Transition Ashram – a part of the solution to social problems and climate change

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Abstract: This article presents an interdisciplinary approach for an individual and societal transition of today's problems into the better. It contains three chapters: the first chapter is a brief overview of the current global situation with a focus on climate change. The second chapter is about how to transform the mind through the practice of meditation and hence the impact on the environment. The third chapter deals with a practical concept of a project, which functions as a driver to transform minds in order to solve current world problems and environmental destruction. In this paper, the idea is named 'Transition Ashram'. The disconnection between human beings and nature results in behaviour that acts against our nurturing planet, against humanity itself. The mind is the source of human action and therefore we should acknowledge that only through a change of the mind a change in global behaviour and society is possible.

Keywords: permaculture; eco-village; cooperation; Ashram; climate crisis; climate change; climate justice; climate action; social change; transition; solution-orientation; agriculture; mindfulness; meditation.

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1   Introduction

"We are standing at the verge of our epoch contemplating the falling of our old structures. Nature is pushing us into our next form of existence, and social challenges are forcing us to reestablish our social structures. The aim of

Transition Ashram is to transform suffering into the chance of being part of the solution to our present global challenges, such as the climate crisis.

In order to become a sustainable society, peace must be assured.

Peace has to start from within.

If we want to establish peace in the world, we first have to establish peace within us.

The way to approach this transition is by gaining a deeper understanding about life and death and by freeing ourselves from the fear of death. Through the practice of mindfulness and insight meditation, anxiety and fear can be reduced significantly (Zeidan et al., 2013). Fear results in the action of holding on to something; this can become a pattern of living and attachment to the longing for material things or emotional pleasure. This is a major cause of degenerative lifestyles nowadays and a hindrance to true happiness and freedom. Fear, perceived in a fruitful way, can be a powerful instrument to overcome destructive mind patterns. Overcoming fear is a way of overcoming attachment and attaining freedom of mind (Giustarini, 2012). Hence, consumption will decrease and communication will be less motivated by fear and attachment.

Furthermore, this transition can give many people who are suffering from sickness a reason to live in order to have the will to be healthy and live a purposeful life.

We are on our way to a tipping point in our Earth's climate system (Spratt and Dunlop, 2018). In order to avoid crossing those dangerous tipping points which can lead to a barely controllable increase in global temperature, social behavioral change has to occur beforehand (Otto et al., 2020).

Both cases are likely to result in chaos and new orientation.

Therefore, this project shall serve to guide a way into a new form of society during this time of reorientation."

2   Our current world

"Be the change you want to see in the world."

– Mahatma Gandhi

The world we are living in is full of pure beauty, love and people living together harmoniously. Due to states of mental delusion, many people are not able to perceive the beauty of nature and hence behave destructively towards themselves and others.

Basically, if there is a problem there will be a cause for it and the result created by it. By always being busy dealing with the effects, one will never be able to deeply understand the cause and solve the source of it. To see the cause, one has to look deep inside oneself and realise the appearance of the cause within the mind.

Nature is pushing humanity to change our way of living. For too long, modern society has separated itself from the nurturing soil beneath its feet. People are born into a world where there is nothing actually natural around them anymore. Many people are too afraid to acknowledge the fact of the climate crisis. We should acknowledge that there is cause for concern and transform it into action.

Modern problems are created by not having a proper understanding of nature, and no proper understanding of the nature of oneself. A lot of this is rooted within the

misunderstanding of religion. There are many reasons for this misunderstanding: Confusing reality with one's intellect, regarding knowledge provided by science as absolute and not looking for experiential knowledge, worldly attachment, aversion resulting from distrust into religious institutions induced by their historic actions, social belief systems and unknown illusions of the mind through which the world is perceived.

The seemingly endless wheel of consumption, seeking pleasure and comfort is causing humanity to cross the planetary boundaries and therefore threatening human extinction.

Grasping a certain concept will never lead to broad knowledge. To understand profoundly, one has to give up one's superficial knowledge and experience and observe nature closely with a mind free of concepts and judgment. In this way, there cannot be any 'wrong' concepts. There can only be concept or no concept.

Also, political extremism is separating the global community; the extremist left is creating the extremist right wing, and vice versa. Just by being peaceful and connecting to each other we can overcome this separation. In the same way, wars are justified in the name of God because somebody has the 'wrong' god or belief system. Both actions are rooted in the clinging to one's knowledge: that one assumes one's own opinion to be the truth and rejects any other opinion. In this way, reality becomes filtered by our own associations with it and is mistaken for true reality.

On the other hand, by not taking care of one's own mind, anger, greed and desire will delude the mind.

Hence, the person only knows this experience of not being peacefully minded, and so cannot get in touch with the joy of freedom and peace, with harmony and emotional stability (Dambrun et al., 2019). The resulting unpeaceful actions are what is shaping global society and causing extinction challenges like climate change and war.

One of the biggest challenges we are facing on Earth, namely climate change, is an existential threat to human civilisation (Spratt and Dunlop, 2018). A major cause of the ongoing rise in greenhouse gas (GHG) emissions after the industrial revolution is human desire. Wanting, wanting, wanting; more, more and more. But the suffering created by desire is not stopped by feeding the desire (Bodhi, 2000). In this way, one is not free, but is imprisoned by one's own desires, because in this way we keep on longing for something in order to be happy and therefore attaching our happiness to certain outcomes or any kind of material possession. This is not a very fulfilling path towards happiness, because it is based upon certain conditions. By removing the cause of grasping towards something, immediate unconditional happiness can arise without the need for any cause. Rather than being kept imprisoned, one can focus on creating solutions for everybody, rather than for one's own ego. In this way, the community supports its members and also one's individual needs can be covered by the community.

2.1   The threat of climate change

In case readers are not familiar with the topic of climate change and climate system tipping points, this is a brief introduction about why it is a topic of the highest concern for humanity.

In order for life on Earth to function, the Earth's climate relies on a balance of certain natural cycles, like the carbon cycle, the methane, phosphorous or hydrogen cycle. These are the basis on which a stable climate and human civilisation can flourish.

In the case of the carbon cycle, about the same amount of carbon dioxide (CO_2) which is released into the atmosphere is also captured and stored in the soil by biological organisms like plants and trees. Because of CO_2 and other greenhouse gases such as methane (CH_4), laughing gas (N_2O) and water vapour in the atmosphere, a mechanism called the greenhouse effect is taking place. Due to the greenhouse effect, the Earth's system is able to withhold a certain amount of heat and establish a mild climate with an average of +14°C; otherwise, the Earth would have an average temperature of –19°C, and all water on the planet would be frozen (Grotzinger and Jordan, 2017).

Figure 1   Greenhouse gas atmospheric concentration over the last 1,000 years (see online version for colours)
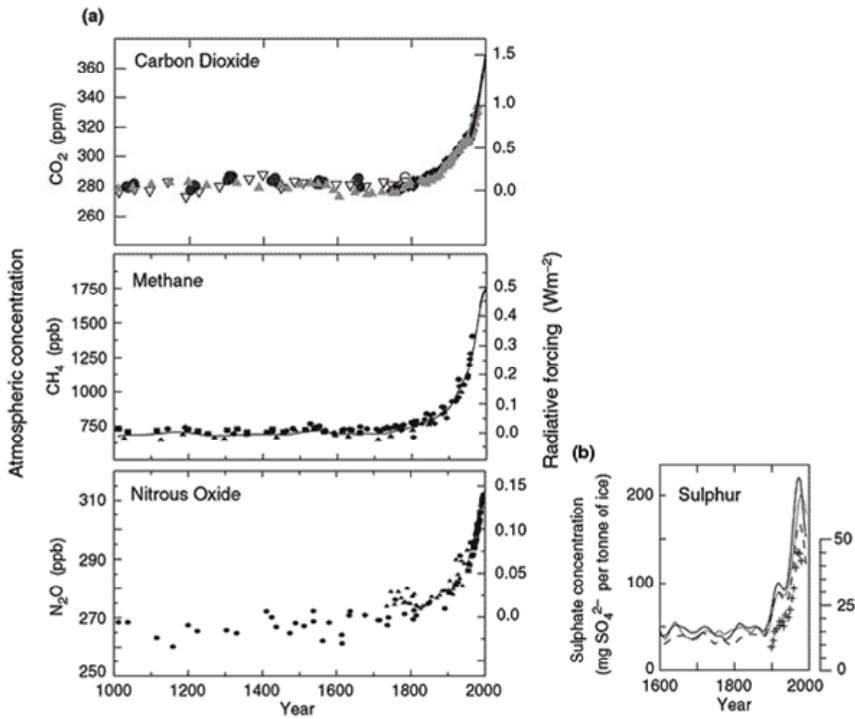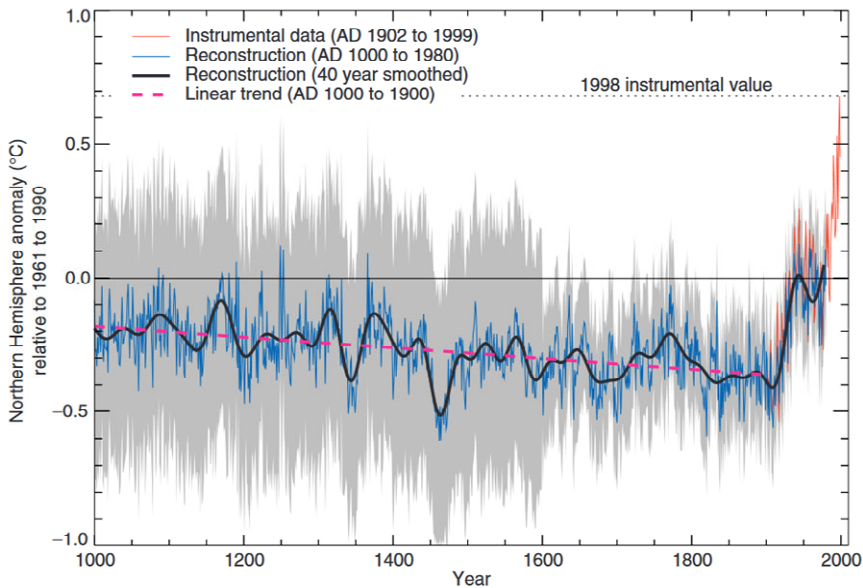

Source: IPPC (2001)

All of the energy for the Earth's climate system comes from the sun. The sun emits high energetic rays with a high frequency and small wavelength ($v = \lambda * f$), see Everet (1956). Greenhouse gases have a certain radiation absorption spectrum and are more likely to absorb low frequency radiation. Therefore, the sun's rays can pass more easily through the GHGs in the atmosphere. When colliding with the Earth, a part of the sun's rays is reflected by the Earth's surface like ice shields (albedo); another part is absorbed by the Earth and re-emitted in a less energetic state with a smaller frequency. The Earth's radiation is more likely to be absorbed by the GHGs in the atmosphere and re-emitted in all directions again. Therefore, not all of the energy gets lost, but a certain amount stays within the Earth's climate system. About 31% of the incoming solar energy is re-emitted into outer space, about 20% stays in the atmosphere and 49% remains within the Earth's surface (Bakan and Raschke, 2002).

Since the industrial revolution, humanity has been relying on what was then a new source of energy: fossil fuels. Due to fossil fuels, a radical economic and industrial growth was able to happen which brought many people material wealth as never before. Burning fossil fuels was responsible for 85% of global CO_2 emissions in 2014 (Edenhofer et al., 2014). Because of increased GHG emissions, more radiation energy is reflected back to Earth and hence the Earth's climate is warming up unusually quickly. This connection between increased GHGs in the atmosphere and global temperature is not just theoretical but clear to see through measurements as can be seen in the correlation of Figure 1 (GHG concentration) and Figure 2 (temperature rise).

Figure 2 Northern hemisphere anomaly temperature from 1,000–2,001 (see online version for colours)

Source: IPCC (2001)

As one can notice in Figure 1 and Figure 2, the increase in GHG emissions is very closely connected to the anomaly temperature increase. Furthermore, even the GHG concentrations and annual mean temperature are changing permanently; there has never been such a drastically fast increase as there has been since the industrial revolution.

As an example, in 2018 anthropogenic causes have increased global average temperature as compared to pre-industrial levels for about 1.0°C (+/– 0.2°C) (IPCC, 2018).

2015, 2016, 2017 and 2018 have been the hottest years since records began (NASA, 2019).

There are several dangerous tipping points in the global climate system. Climate system tipping points are points where the Earth's climate system changes from one state into another. Even though it is not possible to predict them exactly, most climate scientists agree that the point at which they happen lies between 1.5 and 2.5°C (Kirchengast, 2020). Climate system tipping points work in the way of positive feedback

loops, which means that once reached the temperature will increase more drastically and humans will have less chance of interceding.

To name some of them, climate system tipping points are (McSweeney, 2020):

- shutdown of the Atlantic Meridional overturning circulation

- West Antarctic ice sheet disintegration and loss of the albedo effect

- Amazon rainforest dieback

- Permafrost loss and methane hydrates

- West African monsoon shift

- coral reef die-off

- Indian monsoon shift

- Greenland ice sheet disintegration

- boreal forest shift.

"Dry seasons in Amazonian regions are already hotter and longer. Mortality rates of wet climate species are increased, whereas dry climate species are showing resilience. The increasing frequency of unprecedented droughts in 2005, 2010 and 2015/16 is signaling that the tipping point is at hand" (Thomas and Nobre, 2019).

Permafrost and methane hydrates: "By 2100, near surface permafrost area will decrease by 2–66% for RCP2.6 ['peak and decline' scenario where GHG emission will be reduced drastically] and 30–99% for RCP8.5 [business-as-usual scenario]. This is projected to release 10s to 100s of billions of tons [or gigatons, GtC], up to as much as 240 GtC, of permafrost carbon as CO_2 and methane to the atmosphere with the potential to accelerate climate change." (IPCC, 2019) It is estimated by scientists that there is about twice as much carbon stored in permafrost as is currently circulating in the atmosphere (Schuur et al., 2015). The release of those GHGs would have tremendous effects on Earth's climate systems.

The IPCC Special Report on the Ocean and Cryosphere in a Changing Climate further warns that degradation of permafrost thaw is "expected to be irreversible on timescales relevant to human societies and ecosystems" (IPCC, 2019).

Coral reef die-off due to carbon caused ocean acidification is causing a decline in marine life and fish and therefore a major collapse of the Earth's food chain (IPCC, 2018). "Even achieving emissions reduction targets consistent with the ambitious goal of 1.5°C of global warming under the Paris Agreement will result in the further loss of 70%–90% of reef-building corals compared to today, with 99% of corals being lost under warming of 2°C or more" (IPCC, 2018).

Climate justice movements such as 'Extinction Rebellion' or 'System Change Not Climate Change' are blocking and disturbing people's everyday life in order to communicate the climate crisis to citizens. Massive global strikes under the name of 'Fridays For Future' or 'Youth Strike for Climate' are demanding immediate action from the governments in order to reduce the harms of global warming to a minimum. Over 26,800 scientists from Austria, Germany and Switzerland have acknowledged the demands and concerns of the climate strikes as being scientifically justified. On Friday the 20th September 2019, according to the platform 350.org, over 4 million people all

around the world were striking and demanding immediate action in order to achieve a safe future (350.org, 2019).

But what is the solution? What ways of living lie within planetary limits? What changes of mind have to occur in order to dismiss the strongest effects of climate change? With this work, the focus shall be directed towards 'what can be a solution', with the focus on the changes of mind that would lead to behavioural change.

2.2 From tipping points towards solutions

> "Technically, an abrupt climate change occurs when the climate system is forced to cross some threshold, triggering a transition to a new state at a rate determined by the climate system itself and faster than the cause."

> – Prof. Richard Alley

Day by day awareness about the injustice human beings do to ourselves and our planet Earth is rising. This injustice has many faces and at first glance it seems like there are many more to come. Poor people, who are working very hard, struggle to sustain their families with their earnings while some super rich people gain enormous amounts of money by doing hardly anything. This injustice is already implemented in the financial system itself (CFJ, 2018). In terms of climate change, those countries who emit the least greenhouse gases are those who are suffering the most from the effect of the climate crisis, like the Philippines or Sub-Saharan African countries.

Awareness about the (financial) injustice is rising day by day. The young generation in particular is very aware of it, because it is a future they are going to live in.

These problems are nothing new. We have known about the effects of climate change since the 20th century (Club of Rome, 1972), but humanity has not been willing enough to change for the better. Since December 2018, after Greta Thunberg's speech at the COP 24 in Katowice, mass school strikes have started on every continent. Since then the topic of the climate crisis has gotten the appropriate media attention. Some people do not believe, some are afraid to do so. Some are giving everything they can to solve this problem, some are scared it is already too late.

"Achieving a rapid global decarbonization to stabilize the climate critically depends on activating contagious and fast-spreading processes of social and technological change within the next few years" (Otto et al., 2020).

We are writing history in every moment with our deeds. And all of our actions start within our mind. In order to change our actions, it is necessary to change our mind first. Thus, we will achieve to foster the progressive sparks in our mind and let go of those blotted out by fear which are leading to a future of extinction.

Overconsumption and the use of fossil fuels are a major cause of the climate crisis. These are caused by greed and attachment to one's own wealth and belongings. Moreover, these attitudes are hindrances to a truly fulfilling life. In order to transform this world into a peaceful planet, in order to experience this world deeply, peace must be cultivated within ourselves first.

Even though one wants to change the world for the better, many cannot maintain a single moment of silence and peace within them. Without ever knowing the state of being desireless, all actions will not lead us to a peaceful world, a peaceful life. One will still end up in the same habitually created system we are trying to overcome. This is why

there is a special emphasis in the paper on the transformation of mind in order to overcome the climate crisis.

The following project is a contribution to this transformation. Our systems will change; they do so by themselves. What is hindering us from a positive outcome is that society keeps fighting against itself and is kept distracted instead of implementing solutions. The Transition Ashram is to be a best practice place for how to live a harmonic life within nature.

Figure 3   Climate targets for 1.5-degree global temperature increase compared to pre-industrial levels (see online version for colours)
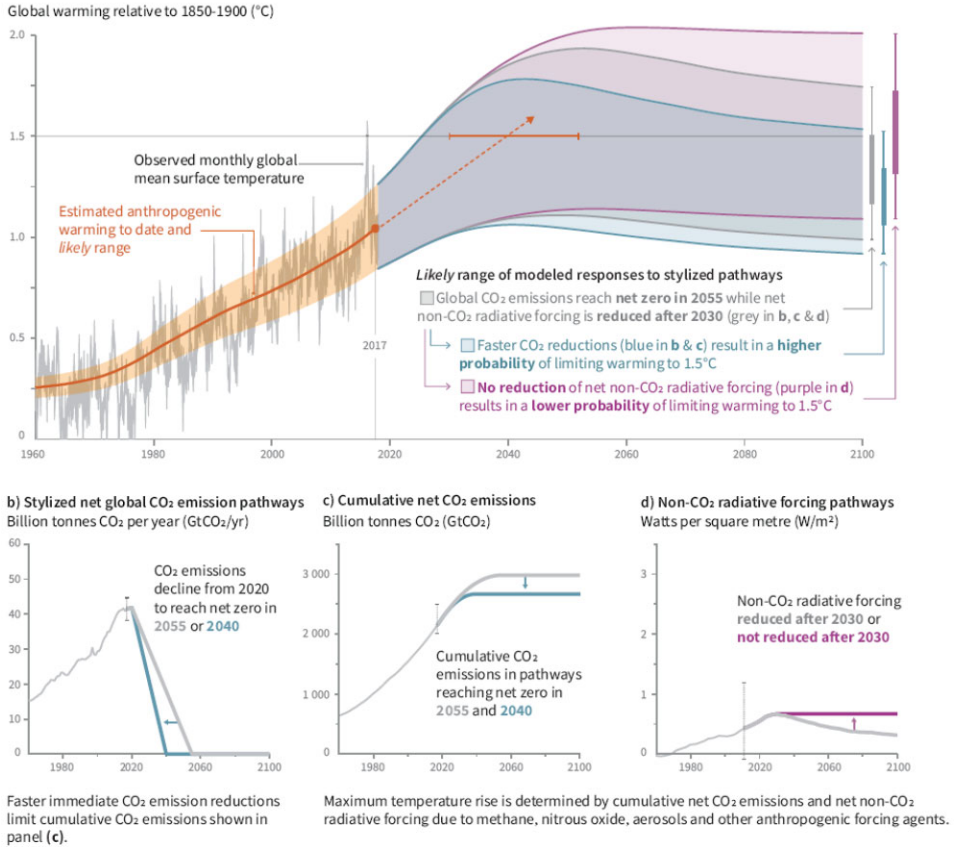
Now we are moving into a new decade, and within the coming years we are likely to reach a tipping point (Lenton et al., 2008). This means moving to another system, which will involve drastic change and temporary chaos.

Actually, we cannot prohibit reaching a tipping point, that is just nature's flow. We can decide what kind of tipping point it will be; we can decide what kind of change we want to create. We cannot stop the flow of change, the way of nature, but we can direct it. This is important to understand.

Either it will be a tipping point of the Earth's climate system, implementing positive GHG feedback loops leading to an almost uncontrollable global temperature rise with all

its side effects, like massive droughts, more extreme weather, sea level rise, mass migration and endangered food security and mass-extinction (IPCC, 2018). Or it will be a social tipping point (Milkoreit et al., 2018), where we move beyond our old political and economic systems and start to communally work together to overcome the climate crisis and carry on a transition of the energy sector, the social system and our understanding of life itself.

In order to avoid a climate catastrophe, major emitting counties as the USA, China, India, Japan and EU countries have to drastically reduce their GHG emissions, as do all other countries as well, and contribute to the global transition (Figure 3). Specifically, that means the world has to reduce its GHG emissions to net zero within the next 20 to 30 years (IPCC, 2013, 2018).

To talk in terms of the carbon budget, for Austria there are only about 1,000–1,500 million tons of CO_2 and equivalent remaining (Mayer and Steininger, 2017) which means that only this sum is allowed to be emitted when obeying climate targets. It is quite hard to get an idea of what a carbon-neutral life, of how we have to achieve it by the middle of the century, may feel like.

This GHG reduction pathway graphically shows the remaining CO_2 and equivalent (eq) budget for Austria (Figure 4).

**Figure 4** Emission budget for Austria (see online version for colours)
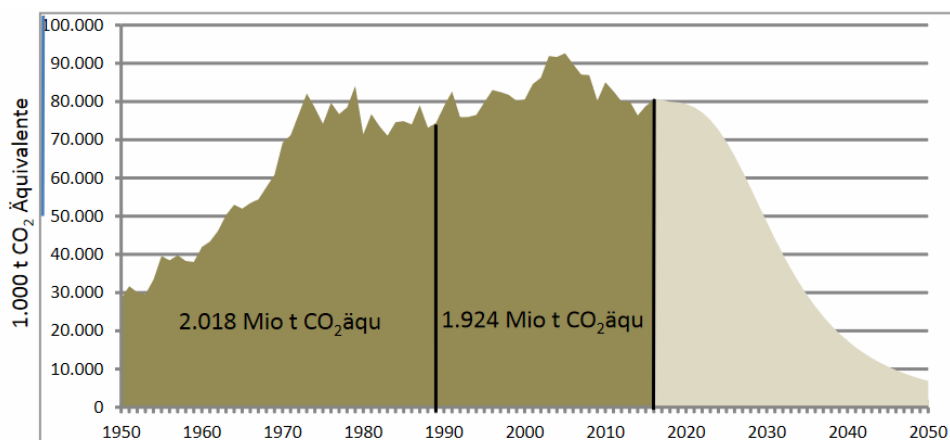
Source: Adapted after Mayer and Steininger (2017)

In order to gain an understanding of what a life on the pathway to carbon neutrality might feel like, the Transition Ashram shall give a living example of this. There are many papers written about the technical transition and transformation of energy supply lines. Therefore, the focus here lies especially on the transformation of mind in order to achieve a sustainable world.

This paper's focus does not lie in providing clean energy by renewable energy sources [as criticised for example by Duraković et al. (2012) and seen in an evolutionary perspective by Ahamer (2008)] but rather in ways of living which do not require huge amounts of energy. Such replacement of energy sources by renewables shall be an example of a global climate solution pathway, because promoting renewables cannot be the only solution (Figure 5). Transition pathways, as you can see in Figure 5, show that

reduction of energy usage and a transition to clean energy in order to provide almost 100% of the energy supply is necessary. This shall be done in the Transition Ashram on a small scale.

Figure 5   Climate targets (see online version for colours)
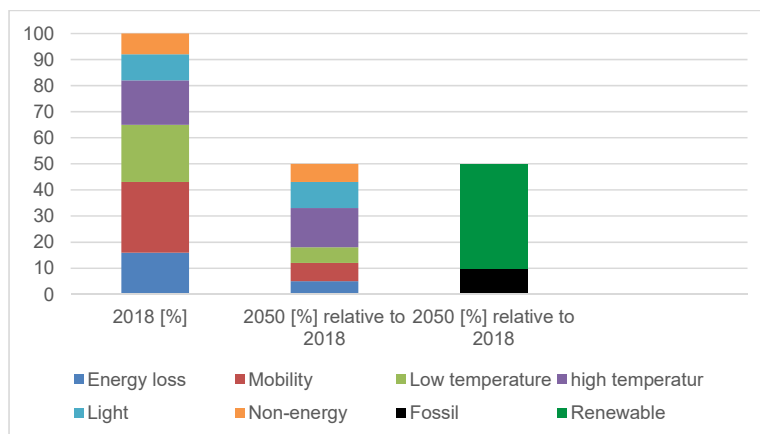
Source: Schleicher and Steininger (2017)

Figure 5 shows that a transition towards the climate goals for 2050 not only includes a transformation of the energy sector towards renewable energy sources, but also a decrease in energy consumption and GHG emission of about 50% compared to 2018.

At a point where economic and political systems might fall, people will look for new orientation to displace an already established alternative, namely for stable ways of living. In such a point, global ecovillages would play and important role as orientation signs.

Ecovillages will be a guideline for society into new, environmentally and socially friendly ways of living, as "ecovillages are highly innovative because they have created small-scale experimental models for finding integrated solutions to burning societal challenges which take into account almost all areas of life" (Kunze, 2015). When the definition of wealth will have effectively changed into new fundamental components, those who own land and do agriculture are the wealthy ones. In this way, the idea of wealth can shift. Nowadays, farmers have a very hard life making a good living even though they are providing the most essential product, food, for the whole of society.

Because humanity is in such a fundamentally changing situation, in a global climate crisis, we should use all the wisdom at our disposal in order to solve this problem and question our own ideologies and belief systems. In order to arrive at a sustainable solution, we should not fight against people we believe are bad. In doing this, we would just become attached to our idea of them being bad and perpetuate this ideology even more.

So rather than focusing on fighting against someone or something, directing our efforts in creating solutions is a more progressive way. At a certain point, the system will fall, at this point, there should be proper solutions already established and new forms of living which people who are seeking stability and clarity can orientate on.

This paper shall be an outline for a possible solution for some of them. The following chapters shall outline a solution for transforming stress, troubles, greed and the

destruction of human health and nature towards clarity, peace, joy and a way of living with flourishing nature.

3 Meditation, a way of knowing nature

> "Life is to experience only, not to attach and not to reject."
>
> – Sayadaw Ashin Ottamasara (2020)

3.1 How to achieve a sustainable world

There have already been established many kinds of possible solutions to climate change: alternative financial systems, circular economy, renewable energy sources. Many people have already attained the knowledge that consumption is not the root of happiness (Ziegler, 2013). Many solutions are already out there but what is missing? The will to change! This is always connected to the current state of mind: the individual mind and the communal mind. In order to change and adopt to a new situation, change into a new system, the mind has to change first. Otherwise, after every kind of external revolution the old structure and the old system will re-establish itself.

There are two important steps in order to change minds.

1   The first is to understand the necessity to do so, which is given by imminent extinction in the form of the anthropogenic climate crisis. This necessity is merely the strongest indication of a needed change. Just the wish for attaining happiness can be reason enough.

2   The second – at least equally important – is to consciously know and then detach and let go of the old mind in order to let go of the old type of mind patterns which got us into this situation.

The emphasis here lies on the second point because it is hardly noticed and strongly underestimated in its necessity. Just a free mind is capable of all kinds of new solutions, new adaptations to a new situation which has never been there before. Only a free mind is capable of using the power of the free flow of nature. Attachments to old forms of mind pattern are keeping us separated in the way that we are associating ourselves with something that we only believe to be real. In reality, this image of ourselves is just a bare illusion (Hood, 2013). These identifications can be something like 'I'm a communist', 'I'm a capitalist' 'I'm Christian' 'I'm atheist ', 'I'm a right-wing person', 'I'm a left-wing person'; associations with one's status, belongings, historic deeds and so on. One should be aware that these states of mind are for convenience only, but have no form of true reality. Furthermore, most of these states of mind are actually not even created by ourselves consciously but rather are the product of what we experience all our lives in the personal environment we are born into: our family, friends, neighbours, schools, workplace and so on. The ego is created by how we associate ourselves with it. In the case of not knowing the process of ego creation, people tend to misunderstand their ego, their self-created associations with their true human nature. That is why it is important to become aware of one's own mind and contemplate it carefully. So, we can know which of the thoughts that are shaping our way of life are actually (sub)consciously intended. By knowing these thoughts consciously and detaching one's self-identification from

them, the self-created limitations of one's experience can expand and be open to new ways of being.

3.2   Lock-Ins

> "In 1989, the economist William Brian Arthur investigated the then ongoing competition between two Video-Cassette-Recording technologies for market shares. For analysis he suggested a model in which consumers are envisaged as having a pre-given (maybe irrational) inclination towards one of the technologies. Inclinations are symmetrically distributed. Customers randomly enter the market and decide for one of the two technologies. Each decision however, increases the weight of the chosen technology. Subsequent customers orientate their decisions on this weight. The more customers decide for one of the two technologies, the more the corresponding weight increases. If the difference between choices exceeds a certain amount, the network effect of the preferred technology starts to outweigh the inclinations towards the other technology. Customers start to decide against their initial inclination and orientate primarily on what the majority of other customers is doing. This increases the weight even further and generates a lock-in-effect from which no way out seems possible anymore. The losing technology might even be much better, but the feedback-driven market decided against it." (Arthur, 1989)

This example of a lock-in effect describes how each of our decisions and actions not only affects our direct surroundings, but also the collective opinion and therefore the collective actions. It shows that in a state where different possibilities are almost equally likely to happen, the outcome is down to the initial actions. So, for the mass of people, it is just following unconsciously the one path which was provided by the first ones who dared to walk it. In order to change mass behaviour, it is therefore not necessary to change the mindset of every single person, but it is however necessary for someone to walk the path first. As in the example given above, the path itself does not really matter (of course this is a simplified example). What matters is the time when somebody starts to walk it.

3.3   Changing minds

Our mind patterns lead our actions. Our current mind pattern has led us into a situation where we are forced to change. So, when change is coming, how can we avoid to not repeat our actions, like after the French revolution. In this example, the external (political) system already changed but the internal system (the mind patterns) did not. So, in order to attain a holistic transformation, it is of utmost necessity to change mind patterns. How to do that? It is therefore necessary to first simply become aware of the current patterns of mind and know how they are. This can be achieved by mindfulness and meditation practice. This practice contains two essential aspects. That of mindfulness, concentration and focus and that of detachment and freeing one's mind. This can be attained by understanding nature's impermanence and the impermanence of one's body. Hence, the knowledge of not owning this body, these thoughts and this life can arise. By becoming aware of this, we may be able to let go of our thoughts which we confuse with our self, our personality. This is the process of becoming aware and letting go of mind patterns. In order to achieve that, new thought can arise and disappear, namely thought which is better fitting the present moment.

As technologies develop, it is even more important to purify our minds in order to enable a healthy usage of these technologies. Even if we can change the way we produce

our energy, a sustainable future cannot be realised while our need to consume is becoming ever greater.

The problem of over-usage of the commons (i.e., using too much of the common goods such as air, water, etc.) can simply be solved to an extent by more restrictions and laws. However, a shift in communal consciousness may achieve a broader solution. The over-usage will reverse its negative impact on the person who did it. This is a common phenomenon in system science called the rebound effect (Jevons, 1865).

3.4 Meditation and sustainability

Systems and change are two things which are omnipresent in all of our lives. Every one of us functions in various ecological, social, economic and habitual systems. Even our bodies are systems in themselves. Change is likewise omnipresent for us. Everything within and outside of us persists only because of change, it is just change in one form or another.

Meditation is a state of awareness of all the changes happening in the moment. Consciousness is not bound by one concept or another, or limited to one focus, but rather is free from all limiting filters of the mind. Much as the human body we identify with is a complex of billions of organisms that are all working together, so are we as living beings on Earth, whether we are aware or unaware of our permanent interconnectedness. There is no way of intellectually understanding this interconnectedness except through experience. In meditation, one can become aware of one's mind patterns and the changing nature of mind and body in every moment. One can become aware of the mind self-identifying with the thoughts we are perceiving, or with the body. As meditation is about freedom, the mind can be freed by knowingly letting go of these self-identifications and classifications of nature which one is perceiving in every moment. By letting go, the mind can expand from its self-created form into free formlessness and dissolve all the barriers of self and non-self we usually create. The mind itself is formless and has no centre. We create this centre through self-identification and limit what we call our self or ego. This is of course necessary for human survival, but it is not the natural form of being. In the moment of understanding about the created nature of ego – a moment of ego dissolution – one can understand that our so-called surroundings are no less part of the Self than this human body. This experience is enough to gain the insight that environmental and social destruction is just an act against oneself due to illusory perception. Meditation is free for everyone and can be practiced every moment without the need for any props (Ahamer, 2020).

3.5 Living the solutions

Attachment to money is part of inequality. The capitalist compulsion for the continuous increasing of profit is widening financial inequality. In 2015, according to a Credit Suisse report, the richest 1% of the population own over 50% of the total financial wealth (Treanor, 2015). In this case, in order to achieve justice, two parameters are essential to change. On the one hand the financial system which is based on literally compulsive economic growth (Exner and Kratzwals, 2012), and on the other hand the liberation of the self-imprisoning nature of the mental attachment to money, wealth, status, and power. Tremendously wealthy people became the victims of their own greed and lock themselves away from true happiness and fulfillment by becoming slaves of their mind's

attachments. However, financial wealth, to a certain extent, is only capable of improving comfort and convenience. Many are trapped in the mind pattern of only 'cost-value ratio' thinking, which, unfortunately for them, has nothing to do with the nature of life.

True happiness, on the other hand, is not based on anything or anyone but is rather a result of one's own inner state. Fortunately, the way out of the deceptive mind patterns is by contemplating mind and detaching freely from these patterns, as is stated above.

4   Transition Ashram

Transition Ashram is an idea for a practical application of the above-mentioned visions in the concrete form of a place which provides the opportunity for collective transformation of the mind towards progressive action for the common good of humanity.

It is in any case not possible to put this idea into a fixed concept; but it can instead develop by itself through self-optimisation during practical implementation. Still, in order to transfer certain ideas which might inspire the reader or enhance the wish to join this vision, the different aspects and ideas of this project are written down in this chapter.

4.1   The aim of this project

> "Transition Ashram is a place for unity; to unify society and unify with nature.
>
> To live free from illusory structures but within the laws and patterns of nature.
>
> To transform suffering into progressive energy by connecting with one's mission and living for a common higher goal. In this way we can overcome the illusion of separated self and be part of the solution to global problems."

Transition Ashram shall provide the opportunity for everybody to change their life for the better. It is named 'Transition Ashram' because its cause is the transition of one's old mind patterns toward freedom of mind and peace. Hence, it is the transition of the interaction between human and nature from a way of destruction towards a healthy coexistence. A transition towards an understanding about the interconnectedness of humanity and nature and a respectful co-creation with nature. Its aim is to provide the opportunity for everybody who is suffering from misery and pain in life to use this suffering as a cause for transformation towards a more deeply fulfilling life. Its perception is beyond good or bad but rather tries to see all kinds of difficulties and problems as a chance for improvement and a loving deed towards our fellow beings. Its foundations are the self-gained understating of nature's law and the interconnected nature of all phenomena; the nature of self and the illusion of ego. By a deep understanding about the ways of nature and its laws one knows that helping others is an act of self-love, and so there are no strict ethical or legal concepts needed, because out of knowing this interrelation people may gain the freedom of deciding what is best for themselves and best for the community with all its consequences.

With an insight into the illusion of ego, the concept of material possession disappears as well. By knowing that one does not own this body, this life, this land and all of the so-called possessions, one can stop holding on to them and let them go more easily, which is a step towards personal freedom. In this way the land, the houses and the community are just for use and they are not taken as illusory possession which causes trouble and harm. Only by understanding the nature of the ego by personal experience

gained through looking within, is it possible to live together in this way. By forcefully implementing the consequences of this insight and forcefully leading people to live in such a way without this insight, individual imprisonment and harm is created (as one can see in history in attempts to impose a life without possessions in communist countries).

Because a proposed Transition Ashram is a collective and supportive place, people will find it easier to establish a healthy routine of mediation practice and progressive deeds. Because of communal support, people will find it easier to overcome hardship and pain. When such place is stable and strong within, its strength can be shared with people seeking transformation by providing a retreat, support and space for them.

Transition Ashram shall be open to everybody and provide an opportunity to experience life in a different way than one is used to. By creating another possible way of life, it is widening the pool of possible ways of life, as it is providing another option and therefore the field of possibilities to choose from is widened.

In order to have the capacity to work for the common good and to perform voluntary action towards a transition into a climate-neutral world, it is necessary to help and support each other and to keep one's personal needs, like working to paying the rent or cooking for oneself, to a minimum. This can be done by collective support and sharing. Once the needs for survival are covered, one can fearlessly create for the common good through one's skills. This is not only a way of performing actions for a transition in order to avoid human extinction but also a path to happiness and spiritual awakening. By working for the common good, one will find it easier to overcome the boundaries of self-created ego. By understanding that loving deeds towards others are actually a form of loving kindness to oneself one will be happy to have the opportunity to help where one can.

Furthermore, the action of helping others is profoundly underlined by the benefits of collective meditation practice. Due to meditation practice people are strong and stable within themselves and are able to help out of a feeling of fullness and gratification, out of the feeling of sharing one's joy towards others in need. The basis of meditative practice and care is very profound, if the stability of one's own mind is not assured the need of helping others as a reflection of the need for help for oneself and the wish of inner completeness can likely lead to a type of behaviour which is known as 'helper syndrome' (originally in German: Helfersyndrom) (Schmidbauer, 1977) or pathological altruism. "Altruistic behavior may be motivated by concern for the other, egoistic concerns for the self, or both" (Oakley, 2013). Due to freeing from the cause of conditioned happiness, one does not seek for behaviour leading to pathological altruism.

The holistic view of the transition from Transition Ashram captures these three dimensions shown in Figure 6.

Figure 6 Transition Ashram targets (see online version for colours)

Simply said, the aim of Transition Ashram is to transform suffering into being a part of the solution to today's problems such as climate change. As well as uniting in our true aspects of being and living a fulfilling life together. The practice of mindfulness and meditation, as well as providing one's own skills to this project are essential aspects of it. In this way, people can get an idea of living a truly purposeful life and adding their skills to it. This will lead to a deeply happy life, which is actually the goal of this project. Without forcing other people but rather helping with bringing solutions on our own and gaining happiness out of it, people can see that this method of climate action is a way that leads to happiness.

To achieve a sustainable world, humanity has to live the solutions, change minds and bring society together again. These are the goals of Transition Ashram in terms of climate change.

4.2   The different aspects of this project

In order to be self-sustainable and self-sufficient, the Transition Ashram is divided into two parts.

The first part is the Ashram within the ecovillage and the Temple itself, located in the countryside not too far away from a nearby town in order to ensure economic stability (Graz or Vienna). The main part of the project is the Ashram and a Temple of universal love and unity is the heart of it. It provides the space for spiritual practice and meditation in order to attain wisdom, peace, happiness and a connection with the source of life. This place will be used for regular meditation retreats, which shall be free of cost and accessible to everyone. To provide food for the community, it is possible to grow food in a permaculture farm to nurture the inhabitants. A big communal building for cooking, eating and being together meets the material and social needs of the inhabitants. In a cooking space, it is possible to prepare the fresh grown food together. Ideas like a vegan restaurant could help with financial income to sustain the community.

An essential part of the transformation process is the clinic within the community. Doctors, therapists and other kinds of healers can practice their skills and help people who are suffering from all kinds of physical or psychological problems to overcome their struggles. Integration into the communal activities and meditation praxis is an essential part of the 'treatment'.

The second part of the Ashram is a place in the city, in the form of a tea house. It is a place for gathering in a constructive atmosphere and regaining clarity and energy. At this place, people living in the city can make their first contact with the Transition Ashram project and get familiar with the place outside the town. Also, regular group meditation sessions shell be held as well as a space provided for people who want to practice meditation anytime. In this way, the Tea Ashram can also contribute to non-consumption and deeper gratification. The Tea Ashram will also contribute to the financial maintenance of the Transition Ashram by selling handmade crafts, tea and art from people in the Transition Ashram.

In the following section, these two aspects of the Transition Ashram Project will be described in more detail.

4.2.1   Transition Ashram

The following items constitute the core of Transition Ashram's identity:

- Ashram, meditation and retreat centre.

- Transformation of suffering into a part of the solution.

- Permaculture, storing CO_2 by farming wisely and producing humus.

- Holistic, integrative clinic.

- Space of surrender for drug addicts.

- Place to live the solutions for climate change and live a truly sustainable life in harmony with nature.

- Island of stability after the effects of global warming will hit Europe.

- Transforming socially discarded persons through meditation.

- Creating affordable tiny houses to solve overpriced housing problems which politics cannot solve.

- Re-establishing Austrian culture and living ancient traditions in order to unify society and overcome social division.

- Meeting place for different political and religious groups to connect to each other.

- Place for conferences.

- Integration of old people into the community.

- Providing elderly people with the opportunity to live within a society where their knowledge is valued and its sharing is appreciated. It can be a place to spend retirement.

- Proper schooling which is affordable to everybody and the start of the curriculum begins its teachings about the basic skills of life like survival and farming; then more intellectual matters, such as arts, studies and sports.

- Creating art and natural products like essential oils, herbal products, natural cosmetics, which will benefit the customers and sell them in order to sustain the community financially.

- Art and self-expression.

- Place for travellers to stay for a while and gain intercultural understanding.

4.2.1.1 Spirituality and nature

4.2.1.1.1 Ashram and retreat centre

We want to share and practice different ways of how to experience unbound states of consciousness and, in this way creating different solutions for problems, taking our part in solving the climate crisis and living a solution.

By gaining understanding about nature and the interconnectedness of all our lives to nature and to each other, we will learn by ourselves how to interact with nature. By gaining this understanding, there will be no further need to verify why not to harm nature

and other living beings. This understanding can only arise due to the direct experience of interconnectedness. This can be achieved by practicing meditation.

There are many different ways of reaching this knowledge and experience, and many ways and techniques have been established. Within Transition Ashram various practitioners and teachers can come together to share their knowledge and teach the common aspects.

There is a huge need for a meditative retreat and re-connection to the inner dimensions in European society. Through mistrust of the church and not taking the opportunity for making a spiritual connection, many fall into the path of using drugs in order to reach higher states of consciousness. Drugs are limited. Meditation is not limited and it is sustainable. Therefore, it is good to create a place to do a retreat for all kind of people who have the wish to do so.

Dissatisfaction is a major driving force in consumerism, robbing the soil and exceeding the planetary limits. With this fake hope of attaining happiness through consumption, many people start to fall into a cycle of enslavement, imprisoned by their desires. Materialistic things are no route to happiness, but rather can be used to express and create the self.

This Ashram shall be an example that Truth is full of happiness and beauty and that it is accessible to everybody. So many people do not know any other form of living rather than the mainstream western way of living. Therefore, many people believe that life is horrible and they do not see any sense in their being. The aim of Transition Ashram is to cut this cycle of misery and give people the chance to connect to their own true nature and the opportunity to be conscious about the destiny they create for themselves in every moment. By finding a meaningful life purpose in alignment with nature and the world surrounding us, one can walk the path of self-realisation with happiness. Everybody's part can be to unfold all their potentials in order to transit to a new world and solve the climate crisis.

All the knowledge and methods practiced at the Ashram are thought to support one's mission and to be empowered and self-aware.

4.2.1.1.2   Permaculture

Permaculture is becoming an increasingly popular way of living across the globe. In short, it is a form of agriculture that, contrary to conventional monoculture farming, tries to integrate many different elements. A basic principle is that permaculture not only involves the production of food but also the creation of healthy relationships between and among humans, animals, insects, plant life, soil, etc. and allows mutually beneficial connections to occur among them. In this way, it is possible to design an area that delivers an abundance of fruit, vegetables, herbs, and other products while biodiversity and ecosystem resilience are enhanced and labour is reduced. This can include the growing of a 'food-forest' to the forming of a simple herbal garden over natural buildings and even how to manage finance and economics.

Figure 7 The ethics of permaculture (see online version for colours)

Source: Roberts (2019)

Our desire to create a community that lives in peace and harmony with its immediate and wider surroundings while all individuals can aim for spiritual fulfilment can most efficiently be nourished by such an ecosystem. To develop a permaculture structure takes some time. Gradually, though, the centre and the connected land should become a self-sustainable organism supplying the community with most of its basic needs through local resources. After several years of building up a solid foundation, the use of outside resources would naturally decrease; the aim is to reduce it to a bare minimum.

> "You can solve all the world's problems in a garden." – Geoff Lawton

As Sachs (2015) cites in his book *The Age of Sustainable Development*:

> "[…] The extent of agriculture's impact on the environment is even bigger than it appears. Think of the planetary boundaries [climate change, ocean acidification, stratospheric ozone depletion, nitrogen phosphorus circle, global fresh water use, change in land use, biodiversity loss, atmospheric aerosol loading and chemical pollution] – almost every one of them is related to agriculture. Almost every of the planetary boundaries is related to agriculture."

Mainstream agriculture has a major impact on global warming nowadays. By planting huge monoculture farms, the soil is destroyed after a period of time. Furthermore, it is not advantageous regarding carbon storage because the soil is no longer able to effectively store carbon. Permaculture or polyculture farming is able to capture carbon and store it naturally in the soil. This is essential for limiting global warming.

Therefore, it is important to show on a small-scale level what healthy and sustainable agriculture can look like and that, together with political legislation, it can be possible to shift agriculture to a more sustainable level.

4.2.1.1.3   Sustainable housing

Transition Ashram shall be a net-zero CO_2 place to showcase how to live in a climate-neutral way and that the future is already possible today. The usage of electricity shall be kept to a minimum by intelligent planning and architecture. The rest of the electricity supply can be created by local renewable energy sources like PV, solar, wind or thermal power.

There are many genius ways of designing living space with little or no use of external energy, for example Earthships (Freney, 2009).

4.2.1.1.4   Holistic clinic

A holistic clinic is an important part of Transition Ashram, to heal patients and provide them with self-empowerment and an awareness about the law of cause and effect, and hence the results of one's deeds toward oneself and others. The clinic should be open for all different types of medicine, therapies and healing arts. There are countless traditions of curing, treatment and healing. Focusing on just one way and rejecting others limits the spectrum of healing options. By accepting these traditions and learning them it is possible to attain a holistic knowledge about the human body and medicine and one can help people in a better way.

In what kind of way can this project actually work?

The clinic should focus on all kind of illnesses but with a focus on internal, chronic and mental/psychic diseases. A health combination between modern and traditional medicine shall be practiced but with the focus on curing the cause of the disease and empowering the persons' self-healing potential. The medical treatments and drugs should act as a 'kickstart' for the patient on the way to healing himself.

The unwillingness to get healed is the cause for not getting healed. This includes the unwillingness to experience life on a deeper level, and further the feeling of meaninglessness in life. Maybe this is caused by a nihilistic world view rooted in overthinking and basically the disconnection to nature and one's vision in life. That is why there is a vision to be part of a common higher goal, to implement the life in a healthy manner.

The main part of the therapy is getting involved in the community and unfolding one's purpose in life. The experience of a good life and a higher vision of life can be the cause of healing. Practically, this part of the therapy can involve (according to the disease of course) taking part in activities like cooking, farming, construction work, education, art, collection of herbs, preparation of herbs, etc. In this way, it is possible to practice ergotherapy, for instance in a way that has real-life applications. The therapeutic work the patients do actually helps to sustain the clinic and the community and therefore the patients themselves as well. This is already a way of healing through self-empowerment for them and it can provide the experience that one actually has the qualities to change something in one's life.

In this way, the patients will also honestly know that they are achieving something and are even helping the whole community. It may provide the experience that they can

provide something useful for the community and society, which can be a motivation for them to become healthy again.

Another part of the therapy can be animal therapy, for example with horses. Patients can take care of the animals and will be empowered in this way.

When people get healed, they can go home if they want or stay and be a member of the community. If people cannot get healed, they also can decide what to do: leave or stay and learn how to live with the disease and still be part of the community by sharing knowledge and skills.

Furthermore, the pain and disease can be used to understand the impermanence of the world and one's physical existence. Also, for healthy people it is good to be surrounded by this fact, so that it is easier for one to detach from the ego, from one's self-associations with the body and be able to free one's consciousness from those limitations more easily.

The clinic shall be one of the main aspects of the community and shall also be a way of covering financial needs in order to sustain communal life. Just by doing proper effective healing work this will be possible, in order to allow for many more people to come. There are countless people suffering in hospitals who keep going in circles with the wish to escape the cause of the disease. The cause of disease can only be found within the mind and can be freed by one's own understanding of its illusory, self-created nature through insight.

In Western countries, the usage of drugs in order to expand one's consciousness has become wide spread. Drugs and rave culture have the aim of getting a spiritual connection. Rave culture acts as ceremonies. By practicing meditation, it is possible to establish this connection without using any substance and without toxic side effects. In this way, many (young) people can be helped.

4.2.2   City Ashram

4.2.2.1   Ideas and different aspects

Targets for a city ashram are:

- first contact point for people in the city, information

- gathering place for constructive meetings

- place for a tea ceremony for the public

- redirecting financial income into the Ashram community

- selling art and handcrafts created by people within the community

- place for treatment and healing work

- Ashram with free group meditation and yoga

- place to seek refuge, peace, silence and insight

- a place to admire the imperfections in the world

- get inspired by art and the taste of tea.

It can be a place in town to sit together in peace and enjoy a tea, buy art or get treatment. In this way, visitors will support Transition Ashram financially and also take part in the

beneficial things happening there. Because of that people will be more willing to go to the tea house as it is indirectly a good deed.

There would be a space open for meditation, so when people feel stressed or are suffering, they can come and practice, or join some regular group meditations. Besides that, there can also be a little clinic with different kinds of therapists. When people come for a tea, they will learn about this possibility, and the other way round.

This place will have different functions. Some have already been listed above. The most important functions and how they can be structured are described now. The problems and support options that a City Ashram should address and offer are: never-ending stress, a place for retreat and finding answers, building a spiritual connection, coming together in a cozy proactive atmosphere, regular group meditations, regular yoga sessions for everyone. Special retreats are planned for the homeless to find strength in themselves and possibly change their way of life and stand for a common cause, as well as a space for healing and treatments of various kinds, practicing tea ceremonies and meeting in this meditative atmosphere.

In most places in the city, a person can be forced to consume and thus often encounter a stressful environment. City Ashram shall provide a place where people can meet and at the same time recharge their physical and mental strength as well as step back from all the external hustle and bustle. A suitable means for this is the traditional tea ceremony, where you sit together and enjoy tea in meditation. The meditative aspect is essential to fully and consciously carry out every single movement with all the concentrated attention that can be spent on it. In this way, you can arrive focused again at the present moment. Every single leaf of the tea tells an endless story. It carries the entire route from the faraway plantation, the entire growth process, the sun, the Earth and all the movements of the farmers. This infinite depth is in so many things that seem mundane to us, and the tea ceremony is supposed to bring us back to these aspects and make them conscious for us.

The resulting atmosphere and insight have an impact on the resulting discussions and any fruitful plans. So, the tea ceremony not only ends at the physical moment of its termination, but is the seed for many more. After a time, a correspondingly strong and marked energy will settle in the tea house, so that the ceremonies and meetings are even more profound and fruitful. In this way, the tea house can indirectly help to solve various problems by providing the right atmosphere for good solutions to flourish.

Furthermore, one will be strengthened and will withdraw from the tea house having gained new courage and understanding of the world. The transformation does not work through tea, but through the handling of tea. Freedom of mind and concentration at the moment are important, because in this way the flow of nature can fully support us.

In order to take advantage of the character of the Tea Ashram, you can also reserve it for constructive meetings or use it as a place to bring different social groups together in an unbiased way, to allow their exchange of ideas and, in the best case, to establish common connections. In this sense, the tea house creates a place in the centre, which should also serve to unite polarities in their common origin, the centre, again. Extremes arise from attachments, so we can help to overcome these extreme points of view through a place shaped by freedom. Without the active conviction of any opinion of which we are subjectively convinced that is absolutely true, we may reach a more equilibrated state; and through the confrontation and associated reflection, a non-judgmental view can be attained.

To provide further inspiration, the room can have a wall full of homemade art in addition to a tea counter and the tea tables. It can, for example, display pictures,

jewellery, self-made clothing or natural items. Most of these could have been made by residents of Transition Ashram (see part A). This is how art works and inspires oneself to put beautiful things in the world. The works of art can be viewed and are thus used to preserve the tea house, the community and, above all, the open Ashram.

In addition, regular group meditations and joint yoga sessions at fixed times should be free or for a voluntary donation. This is the core principle of the Ashram. Furthermore, there should always be a room in which one can spend the whole day and meditate independently. Ideally, there is always one person available to help and provide guidance, if needed. This is also intended to restore a lack of spiritual connection that leads many to abuse drugs.

The Tea Ashram is also supposed to be the first point of reference for people in the city with Transition Ashram planned outside of town (Graz). In this way, people know that this place exists, that there are retreats of several days to visit. At the same time, it is conveyed that this is a non-profit project and therefore one can support this project with a purchase or a tea.

5   Conclusions

Giving up some of our so-called living standards in order to ensure a secure climate pathway (i.e., towards a secure future climate) can be seen not just as losing something, but rather be a major opportunity for personal freedom and spiritual evolution. It provides the chance to collectively overcome the self-imprisonment of the mind's attachments and desires. Transition pathways show that the transformation of energy production alone is not capable of meeting the GHG reduction necessary to ensure a safe future for humankind. Therefor a shift in consumerism has to occur.

What has been done to escape the possibility of human extinction is not enough and the solutions focus mainly on technology but little on the changing of human behaviour towards each other and nature. Changing our state of mind is the route to changing human behaviour. One way in which mind transformation can be achieved is the practice of mindfulness and insight meditation. In this way, suffering can be transformed by meditation practice into action for personal health and therefore communal well-being. In order to focus this aspect of mind transformation, a stable place can be established which provides free meditation retreats and gives the opportunity to practice a life based on solutions to global problems like climate change. The idea of 'Transition Ashram' was presented in this paper. It can be a small-scale laboratory for social change. In times of new orientation, social or climatic tipping-point projects like this can be a pillar to orientate on when society is looking for a new way to live, a life within planetary limits. Its aim is to enhance real life, down-to-Earth solutions to social problems and climate change in a way in which people can experience them personally, rather than focusing on blaming the people in power. A holistic clinic combined with regular meditation practice can function as a transformative wheel which supports the healing process of various people and aims to integrate them in communal work and activities where they are encouraged to unfold their personal skills. Solutions can be created by turning individual problems into good deeds for a community. In this way, one can feel one's meaningful impact on society. Furthermore, the clinic is meant to be a main financial pillar to cover some of Transition Ashram's communal needs.

Giving up what we think we are, what we think we possess and the lifestyle we are striving for can be a sacrifice which leads to peace and a liberation from self-associating with one's own possessions. Letting go of these associations, together with the contemplation of nature within the body and mind, can lead to insight and unconditional happiness. In this way, social problems and climate change can be seen as a necessary call for human transformation towards a healthier and more fulfilling way of being which is not contingent upon intellectual or material possession but rather upon the conscious knowing of the impermanent present moment in nature. In order to widen the choice of possible ways of living for society, it is useful to create another option of lifestyle. Within this field between polarities, human beings can choose their way of action. This enlarges the field of choice for one's behaviour.

All in all, Transition Ashram shall provide a real-life example of transforming problems into healthy actions and solutions for contemporary problems with communal support, the unfolding of one's potential and meditation practice. It can be a pioneer in narrowing chasms within society and culture and helps to unify people beyond their political belief and social background. It may provisde self-empowerment for people in order for them to know that one can do something about individual and global conflicts in a progressive way and provide the knowledge that the human race is not just the source of many problems but also creates solutions to them, depending on the individual and collective human state of mind.

Acknowledgements

References

350.org (2019) *Over 4 Million People Strike for Climate Action* [online] https://350.org/press-release/over-4-million-people-strike-for-climate-action/ (accessed July 2020).

Ahamer A. (2020) *The Rising Monkey* [online] http://www.therisingmonkey.com (accessed July 2020).

Ahamer, G. (2008) 'Im Spiegelkabinett unterschiedlicher Entwicklungsvorstellungen', *Journal für Entwicklungspolitik*, Vol. 24, No. 3, pp.56–76, DOI: 10.20446/JEP-2414-3197-24-3-56.

Arthur, W.B. (1989) 'Competing technologies, increasing returns, and lock-in by historical events', *Economic Journal*, Vol. 99, No. 394, pp.116–131.

Bakan, S. and Raschke, E. (2002) 'Der natürliche Treibhauseffekt', *Promet*, Vol. 28, Nos. 3/4, pp.85–94.

Bodhi, B. (2000) *A Comprehensive Manual of Abhidhamma*, Onalaska, Buddhist Publication Society, Kandy, Sri Lanka.

CFJ (2018) 'Spotlight on financial; understanding global inequalities to overcome financial injustice', *Citizens for Financial Justice* [online] https://www.counter-balance.org/wp-content/uploads/2019/09/CFJ-Spotlight-financial-justice-report-Sep2019.pdf (accessed July 2020)..

Club of Rome (1972) *The Limits of Growth*, Potomac Associates – Universe Books, New York.

Dambrun, M., Berniard, A., Didelot, T. et al. (2019) *Unified Consciousness and the Effect of Body Scan Meditation. Mindfulness*, Vol. 10, pp.1530–1544, https://doi.org/10.1007/s12671-019-01104-y.

Duraković, E., Feigl, B., Fischer, B., Fleck, C., Galler, L-M., Heinrich, J., Kulmer, K., Kurzweil, B., Scholze, M., Sperl, R., Unterköfler, R., Matzenberger, J., Remele, K. and Ahamer, G. (2012) 'Dialogic global studies for multicultural technology assessment', *Multicultural Education and Technologies Journal*, Vol. 6, No. 4, pp.261–286, DOI: 10.1108/17504971211279527.

Edenhofer, O. et al. (2014) *Climate Change: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge.

Everet III, H. (1956) *The Theory of the Universal Wave Function*, Princeton University Press, Princeton.

Exner A. and Kratzwals, B. (2012) *Solidarische Ökonomie & Commons*, Mandelbaum Kritik & Utopie, Vienna.

Freney M. (2009) 'Earthships: sustainable housing alternative', *International Journal of Sustainable Design*, Vol. 1, No. 2, pp.223–240, DOI: 10.1504/IJSDES.2009.028885.

Giustarini G. (2012) 'The role of fear (Bhaya) in the Nikāyas, and in the Abhidhamma', *Journal of Indian Philosophy*, Vol. 40, No. 5, pp.511–531 [online] https://www.jstor.org/stable/43496606 (accessed July 2020).

Grotzinger, J. and Jordan, T. (2017) *Allgemeine Geologie*, Springer, Berlin.

Hood, B. (2013) *The Self Illusion*, Oxford University Press, Oxford.

IPCC (2001) *Third Assessment Report on Climate Change*, WMO, Geneva [online] https://www.ipcc.ch/report/ar3/wg1/ (accessed July 2020).

IPCC (2013) 'The physical science basis', in Stocker, T.F., Qin, D., Plattner, G-K., Tignor, M.M.B., Allen, S.K., Boschung, J., Nauels, A., Xia, Y., Bex, V., Midgley, P.M. (Eds.): *Contribution of Working Group 1 to the 5th Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, UK, England [online] https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf (accessed July 2020).

IPCC (2018) 'Summary for policymakers', in Masson-Delmotte, V., Zhai, P., Pörtner, H-O., Roberts, D., Skea, J., Shukla, P.R., Pirani, A., Moufouma-Okia, W., Péan, C., Pidcock, R., Connors, S., Matthews, J.B.R., Chen, Y., Zhou, X., Gomis, M.I., Lonnoy, E., Maycock, T., Tignor, M. and Waterfield, T. (Eds.): *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* World Meteorological Organization, Geneva, Switzerland, 32pp.

IPCC (2019) 'Summary for policymakers', in Pörtner, H-O., Roberts, D.C., Masson-Delmotte, V., Zhai, P., Tignor, M., Poloczanska, E., Mintenbeck, K., Alegría, A., Nicolai, M., Okem, A., Petzold, J., Rama, B. and Weyer, N.M. (Eds.): *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*, in press.

Jevons W.S. (1865) *The Coal Question*, Macmillan, London.

Kirchengast, G. (2020) *Interview for Tipping Point Radio on 4.4.2020* [online] https://open.spotify.com/episode/2tkfrwJHPFILIRjhxj3hGH?si=Ly2biStSSQCHInKaVa1ntA (accessed July 2020).

Kunze, I. (2015) 'Ecovillages: isolated islands or multipliers of social innovations?' [online] http://www.transitsocialinnovation.eu/blog/ecovillages-isolated-islands-or-multipliers-of-social-innovations (accessed July 2020).

Lenton, T.M. et al. (2008) 'Tipping elements in the Earth's climate system', *Proc. Natl. Acad. Sci.*, Vol. 105, pp.1786–1793, https://doi.org/10.1073/pnas.0705414105.

Mayer, L. and Steininger, K. (2017) *Das Treibhaus-Budget für Österreich*, Wissenschaftlicher Bericht Nr. 72-2017, Wegener Center für Klima & globalen Wandel, Karl-Franzens Universität Graz, Graz, Austria [online] https://www.global2000.at/sites/global/files/CO2-Budget_Studie.pdf (accessed July 2020).

McSweeney, R. (2020) 'Explainer: nine 'tipping points' that could be triggered by climate change' [online] http://www.carbonbrief.org/explainer-nine-tipping-points-that-could-be-triggered-by-climate-change (accessed July 2020).

Milkoreit, M. et al. (2018) 'Defining tipping points for social-ecological systems scholarship – an interdisciplinary literature review', *Environmental Research Letters*, Vol. 13, No. 3, https://iopscience.iop.org/article/10.1088/1748-9326/aaaa75/meta.

NASA (2019) '2018 fourth warmest year in continued warming trend, according to NASA', NOAA, News, 6 February 2019 [online] https://climate.nasa.gov/news/2841/2018-fourth-warmest-year-in-mccontinued-warming-trend-according-to-nasa-noaa/ (accessed July 2020).

Oakley, B. (2013) 'Concepts and implications of altruism bias and pathological altruism', *PNAS*, Vol. 110, Supplement 2, pp.10408–10415, https://doi.org/10.1073/pnas.1302547110.

Otto, I.M. et al. (2020) 'Social tipping dynamics for stabilizing Earth's climate by 2050', *Proceedings of the National Academy of Science (PNAS)*, 4 February, Vol. 117, No. 5, pp.2354–2365, DOI: 10.1073/pnas.1900577117.

Roberts, D. (2019) *Interconnected* [online] https://www.interconnected.me/thoughts-on-the-permaculture-flower/ (accessed July 2020).

Sachs, J. (2015) *The Age of Sustainable Development*, Columbia University Press, New York.

Sayadaw Ashin Ottamasara (2020) *Thabarwa Nature Centre* [online] http://www.thabarwa.org (accessed July 2020).

Schleicher, S. and Steininger, K. (2017) *Wirtschaft stärken und Klimaziele erreichen: Wege zu einem nahezu treibhausgas-emissionsfreien Österreich*, Wissenschaftlicher Bericht Nr. 73-2017, Wegener Center für Klima und Globalen Wandel, Karl-Franzens-Universität Graz [online] https://wegcwww.uni-graz.at/publ/wegcreports/2017/WCV-WissBer-Nr73-SSchleicherKSteininger-Nov2017.pdf (accessed July 2020).

Schmidbauer, W. (1977) *Die hilflosen Helfer, Über die seelische Problematik der helfenden Berufe*, Rowohlt, Reinbek bei Hamburg.

Schuur, E., McGuire, A., Schädel, C. et al. (2015) 'Climate change and the permafrost carbon feedback', *Nature*, Vol. 520, pp.171–179, https://doi.org/10.1038/nature14338.

Spratt, D. and Dunlop, I. (2018) 'What lies beneath, the understatement of existential climate risk', Melbourne [online] https://climateextremes.org.au/wp-content/uploads/2018/08/What-Lies-Beneath-V3-LR-Blank5b15d.pdf (accessed July 2020).

Thomas, E.L. and Nobre, C. (2019) 'Amazon tipping point: last chance for action', *Science Advances*, Vol. 5, No. 12, p.eaba2949, DOI: 10.1126/sciadv.aba2949.

Treanor, J. (2015) 'Half of world's wealth now in hands of 1% of population – report', *The Guardian* [online] https://www.theguardian.com/money/2015/oct/13/half-world-wealth-in-hands-population-inequality-report (accessed July 2020).

Zeidan, F. et al. (2013) 'Neural correlates of mindfulness meditation-related anxiety relief', *Social, Cognitive and Affective Neuroscience*, Vol. 9, No. 6, pp.751–759, DOI: 10.1093/scan/nst041.

Ziegler, E. (2013) *Gesundheit, Evolution und Nachhaltigkeit*, Zurück in die Vergangenheit und egoistisch die Zukunft retten, Graz.