambridge, UK: Cambridge University Press.

<sup>443</sup> Anderson, M. B., Brown, D., & Jean, I. (2012). *Time to listen: Hearing people on the receiving end of international aid*. Cambridge, MA: CDA Collaborative Learning Projects. Retrieved from <https://www.cdacollaborative.org/wp-content/uploads/2016/01/Time-to-Listen-Hearing-People-on-the-Receiving-End-of-International-Aid.pdf>

444 Further reading:

Balboa, C. M. (2014). How successful Transnational Non-Governmental Organizations set themselves up for failure on the ground. *World Development*, 54, 273–287. <https://doi.org/10.1016/j.worlddev.2013.09.001>

Banks, N., Hulme, D., & Edwards, M. (2015). NGOs, states, and donors revisited: Still too close for comfort? *World Development*, 66, 707–718.

Bebbington, A. J., Hickey, S., & Mitlin, D. C. (Eds.). (2008). *Can NGOs make a difference? The challenge of development alternatives*. London, UK: Zed Books.

Elbers, W., & Arts, B. (2011). Keeping body and soul together: Southern NGOs' strategic response to donor constraints. *International Review of Administrative Sciences*, 77(4), 713–732. <https://doi.org/10.1177/0020852311419388>

Fowler, A. (2000). Civil society, NGDOs and social development: Changing the rules of the game [PDF file]. Retrieved from <http://hdl.handle.net/10419/148834>

Harwood, R. C., & Creighton, J. A. (2009). The Organization-First Approach: How programs crowd out community [PDF file]. Retrieved from <https://www.kettering.org/sites/default/files/product-downloads/OrganizationFirstApproach.pdf>

Jalali, R. (2013). Financing empowerment? How foreign aid to southern NGOs and social movements undermines grass-roots mobilization. *Sociology Compass*, 7(1), 55–73.

Overseas Development Institute. (1996). The impact of NGO development projects [PDF file]. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2636.pdf>



## **10. Veganism**

<sup>445</sup> From a letter in the 1972 *New York Post*. As cited in Goldstein, E., & Stahl, B. (2015). *MBSR every day: Daily practices from the heart of mindfulness-based stress reduction*. Oakland, CA: New Harbinger Publications, p. 40.

<sup>446</sup> This chapter is only a brief introduction to veganism. For more elaborate introductions, see:

Bohanec, H., & Bohanec, C. (2013). *The ultimate betrayal: Is there happy meat?* Bloomington, IN: iUniverse.

Marcus, E. (1998). *Vegan: The new ethics of eating*. Ithaca, NY: McBooks Press.

Moby, & Park, M. (Eds.). (2010). *Gristle: From factory farms to food safety*. New York, NY: The New Press

Robbins, J. (2012). *Diet for a new America: How your food choices affect your health, happiness and the future of life on earth* (Rev. ed.). Tiburon, CA: H. J. Kramer.

Stepaniak, J. (2000). *The vegan sourcebook*. Los Angeles, CA: Lowell House.

Winters, E. (2022). *This is vegan propaganda (and other lies the meat industry tells you)*. London, UK: Vermilion.

For an overview of available resources see:

Sanctuary for Health and Reconnection to Animals and Nature. (2020). Resources. Retrieved from <https://sharan-india.org/resources/>

<sup>447</sup> Singer. (2015). *Op cit*.

<sup>448</sup> One of the earliest people to make this argument in Western philosophy was Jeremy Bentham. In 1823 he wrote:

*The French have already discovered that the blackness of the skin is no reason why a human being should be abandoned without redress to the whims of a tormentor. Perhaps it will some day be recognized that the number of legs, the hairiness of the skin, or the possession of a tail, are equally insufficient reasons for abandoning to the same fate a creature that can feel? [...] The question is not 'Can they reason?' or 'Can they talk?' but 'Can they suffer?'*

Bentham, J. (2017). *An introduction to the principles of morals and legislation* (Rev. ed.). J. Bennett (Ed.), Canada: Early Modern Texts, pp. 143-144. (Original work published 1823) Retrieved from <http://www.earlymoderntexts.com/assets/pdfs/bentham1780.pdf>

449 Charles Darwin already acknowledged this in *The Descent of Man*, the work in which he laid the foundations for his theory of evolution:

*[M]an and the higher animals, especially the Primates, have some few instincts in common. All have the same senses, intuitions and sensations – similar passions, affections, and emotions, even the more complex ones; they feel wonder and curiosity; they possess the same faculties of imitation, attention, memory, imagination, and reason, though in very different degrees.*

Darwin. (1871). *Op cit.*, pp. 48-49.

More recently, in 2012, a group of neuroscientists gathered in Cambridge and signed a declaration stating that many animals also have consciousness, emotions and intentional behaviors.

Low, P. (2012). The Cambridge declaration on consciousness [PDF file]. Retrieved from <http://fcmconference.org/img/CambridgeDeclarationOnConsciousness.pdf>

Further reading:

de Waal, F. (2017). *Are we smart enough to know how smart animals are?* New York, NY: Norton.

Mason, J. M. (2003). *The pig who sang to the moon: The emotional world of farm animals.* New York, NY: Random House.

Mason, J. M., & McCarthy, S. (1996). *When elephants weep: The emotional lives of animals.* New York, NY: Random House.

450 This is a reference to the controversial Bible verse Genesis 1:26 where God grants man ‘dominion’ over the animals. The King James Version reads:

*And God said: Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.*

This verse has been heavily debated among theologians, animal rights activists and environmentalists. According to some it shows the anthropocentric nature of the Judeo-Christian tradition, which would be at the origin of modern man’s current abusive relationship with the environment and other species.

451 The term *ahimsa* comes from Indian spirituality, which has a long history of vegetarianism both in Hinduism, Buddhism and Jainism.

Spencer, C. (1995). *The heretic's feast: A history of vegetarianism*. Hanover, NH: University Press of New England, pp. 69-86.

452 A slightly different version of this phrase has been falsely attributed to Gandhi. "The greatness of a nation and its moral progress can be judged by the way its animals are treated."

Johnson, P. (2013). Mahatma Gandhi hoax quote: Greatness of a nation and its moral progress can be judged by the way that its animals are treated. *Animals Matter to God*. Retrieved from <https://animalsmattertogod.com/2013/09/13/mahatma-gandhi-hoax-quote-greatness-of-a-nation-and-its-moral-progress-can-be-judged-by-the-way-that-its-animals-are-treated/>

453 Further reading on the ethical aspect of veganism:

Saffran Foer, J. (2009). *Eating animals*. New York, NY: Little, Brown and Company.

Tuttle, W. (2005). *The world peace diet: Eating for spiritual health and social harmony*. New York, NY: Lantern Books.

454 An interesting book on a down-to-earth approach to raising awareness about veganism would be:

Leenaerts, T. (2017). *How to create a vegan world: A pragmatic approach*. New York, NY: Lantern Books.

455 In Sadhana Forest, the manure we use for planting our trees is human manure. We compost our own human waste using dry composting toilets. Our compost is of high quality as we follow a wholefood plant-based diet and a plant-based diet is more alkaline than a non-vegan diet.

More information on human manure: Jenkins, J. C. (2019). *The humanure handbook: Shit in a nutshell* (4th ed.). Grove City, PA: Joseph Jenkins.

456 An interesting book on why we look at different species in such different ways, something the author calls ‘carnism’ is: Joy, M. (2010). *Why we love dogs, eat pigs and wear cows: An introduction to carnism*. San Francisco, CA: Conari Press.

457 Lymbery, P., & Oakeshott, I. (2014). *Farmageddon: The true cost of cheap meat*. London, UK: Bloomsbury.

Pacelle, W. (2010). Animals. In Moby & Park, *op cit.* (pp. 33-52).

Singer, P. (2015). *Animal liberation* (Rev. ed.). London, UK: The Bodley Head, pp. 95-158.

458 Any drug that kills microorganisms, including antibiotics.

459 A large part of these drugs is fed preventively. They are also used to promote growth.

Aarestrup, F. M. (2015). The livestock reservoir for antimicrobial resistance: A personal view on changing patterns of risks, effects of interventions and the way forward. *Philosophical Transactions of the Royal Society B*, 370, 20140085. <http://doi.org/10.1098/rstb.2014.0085>

Van Boeckel, T. P., Glennon, E. E., Chen, D., Gilbert, M., Robinson, T. P., Grenfell, B. T., ... Laxminarayan, R. (2017). Reducing antimicrobial use in food animals. *Science*, 357(6358), 1350-1352. <https://doi.org/10.1126/science.aao1495>

460 Delforce, C. (Producer & Director). (2018). *Dominion* [Motion picture]. Australia: Aussie Farms. Retrieved from <https://www.youtube.com/watch?v=LQRAfYEsKo>

Faruqi, S. (2016). *Project animal farm: An accidental journey into the secret world of farming and the truth about our food*. New York, NY: Pegasus Books.

Monson, S. (Producer & Director). (2005). *Earthlings* [Motion picture]. USA: Nation Earth. Retrieved from <https://www.youtube.com/watch?v=aeRHI09niHs>

Pacelle. (2010). *Op cit.*

<sup>461</sup> The number of animals killed is even higher still, as the statistics only include animals that reach the slaughterhouse. Many animals die before they even reach there because of the tough conditions they are under. For instance, around 6-7% of broiler chickens die before they reach slaughter age.

Scientific Committee on Animal Health and Animal Welfare. (2000). *The welfare of chickens kept for meat production (broilers)*. Brussels, Belgium: European Commission, p. 24.

The FAO statistics neither include millions of animals killed in hunting, poaching, killed for fur, or for scientific experiments. More info on fur farming and animal testing:

Humane Society International. (2020). Animal testing. Retrieved from <https://www.hsi.org/issues/animal-testing/>

Humane Society International. (2020). Fur. Retrieved from <https://www.hsi.org/issues/fur/>

<sup>462</sup> The most consumed animals are by far chicken. They account for almost 75 billion of the annual slaughter. 3 billion ducks are killed, 1.5 billion pigs, 637 million sheep, 300 million cows and many others.

<sup>463</sup> In 1961, 8.4 billion animals were slaughtered. Global meat production was 360 million tonnes in 2022 up from 71 million in 1961. Meat consumption per capita doubled from 23 kg to 45 kg per person. In premodern times meat consumption was even much lower, under 10 kg per person per year, even in the more affluent countries.

FAO. (2023). Livestock primary. In *FAOSTAT* [Data file]. Retrieved from <https://www.fao.org/faostat/en/?#data/OCL>

Smil, V. (2013). *Harvesting the biosphere: What we have taken from nature*. Cambridge, MA: MIT Press, pp. 125-129.

United Nations Department of Economic and Social Affairs, Population Division. (2022). World population prospects 2022 [Data file]. Retrieved from <https://population.un.org/wpp/DataQuery/>

<sup>464</sup> Alexandratos, N., & Bruinsma, J. (2012). *World agriculture towards 2030/2050: The 2012 revision*. Rome, Italy: FAO. Retrieved from <http://www.fao.org/3/ap106e/ap106e.pdf>

<sup>465</sup> FAO statistics for milk are in tonnes. Milk weighs a bit more than water. We assumed a weight of 1.03kg for one liter of milk. The FAO statistics begin in 1961.

FAO. (2023). Livestock primary. *Op cit.*

<sup>466</sup> Esslemont, R. J., & Kossaibati, M. A. (1997). Culling in 50 dairy herds in England. *Veterinary Record*, 140, 36-39. <https://doi.org/10.1136/vr.140.2.36>

Hadley, G. L., Wolf, C. A., Harsh, S. B. (2006). Dairy cattle culling patterns, explanations, and implications. *Journal of Dairy Science*, 89(6), 2286-2296. [https://doi.org/10.3168/jds.S0022-0302\(06\)72300-1](https://doi.org/10.3168/jds.S0022-0302(06)72300-1)

United States Department of Agriculture. (1996). Economic opportunities for dairy cow culling management options [PDF file]. Retrieved from [https://www.aphis.usda.gov/animal\\_health/nahms/dairy/downloads/dairy96/Dairy96\\_is\\_BiosecurityPrac.pdf](https://www.aphis.usda.gov/animal_health/nahms/dairy/downloads/dairy96/Dairy96_is_BiosecurityPrac.pdf)

<sup>467</sup> Marcus. (1998). *Op cit.*, pp. 125-138.

<sup>468</sup> Marcus. (1998). *Op cit.*, pp. 99-114.

<sup>469</sup> Damerow, G. (2012). *The chicken encyclopedia: An illustrated reference*. North Adams, MA: Storey Publishing, p. 276.

470 Broiler chickens are an entirely different breed that puts on weight very fast. They reach their slaughter weight within 6 to 7 weeks. They put on weight so fast that their young legs can hardly support their bodies and the majority has trouble walking. Read more on the extreme conditions broiler chickens have to face:

Bessei, W. (2006). Welfare of broilers: A review. *World's Poultry Science Journal*, 62(3), 455-466. <https://doi.org/10.1017/S0043933906001085>

Turner, J., Garcés, L., & Smith, W. (2005). *The welfare of broiler chickens in the European Union*. Hampshire, UK: Compassion in World Farming Trust. Retrieved from <https://www.ciwf.org.uk/media/3818904/welfare-of-broilers-in-the-eu.pdf>

Scientific Committee on Animal Health and Animal Welfare. (2000). Op cit.

471 Marcus. (1998). *Op cit.*, pp. 99-114.

472 According to the FAO there are 8 billion layer hens in the world. A large part of them is reared in industrial systems. This means that they are culled every two years and need to be replaced. This implies that every year roughly 4 billion new layer hens need to be born, for which there is an equal number of male chicks that needs to be culled. These male chicks are not included in the FAO slaughter statistics as they are not commonly used for food.

FAO. (2023). Livestock manure. In *FAOSTAT* [Data file]. Retrieved from <http://www.fao.org/faostat/en/#data/EMN>

473 Per capita consumption more than tripled from 7 kg per person in 1950 to 22.8 kg in 2021.

FAO. (2024). *Fishery and aquaculture statistics: Yearbook 2021*. Rome, Italy: Author. <https://doi.org/10.4060/cc9523en>  
FAO. (2024). FishStat [Data file]. Retrieved from <https://www.fao.org/fishery/en/fishstat>



<sup>474</sup> FAO. (2018). *The state of world fisheries and aquaculture 2018: Meeting the sustainable development goals*. Rome, Italy: Author, p. 93. Retrieved from <http://www.fao.org/3/I9540EN/i9540en.pdf>

<sup>475</sup> Pauly & Zeller estimate it around 9.6 megatonnes, Watson & Tidd come at 14.5 million and Agnew et al.'s estimate is between 11 and 26 megatonnes.

Agnew, D. J., Pearce, J., Pramod, G., Peatman, T., Watson, R., Beddington, J. R., & Pitcher, T. J. (2009). Estimating the worldwide extent of illegal fishing. *PLoS ONE* 4(2), e4570. <https://doi.org/10.1371/journal.pone.0004570>

Pauly, D., & Zeller, D. (2016). Catch reconstructions reveal that global marine fisheries catches are higher than reported and declining. *Nature Communications*, 7, 10244. <https://doi.org/10.1038/ncomms10244>

Watson, R. A., & Tidd, A. (2018). Mapping nearly a century and a half of global marine fishing: 1869-2015. *Marine Policy*, 93, 171-177. <https://doi.org/10.1016/j.marpol.2018.04.023>

<sup>476</sup> Unintentional catch, or 'bycatch' is high when fishing gear is not adapted to the intended species. That is why bycatch is by far the highest in massive trawlers used by shrimp fisheries. They have a discard rate of around 60%.

Kelleher, K. (2005). *Discards in the world's marine fisheries: An update*. Rome, Italy: FAO. Retrieved from <http://www.fao.org/3/y5936e/y5936e00.htm>

<sup>477</sup> Discard mortality rates vary considerably amongst species and circumstances and there is no general estimate available.

Benoît, H. P., Hurlbut, T., Chassé, J., Jonsen, I. D. (2011). Estimating fishery-scale rates of discard mortality using conditional reasoning. *Fisheries Research* 125-126, 318-330. <http://doi.org/10.1016/j.fishres.2011.12.004>

Davis, M. W. (2002). Key principles for understanding fish bycatch discard mortality. *Canadian Journal of Fisheries and Aquatic Sciences*, 59(11), 1834-1843.

Mesnil, B. (1996). When discards survive: Accounting for survival of discards in fisheries assessments. *Aquatic Living Resources*, 9, 209-215.

<sup>478</sup> Kelleher estimates worldwide bycatch at 7.3 megatonnes yearly, Gustavsson et al. and Watson & Tidd estimate it around 12 megatonnes and Pauly & Zeller arrive at 22.5 Mt.

Gustavsson, J., Cederberg, C., Sonesson, U., & Emanuelsson, A. (2013). *The methodology of the FAO study: "Global Food Losses and Food Waste - extent, causes and prevention"* - FAO, 2011. Borås, Sweden: The Swedish Institute for Food and Biotechnology, pp. 66-68. Retrieved from <http://www.diva-portal.org/smash/get/diva2:944159/FULLTEXT01.pdf>

Kelleher. (2005). *Op cit.*; Pauly & Zeller. (2016). *Op cit.*; Watson & Tidd. (2018). *Op cit.*

<sup>479</sup> The only estimates we could find were from the *Fishcount* website. Their estimate is between 1 and 3 trillion. However, their numbers are incomplete as they do not include crustaceans and mollusks caught in the wild nor farmed mollusks. They also do not include *IUU* catch and discard. I estimate the total would be at least twice as much: between 2.1 trillion and 6.9 trillion fish and shellfish killed yearly. Check our calculations at <https://bit.ly/fish-estimate>

Fishcount. (2019). Estimates of numbers of individuals killed in (FAO) reported fishery production. Retrieved from [http://fishcount.org.uk/studydatascreens/2016/fishcount\\_estimates\\_list.php](http://fishcount.org.uk/studydatascreens/2016/fishcount_estimates_list.php)

<sup>480</sup> FAO. (2018). *Op cit.*, pp. 39-47.

Worm, B., Barbier, E. B., Beaumont, N., Duffy, J. E., Folke, C., Halpern, B. S., ... Watson, R. (2006). Impacts of biodiversity loss on ocean ecosystem services. *Science*, 314(5800), 787-790.  
<https://doi.org/10.1126/science.1132294>

Further reading on the impact of our fishing industry on marine ecosystems:

Clover, C. (2006). *The end of the line: How overfishing is changing the world and what we eat*. Berkeley, CA: University of California Press.

<sup>481</sup> Aleksandrowicz, L., Green, R., Joy, E. J., Smith, P., & Haines, A. (2016). The impacts of dietary change on greenhouse gas emissions, land use, water use, and health: A systematic review. *PLoS ONE*, 11(11), e0165797. <https://doi.org/10.1371/journal.pone.0165797>

Baroni, L., Cenci, L., Tettamanti, M., & Berati, M. (2007). Evaluating the environmental impact of various dietary patterns combined with different food production systems. *European Journal of Clinical Nutrition*, 61, 279–286. <https://doi.org/10.1038/sj.ejcn.1602522>

Leip, A., Billen, G., Garnier, J., Grizzetti, B., Lassaletta, L., Reis, S., ... Westhoek, H. (2015). Impacts of European livestock production: Nitrogen, sulphur, phosphorus and greenhouse gas emissions, land-use, water eutrophication and biodiversity. *Environmental Research Letters*, 10, 115004. <https://doi.org/10.1088/1748-9326/10/11/115004>

Nelson, M. E., Hamm, M. W., Hu, F. B., Abrams, S. A., & Griffin, T. S. (2016). Alignment of healthy dietary patterns and environmental sustainability: A systematic review. *Advances in Nutrition*, 7, 1005–1025.

For an introduction, one can watch the documentary *Cowspiracy*.

Anderson, K., & Keegan, K. (Producers & Directors). (2014). *Cowspiracy: The sustainability secret* [Motion picture]. US: A.U.M. Films.

<sup>482</sup> This includes fish and seafood, meat, fat, edible offals, (unprocessed) milk, eggs, hides, wool, honey, beeswax and silk.

FAO. (2023). Livestock primary. *Op cit*.

<sup>483</sup> Livestock Environment and Development Initiative, & FAO. (2006). *Livestock's long shadow: Environmental issues and options*. Rome, Italy: FAO, p. xx. Retrieved from <http://www.fao.org/3/a0701e/a0701e.pdf>

484 Shukla, P. R., Skea, J., Calvo Buendia, E., Masson-Delmotte, V., Pörtner, H. O, Roberts, D. C., ... Malley, J. (Eds.). (2019). *Climate change and land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*. Geneva, Switzerland: IPCC, pp. 475-491. Retrieved from <https://www.ipcc.ch/srccl/>

485 More on the alliance on their website:

<https://www.scientistswarning.org/>

486 Ripple, W. J., Wolf, C., Newsome, T. M., Barnard, P., & Moomaw, W. R. (2020). World scientists' warning of a climate emergency. *Bioscience*, 70(1), 8-12, p. 11. <https://doi.org/10.1093/biosci/biz088>

487 Kendall, H. W., & Pimentel, D. (1994). Constraints on the expansion of the global food supply. *Ambio*, 23(3), 198-205.

Pimentel, D., & Pimentel, M. H. (2008). *Food, energy and society* (3rd ed.). Boca Raton, FL: CRC Press.

488 This is the estimate of World Bank environment specialists Robert Goodland and Jeff Anhang. The FAO estimate is only 14.5%. Another progressive estimate is Searchinger's at 33-40%. We will highlight the differences in their approaches in this paragraph.

Gerber, P. J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., ... Tempio, G. (2013) *Tackling climate change through livestock: A global assessment of emissions and mitigation opportunities*. Rome, Italy: FAO. Retrieved from <http://www.fao.org/3/a-i3437e.pdf>

Goodland, R., & Anhang, J. (2009). Livestock and climate change: What if the key actors in climate change are... cows, pigs and chickens? *World Watch*, 22(6), 10-19.

Livestock Environment and Development Initiative & FAO. (2006). *Op cit*.

Searchinger, T. D., Wiersenius, S., Beringer, T., & Dumas, P. (2018). Assessing the efficiency of changes in land use for mitigating climate change. *Nature*, 564, 249-253. <https://doi.org/10.1038/s41586-018-0757-z>

There was a debate between the FAO and the World Bank scientists. The FAO published a critique of the Goodland & Anhang article, which was refuted by the latter, after which the FAO scientists declined to continue the debate.

Herrero, M., Gerber, P., Vellinga, T., Garnett, T., Leip, A., Opio, C., ... McAllister, T. A. (2011). Livestock and greenhouse gas emissions: The importance of getting the numbers right. *Animal Feed Science and Technology*, 166–167, 779–782.

Goodland, R., & Anhang, J. (2012). Livestock and greenhouse gas emissions: The importance of getting the numbers right, by Herrero et al. [Anim. Feed Sci. Technol. 166-167, 779-782.], *Animal Feed Science and Technology*, 172, 252-256.

489 Searchinger et al. (2018). *Op cit*.

<sup>490</sup> Springmann, M., Godfray, H. C., Rayner, M., & Scarborough, P. (2016). Analysis and valuation of the health and climate change cobenefits of dietary change. *PNAS*, 113(15), 4146-4151, p. 4150. Retrieved from <https://www.pnas.org/content/113/15/4146>

<sup>491</sup> FAO. (2023). Livestock primary. *Op cit*.

<sup>492</sup> An estimate of 100 million tonnes versus 9 million tonnes of carbon weight. Human biomass is estimated to be 60 million tonnes of carbon.

Bar-On, Y. M., Phillips, R., & Milo, R. (2018). The biomass distribution on Earth. *PNAS*, 115(25), 6506-6511. <https://doi.org/10.1073/pnas.1711842115>

<sup>493</sup> According to Goodland and Anhang livestock breathing produces 8.8 billion tonnes of CO<sub>2</sub> per year. This is more than the latest FAO estimate for the entire livestock sector, namely 7.1 billion tonnes. The FAO's estimate of CO<sub>2</sub> from breathing is 3 gigatonnes, but they believe it should not be included in emission calculations. The IPCC estimate for direct industry emissions is 10.3 gigatonnes CO<sub>2</sub>-equivalent.

<sup>494</sup> The FAO only counts the carbon that is released through destruction of natural habitats. It does not count all the CO<sub>2</sub> that is no longer absorbed by these forests after they are cut down year after year. Searchinger et al. estimate that only including this would make sector emissions 3-4 times higher.

Goodland & Anhang do not include this so-called 'carbon opportunity cost' (COC) in their 50% estimate. Instead, they calculate what the amount of CO<sub>2</sub> saved would be if we would grow plants for biofuels instead of raising livestock, which is significantly less than the carbon opportunity cost. If we would use Searchinger's estimate in their calculations, Goodland & Anhang's estimate would go up to 60% of all GHG emissions.

More on deforestation and COC in the paragraph on land use.

<sup>495</sup> The livestock sector is responsible for 53-65% of anthropogenic N<sub>2</sub>O emission, a greenhouse gas with a warming potential 300 times that of CO<sub>2</sub>.

<sup>496</sup> Even though methane is more powerful than CO<sub>2</sub>, it has a relatively short half-life. According to the IPCC its 'global warming potential' is 84 times that of CO<sub>2</sub> over a 20-year period and 28 times that of CO<sub>2</sub> over a 100-year period. The FAO uses the 100-year impact, while Goodland and Anhang think it is more appropriate to look at the 20-year impact as the impact of climate change will be felt in the near future.

<sup>497</sup> 44% according to the latest FAO report, 37% in earlier reports.

<sup>498</sup> Goodland & Anhang gauge livestock methane release at 7.4 billion tonnes CO<sub>2</sub> -equivalent. According to the IPCC the transport sector is responsible for 7 gigatonnes.

<sup>499</sup> Gerber et al. (2013). *Op cit.*; Goodland & Anhang. (2009). *Op cit.*

Livestock Environment and Development Initiative & FAO. (2006). *Op cit.*

IPCC. (2014). *Climate change 2014: Synthesis report*. Geneva, Switzerland: Author. Retrieved from <https://www.ipcc.ch/report/ar5/syr/>

These are the main sources of greenhouse gas emissions in the livestock industry. Goodland & Anhang count a few more in their study. And then there is also the enormous medical impact of eating meat and dairy, which we will go into in the next paragraph. Meat and dairy contribute to many diseases which require large amounts of medication and treatment, all with associated emission costs. These emissions are not counted in Goodland & Anhang's study.



<sup>500</sup> Kraussman, F., Erb, K. H., Gingrich, S., Lauk C., & Haberl, H. (2008). Global patterns of socioeconomic biomass flows in the year 2000: A comprehensive assessment of supply, consumption and constraints. *Ecological Economics*, 65, 471-487. <https://doi.org/10.1016/j.ecolecon.2007.07.012>

Wirsenius, S. (2003). The biomass metabolism of the food system: A model-based survey of the global and regional turnover of food biomass. *Journal of Industrial Ecology*, 7(1), 47-80. <https://doi.org/10.1162/108819803766729195>

<sup>501</sup> Kraussman et al. estimate it at 25 kg, Vitousek et al. (as cited in Smil) estimate 20 kg, Herrero et al. 6 kg and FAO scientists Mottet et al. 5.5 kg.

Herrero, M., Havlík, P., Valinc, H., Notenbaert, A., Rufino, M. C., Thornton, P. K., ... Obersteiner, M. (2013). Biomass use, production, feed efficiencies, and greenhouse gas emissions from global livestock systems, *PNAS*, 110(52), 20888–20893.

Kraussman et al. (2008). *Op cit.*

Mottet, A., de Haan, C., Falcuccia, A., Tempio, G., Opio, C., & Gerber, P. (2017). Livestock: On our plates or eating at our table? A new analysis of the feed/food debate. *Global Food Security*, 14, 1-8. <https://doi.org/10.1016/j.gfs.2017.01.001>

Smil, V. (2011). Harvesting the biosphere: The human impact. *Population and Development Review*, 37(4): 613–636.

<sup>502</sup> Cassidy, E. S., West, P. C., Gerber, J. S., & Foley, J. A. (2013). Redefining agricultural yields: From tonnes to people nourished per hectare. *Environmental Research Letters*, 8, 034015. <https://doi.org/10.1088/1748-9326/8/3/034015>

Wirsenius. (2003). *Op cit.*

<sup>503</sup> According to the FAO 86% of the diet of livestock is food that could not be eaten by humans.

<sup>504</sup> Livestock eats about 1 billion tonnes of cereals per year and 400 million tonnes of other crops that could equally be food for humans.

FAO. (2019). New food balances. In *FAOSTAT* [Data file]. Retrieved from <http://www.fao.org/faostat/en/#data/FBS>

<sup>505</sup> Nellemann, C., MacDevette, M., Manders, T., Eickhout, B., Svihus, B., Prins, A. G., & Kaltenborn, B. P. (Eds.). (2009). *The environmental food crisis: The environment's role in averting future food crises*. Nairobi, Kenya: United Nations Environment Programme, p. 27. Retrieved from

<https://www.unenvironment.org/resources/report/environmental-food-crisis>

Pimentel & Pimentel. (2008). *Op cit.*, p. 73.

<sup>506</sup> It is estimated that between 691 and 783 million people faced hunger in 2022.

FAO, IFAD, UNICEF, WFP, & WHO. (2023). *The state of food security and nutrition in the world 2023: Urbanization, agrifood systems transformation and healthy diets across the rural–urban continuum*. Rome, Italy: FAO. <https://doi.org/10.4060/cc3017en>

<sup>507</sup> More on environmental degradation in the epilogue.

Cribb, J. (2010). *The coming famine: The global food crisis and what we can do to avoid it*. Berkeley, CA: University of California Press.

Nellemann et al. (2009). *Op cit.*

<sup>508</sup> Livestock Environment and Development Initiative & FAO. (2006). *Op cit.*, p. xxi.

509 80-90% of this is grassland, and the remainder is land used  
for feed crops. Feed crops for livestock occupy 1/3 of all  
cropland. The FAO recently reduced their estimate for land used  
for grazing considerably.

Livestock Environment and Development Initiative & FAO.  
(2006). *Op cit.*

Mottet et al. (2017). *Op cit.*

Thornton, P., Herrero, M., & Ericksen, P. (2011). Livestock  
and climate change. *Livestock Exchange Issue brief*, 3.

United Nations Convention to Combat Desertification.  
(2019). *Land in numbers 2019: Risks and opportunities*. Bonn,  
Germany: Author, pp. 2-3. Retrieved from [http://  
catalogue.unccd.int/1202-Land%20in%20numbers\\_2%20new-  
web.pdf](http://catalogue.unccd.int/1202-Land%20in%20numbers_2%20new-web.pdf)

510 And only 40% of protein.

511 FAO. (2019). New food balances. *Op cit.*

512 Peters, C. J., Picardy, J., Darrouzet-Nardi, A. F., Wilkins, J. L.,  
Griffin, T. S., & Fick, G. W. (2016). Carrying capacity of U.S.  
agricultural land: Ten diet scenarios. *Elementa: Science of the  
Anthropocene*, 4, 116. [http://doi.org/10.12952/  
journal.elementa.000116](http://doi.org/10.12952/journal.elementa.000116)

Poore, J., & Nemecek, T. (2018). Reducing food's  
environmental impacts through producers and consumers.  
*Science*, 360, 987–992.

513 Curtis, P. G., Slay, C. M., Harris, N. L., Tyukavina, A., &  
Hansen, M. C. (2018). Classifying drivers of global forest loss.  
*Science*, 361(6407), 1108-1111. [https://doi.org/10.1126/  
science.aau3445](https://doi.org/10.1126/science.aau3445)

FAO. (2019). Land use. In *FAOSTAT* [Data file]. Retrieved from  
<http://www.fao.org/faostat/en/#data/RL>

514 14% of deforested Amazon land is for crops. A number of these crops are fed to livestock.

De Sy, V., Herold, M., Achard, F., Beuchle, R., Clevers, J. G., Lindquist, E., & Verchot, L. (2015). Land use patterns and related carbon losses following deforestation in South America. *Environmental Research Letters*, 10, 124004. <https://doi.org/10.1088/1748-9326/10/12/124004>

Livestock Environment and Development Initiative & FAO. (2006). *Op cit*.

Ritchie, H. (2021). *Deforestation and forest loss*. Our World In Data. Retrieved from <https://ourworldindata.org/deforestation>  
Further reading on the challenges the Amazon is facing:

Boucher, D., Elias, P., Lininger, K., May-Tobin, C., Roquemore, S., & Saxon, E. (2011). *The Root of the Problem: What's driving tropical deforestation today?* Cambridge, MA: Union of Concerned Scientists. Retrieved from [https://www.ucsusa.org/sites/default/files/2019-09/UCS\\_RootoftheProblem\\_DriversofDeforestation\\_FullReport.pdf](https://www.ucsusa.org/sites/default/files/2019-09/UCS_RootoftheProblem_DriversofDeforestation_FullReport.pdf)

Greenpeace. (2006). *Eating up the Amazon*. Amsterdam, The Netherlands: Author. Retrieved from <https://www.greenpeace.org/usa/wp-content/uploads/legacy/Global/usa/report/2010/2/eating-up-the-amazon.pdf>

Nepstad, D. C., Stickler, C. M., Soares-Filho, B., & Merry, F. (2008). Interactions among Amazon land use, forests and climate: Prospects for a near-term forest tipping point. *Philosophical Transactions of the Royal Society B*, 363, 1737-1746. <https://doi.org/10.1098/rstb.2007.0036>

515 Livestock Environment and Development Initiative & FAO. (2006). *Op cit*.

<sup>516</sup> Goodland & Anhang estimate we could ‘catch’ half or more of all emissions this way. Searchinger et al.’s estimate is 14-21 billion tonnes of CO<sub>2</sub>-equivalent. Poore & Nemecek’s estimate is much lower, at only 8 gigatonnes. (The IPCC estimates we emit about 49 gigatonnes of CO<sub>2</sub> equivalent per year.)

Goodland & Anhang. (2009). *Op cit.*, p. 13.

IPCC. (2014). *Op cit.*, p. 47.

Poore, J., & Nemecek, T. (2018). Reducing food’s environmental impacts through producers and consumers. *Science*, 360, 987–992, p. 5.

Searchinger et al. (2018). *Op cit.*, p. 251.

Further reading:

Müller-Wenk, R., & Brandão, M. (2010). Climatic impact of land use in LCA: Carbon transfers between vegetation/soil and air. *International Journal of Life Cycle Assessment*, 15, 172–182. <https://doi.org/10.1007/s11367-009-0144-y>

Schmidinger, K., & Stehfest, E. (2011). Including CO<sub>2</sub> implications of land occupation in LCAs: Method and example for livestock products. *International Journal of Life Cycle Assessment*, 17, 962–972.

<https://doi.org/10.1007/s11367-012-0434-7>

<sup>517</sup> Mekonnen, M. M., & Hoekstra, A. Y. (2011). *National water footprint accounts. The green blue and gray water footprint of production and consumption* (Vol. 1). Delft, The Netherlands: UNESCO-IHE Institute for Water Education. Retrieved from <https://waterfootprint.org/media/downloads/Report50-NationalWaterFootprints-Vol1.pdf>

518 A vegetarian diet has a 35-55% lower water footprint than an average diet in Western Europe. The water footprint of a vegan diet appears to be similar or even lower.

Barilla Center for Food & Nutrition. (2015). *Double pyramid 2015: Recommendations for a sustainable diet*. Parma, Italy: Author, pp. 82-95. Retrieved from <https://www.barillacfn.com/m/publications/dp-2015-en.pdf>

Rosi, A., Mena, P., Pellegrini, N., Turrone, S., Neviani, E., Ferrocino, I., ... Scazzina, F. (2017). Environmental impact of omnivorous, ovo-lacto-vegetarian, and vegan diet. *Scientific Reports*, 7, 6105. <https://doi.org/10.1038/s41598-017-06466-8>

Vanham, D., Comero, S., Gawlik, B. M., & Bidoglio, G. (2018). The water footprint of different diets within European sub-national geographical entities. *Nature Sustainability*, 1, 518–525. <https://doi.org/10.1038/s41893-018-0133-x>

519 Livestock Environment and Development Initiative & FAO. (2006). *Op cit.*, pp. 128-134.

Mekonnen, M. M., & Hoekstra, A. Y. (2010). *The green, blue and gray water footprint of farm animals and animal products* (Vol. 1). Delft, The Netherlands: UNESCO-IHE Institute for Water Education. Retrieved from <https://waterfootprint.org/media/downloads/Report-48-WaterFootprint-AnimalProducts-Vol1.pdf>

Mekonnen, M. M., & Hoekstra, A. Y. (2011). The green, blue and gray water footprint of crops and derived crop products. *Hydrology and Earth System Sciences*, 15, 1577–1600. Retrieved from <https://waterfootprint.org/media/downloads/Mekonnen-Hoekstra-2011-WaterFootprintCrops.pdf>

Pimentel & Pimentel. (2008), *Op cit.*, pp. 183-200.

<sup>520</sup> Kummu, M., Guillaume, J., de Moel, H., Eisner, S., Flörke, M., Porkka, M., ... Ward, P. J. (2016). The world's road to water scarcity: Shortage and stress in the 20th century and pathways towards sustainability. *Scientific Reports*, 6, 38495. <https://doi.org/10.1038/srep38495>

Livestock Environment and Development Initiative & FAO. (2006). *Op cit.*

<sup>521</sup> According to Mekonnen & Hoekstra 1.8 to 2.9 billion people face severe water scarcity for at least 4 to 6 months per year today, and half a billion face severe water scarcity all year round.

Burek, P., Satoh, Y., Fischer, G., Kahil, T., Nava Jimenez, L., Scherzer, A., ... Wiberg, D. (2016). *Water futures and solution: Fast Track Initiative final report*. Laxenburg, Austria: International Institute for Applied Systems Analysis. Retrieved from <http://pure.iiasa.ac.at/id/eprint/13008/1/WP-16-006.pdf>

Mekonnen, M. M., & Hoekstra, A. Y. (2016). Four billion people facing severe water scarcity. *Science Advances*, 2(2), e1500323. <https://doi.org/10.1126/sciadv.1500323>

United Nations Convention to Combat Desertification. (2019). *Op cit.*, p. 7.

<sup>522</sup> Further reading:

Changing Markets Foundation. (2018). *Growing the good: The case for low-carbon transition in the food sector*. Utrecht, The Netherlands: Author Retrieved from <http://changingmarkets.org/wp-content/uploads/2018/10/Growing-the-Good-report-v3.pdf>

Livestock Environment and Development Initiative & FAO. (2006). *Op cit.*

Merzer, G. (2021). *Food is climate: A response to Al Gore, Bill Gates, Paul Hawken, and the conventional narrative on climate change*. Atlanta, GA: Vivid Thoughts Press.

Oppenlander, R. (2012). *Comfortably unaware: What we choose to eat is killing us and our planet*. New York, NY: Beaufort Books.

Weis, T. (2013). *The ecological hoofprint: The global burden of industrial livestock*. London, UK: Zed Books.

<sup>523</sup> Machovina, B., Feeley, K. J., Ripple, W. J. (2014). Biodiversity conservation: The key is reducing meat consumption. *Science of the Total Environment*, 536(1), 419-431.

<sup>524</sup> Campbell, T. C., & Campbell, T. M. (2016). *The China Study: The most comprehensive study of nutrition ever conducted* (Rev. ed.). Dallas, TX: BenBella Books.

Davis, G., & Jacobson, H. (2015). *Proteinaholic: How our obsession with meat is killing us and what we can do about it*. New York, NY: HarperOne.

Medawar, E., Huhn, S., Villringer, A., & Witte, A. V. et al. (2019). The effects of plant-based diets on the body and the brain: A systematic review. *Translational Psychiatry*, 9, 226 (2019). <https://doi.org/10.1038/s41398-019-0552-0>

Song, M., Fung, T. T., Hu, F. B., Willett, W. C., Longo, V. D., Chan, A. T., Giovannucci, E. L. (2016). Association of animal and plant protein intake with all-cause and cause-specific mortality. *JAMA Internal Medicine*, 176(10), 1453-1463. <https://doi.org/10.1001/jamainternmed.2016.4182>

<sup>525</sup> Clark, M. A., Springmann, M., Hill, J., & Tilman, D. (2019). Multiple health and environmental impacts of foods. *PNAS*, 116(46), 23357–23362. <https://doi.org/10.1073/pnas.1906908116>

Nelson et al. (2016). *Op cit*.

For an overview of relevant studies, see:

Mehta, T. (2020). Reference list for plant diet and health [Text document]. Retrieved from <https://plantbaseddata.org/>

As an introduction, I recommend documentaries like *Forks over Knives*, *What the health* or *Gamechangers*.

Anderson, K., & Keegan, K. (Producers & Directors). (2017). *What the health* [Motion Picture]. US: A.U.M. Films.

Corry, J., Wendel, B. (Producers), & Fulkerson, L. (Director). (2011). *Forks over knives* [Motion Picture]. US: Monica Beach Media.

Pace, J., Wilks, J. (Producers), & Psihoyos, L. (Director). (2018). *The game changers* [Motion Picture]. US: ReFuel Productions.



526 Campbell & Campbell. (2016). *Op cit.*

527 Institute for Health Metrics and Evaluation. (2018). *Global burden of disease study compare* [Data file]. Retrieved from <http://www.healthdata.org/data-visualization/gbd-compare>

WHO. (2018). The top 10 causes of death. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>

528 Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., ... Murray, C. M. (2019). Food in the Anthropocene: The EAT-Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, 393, 447-492, p. 447. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)

529 Barnard, N. (1993). *Food for life: How the new four food groups can save your life*. New York, NY: Three Rivers.

Campbell & Campbell. (2016). *Op cit.*; Davis & Jacobson. (2015). *Op cit.*

Esselstyn, C. B. (2008). *Prevent and reverse heart disease: The revolutionary, scientifically proven, nutrition-based cure*. New York, NY: Avery.

Greger, M., & Stone, G. (2015). *How not to die: Discover the foods scientifically proven to prevent and reverse disease*. New York, NY: Flatiron Books.

Ornish, D., & Ornish, A. (2019). *Undo it! How simple lifestyle changes can reverse most chronic diseases*. New York, NY: Ballantine Books.

Popkin, B. M. (2006). Global nutrition dynamics: The world is shifting rapidly toward a diet linked with noncommunicable diseases. *The American Journal of Clinical Nutrition*, 84(2), 289–298. <https://doi.org/10.1093/ajcn/84.2.289>

530 International Agency for Research on Cancer. (2015). *Red meat and processed meat*. Lyon, France: Author. Retrieved from <https://publications.iarc.fr/564>

531 World Cancer Research Fund, & American Institute for  
Cancer Research. (2018). *Wholegrains, vegetables and fruits and the  
risk of cancer*. London, UK: World Cancer Research Fund  
International. Retrieved from [https://www.wcrf.org/sites/  
default/files/Wholegrains-veg-and-fruit.pdf](https://www.wcrf.org/sites/default/files/Wholegrains-veg-and-fruit.pdf)

532 Academy of Nutrition and Dietetics. (2016). Position of the  
Academy of Nutrition and Dietetics: Vegetarian diets. *Journal of  
the Academy of Nutrition and Dietetics*, 116(12), 1970-1980. [https://  
doi.org/10.1016/j.jand.2016.09.025](https://doi.org/10.1016/j.jand.2016.09.025)

533 Tusso, P. J., [Ismail, M. H.](#), Ha, B. P., & [Bartolotto, C.](#) (2013).  
Nutritional update for physicians: Plant-based diets. *Permanente  
Journal*, 17(2), 61-66. <https://doi.org/10.7812/TPP/12-085>

534 Springmann et al. estimate 8 million by 2050; the latest FAO  
estimate is 14 million by 2030; and Willet et al. estimate 11 million  
lives could be saved even today.

FAO, IFAD, UNICEF, WFP, & WHO. (2020). *The state of food security  
and nutrition in the world 2020: Transforming food systems for  
affordable health systems*. Rome, Italy: Author, p. 99. Retrieved from  
<http://www.fao.org/3/ca9692en/CA9692EN.pdf>

Springmann et al. (2016). *Op cit.*; Willet et al. (2019). *Op cit.*

535 Springmann et al. (2016). *Op cit.*

536 Springmann et al. (2016). *Op cit.*

537 Campbell, T. C., & Jacobson, H. (2014). *Whole: Rethinking the  
science of nutrition*. Dallas, TX: BenBella Books.

538 60% of all known infectious diseases is zoonotic.

IPBES. (2020). IPBES workshop on biodiversity and  
pandemics [PDF file]. Retrieved from [https://  
www.preventionweb.net/publications/view/74428](https://www.preventionweb.net/publications/view/74428)

Taylor, L., Latham, S., & Woolhouse, M. E. (2001). Risk  
factors for human disease emergence. *Philosophical Transactions of  
the Royal Society B*, 356, 983-989. [https://doi.org/10.1098/  
rstb.2001.0888](https://doi.org/10.1098/rstb.2001.0888)

539 Centers for Disease Control and Prevention. (n.d.). Saving lives by taking a One Health approach: Connecting human, animal, and environmental health [PDF file]. Retrieved from <https://cdc.gov/onehealth/pdfs/OneHealth-FactSheet-FINAL.pdf>

540 Diamond, J. (1999). *Guns, germs and steel: The fates of human societies*. New York, NY: Norton, pp. 195-214.

McNeill, W. H. (1998). *Plagues and people*. New York, NY: Anchor Books. pp. 69-123.

Wolfe, N., Dunavan, C., & Diamond, J. (2007). Origins of major human infectious diseases. *Nature*, 447, 279–283. <https://doi.org/10.1038/nature05775>

541 FAO. (2013). *World livestock 2013: Changing disease landscapes*. Rome, Italy: Author. Retrieved from <http://www.fao.org/docrep/019/i3440e/i3440e.pdf>

FAO, WHO, & World Organisation for Animal Health. (2004). Report of the WHO/FAO/OIE joint consultation on emerging zoonotic diseases [PDF file]. Retrieved from [https://apps.who.int/iris/bitstream/handle/10665/68899/WHO\\_CDS\\_CPE\\_ZFK\\_2004.9.pdf](https://apps.who.int/iris/bitstream/handle/10665/68899/WHO_CDS_CPE_ZFK_2004.9.pdf)

Greger, M. (2020). *How to survive a pandemic*. New York, NY: Flatiron Books.

542 FAO. (2013). *Op cit.*, p. 3.

<sup>543</sup> Greger, M. (2006). *Bird flu: A virus of our own hatching*. New York, NY: Lantern Books.

Herfst, S., Schrauwen, E. J., Linster, M., Chutinimitkul, S., de Wit, E., Munster, V. J., ... Fouchier, R. A. (2012). Airborne transmission of influenza A/H5N1 virus between ferrets. *Science*, 336(6088), 1534-1541. <https://doi.org/10.1126/science.1213362>

Further reading:

Andiman, W. A. (2018). *Animal viruses and humans, a narrow divide: How lethal zoonotic viruses spill over and threaten us*. Philadelphia, PA: Paul Dry Books.

Wallace, R. (2016). *Big farms make big flu: Dispatches on infectious disease, agribusiness, and the nature of science*. New York, NY: Monthly Review Press.

## **Conclusion**

<sup>544</sup> Tutu, D. M. (1999). *No future without forgiveness*. New York, NY: Doubleday, p. 29.

## **Epilogue**

<sup>545</sup> Holy Father Francis. (2015). *Encyclical letter Laudato si': On care for our common home*. Vatican: Vatican Press, pp. 3-4. Retrieved from [http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\\_20150524\\_enciclica-laudato-si.html](http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html)

<sup>546</sup> Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A. G., de Souza Dias, B. F., ... Yach, D. (2015). Safeguarding human health in the Anthropocene epoch: Report of The Rockefeller Foundation-Lancet Commission on planetary health. *The Lancet*, 386, 1973-2028, p. 1974. [http://doi.org/10.1016/S0140-6736\(15\)60901-1](http://doi.org/10.1016/S0140-6736(15)60901-1)

<sup>547</sup> IPCC. (2023). *Climate change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Geneva, Switzerland: Author, p. 24. <https://doi.org10.59327/IPCC/AR6-9789291691647>

<sup>548</sup> *Ibid.*, p. 14.

<sup>549</sup> IPCC. (2021). *Climate change 2021: The physical science basis. Contribution of working group I to the sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: Cambridge University Press. Retrieved from <https://www.ipcc.ch/report/ar6/wg1/>

IPCC. (2022). *Climate change 2022: Impacts, adaptation, and vulnerability: Contribution of working group II to the sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: Cambridge University Press. Retrieved from <https://www.ipcc.ch/report/ar6/wg2/>

Masson-Delmotte, V., Zhai, P., Pörtner, H., Roberts, D., Skea, J., Shukla, P. R., ... Waterfield, T. (Eds.). (2018). *Global Warming of 1.5°C*. Geneva, Switzerland: IPCC. Retrieved from <https://www.ipcc.ch/sr15>

IPCC. (2023). *Op cit.*; Ripple et al. (2020). *Op cit.*

For an introduction to the possible consequences of climate change, see:

Hoppin, A., Reverand, S. (Producers), & Bowman, R. (Director). (2008). *Six degrees could change the world* [Motion Picture]. US: National Geographic.

<sup>550</sup> Ripple et al. (2020). *Op cit.*, p. 9.

<sup>551</sup> According to the United Nations Environment Programme (UNEP).

<sup>552</sup> According to the *World Wildlife Fund* (WWF).

<sup>553</sup> According to the *Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (IPBES).

554 Brondizio, E. S., Settele, J., Díaz, S., & Ngo, H. T. (Eds.). (2019). *Global assessment report on biodiversity and ecosystem services of the IPBES*. Bonn, Germany: IPBES. Retrieved from <https://ipbes.net/global-assessment>

Millenium Ecosystem Assessment. (2005). *Living beyond our means: Natural assets and human well-being* [PDF file]. Retrieved from <https://www.millenniumassessment.org/en/BoardStatement.html>

Montanarella, L., Scholes, R., & Brainich, A. (Eds.). (2018). *The IPBES assessment report on land degradation and restoration*. Bonn, Germany: IPBES. Retrieved from [https://ipbes.net/sites/default/files/2018\\_ldr\\_full\\_report\\_book\\_v4\\_pages.pdf](https://ipbes.net/sites/default/files/2018_ldr_full_report_book_v4_pages.pdf)

Nellemann et al. (2009). *Op cit.*

Shukla et al. (2019). *Op cit.*; Whitmee et al. (2015). *Op cit.*

United Nations Convention to Combat Desertification. (2017). *The Global Land Outlook*. Bonn, Germany: Author. Retrieved from <https://knowledge.unccd.int/publication/full-report>

WWF, & Institute of Zoology. (2018). *Living Planet Report 2018: Aiming higher*. Gland, Switzerland: WWF. Retrieved from [https://wwf.panda.org/knowledge\\_hub/all\\_publications/living\\_planet\\_report\\_2018](https://wwf.panda.org/knowledge_hub/all_publications/living_planet_report_2018)

555 Millenium Ecosystem Assessment. (2005). *Op cit.*, p. 5.

556 Díaz, S., Settele, J., Brondízio, E. S., Ngo, H. T., Guèze, M., Agard, J., ... Zayas, C. N. (Eds.). (2019). *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the IPBES*. Bonn, Germany: IPBES, p.8. <https://doi.org/10.5281/zenodo.3553579>

557 Devall, B., & Sessions, G. (1985). *Deep ecology*. Layton, UT: Gibbs Smith.

Naess. (1973). *Op cit.*

558 WWF & Institute of Zoology. (2018). *Op cit.*, p. 6.

559 We take so much antidepressants they are even polluting the environment. Their residues have been found in fish in effluent waters. More in general “residues of pharmaceuticals at trace quantities are widespread in aquatic systems,” and their long-term effect on the environment remains largely unknown.

Brooks, B. W., Chambliss, C. K., Stanley, J. K., Ramirez, A., Banks, K. E., Johnson, R. D., & Lewis, R. J. (2005). *Environmental Toxicology and Chemistry*, 24(2), 464-469.

Fent, K., Westonac, A. A., & Caminada, D. (2006). Ecotoxicology of human pharmaceuticals. *Aquatic Toxicology*, 76(2), 122-159. <https://doi.org/10.1016/j.aquatox.2005.09.009>

560 Naess. (1973). *Op cit.*, p. 95.

561 Eisenstein, C. (2018). *Climate: A new story*. Berkeley, CA: North Atlantic Books. Retrieved from <https://charleseisenstein.org/books/climate-a-new-story/eng/a-lost-truth/>

562 Goldsmith, E., Allen, R., Allaby, M., Davoll, J., & Lawrence, S. (1972). *Blueprint for survival*. Boston, MA: Houghton Mifflin.

563 Andreas, M., & Wagner, F. (2012). *Realizing utopia: Ecovillage endeavors and academic approaches*. Munich, Germany: Rachel Carson Center. Retrieved from <http://www.environmentandsociety.org/perspectives/2012/8/realizing-utopia-ecovillage-endeavors-and-academic-approaches>

564 Eisenstein. (2018). *Op cit.*



# 10 Principles for a compassionate society

What if humanity had a chance to start over? How can we create a compassionate society that meets our inborn needs? Based on over 20 years of experience in Sadhana Forest, the community he founded, Aviram Rozin takes you along in an exploration of what he sees as the key design principles of a compassionate society, which allow all beings to thrive. With the help of Gijs 'Jazz' Van den Broeck, he takes a deep dive into the science of well-being, learning, cooperation, community and non-violence, and distills 10 building blocks for compassionate societies. Do you feel that the world could be a better place? Do you wish to make a change but you are not sure how? This book may provide you with a road map.