# Gaia Terra

## Permaculture in an Ecovillage Setting

Abstract:

In a profit-dominant narrative/world and a commodifying social-ecological system, the interactions between humans, environment and nature show us complex inequity and effects on the interwovenness of human health and the health of the environment. In this study, I aim to depict a different approach to human well-being. For that I lived in a so-called ecovillage named *Gaia Terra* and studied their way of life by conducting interviews and participating in daily practices. Permaculture, which is applied there, is more than merely an agrarian practice and rather a holistic approach to health. Safe spaces are created or re-used where new embodied selves perform within. I found that ecovillages align with certain ethics: "Caring for the People", "Caring for the Planet" as well as "Fair Share" are specific conceptions of well-being. The embodied dwellers in *GT* work towards a harmonic, regenerative and healthy interrelation between human and non-human.

You do not have to be good.

You do not have to walk on your knees

for a hundred miles through the desert repenting.

You only have to let the soft animal of your body

love what it loves.

Tell me about despair, yours, and I will tell you mine.

Meanwhile the world goes on.

Meanwhile the sun and the clear pebbles of the rain

are moving across the landscapes,

over the prairies and the deep trees,

the mountains and the rivers.

Meanwhile the wild geese, high in the clean blue air,

are heading home again.

Whoever you are, no matter how lonely,

the world offers itself to your imagination,

calls to you like the wild geese, harsh and exciting -

over and over announcing your place

in the family of things.

Mary Oliver, Wild Geese, 1986

# CONTENT

## ABBREVIATIONS:

GEN: Global Ecovillage Network

GT: Gaia Terra

CMA: Critical medical Anthropology

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## 1. INTRODUCTION

*Pharmacy becomes a Farmacy[1]*

The study of Human Ecology is transdisciplinary per se and to me it presents an academic field to integrate all spheres of life on earth. The intertwining of social, economical, and ecological happenings situates the discipline on a trajectory to define and engage with a notion of a social-biosphere-friendly mode of living, which is beyond commodifying technocratic comprehensions and illusions.

The world, and all that it inhabits, is continuously changing. Abandoned spaces are filled with life and created as meaningful places for *ReGENeration* (meeting 26.3). Individuals come together in grassroot movements, expressing sovereignty over their moral attitudes towards a well-being in life, on their land as well as over the mode of perceiving the world and how to operate on it. One such grassroot movement is an ecovillage, which can be described as a community that strives to be socially, economically and ecologically more just.

In a *glocalized* world where profit and growth in fast pace is the maxim, we find ourselves in an atmosphere of departure: Away from climate denial, towards an understanding for well-being, simplicity of life and the importance of healthy relations - within community, the environment, nature and the mind and body. There is a shift in society, towards post-fossil mindsets, with changing power structures and creative grassroot movements. These movements aim to counter profit-led industrial agricultural systems, that harm the health of humans and the environment. Moreover, they organize to act independently – by generating regenerative projects, which are based in socioecological transformative ideas such as the ecovillage *Gaia Terra* in Friuli Giulia in Italy, which is part of a global ecovillage network (GEN).

"We do it, because we want to do it – not because of money" (Debora in *Gaia Terra*).

At the heart of this thesis stands the concept 'permaculture', which is broadly a 'sustainable' agricultural concept, and how a diverse, more holistic approach to health, lived by those engaging with and practicing it, may be identified. The term 'health' is a non-confined concept and its understanding cannot be defined definitive. Health and healing are embedded in a place and time context and comprise different factors that affect it. With regard to permaculture, the concept Health can be understood as interrelated to the health of the environment and to the way of how the human body is conceived. Therefore, this study focuses on a relational

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[1] term(s) called creatively by holistic health medical doctor Romy Paredes in an interview

perspective on interactions between humans, their social environment and nature, as well as on how we conceive ourselves and our surroundings and how we make sense of it.

The conception of human exceptionalism and the commodification of nature are destructive and harmful to the planet Earth. It should be viewed as highly problematic, that industrial agrobusinesses are using pesticides due to a profit led hegemonic thinking. Industrial machines are inherent in such a centralizing predominant agricultural industry. This hegemonic power relation is also inherent in medicalization and academic medicine. Overall, the criticism is addressed towards the biomedical gaze as well as towards dichotomies for example between mind, body or between the health of humans, the social environment, and the health of the biophysical environment (e.g., soil, water, air).

## 2. PATHS AWAY FROM DRUGS FOR SOIL AND BODY

"…there is no us and them, no definitive boundaries between human and non-human, and no space for science outside of the world it engages with" (Rossiter 2007 cit. in Hastrup 2014: 2).

William Allen Miller (1857 cit. in Rhodes 2012) describes in his *Elements of Chemistry* the interrelation between plants growth, the soil, and atmospheric gases:

Water and chemical compounds are provided by the atmosphere, while soil provides nutrients for the growth of plants. However, if the soil is exhausted due to excessive agriculture, then 'sterility will be the inevitable result (ibid.)

Thus, in the 19th century chemical fertilisers are used widespread in the conventional agriculture to maximise yield outcome. Human agrarian activities, which cause soil degradation such as "land-clearing, irrigation, the spraying of chemical fertilisers and pesticides, overgrazing and the mechanical effect of heavy farming equipment passing over the soil, all take their toll" (Rhodes 2012: 364). There are opportunities for anthropologists to study agriculture's effects on environmental and human health, spanning from micro (microbiome) to macro (political economy). Academical contributions on the topic of agriculture's impact on the environment are made by Thurston and Fisher (2007), Boserup (1965), O'Donnell et al. (2001). Other authors thematize the agriculture's impact on human health, like Larsen (1995) or Victora et al. (2008), who writes about undernutrition, as well as Rabinowitz and Conti (2013), who study the connection between agriculture and zoonoses, infectious and chronic disease. Diamond (1987) goes so far to state that agriculture is the "worst mistake in human history".

Taking an insight into regenerative livelihoods and permaculture mindsets led me to find a diverse range of individuals and people who have the ambition to create and maintain a constant state of well-being and harmony throughout daily life.

"Health comes through better relations", states Debora (20.2.2022), the initiator of *Gaia Terra* project in the Italian geographical area of Friuli-Giulia Venezia.

To embed this concept within the actuality of recent times, it is notable how the COVID-19 pandemic not only showed us the fragility of healthcare systems, but importantly how the term health and healing is understood mainly as a clinical, biomedical, reductionist view on well-being and the body. Through this thesis and the empirically gained insights that are described, I attempt to let an understanding of the term 'health' develop.

I started looking for regenerative relations to land and agrarian practice in November 2021 and I noticed the diverse spectrum of so-called ecovillages, which are registered at a network called 'Global Ecovillage Network (GEN)', and the Italian part of it, namely 'R.I.V.E (rete italiana ecovillaggi)'. Moreover, I came in touch with historically family-led farms such as Sepp Holzer's alpine permaculture garden and the Carinthian *Wurzerhof*, who is member at *PlatO* – which is a platform from and for anthroposophical therapeutical organisations in Austria. Additionally, the anthroposophical theoretical contributions of Rudolf Steiner (1955) are to mention, which explore biodynamic agricultural processes.

By informing myself about the different projects which so far exist in this global artistic jungle of ecovillages, I realized that this communitarian mode of living is not at all marginalized anymore. On the contrary, there is various unique forms of so-called ecovillages within the whole network. Like a single snowflake drizzling onto the snowscape, I realized permaculture projects as a heterogenic landscape, as it can be described as *Ideoscapes* (Appadurai[2] 1996: 33), not as something encapsulated or fixed located and neither as a lonely island or a single nutshell out in the ocean. but rather as fluid, dynamic, process- and solution oriented. Indeed, "the whole is greater than the sum of its parts" (Aristotle).

Why do we hesitate to move away from *Destructoculture (c.f. GAIA Academy)?*

By investigating permaculture projects within an ecovillage setting, specifically living in *Gaia Terra*, as well as extending the research with three further interviews, it is evident that the term

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[2] Arjun Appadurai defines five "dimensions of global cultural flows" symbolizing landscapes of historically imagined worlds/communities (see Benedict Andersons 1998)

'health' is present during daily tasks and differently conceived. To imagine a quality of life, in the sense of a well-being for all beings on Earth, the slogan of *GT* is expressed in "*Leggeri sul pianeta*", which means "go easy, soft on the planet", which is illustrated by a photo given below (Figure 1).



(Fig. 1.: *Gaia Terra* slogan (photo by author).

Being curious about ideas of a more harmonious life, leaning towards biocentric rather than anthropocentric perspectives of life, I found a variety of socio-ecological projects involving permaculture, mostly embedded in the academical setting, where a range of permaculture design courses are offered. During a permaculture design course, led by Valerie Seitz and the Permaculture Austrian Academy, I gained insight into collaborative projects such as the housing project *Pomali* in Austria, *Sieben Linden,* the *Tempelhof* ecovillage and the *ZEGG* community in Germany, the *Roskilde* co-housing in Denmark, *The Farm Ecovillage* (USA), the ecovillage *Torri Superiori* and *Damanhur* in Italy, as well as the *Crystal waters* permaculture village in Australia and *Findhorn* in Scotland. In the region of the south of Austria a communal project namely *Camphill AT*, that originated from North America, focuses on social therapeutic aspects exemplified by *Hertha* in Denmark. In another part in Austria, in the *Kleinwalsertal* in Vorarlberg, Andreas Haller has a permaculture project in the mountains and also includes healing herbs in his practices.

A member of the *AYA ecovillage* in the Netherlands argues that „in response to the impending climate crisis, ecovillages offer resilient and alternative way of life that is self-sufficient and meaningful" (cit. on social media of *GEN*). Does this variety and diversity of long-term projects

such as *GT* mean that **T**here **A**re **M**any **A**lternatives - *T.A.M. A.*[3] or does it deserve a closer engagement to rely on its transition potential? If conceived as an "alternative" to systematically destructiveness, what does it mean for the relation between humans, their environment, and its health and with what implications for a diverse, profound understanding of health and a holistic conception of a healthy life?

On my journey exploring ecovillages and permaculture, I took part in a traditional Chinese medicine (*TCM)* lesson entitled "TCM herbs in the permaculture garden" held by medical doctor Eva Ronco. Furthermore, through the 'GEN' network I heard about the "ReGEN-Nation's program – *a whole system design for ReGENeration"* (URLregen) course, which is hosted by the GEN in Oceania and Asia (GENOA). On 26.3, I took part on the information session on 'ReGENeration' and got in contact with Romy Paredes.

Hereby, the educational and academic character of Permaculture is to notice. *PIA*, the Permaculture Academy in the alpine region of Austria for example, works for and together with the charity "Austrian Institute for applied Eco pedagogy E.R.D.E.". Furthermore, I was inspired by an online course by the *Gaia Academy*. The name Gaia originally derives from Greek and means 'earth goddess'. This pedagogical scope of permaculture is also presented by transnational joint events such as the *European Permaculture Convergence EUPC conference* (EUPC22). Furthermore, the *Earthaven Ecovillage's School of Integrated Living (SOIL)* is to mention. Throughout the engagement with the topic and through field study in *GT* I realize that Pedagogy, Peace Studies as well as artistic installations can be related to permaculture. The art event *Vienna Biennale for Change 2021* raises the terms *PlanetLove*, *EatLove* and *ClimateCare* which guide the event and are illustrated by art installations, which incorporate food and gardening. This shows that the topic is also embedded within the art sector, exemplified by the art project "Common Growth". Ana Chiriac and Katharina Sauermann (2021: 105) propose to design a piece of the urban area as an agro-ecological model, which "combines urban social housing settlements and permaculture zones". In this project the artists envision a city with a new set of values and "promote a new intergenerational lifestyle in synergy with the natural world, by putting food production and the value of fertile soil in the foreground of attention." (ibid.). In "The Flavour of Compassion" the artists Urska Golob and Fransisca Tan (2021: 106) focus on food and discuss how social interaction might look "in a culture where compassion is acknowledged as the base of social sustainability". The art installation imagines a society where

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[3] this acronoym arose in World Social Forum from 2001 contrary to *TINA – There Is No Alternative*

a feeling of compassion is perceived through food and/or design – and if, "What taste, smell, colour, shape or texture does it have?" (ibid.).

## 2.1. CASE SETTING

"Ecovillages are Laboratories of the Society" (Valerie Seitz in ecovillage course, February)



(Figure 2.: Logo, source: Home *GT*)

The ecovillage *Gaia Terra,* represented visually by its symbol (Fig.2), in Friuli Giulia Venezia presents the ethnographical case study. The project, derived from an individual's persons vision and mission is part of the *R.I.V.E.* and the *GEN* network. There are historical paths to explore in *GT*'s specific geographical context - on a local scale as well as on a global scale because of armed conflicts in the mountain warfare in the First and Second World War (e.g., Battle of Isonzo). Nowadays, passionate wanderers and hikers can walk along the "Friedenswege", the Paths of Peace called *Amici delle Dolomiti*, an alpine landscape which is a symbolical and historical place.

I will never forget the argument stated by Damiano, who identifies as a dweller in *Gaia Terra* since its beginning. When I got picked up by Debora and him at the train station in Udine on the 11.2.2022, Damiano welcomes me warmly and postulates that "we are in the heart of the earth" and that I am part of this "Earth Centre" now as well.
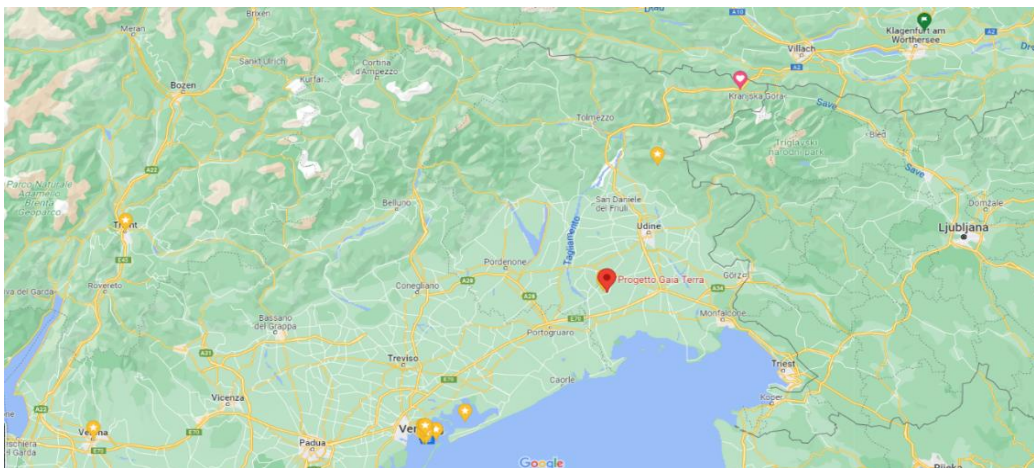


(Figure 3: Geographical Location Gaia Terra, Source: google Maps)

(Figure 4: *Gaia Terra*, Photo by author)

Based on performing social Permaculture, *GT* Earthlings and the number of volunteers vary with the seasons. The emphasis on the social sphere grounds community projects. For the process of community building, it is important to mention Scott Peck's book on pathways to an authentic community (1984). Furthermore, the ecovillage/community catalogue *Eurotopia* as well as books such as *Soziocracy and Circle Structures[4] (*Strauch, Reijmer 2018)*, Creating a Life Together* (Christian 2003) and *the Kommunebuch* (2014) are relevant. Moreover, Manitonqual, as being a member of the ethnic indigenous group Wampanoag, points out the Way of the Circle, the Circle Way[5] and engaged with community and spirituality in a philosophical way. The process-oriented psychotherapist Arnold Mindell is also inspiring regarding community conflicts, and the relation between embodied experiences, physical aspects and the implications on dreams. He states that health has its beginning in thinking.

"A world which is built on respect, compassion, love, responsibility, freedom, diversity, and humility … not only in the relations amongst humans but also between humans and the rest of nature … surely, we can not only dream this but also forge paths towards it?" (cit. in URLvikalp). "How much are we as individuals or organisations living these values and

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[4] translated from original title *Soziokratie Kreisstrukturen als Organisationsprinzip zur Stärkung der Mitverantwortung des Einzelnen*

[5] https://circlewayfilm.com/de/was-ist-der-weg-des-kreises/

principles? Are our organisations and our work based on solidarity, simplicity … are there alternative economic options for our own work?" (ibid.).

Having embedded the thesis topic in this work, I highlight the diversity and variety within social-ecological permaculture projects, which are linked to the ecovillage movement. In the following chapter I inform on the background and purpose of the thesis, as well as what I aim for.

### 3. PURPOSE OF THE RESEARCH

As a white female student from the Global North, I have a critical stance towards the biomedical gaze and the unidimensional treatment with drugs. I am critical towards pathology, which does not empower people dealing with ill-health and neither put them in touch with their own bodily understanding. As an undergraduate anthropologist, I render medical anthropology and theories on the human body as highly interesting. In my undergraduate, I focused on Care practices and moreover on posthuman perspectives on nature and culture.

I explore projects in communities, who live by the permaculture ethics. I attempt to understand the human body and its health holistically, depending on the mutual relation of humans and their environment. What does permaculture offer in a massive agroindustry? What benefits the society as a whole? What can it offer to the ontology of pathology and the cultural construction illness?

Basically, the focus on permaculture derives from an interest in the spectrum of communal life and going "back to the roots" of enjoying simple things in life on a mutual basis. With an interest in environmental anthropology and psychology, as well as in medical anthropology, I engaged in gardening where I perceived the activity as good for my mental state of health. I felt to sow seeds and to plant lettuce and spinach in soil is grounding. Thus, an individual health purpose can also be stated. I embrace diversity, pluriverse thoughts and ethnomedicine within the understanding of health / ill-health. Moreover, I am excited for social and ecological housing. I am aware of my bias of such inspiring projects. On a wider level, this work wants to underline a pluriverse approach to social spheres, a pluriverse mode of thought and handling issues – specifically the mental health care sector and the agriculture branch. In both fields, chemicals such as drugs, pesticides and herbicides take the role of deepening and re-creating relationships in which dependency is inherent and destructive on a material and symbolically level. Meaning that the risks that are systematically generated by chemical-intensive agriculture, namely concentrated livestock and mass production, the marketing of these ultra-

processed foods, and unequal organized global supply chains, cause the central issue. Biodiversity, and at the same time, human well-being is affected, by economic dependencies and detachment.

## 3.1. RESEARCH AIM

On this ethnographical journey, my investigation aims to highlight and analyse permaculture activities, how they align with the permaculture principles and ethics coined by David Holmgren (in 1970), and how the people in place apply permaculture for overall well-being. Importantly, I intend to put the concept Health in centre, circulating around permaculture activities, discuss it critically and get an insight in the member's conceptions of what health and a healthy life means. Hereby, I aim for a cohesive and informative narration about the interviewed voices from different backgrounds and to underline the transdisciplinary understanding of health. I also want to point out an intention to embrace tolerance towards ill-health, as well as small-scale movements such as *Gaia Terra*.

"The garden is the smallest parcel of the world and at the same time the totality of the word"

(M. Foucault 1986).

By engaging with the case setting of *GT*, its re-use or/and creation of land, I ethnographically want to inform about the place and how the community organizes their way of living aligned to permaculture. The challenge is to link it to implications for a diverse understanding of health and formulate it. The project focus lies mainly on activities in *GT* in Italy, but, to underline the focus on health, three interviews were additionally conducted and those insights are added in the discussion chapter (7) on the empirical case.

## 3.2. OVERVIEW OF RESEARCH AND PROJECT

Previously, I provided the reader with the background of the thesis by defining the aim and the purpose of the topic. This chapter informs on the research question before the subsequent chapter (4) presents permaculture. In chapter five, the topic is theoretically embedded. Hereby, theoretical anthropological thoughts on the body, space and culture are outlined, because the body is central to health and embodied space (c.f. Low 2010). The Dissonance theory is also thematized regarding the more individual sphere. Moving further away from the individual level, theoretical conceptions about 'Health', 'planetary Health', 'Conviviality' (Illich 1973) and the 'dwelling perspective' (Ingold 2000) are included. Subsequently, the methodological part informs about methods and approach. Hereby, I consider the importance of research ethics and my own standpoint and reflexivity within the fieldwork and throughout the process. This

is followed by the ethnographical part, depicting *GT* and presenting findings regarding health and a holistic understanding of it. Critically, I do not only write as a thinker and a listener (Tsing, 2015), but I am actively engaged in the field and live amongst the community members.

Having outlined the ambition of the thesis and that it aims for a reflexive, regenerative understanding of health, I formulate a research question and supportive sub- questions. The following research question guides my project and gives my work a focus.

## 3.3 RESEARCH QUESTIONS

The main question, which guides this work is formulated and thus the study is seeking to answer:

How is Permaculture in the specific context, namely in the Italian ecovillage *Gaia Terra,* lived and what does the concept offer for moving towards a regenerative relation between humans and their environment – in the sense of a holistic understanding of health?

This Research Question is supported by more specific sub-questions:

- What implications do the permaculturists views have for our understanding of health and social ecological justice?
- How does the Permaculture approach encourage an understanding of human health that is mutual to the health of the environment?
- Is it a viable model towards a just transition and is it possible to replicate this mode of living in a global context/on a global scale?

In the following, I outline the solution-oriented concept called 'permaculture' (Holmgren & Mollison). I discuss what permaculture is, stands for and relate it to health. This thesis is based on the concept of permaculture and thus, it is explained as given below, also in relation to the health aspect within the concept.

## 4. PATHS TOWARDS SOCIAL ECOLOGICAL HARMONY –
## REFUSAL AND MORE – PERMACULTURE- BEYOND MERELY FARMING

> "Let food be thy medicine and medicine be thy food."
>
> Hippocrates (cit. in Melby & Maurer 2016: 45)

Throughout the history, human settlement and the engagement with the soil and its quality for fertility took place in different locations and times, connected to the way of viewing the natural environment and the world and the specific knowledge about it. At this point, it is necessary to highlight the acknowledgment of indigenous knowledge, but importantly without romanticizing indigenous livelihoods and their engagement with non-humans.

Masanobu Fukuoka (1913–2008) was a Japanese farmer and philosopher. By establishing the "Fukuoka method" what means "do-nothing farming" (cit. in Rhodes 2012: 365) he conceives farming as not merely a means of producing food but as an aesthetic or spiritual approach to life as well. Fukuota claims that his approach "prevents water pollution, loss of biodiversity and soil erosion and but to an avoidance of manufactured inputs and equipment" (cit. in ibid.).

As a global grassroots philosophy and movement *Permaculture* (Holmgren & Mollison 1978, 2002) is an agglomeration of permanent and culture. The term Permaculture can be traced back to Bill Mollison and David Holmgren, two Australian scientists (1978), engaging in ecology, geography, the effect on the Australian landscape and designing landscapes (Whitefield, 2010). Historically it is important to note that Holmgren and Mollison also referred to ancestors, namely aborigines and their indigenous knowledge and way of engaging with the soil and within community. There are multiple conceptions of the Permaculture concept, which can be seen as transdisciplinary where different academic study fields overlap. Macnamara (2012: 1) informs that "there are as many permaculture definitions as there are permaculturists". A quantitative survey of 698 permaculture proponents state that the concept is mainly perceived as firstly, a framework for design and planning, secondly, a philosophy and worldview, thirdly a social movement, fourthly as a set of gardening and farming principles, and fifthly, as a profession (Ferguson, 2012). At the same time, Permaculture addresses manifold issues because of the holistic approach to the social, economic, and ecological sphere of life and the emphasis on offering a set of tools for interrelated socioecological issues. This is probably because of the holistic claim or character of the concept, 'The scope flows through all spheres of organizing Life'. Hereafter a whole set of ethics and principles are proposed and illustrated in the Permaculture Flower:

(Figure 5: *The Permaculture Flower* by Holmgren and Mollison 2002, illustration by author)

Permaculture has at its core a set of three ethical principles, defined by Holmgren and Mollison (1988) as follows. The ethical foundation of permaculture laid out are:

a., "Care of the Earth" and all its ecological functions and systems

b., "Care of people" - human inhabitants of the Earth

c., "Fair Share" - Return of surplus to the Earth and people, to the above two functions (ibid.)

Holmgren's Principles:

i. Observe and Interact

ii. Catch and store Energy

iii. Obtain a Yield

iv. Apply Self-Regulation and accept Feedback

v. Use and value Renewable Resources and Services

vi. No waste

vii. Design from Patterns to Details

viii. Integrate rather than segregate

ix. Use small and slow solutions

x. Use and value Diversity

xi. Use Edges and value the Marginal

xii. Creatively Use and Respond to Change

(Figure 6: Principles, illustration by author c.f. Holmgren 2002)

Permaculture activities give importance to the restoration of landscapes and the health of the soil. Permanent – Culture - and Agriculture, meaning permaculture is the contrast of the anthropocentric mastery of nature and rather puts an emphasize in the interconnectedness of humans, animals, and natural processes, by encompassing a set of ethical principles and design guidelines. Permaculture can be understood as an ideological stance to Life itself or as a philosophical approach to social interrelations and their relation to natural processes and animals (c.f. Eliades, 2012). By this very definition, this system necessitates the harmonious interrelationship of humans, plants, animals, and the Earth. Despite its conceptual character it is grounded in the application to everyday life, thus in practicality. Eliades (2012) examines the nature of permaculture and the nature of what is defined as Philosophy and understands Permaculture as a 'practical philosophy' and according to him permaculture "doesn't reduce the world to a set of abstract and ultimately meaningless mathematical equations, which are nothing more than human mental abstractions. Instead, it describes the connections and relationships between natural systems, the countless living organisms on this planet, and the planet itself" (ibid. 2012).

Centrally, permaculture emphasizes the interconnection among humans and non-humans (Veteto and Lockyer, 2008). Having said this, the permaculture worldview contains a specific view on human and non-humans' relations, which is to differ from dualistic worldviews of both "growth-oriented development and preservation-oriented conservation" (Morel et al. 2012: 2).

The idea is that "with the application of ecologically informed holistic planning and design—humans can meet their needs while increasing ecosystem health" (ibid.: 3). According to Rhodes (2012: 345) who is engaging in regenerative agriculture and the texture of the soil in a geological way, "Permaculture and regenerative agriculture offer potentially the means to provide food and materials on the small scale, and address the wider issues of carbon emissions, and resource shortages." Therefore, permaculture design aims to minimise waste, human labour, and inputs of energy and other resources derived from observing nature. Permaculture encompasses a set of ethical principles and technique guidelines. However, the extent to which these principles are consistent with ecological theories and empirical findings is not explored in this paper because, first, it is beyond the scope of the study and, second, it is not the verification or falsification of the principles that is of interest, but rather to establish a basic understanding of the nature of permaculture should be established. In practice, design decisions are rarely made dogmatically using a principles checklist, but intuitively according to Salleh et al. (2018) and Nelson (2018).

In *Permaculture One* Holmgren (2000) defines Permaculture as a "Consciously designed landscapes which mimic the patterns and relationships found in nature, while yielding an abundance of food, fibre and energy for provision of local needs".

The first principle is to observe and interact with the surrounding, as Nelson (2018) and Salleh et al. (2018) establish. Before intervening in a system, permaculturists observe the given site conditions, such as the climate, soil conditions, existing flora and fauna et cetera and draw conclusions from them, which interventions are possible or necessary to create a functioning system that corresponds to the permaculture vision and energy exchange (Nelson2018). Following observation, interaction take place in a gentle manner and, depending on the experience gained, allow for learning from mistakes and gradual adaptation to conditions (Holmgren2020).

Humans conducting permaculture are also aware that some perceived responses of the system may not be due to their intervention but may be contextual natural events. Even if the response of the natural system to an intervention is in a sense positive, the intervention is not subsequently carried out more frequently or in higher doses to avoid negative consequences, such as the overfertilization of land does. Through precise observation and recourse to traditional knowledge, actors attempt to avoid such overfertilization as Millington (2002) and Holmgren (2011) argue.

Holmgren (2020) highlights that a system of circular solar energy, a process in which the energy of solar radiation is used to produce molecules from carbon dioxide, water, and mineral nutrients that store the sun's energy in the form of chemical energy. Relevant are four key elements, namely water, living, soils, trees, and seeds. While water and nutrient cycles undoubtedly influence energy use in an ecosystem, it should be noted that they are not the same as energy flows (Nelson 2018). Water is a limiting factor in some rural small-scale economies and most living being depends on regular hydration. Hereby, the design of watercourses in permaculture systems considers the whole landscape context. In addition to the water storage capacity of soils, the storage capacity of nutrients and carbon in soils is an indicator of the vitality of an ecosystem and the supply security/sovereignty it provides for people. It is ensured, among other things, by a high humus content as Holmgren (2011, 2020) and Nelson (2018) inform.

In an ecological sense, Permaculture, therefore, wants to build up humus in the system, e.g., by returning crop residues to the cropland. By integrating trees into permaculture systems, humus

can be built up both, as well as store water and nutrients in the long term and contribute to the storage of $CO_2$ as Holmgren (2020) marks out.

The process-oriented and systemic concept is based on ecological principles and strives towards harmless, harmonious, and curative relation to the natural environment. The concept and application of it overbridge academic resources and the sphere of the society (Rhodes 2012.: 365).

*We can teach philosophy by teaching gardening, but we cannot teach gardening by teaching philosophy.* — Bill Mollison (URLPermaculture & Philosophy)

Beyond being applied as a philosophical stance towards life, as a livelihood, and a counter movement to dominant hegemonies, "it can improve our health through stress relief, exercise, mental activity and better nutrition" (URLdeepgreenpermaculture). Psychological contributions talk about health aspects through community building, expressed in the term *Psychological Sense of Community (PSOC).* Permaculture may be applied as a mental health strategy, releasing old pain by dealing with grief and caring for your body. Complementary alternative medicine such as Ayurveda practices or Traditional Chinese Medicine (TCM) and healing herbs garden are part of a permaculture well-being.

## 5. THEORETICAL BACKGROUND

*Consultation becomes Conversation[6]*

Previously, the concept of Permaculture was described. In this chapter it is time to turn over a new leaf. Here, I present an outline of what I consider the most relevant theoretical perspectives, that relate to the focus of this thesis.

When focusing on the term health and healing, the human body is a central point of discussion. Through the Permaculture lens it is possible to spot ways in which socio-cultural systems, such as the corporate massive food industry, are harmful to those who are part of it. Through this viewpoint modern healthcare can also be criticized, as well as "it's emphasis on intrusive cures rather than holistic healing" (Ashwanden 2019). Thus, the Permaculture mindset is the acknowledgment of synergies between plants, animals, and biophysical processes and thus, the interconnectedness of ecosystems and its inhabitants. The human body is thought of as an ecosystem, as socially and historically shaped and as interconnected parts. This holistic understanding of its wholeness and mutuality accompanies the healing approach. How the understanding of a holistic (mental) healthcare approach and how mind and body have been theorized in history (e.g., Descartes) differs to how they are enacted in daily life. Here I elaborate on theoretical background foundations that are important for the understanding of health and which support the aim and scope of the thesis.

Specifically focusing on regenerative livelihood and bodily expressions, I outline in the following paragraph conceptual and anthropological thoughts about 'Embodiment', 'the Body' in 'Space' and 'Place'.

### 5.1. EMBODIMENT THEORY

Within the literature on embodiment, several anthropological scholars shall be highlighted, such as Csordas (1994) on the study of a dynamic body, experience, emotion, and violence; Mascia-Lees (2011) on affect, pain and bodily modifications, as well as Lock (1993) engaging with the social, cultural and historical contexts of the body. Margaret Lock and Farquhar (2007) explore issues around the commodification of bodies, colonialism, and bioscience in their work titled *Beyond the body proper: Reading the anthropology of material life*. The theory of Embodiment challenges the dualism of mind and body. Here, Scheper-Hughes's anthropological work entitled as *Bodies for Sale – Whole or in Parts (2001)* is to highlight.

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[6] Paredes

In general, the concept of embodiment arose in the mid-1980's as a way of describing felt, affective, enlivened bodily experiences. It can be embedded in fields like philosophy, psychology, and neuroscience. Anthropology moved from studies of the body to the perspective of the humans as a bodily being in the world. (Here I reference to Tim Ingold (2000) and his dwelling perspective see on page 34). Related to the theory of embodiment is the Anthropology of the senses (see Ingold 2011).

In this sense, I am keen to highlight Michael Jackson (1989, 2001). Having conducted fieldwork among the *Kuranko* ethnic group of Sierra Leone (1969) he postulates to attend to feelings, emotions, affects, hopes, fears in daily life which are affecting and shaping individuals' bodies. Therefore, he suggests ethnographic writing, in a mode which describes vividly the life of locals who have individually lived and felt experiences (c.f. 2001: 172). Moreover, he critiques the ethnocentrism of Western epistemologies, points out the importance of ethnographical writing as a method and applies an embodied understanding of other peoples' lives. Inspirational is his mixed approach with Poetry.

When we see mind, body, experience and practice as interacting, then it shifts the way we experience our world through our bodies.

Rebecca Seligman (2017) and other scholars like Alan Goodman and Nancy Krieger (2001) engage with Embodiment differently. They are concerning the implications of eco-social interactions and the social-cultural environment on biological processes. Precisely interesting is "how we literally incorporate, biologically, the material and social world in which we live, from conception to death" (Krieger 2001: 672). Seligman (2017) uses the concept in an endeavour to overbridge rigid dichotomous conceptions about nature versus culture or vice versa. By doing ethnographic fieldwork at *Candomblé* religion in Brazil, she writes about how community practices related to religion/spirituality foster re-orienting of individuals as well as of the group. Through this engagement with oneself and within the group, she argues, the self-perception changes and thus also shifts in bodily states take place. This practice and self-transformation deal with stress, trauma, or depression and in turn engender social, psychological and physical health effects. For this mutually relation, Seligman (2017) coins the term "Bio-looping". Hereby, she blurs the line between nature and culture.

The embodiment approach counters reductionist, rigid, stagnate and dichotomous bodily categories and conceptions. Within medical anthropology, the theory was further developed and applied in the study of illness, which is understood as the individual patient's experience in contrast to the notion of Disease and Sickness (see Arthur Kleinmann). For example, the French

anthropologist Didier Fassin (et. al. 2007) traces the AIDS epidemic in South Africa in his book called *When Bodies Remember*. He incorporates the Embodiment of history, incorporating social conditions and historical experience and narratives of the individual body. Furthermore, Lock and Vinh-Kim Nguyen (2010) and their work *Anthropologies of medicine* is to mention and in the field of critical medical approach (CMA) the scholars Parker and Harper (2006) and specifically Nancy Scheper-Hughes are crucial. Similarly with important anthropologists like Margaret Mead and Gregory Bateson, Scheper-Hughes critics biomedicine and conducted anthropological fieldwork in Northeast Brazil, Argentina, Israel, South Africa, Moldova, the Philippines, and the U.S. Within CMA she wishes for "a call for a more humble model of doctoring, as opposed to 'plumbing', simple 'body-work', that would leave social ills and social healing to political activists, and psychological/spiritual ills and other forms of existential malaise to ethnomedical and spiritual healers" (Scheper-Hughes 1990: 67). This endeavour is inspired by Illich's (1967) analysis of the "sick-making propensities of an ever-expanding sphere of biomedical competence" (cit. in Scheper-Hughes 1990: 67).

> "…ills in the sense that life itself is one long terminal sickness, and one which requires a multiplicity of creative responses" (Scheper-Hughes 1990: 67)

Scheper-Hughes (1990) and proponents of critically applied medical anthropology (e.g., Lock 1986 propose an (1) "demedicalization of life in modern society", and (2) an "anthropological discourse on non-biological forms of healing" and c., the "Radicalization of medical knowledge and practices".

Historical eminent voices who critique Biomedicine are Michel Foucault, with his works *Madness and Civilization* (1967), *The Birth of a Clinic* (1975)*,* and *Discipline and Punish* (1979). Taussig's works (1978,1987) can be defined as a potent social-anarchist critique of medicine.

## 5.2. THE BODY

There circulates a wide range of anthropological theories of body, space, and culture – such as for example phenomenology of philosopher Merleau-Ponty (1945).
The body occupies the space, and with it its perception and experience of that space. Equipped with this specificity the space "expands in relationship to a person's emotion's, sense of self, social relations..." (cit. in Low 2003: 10). In WEIRD[7] cultures the self is perceived as "naturally" situated in the body, as something precultural given (c.f. Scheper-Hughes & Lock

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[7] abbreviations for: western, educated, ideologized, rational, democratic,

1987). We "have bodies" and "are bodies" (Turner Bryan 1984 cit. in Low 2003: 11). Through corporeal experience in daily life human beings are embodied and thus the body is "also inherently social and cultural" (ibid., (see also e.g., Douglas 1970, Mauss 1950, Bourdieu 1984). Without falling into the biological reductionism trap, the body as an organism, "biologically depends for its reproduction, nurturance, and existence on other individuals and the environment, even this biological individuality is relative, depending on other social beings" (Turner Terence 1995).

Thus, the body is understood as a multiplicity: the "two bodies" representing the social and physical (Douglas, 1970). The "three bodies" of the individual body, social body, and body politic (Scheper-Hughes & Lock, 1987). In addition to the three and extended by the consumer body and the medical body, O'Neil, (1985) terms the "five bodies" (Low 2003: 10). The embodied experience then takes on material and symbolical form.

Within the medical anthropology field Annemarie Mol (2002) explores *The body multiple: ontology in medical practice* (2002). Despite the postulation of an "enacted World" (Mol 2002: 31) Mol does not reject the physical realities like bodies and blood, but rather puts an emphasis on the relationship between the body, the patient, the disease, the doctor, and the technology. How these actors collaborate and *do* disease is interesting. She states that "objects come into being- with the practices in which they are manipulated" (ibid.: 42). She states a "multiplicity of reality" and asks ''how (medical) objects are handled in practice?" (ibid.: 5). She writes that reality multiplies and follows objects. Reality is constantly being *enacted* through practice. Bodies are manipulated through diverse practices. In contrast to the dichotomy (mind-body) she says that we enact and perform our bodies – outside and inside the hospital. Mol tries to overcome dichotomies like the subject/object divide (nature – culture, knowing subject – objects that are known) (ibid.: 33).

Including the Body in the anthropology of space and place it is possible to understand links of body/space/culture and to theorize the body as a speaking and moving space in and of itself. Concluding talking about the embodied self, the role of social cultural views on the Body and aspects such as language, discourse, and experience in the topic of space – place making, it is to say that the human body and its environment, are constituted mutually.

This insight is pointed out by Tim Ingold (2011: 68). He conceptualizes 'meshwork' which denotes "being alive" as a process of "continuous birth". As a ground for emotions, sensations and perception, the bodies (human and nonhuman) are in exchange with each other – with their social and natural environment.

By practicing permaculture, certain changes take place in your perspective and prospect of well-being. In an ideal permaculture process, certain design principles are considered for the embodiment of space. The concept of Permaculture can be understood as embodied.

The following chapter will discuss the impact of dissonance on aspects of holistic ecological and therefore permaculture fields. Such as embodied experiences, dissonance is interesting on an individual, as well as on a group level.

## 5.3. DISSONANCE THEORY

Festinger's (1957) theory of cognitive dissonance refers to the emergence of cognitive dissonance after actions and the subsequent information acquisition and processing behaviour characterized by the motivation to reduce this dissonance. According to Festinger (1957), before a decision is made, a person finds himself in action, in a state of conflict (having to choose between alternatives), and then in a state of cognitive dissonance. Here in the state of cognitive dissonance the person has to justify the chosen alternative. All decisions and resulting actions, (e.g., the purchase of a product) have, besides the desired, intended consequences, also undesired consequences. The theory of cognitive dissonance is in any case in conflict with the decision and the corresponding action as Harmon-Jones,Mills (2019) share. In the following, it will be explained why really all decisions and the subsequent actions have undesirable consequences as well as desirable ones, therefore also in the context of permaculture, where however, literature does not draw a clear line to, but despite of this, since humans are the decision makers, cognitive dissonance plays a factor in permaculture implementation and success.

Let us assume that a person must choose between two alternatives. Both alternatives may have specific advantages and disadvantages. The specific disadvantages and the lost specific advantages of the rejected alternative are the disadvantages of the chosen alternative. Where are then the undesirable consequences? At least a decision restricts a previously still existing available scope for decision, which is now narrowed.

In addition, there are also unexpected consequences. As far as these are undesirable consequences, additional perception of cognitive dissonance can be expected when they occur, as Harmon-Jones, Mills (2019) point out. In the phase directly after the action, people obviously perceive the negative aspects of this action particularly intensively and rate them higher. The perceived negative aspects of an action are at odds with the choice decision and thus trigger cognitive dissonance. Individuals will shortly after make a decision or take an action and tend to regret it. This leads to the fact that essentially the information search and processing is tried

to be processed in such a way that the original action is subsequently justified as Thogersen (2002) states. The perception of cognitions that are dissonant with the action, and the resulting state of tension that is perceived as unpleasant, is the cognitive dissonance. This leads to activities that aim to reduce or, if possible, eliminate the dissonance. Cognitive dissonance controls perceptual and information processing behaviour. The stronger the cognitive dissonance is perceived, the stronger is the motivation to eliminate it, and the stronger is presumably the motivation to reduce it as Rashid and Mohammad (2012) point out.

In the context of ecology, the theory of cognitive dissonance is a consistency theory, as Thogersen (2002) establishes. It refers to a class of theories that explain people's striving to be free of contradictions. People experience tension of various kinds as unpleasant, combined with a need to relieve this tension. This cognitive theory is concerned with contradictions between cognitions and the need to establish cognitive consistency.

As a result, we can behave (in simplified terms) either environmentally protective or environmentally hazardous, e.g., recycle or not recycle, as Rashid and Mohammad (2012) and Thogersen (2002) put it. For the sake of simplicity, the clear categories here are if a person does not behave in an environmentally protective manner, even though the personal ecological norm actually speaks in favour of environmental protection, a state of unpleasant tension will be reached (Thogersen: 2002). If a person, as Rashid and Mohammad (2012 point out, behaves in an environmentally protective manner, something can occur that is referred to in psychology as a spillover effect. A small commitment spills over, so to speak, and thus gradually lead to a greater commitment. In other words, attitude becomes action, it spills over to action. Commitment can range from low-threshold environmental behaviours to very high-impact behaviours (c.f. Bilharz and Schmitt 2011):

When thinking about dissonance, it starts with the choice of food. The consumers of industrial food, animal derived or vegan diets, feel with other living beings and do not want them to be harmed (Thogersen,2002). Here, the invisibility and alienation from consumption of the food productive system plays a role.

## 5.4 HOLISTIC HEALTH

Anthropologically speaking the health system is a sociocultural system and issues of justice and equality are to link to health. Lerner (1973: 6) informs that health cannot be measured directly, and that health is a "multidimensional or qualitative characteristic" (ibid.). The health of a community, he states, should be considered as beyond an "aggregate of the health statuses of the individuals" (ibid.: 7). Moreover, the well-being of any individual relates to the health of his/her community - as an entity. When it comes to produce knowledge in the field of Global Health, "health" needs to be conceived beyond a "biomedical phenomenon" (ibid.: 12).

According to the WHO's (1948) Constitution 'Health' "is a state of complete physical, mental and social well-being and…" thus, it is not merely constituted by the absence of disease or infirmity. This defines a holistic approach already but how should it be applied?

Medical anthropology has established itself as an independent sub-discipline of social and cultural anthropology. This branch and the critical medical anthropological approach examine all those phenomena that are associated with disease, sickness, illness, health and healing in societies and cultures worldwide, as Brown and Nading (2019) and Lerner and Berg (2017) point out. The approach of critical-interpretative medical anthropology includes not only the research and analysis of medical and health-related practices, institutions, and ideas in 'non-Western' societies in the Global South or ethnomedicine. It also refers to the analysis of the multi-layered articulations of biomedicine and other forms of medicine and healing in European and North American societies themselves.

In the field of Global Health, Larson (1999: 125) also relates Health to a conceptualized environmental model in which he conceptualizes health as a matter of "adaptation to physical and social surroundings". He continues with the Wellness model and depicts health broadly as the "integration of mind, body, and spirit" (Larson 1999: 126). Interestingly, Brown et al. (2018) add the notion "place" and state that places can affect physical and mental health. This vision is embedded in medical geography. Hereby, they view the "subjective experience" as crucial because places, in contrast to the different concept of space, are embodied and evoke emotions, and everybody experiences places differently (ibid.: 44).

In the understanding of human health, we should also take in consideration the non-humans, such as animals and plants, as Rock & Degeling (2016) promote in their work *Toward "One Health" Promotion.* The *One Health* approach, as Stellmach et al. (2018) highlight is based on the understanding that human, animal and environmental health are closely interrelated in a web of relations. The *One Health* approach serves prevention and promotes inter- and

transdisciplinary cooperation, especially between human medicine, veterinary medicine, humanities and environmental sciences. In other words, it can be seen as an attempt to see health as one holistic concept, where all beings and plants are linked together through constant relations, exchange and change.

As Deem et al. (2019) remark, so-called traditional medicine is concerned with the immediate (proximate) causes of disease and apply a lens which is not deterministic or reductionist but is rather knowledge-driven and time intense. So-called evolutionary medicine, on the other hand, sees the organism as the product of a 3-billion-year long history and asks why this disease occurs in this person at this time (the object is the genotype), and how to alleviate the symptoms, without being aware of causes, as fast as possible. Health, as Lebov et al. (2017) argue, is a human right and health has a special significance not only for the individual person but also for the society as a whole. It has shown that health is more than just medicine or depending on it.

In addition, health can be understood broadly, extended to the biosphere and the natural world, described in the term 'Planetary Health' (coined by Horton 2014). The close integration of the animal and plant world, as well as that of microorganisms, e.g., through infectious diseases transmitted by animals may have acknowledged the comprehensive *One Health* concept in a more urgent way. For the medicine of the future, this means that it must look beyond the classic areas of diagnostics, pathology, therapy, and prevention, in order to view health from a holistic perspective.

In research, teaching and practice of evolutionary medicine, the focus is still on the disease itself. A holistic perspective has not been established within centralised medicinal approach. Thus, "One Health" wants to go beyond human health, towards multispecies flourishing in which the world is one "being" of health, where all living in it is connected and interlinked.

*"The most general piece of advice if the goal is to avoid global disaster and cool down the humanly induced runaway processes currently threatening planetary health, consists in scaling down (and slowing down)." (*Thomas Hylland Eriksen 2016*)*

First of all, it is to clarify that I am not advocating nor in favour of a point of view which perceives the Planet Earth per se as a sentient being.

From Globe to Planet – from social justice to climate justice?

"Planetary health is understood as the health and well-being of Mother Earth and of humanity as an inextricable part of natural ecosystems" (URLWaiora).

The notion 'Planetary Health' refers to the interconnectedness of the state of health of the human and that one of the natural system and biophysical flows on the Planet. Jennifer Cole (2019) addresses the current challenges of e.g., pollution and anthropocentric induced impacts of environmental change on health. According to Cole (2019: 2) "'Planetary Health' - the idea that human health and the health of the environment are inextricably linked - encourages the preservation and sustainability of natural systems for the benefit of human health".

As a broad selection of works on 'planetary health' I mention The Journal *called Lancet Planetary Health.* More voices (Ratima et al. 2019: 3) acknowledge the "inextricable links between human well-being and the natural"; abandon a worldview which divide humanity from the planet's ecosystems and argue for the "interconnectivity between humans, other than-humans, and the land, water, and air on which we rely" (ibid.: f).

In connection to 'planetary Health' Rockström and colleagues (2019) thematize the notion 'Planetary Boundaries'. Understood more as a technical approach but defined as boundaries within which it is expected that humanity can operate. Having said this, I oppose utilitarian and extractive technocratic approaches to resources.

Having outlined what a vision of 'Planetary Health' stands for, similarly Ivan Illich's concept of 'Conviviality' (1973), outlined below, is concerned with interrelations and how to open them up towards harmony.

## 5.6. ILLICH'S CONVIVIALITY

On the ground, Illich critiques and problematizes technocratic institutions, which are to view as embedded in a hegemonic relation, focusing on machines, rather than on social relations.

What or which tool may be the extension of the social person – under which to flourish?

He is opposed to the idea of a human as mechanical parts and critically depicts that technocratic elites exert a "radical monopoly" (1973) on basic human needs such as health, agriculture, building, and learning.

Illich lays out his work by taking a critical stance towards institutionalized forms such as modern medicine[8] and how it attends illness and health. (1) Concomitant with the professionalization of medicine, a certain narrative on what constitute illness and who impose and determine whether an individual is sick or not and how the medical practitioners attend to suffering, comes along. The determination from these medical practitioners is disempowering for the patient, instead of empowering. (2) The certain implementation of 'modern medicine' also implies how we interface with the world. He critiques dominant institutionalized tools[9] - understood as technologies for e.g., in hospitals, on which dependence and disempowerment is generated. This tools of *homo faber*[10] nor ahistorical neither socially, are understood as ideologized tools.

Thus, Illich (1973: 53) wants to question "the range within which machines are used to extend human capability and the range in which they are used to contract, eliminate, or replace human functions." He defines the term "Conviviality" in opposition to growth maxim and industrial productivity. Furthermore, Illich (1973) intends to appreciate and revalue the relational aspect amongst people and their environment. Particular towards each other and amongst each other - as historical subjectivities and social bodies.

Concluding this section, I assert that the 'Conviviality' he is talking about is the conviviality of genuine human relationship which in turn is predicated on a certain relation with our world. At this point and in terms of content I engage with Tim Ingold and his conceptual perspective.

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[8] Hereby, I state that Illich also sees the issue in institutional education.

[9] I clarify that Illich (1973: 53) leaves the meaning of a tool open, referring to its flexibility he states: "A tool can grow out of man's control, first to become his master and finally to become his executioner…"

[10] the term *homo faber* in contrast to *homo sapiens* meaning a human capable of doing, acting on, changing his/her environment. See also Hanna Arendt (1958) coins *Animal laborans*.

## 5.7. INGOLD & THE DWELLING PERSPECTIVE

The British social anthropologist Tim Ingold analyses the perception and interaction of humans with nature and describes the relationship as not opposed, but as an interactive process. "Persons and environment are mutually constitutive components of the same world, and in both perception and consumption, meanings embodied in environmental objects are "drawn into" the experience of subjects" (Ingold 1992: 51). He develops the dwelling perspective, meaning humans inhabit the world as like another kind of Being. This inhabitation of the earth, namely the "dwelling perspective" (ibid.) could be helpful to academia and beyond. This viewpoint understands all entities, whether human or non-human, as "active, practical and perceptive confrontation with the constituents of the inhabited world" (Ingold 2000: 72). A central point is that "the comprehension of the world is not a matter of construction, but of confrontation, not of a It is a matter of building, but of living, not a view of the world, but a view in the world" (ibid.). He encourages to let things or the natural world simple BE, that is, to accept, observe and learn from each other, instead of trying to explain them, use or extract.

For Ingold, it is important not to treat the world as a place from which "data" is extracted to declare it as our acquired knowledge, but "to turn towards the world as a place of study". "Life is not in the stone, but the stone is life" and is made meaningful by human activities. In this context, he argues that previous studies of material culture, such as Daniel Miller's work "Materiality" (2005) have focused on "materiality" and not on the material. To understand the "inhabited" world (Ingold 2002: 20f), he understands that "properties of materials are not attributes, but stories" (ibid.). Because if the focus is on the material, "People play a role in the context of the stone", for example, and vice versa, e.g., "Stones have a role in the context of the people" (ibid.: 31f). Thus, he appeals, "take materials seriously, since it is from them that everything is made" (ibid.: 31) and pleads for the Dwelling perspective, with which to inhabit the world amongst other Beings.

# 6. APPLIED METHODS AND METHODOLOGY – LABORATORY BECOMES LABORASTORIES[11]

To experience and formulate how *Gaia Terra* aligns with Permaculture Principles and ethical considerations, as well as to explore and formulate a holistic conception on the notion of Health, I conducted a case study of *Gaia Terra* and extended the research by interviews with experts external from the Italian ecovillage. By doing qualitative research I rather lean on ethnographic inquiry, where Jackson's book *Paths toward a Clearing: Radical Empiricism and Ethnographic* (1989*)* is to point out.

Anthropologist Michael Jackson (1989, 2012) engages with phenomenology, intersubjectivity, radical empiricism, experience, and behaviour. He highlights the centrality of ethnographic writing within Anthropology. In Chapter 13 of his book (2012) he writes *On the Work and Writing of Ethnography methodologically,* where he views the role of Anthropology as 'the systematic application of analogical thought to a pluralistic universe, a way of understanding the other as oneself in other circumstances' (Jackson 2012: 8).

In the further course of my work, I would like to discuss my detailed research methods and possible problems. The work is based on primary and secondary data.

## 6.1 Ontological and epistemological stance

> "Ontology", Mol (2002:6) claims, "is not given in the order of things but … instead, ontologies are brought into being, sustained, or allowed to wither away in common, day-to-day, sociomaterial practices."

Addressing the question on what is out there, what is the nature of Being and existence I apply a critical realist ontology which importantly incorporates a moderate social constructivism lens. The word 'ontology' was coined by Jacob Lorhard in 1606 (URL1) and engages with philosophical thoughts. Taking a critical realist standpoint, in line with Roy Bhaskar's (1975), I sense the world as existing independently of my knowledge of it and how I interpret it (Benton, 2004). Thus, critical realism guides my ontological position. Hereby, Bhaskar (1979) distinguishes between two different dimensions of the world, namely the 'intransitive' and the 'transitive' (Bhaskar, 1998/1979). The first mentioned dimension is the one objective reality which exists in the world, whereas the transitive dimension is my own construction of that reality (Sayer, 2000).

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[11] term coined by medical doctor Romy Paredes, during interview

Moreover, to regard *pluriverse* (Escobar 2017) ways of knowing and perceiving the world, I acknowledge and render posthuman theoretical thinkers such as Arturo Escobar (2016), Tim Ingold (2000), Donna Haraway (2007 e.g., "multispecies world") and Ivan Illich (1973), Anna Tsing (2015) and Noske Barbara (1993) as important and inspirational.

„Earth is a communion of subjects, not a collection of objects "

(Berry 2013 cit. in Escobar 2016: 28)

Addressing the question of how to view the world – I highlight Miranda Fricker's (2009) work on epistemic injustice and am aware of (not only historical) Power relations in the production of knowledge, as well as the colonial encounters within the sphere of Anthropology and its methods.  In line with Mol (2002:152) my applied ethnographical method does "no longer follow a gaze that tries to see objects but instead follows objects while they are being enacted in practice".

## 6.2 ENTERING THE FIELD

Before entering the Field, I asked myself what expectations I have and importantly it is to note that the researcher shall not feel fear at all, of Entering, getting on and interacting with the Field, as Lindner (1981) thematises and problematizes.

Being equipped with an anthropological point of view and attempting to understand rather than explaining what happens around ourselves and with us. Having thematized the Anthropology of Embodiment in the theoretical part, the term embodied Anthropology is to stress out, because the work is also characterized by embodied fieldwork. In other words, I reflect my body as being entangled in the process.

For me it seems crucial to mention that it was not the first time for me travelling to this region and particularly important that I am able to express myself in the Italian language and that I understand the dwellers in their language of origin and amongst each other. Despite that transcultural communication, I am aware of my position as a Newcomer, aware about reflecting my self-image which differs from the image ascribed to my person from not-yet-known People. I regard the process of doing ethnographical Fieldwork as an ongoing and permanent process of relating to the Field, interacting with it (Carola 1989) where participant observation is to point out as the anthropological method (see e.g., Mason 2002, Okely 2012). "Ethnographic field research is characterized by a particularly intensive and long-term relationship to the field of study that goes beyond the mere collection of data" (Breidenstein et. al. 2013: 46).

Moreover, I take an engaged approach within the Field by taking part in daily tasks such as preparing lunch or dinner or cleaning tasks. Engaged also, because of being present in daily rituals, ceremonies, and contributing collectively. Moreover, I learned in action by enrolling in a Permaculture Design Course (PDC Austria Permaculture Academy) as well as in an online Course about Regenerative Livelihood, led by the *GAIA* University in Mexico.

At the beginning of the research process, the approach was deductive, which changed at the point of arriving at the Field, where inductive theoretical thoughts were considered, and a circular research process developed. In other words, an iterative cycle of analysis (c.f. Raewyn Bassett 2012) characterizes the method. As I moved back and forth through my interview data as well as through the iterative cycles of analysis, new theoretical ideas were an ongoing process.

Following thoughts on decolonial methods, Mignolo & Walsh (2018) offer the Decoloniality approach to support and open the canon of knowledge. Thus, I attempt to apply a decolonial perspective and approach and consider multiple diverse modes of conceiving, acting, and knowing (ibid.) as important to acknowledge. What is also precisely crucial is the refusal of ethnocentric or reductionist assumptions, as well as the reflexivity of my past experiences and certain biases. Throughout the process I reflected my position as a critical white female student from the Global North and acknowledge Haraway's (1988) epistemological contributions entitled as "situated knowledges" and "partial knowledges". In this, it is understood that a given information, or our knowledge is always uncomplete and thus partial. Similarly, I think about the complexity of inter- transcultural communication and mutual understanding.

### 6.3. SEMI-STRUCTURED INTERVIEWS AND SAMPLING

Data was also mainly derived from five semi-structured Interviews as an ethnographic method (Karen 2005). Debora, the initiator of Gaia Terra acted as like a gatekeeper for me to get in contact with the members. Before recording, informed consent was obtained and later, the interview was transcripted. I conducted two interviews with Debora, one in person in her room in the ecovillage and the second on via Zoom two weeks after departure. The spoken language was Italian, but I encouraged respondents to use English if they feel like the meaning of it expresses it more clearly. Additionally, I conducted three semi-structured interviews, two of them by getting to know each other online via zoo, namely with Dr. Romy Paredes, Alberto and Andreas Haller. It is to mention that before meeting on zoom again, I got to know Alberto on a personal level in Udine prior to that. He takes the position of the representative of the international alliances of Shamanism. For each interview I predetermined a set of questions

which I let open-ended. Robert Merton (1959 cit. in Breidenstein et al. 2013) argues that it is more difficult to find the right questions than to answer them. "Questions" he continues, need to be formulated in a way in "which they grasp the case" (ibid.).

Focus, concentration, and listening is central in the interview, as Talmage (2012: 296) outlines by stating "active listening […] or active collaboration between the interviewer and respondent so that the respondents' utterances are appropriately directed and framed for the research interview". During interviewing and listening to the Italian words I resisted my impetus to contribute and react verbally on the content, in order to let narrate her story. Interviewing was more like a collaborative engagement with each other, I felt. Analytically, I engaged with the recorded interviews in depth, interpreted data and established categories or values. By the means of formulating these, ethnographical insights and outcomes are discussed.

## 6.4. ETHICAL CONSIDERATIONS AND LIMITATIONS

Keeping ethical considerations in mind are vital throughout the research process.

Since I conducted my study during the COVID-19 pandemic (February – March 2022), I had to fill out the EU – Italian registration Form when passing the Austrian Italian border by train. Surely, the requirement to cross the national border is the COVID vaccination. Since Italian is not my language of origin it is to inform about limitations of my personal language competencies and especially about the diversity of dialects and accents within the Italian language. A different attitude towards the COVID-19 vaccinations, but also a shared critical stance towards political regulations and reactions is to notice. The talk about differences in the willingness to vaccine, between me and ecovillage dwellers tough was not hindering the getting on phase in the field in any way.

The Entering of the Field is dependent on time and actors as well as on the question of acceptance. I think, the case changes due to my presence within it. A holistic ethnographical approach within anthropology is challenging, but especially in healthcare a reliant model to understand a patient's journey and his/her experiences.

An ethical issue could arise through divergent attitudes, meaning dissonance on for example how to wash oneself and what products are expected to use. Prior to entering the fieldwork ethnographically, I reached out to Debora for the first time in November 2021, informed her about my student position and academic endeavour. Thus, prior informant consent was obtained by video chat and the communication amongst us continued via WhatsApp and Zoom.

It was also agreed on that mainly authentic names can be mentioned from the interview and the field, but some are also anonymised. After receiving their consent on doing Photography I did so and included them in this thesis upon agreement, whereas some Gaia Terra dwellers also send me some photos via the group on the messenger Signal. Once, at a weekly meeting I asked about anonymising or not and was welcomed by all to name the practitioners.

Throughout my presence and engagement in *Gaia Terra* I was writing an ethnographical diary and took notes. Giampietro (2007a, 2007b) informs on how to do Ethnography and about ethical dilemmas.  Hereby, strategies about "From Field to Desk" (Emerson, Shaw et al. 1995) are useful on writing fieldnotes, whereas the research has a circular character.



(Fig: 7: GT, Photos by author)

# 7. ETHNOGRAPHICAL FINDINGS AND DISCUSSION

In this chapter I present my findings from the ethnographical fieldwork and the conducted interviews to answer my research questions: How Permaculture is lived in the Gaia Terra setting and aligns with permaculture ethics. Moreover, by describing permaculture practices in the following, a non-mainstream conception of Health towards holism is illustrated.

## 7.1. GAIA TERRA'S PERMACULTURE AND HEALTH IMAGINARY

The dwellers of *Gaia Terra*, the permaculturist Andreas Haller and Alberto, the representative of the *International alliances of universal shamanism,* as well as the holistic medical doctor Romy Paredes take a critical stance towards hegemonic capitalist and profit-focused businesses. This is a crucial part within permaculture ethics. Throughout the process I noticed these practitioners embody such an aware, reflective, and critical stance. "For me, Permaculture is THE solution. It damages capitalism" (Interview Haller 27.3). Similarly, Alberto (Interview20.2) takes a critical stance towards the world economy by stating "I feel they don't like us". Also, *GT* believes they "are walking and performing towards achievement, as a cohesive and coherent group, sharing some same values" (DeboraInteriew28.3). Thus, to be in and remain harmony with their own bodies, lifechanging choices are taken and ambitions and shared values and feelings are put in practice. Because "the health comes through better relationships" (ibid.).

"They already destroyed everything, only for profit, and that all without knowing that they harm themselves" (Lele member *GT*, February)

In *Gaia Terra,* Social Permaculture is the initial basis for a self-reliant, autonomous and regenerative project, which evolves over time towards a socially organized mode of living. This path encompasses all social spheres of life as well as a certain view and (future) visions on the relation with soil and things which surround as. Throughout the data collection I noticed that *GT* orientates towards fairness and its vision and mission align*s* with the *Care for the People*, *Care for the Earth* and *Fair Share* Permaculture ethic.

" … I had more awareness about people because I was a therapist. Then I became aware about how we are linked to one another and linked to the 'Hearth'. I realized the more we go far away from the 'Hearth', the more we get sick" (DeboraInterview28.3).

She coins the term 'He*art*h' – meaning an agglomeration of the word Heart and the Earth and emphasizing the awareness of limited resources as well as feelings and affects which connect

the individual to the group. "The balance is to live in harmony with nature and to feel the connection. The love between us, the heart-connection. Food brings us together" (ibid.).

## 7.1.1 EXCHANGE & RECIPROCITY AS EMBODIED

Debora Sbaiz had a personal journey, about which she writes in her *Viaggio in verticale* (2015). In her story of "coming down to the Earth again" she expresses her vision for the project: *GT* will strive towards "respect for the system in which we live, knowing that ours is a finite planet with resources that cannot be wasted"[12] (2015: 61). "…to construct an ecological structure", she continues "that is the home of people who want to live in a simple way respecting the nature, and to learn good practices for the respect of the environment" (ibid.: 60).

The initiator told me that before starting the communal project *GT*, a personal degrowth was the starting point for her inspiration. She wrote a book in which she expresses a travel with herself, to try to travel without money "to survive in the planet, with ideas and with exchanging things. I stopped everything what concerned money use" (DeboraInterview28.3). As an initiator Debora embodies the socioecological project. *GT* is "like a family, where the individual is respected" (ibid.).



(Figure 8: Mission of GT)

The individual person feels free to grow on a personal level, take part in events and ceremonies, so that he/she comes re-oriented, self-reliant and inspired back to the group. Thus, the individual

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[12] translated from original Italian written words (2015)

is constantly in exchange with the community and vice versa, creating a meaningful embodied space and re-using abandoned space.

The industrial area was bought by Debora in 2017, whereas the first attempt was in 2013. In 2012 there was a fire at the place and the initiators Debora, Damiano and Riccardo presented the project in the national gathering in Tuscany.

The slogan of the Italian Ecovillage is "*leggeri sul pianeta*" which means "being gently, soft with the planet". It is to state that the values and vision are based on Permaculture Ethics and a regenerative mode of living and livelihood. Gaia Terras characteristics are circular, vegan diets, no waste, 8 R'S (to rethink) such as re-gifting as illustrated in Fig. X), wall building out of soil and straw. Further terms they live by and promote are "*cura relazioni*" (healing of relationships see figure 8) and "*cresitá personale*" (individual growth). Reciprocal relations, sociocracy and the-circle-performing are lived daily. The circular re-use aspect in their local economy is expressed by the use and exchange of food, own production, the garbage system and their own biological purification plant.

 Things are re-used and social relations are engendered through reciprocal, non-capitalist-market relations. "We circulate the energy and use the potential of what we can exchange to satisfy multiple subjects to support everyone's healthy well-being" (Debora20.2). By working together and exchanging with the farmer called *Pitoni*, the carpenter neighbour, or farms and ecotourism, social relationships are built on friendship, communication and respect and perpetually constituted mutually.

By working with the relational aspects these are an extension of the social body, in contrast to the mechanized relations and its "blind faith" (Hornborg 2016) in technology and the "fetishized money" as a remedy for the severe symptoms of the Planet. Theoretically speaking, according to Mauss [1925] "The Gift", "Le Don", "Prestation" is a "total social phenomenon" (ibid.: 53) and thus reflects the religious, ideological and sociocultural aspects of a social group – re-enforcing social cultural ties and mirroring a certain way of relating to the world? Overall, compassion is created. *GT* renders itself as part of the global movement because of the "social, relational and harmonic open aspect of permaculture" (Debora28.3). In the cultural organization they "are re-using things, to give them a different life" (ibid.).
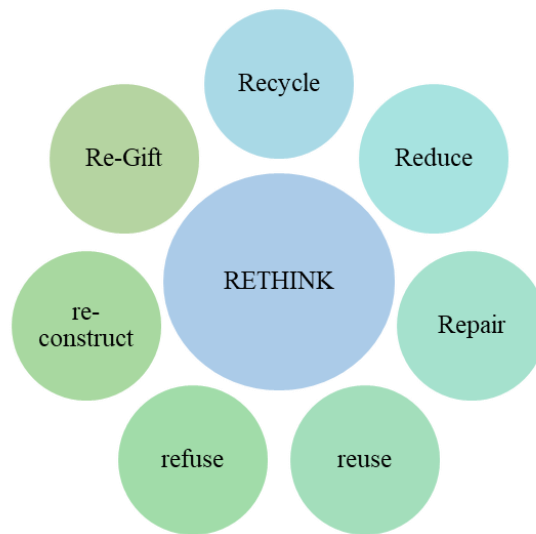
(Figure 9: 8 R'S, illustration by author, c.f. Ecovillage Course)

The orientation and organization are based on rules and obligations in order to reinforce the social relationships within and between groups, as expressed in a welcome letter (see appendix).

Some of these rules are:

~   "We live in a simple way. We respect the environment and the nature. We do not waste water, toilet paper, electric energy, chemicals nor for cleaning neither for the body"
~   "…to respect the others who share the Life on mother's earth. We thank the vegetables and esteem its value"
~   "We care for human relations, which are reciprocal. If you have problems, come and talk. We listen and help. Narrating about yourself and about us." [13]

Hereby, all interested people, who align with these social rules and who respect the environment and cohabitants, are welcome, because *GT* is "trying to build a culture of peace" (Debora20.2).

"*GT* is a small circle of residential people, encircled by a larger circle made up of people visiting us and an even larger circle of the whole house" – with house meaning the biosphere and its ecological boundaries. *GT* acknowledges that when the individual can thrive, then the whole group can grow and learn from each other. Volunteers and all dwellers are welcome to live out their ambitions. The place then, is shaped and re-embodied in a mutual relation with the individual bodies and the group.

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[13] translated from Italian

Performance, the body and *The Circle Way* (Manitonqual) are central aspects in *GT*. How to prepare and cook food is done in a group of three. Daily rituals before cooking are performed, such as making a circle, holding each other's hands, expressing gratefulness by putting creative terms as well as dancing and singing. The importance of celebrating and music for community building processes and an individual social, emotional, mental and physic well-being is experienced at for example fireplaces in the evening or pedagogical workshops. Here, I talk about inspiring and formative social events.

The body is constantly moving and in the flow of new insights, embodying them and shaping beyond individual levels. Throughout my stay I notice that *GT* acknowledges the socialcultural historical subjective aspect of bodily processes. On 17.2 I spontaneously was invited for a blue Chakra dance in a group, improvised and imitating someone's dance moves. What joy and fun it was to move my body in the same way as the group, following rhythm, the tact and choreography. In Chakra Yoga the colour blue stands for strengthening the sound of my voice and I remember loudly laughing into the middle and mimicking sounds where I firstly felt a bit awkward to express but then came to join in.

On the 15.2. I took part in a meeting held by Debora about interconnected personality types. I reflected on my person and it ended in an interesting open reflective group discussion. Given below, a photo of the class in *GT* shows the types.



(Fig. 10, own Photo)

Another unforgettable experience were two ceremonies, led by Alberto – the Italian representative of the *International universal alliances of shamanism"*, where Walter Menozzi is the head since approximately thirty years. Experiencing shamanistic rituals in a circular group was an exciting option to reflect on my body, my suffering and well-being, to get in touch with not only physical motions and cultural stuff but also my mental and emotional bodies. Moreover, talking to Alberto showed me the broad, colourful and indigenous-shaped knowledges he offers.

"A ho metakio mejasy" seems to me as the slogan for the two-day ceremony, what means "to be part of nature" (Alberto20.3). "Nature cycles are human cycles and when using medicine humans shall connect to their multiple bodies, to be one, in front of nature" (ibid.).

Having collectively constructed a sweat lodge on the soil, by wood sticks and covers, I listen carefully and sense the wholeheartedness of the shamanistic practitioners and all who take part to start my individual bodily experience whilst being amongst the group, being surrounded by hot vapour steaming from hot stones which were put in the fire and sacredly brought into our hut. Being surrounded by the sound of barrel, the darkness and his voice and melody…

Alberto has a clear holistic imaginary on Health and invites me by stating "…you do such ceremony when one body in you feels bad" (Alberto20.3). He explained that I will feel different afterwards and conceive health as "when the physical, mental, emotional and spiritual body are equilibrated and related to each other. And not, when one body is disconnected to each other" (ibid.). Alberto argues that humans are "sensitive spiritual beings with mind and emotions".

"For the *Lakota* tribe[14] for example food is sacred and they care about an interconnection to the buffalo." (ibid.) "Non-humans and animals" he continues in referring to the Latin word anima (soul), "are not to imagine as something without a soul, but as spirits with a body, such as we are. So why to eat the body of a spirit?"

### 7.1.3 RELATION TO SOIL / HEALING HERBS

In *GT* the fermentation and probiotics play an important role. Debora gives classes on fermentation and how to produce "Fervida" which is used as an organic fermented means to clean. Hereby she states that we connect also to our body and to nature because "probiotics are matching with our own bodily system, because we ourselves consist of bacteria" (Debora 13.2.). By not being part of toxic or mass garbage producers the initiators are proud of themselves and

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[14] group of ethnic group Sioux, in U.S

the project. "We sustain the rhythm and flows of the biosphere and come together in circles to relate in a gently way to the soil and nature in us and surrounding us. She, the nature shall live, not be extracted limitless, but rather the bee shall just be" (Debora20.2).

Throughout the engagement in *GT* the *Gaia Theory* by James Lovelock (1957) which views the "Earth itself is a cybernetic system", circulated in my mind when participatively observing or listening.

In *GT* I appreciated healing herbs, when I had pain, as well as emotional support. Activities to create a garden and visionary ideas for a forest started this year. A network with farms in the surroundings to exchange soil is important, as shown on the photo below.



(Figure 11. Photo by Riccardo)

I extended my fieldwork with an insight in Haller's Permaculture Project & Health Imaginary. Andreas Haller, the herbology teacher integrates healing herbs in his permaculture garden. He wants to be "independent from global structures which are doomed to fail or to take care of us". He continues stating that "it seems like a fact that such a cultural system can no longer be sustained" (Zoom Interview Andreas Haller 27.3)

"Nowadays, in times of non-Peace and a global pandemic I feel like my path makes even much more sense" (…) "Within this fragile capitalist system it is just a question of time when self-sufficient and local structures grow like mushrooms, account as necessary and perform their ultimate answer" (Interview Haller 27.3).

With regard to Festinger's theory on Dissonance, a balance between Andreas Haller's attitudes, ideologies and actual doings is to notice. In the statement he refers to power relations, and he conceives his practices as actively opposing industrial structures such as the food industry.

Andreas Haller embodies and provides knowledge about herbs and how to foster biodiversity. By expanding his permaculture garden, it almost decupled. He is advisor at the "Allgäuer Kräuterverband", meaning an herb union in the region of Allgäu and he teaches on self-reliance, herbs, tincture and salve. He acknowledges ethnobotany, and Andreas is also a mental trainer and considers mental health as the most important factor for a healthy being as well as awareness about the "link between pharmacy, food industry and how a healthy body or product is communicated". "Now more than ever", he continues, "we need to shift our priority of values and produce food and housing in a way that is in accord with the nature, with the ecology" (HallerInterview27.3); and "to give something back to nature and create a meaningful *Lebensraum*" (ibid.).

As 'Health' he understands not just the growing of healthy food, but to be aware of humans as an "aspect of nature" (ibid.). He conceives current labour as "a means to a specific purpose", namely the capitalist purpose. On the contrary, he describes his project as meaningful and as Joy. He says, "Beyond individual endeavours I want to contribute to a harmonic and just cohabitation of all living beings" (HallerInterview27.3).

Through the permaculture course that I attended, led by Permaculture Austria Academy and Valerie Seitz, I got invited to join a Zoom meeting on TCM already mentioned at page 7. Traditional Chinese Medicine herbs in the permaculture garden may lead to self-sufficiency and self-reliance. A practical guide on how to apply TCM in a garden and how to use for diagnostics offers the Viennese TCM-therapist Georg Weidinger (2014), who combines classical academic medicine with medicine from the Orient or ethnomedicine.

Eva Ronco (zoom TCM 20.2.2022) advocates for an engagement with healing herbs and says that in Europe "a lot of knowledge on how to grow or where to get certain healing herbs is almost lost". "Apart from the sustainable ecological footprint and benefit for biodiversity", she continues "growing healing herbs has a positive emotional effect on once's body" (Ronco ibid.). Through that I got to know healing herbs and their specific healing effects:

- Goji berry or *GouQiZi*, which by the way grows in Seestadt in Vienna. It stabilizes blood sugar and thus is good for Diabetes. Amongst others, it supports the eyes and improves depression or trauma.
- Mulberry or *Sang Ye,* which supports fertility, improves tinnitus and sleeplessness.
- Chrysanthemum Flower or *Ju Hua* is good for the blood, to clean out toxins, in combination with e.g., Goji helps with prostate cancer.

- Japanese honeysuckle or *Jin Yin Hua,* which is antibacterial and anti-inflammatory & a.o.
- Mugwort or *Ai Ye* which is good when having menses, alleviates pain and warms.

## 7.2. A HOLISTIC MEDICAL DOCTOR'S IMAGINARY OF HEALTH

Romy Paredes, the author of *Transformational Medicine* (2015) sees his education in the medical school, the professionalization and the separation of the body as highly critical. He visited the *Maya ecovillage* on Philippines who see "the human being as a wholeness" (31.3). He founded the "Wellnessland" which is a "holistic place for self-transformation" (URLwellness). "Holistic centres are places that change people's lives. Safe spaces to 'be yourself'. Supportive environments to explore emotional, mental, physical and spiritual well-being…" (ibid.). His ambition as a holistic medical doctor is to "empower people to take control of their Life" (31.3) and engage with root causes of a sickness or illness, because instead, "maintaining drugs/medicine signifies maintaining the disease". It creates dependencies. "Yet, everything wants to get accomplished in a speed, without really dealing with it. The human body is not something to separate in parts like the mind and the body or is not here to label and sell for" (Paredes31.3).

In this anthropocentric era, the planet is vulnerable like a patient but importantly highlighted by Romy Paredes is that "nature does not rush" (Interview31.3). The holistic medical doctor and founder of the *Wellnessland Health Institute* on the Philippines[15] considers his education at the medical school and the way of teaching as critical and refers to the rapidity of treating symptoms within medicalization. When symptoms occur, drugs are prescribed immediately in the moment and short term, without engaging with the root cause of the disease - which possible arose over a longer term due to manifold, complex influential aspects.

It reminds me of the large agrobusinesses that do not care about consequences for the individual worker or the environment. "A shift in perception …", states the author of several books, such as *Transformation Medicine* (2015*)*, "…is the fastest healing, where self-transformation and an understanding for the human being as a wholeness can empower people to take control of their health and responsibility to their bodies" (ibid.).

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[15] see further experts on this field on wellnessland.org

„In a (medical) consultation[16] there is an asymmetric relation. The doctor is here, prescribing maybe unaware medicine. The patient is there, taking it and following the doctor" (31.3 12.15). Taking prescribed medicine may perpetuate and result in "Maintenance medicine" s. It is a power relation where authority is carried out. "What is authentic medicine? Is it about following the rules of the medical industry, bid medicine, big pharma?" (ibid.).

"The heart of healing has been forgotten, the intuitive part" because how diseases are attended "has become mechanical. The disease is not here to kill them, to harm them, but to talk to the body and remind to transform their lifestyle (..); it is a lot about un-learning".

Paredes puts the responsibility on the individual and asks to get in touch with oneself instead of a blind faith in pharmaceutics. He links 'Health 'to the interconnectedness of "Food, Community, the human body and Care."

"Our body cannot be reduced (…) to a laboratory machine. I pay attention to the wisdom of the body. Knowledge told me how to treat symptoms." When emphasizing on the root cause "it leads to self-transformation instead of medicalization, but medical schools are influenced by pharmaceutics." As root causes of a disease, he mentions (1) "toxicity" and (2) "deficiency". "Toxicity" means "something is in the body which should not be here", like too much stress, too much junk food, too much anger or bitterness" (Paredes31.3).

Secondly, "deficiency" is described as something lacking in the body, such as lack of sunlight, of sleep, water, fruits, smile" (Paredes31.3).

He considers the multiplicity of the body, namely the "physical, mental, emotional and spiritual body". Similarly, also diseases and root causes have to be looked at. He also considers feelings and emotions, as well as biophysical processes such as sun light.

When hearing about a diagnosis and/or labelling an individual with a categorized illness, certain consequences may arise, which influence well-being and the biological state. "Panic or fear is contraction, when you are stressed our muscles, our breath is contracted. We have become one intellectual, we know too much information, but business is not paying attention to the wisdom inside each one of us (ibid.).

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[16] into „conversation place to bring back symmetry" (by Paredes)

Holistic health is not just understood as the mind and the body, but being aware that,

> "…we are part of the earth. Parts of our lungs are literally up there in the trees. What we (humans) inhale, the trees exhale and vice versa" (Paredes31.3).



(Figure 12.: Photos by author, in *GT*)

## 8. CONCLUSION

Permaculture in *Gaia Terra* is for the Gaia Terra, for *Pachamama* (Mother Earth, indigenous south America) and the People. As a peer and not a maraud master, you develop a communion within community and with nature — a sense of oneness goes along with it which is built on ethical and life-affirming actions. My concluding thoughts are, when we strive for "Kinship with All Life" (Boone Allen 1954), "communication with nature" (Braunroth Eike), for "Harmony with the natural Beings" (ibid.) and for diverse nonviolent gardens on Earth, we can move towards more pluralism in medical systems and its underlying understanding of Health and well—being. We can move towards regeneration and reciprocal harmony, as well as taking care of people and environmental health instead of profit. deterrent

The medical aspect in permaculture seems to be embedded within a critical stance towards current dominant ways of broader social and ecological concerns, as expressed by permaculturist and teacher Andy Haller. The health aspect, using the example of herbology does not seem to have been the initial motivation behind the start of the project. When questioning about his understanding of health and reflecting on his activities with herbology in his surroundings, he makes clear that the way of thinking and being aware of what a happy life and well-being means, is vital for the health/ill health of someone's own.  In other words, due to the holistic approach of a permaculture life, living and being are geared to certain socioecological ethics, values, and principles. It is understandable that such a project needs to grow over time and specific characteristics or specialized competencies such as fermentation (Fervida) in Gaia Terra or Andys garden full of herbs come into being within the community process. Health is lived, namely through a critical stance towards destructive life and production forms, a focus on the body, it's performance and the self. The appreciation of a healthy life is inherent with the actual does and don'ts in daily life.

Concluding, I state that the dichotomy between mind and body influences not just how we deal with health issues but paths the way on how we conceive the term, make sense of it and attend it. A rigid, reductionist, biomedical gaze on illness and how mind and body interrelates to each other definitely also influences biomedicine, psychology and psychiatric institutions. Moreover, we should question why certain attributions are addressed towards specific individuals and/or the group.?

For me, Health is a verb. Our bodies express how we interact with the world. Space, Place Body, Experience and value-laden ideologies are understood as mutually constitutive. We are not composed as separated minds and bodies. The 'becoming different' results in a shift in how we see ourselves. Our narrative about ourselves has social, psychological, physical and emotional consequences. New self-narratives emerge, and go along with new experiences, new felt emotions and behaviours and actual doings which are compatible with previous ones. Thus, it results in new embodied ways of being.

To make a life worth living, I suggest reflecting, connect and take responsible with the self, the own body. Fundamentally, transformation requires a shift in perspective and as well as shift in bodily conceptions. Suffering is subjective – as the bodily experience. In line with Illich and Ingold I argue for a peaceful bodily-being-in-the-world.

I am taking a stance, but not just for my own well-being, to listen to my body, but for the planet as well. I regard it as crucial to acknowledge and consider emotions, affects and give them a stage to reflect on. We need to change for all sorts of complex reasons in reality, also for emotional reasons, and not just to arrive at Health and a resilient, harmonic human – nonhuman relation. Because the way is the aim and travelling are the best ways of learning.

"To let the arrogance of the mind, go and turn to the genius of my heart" (Paredes31.3)



(Figure 13: Photo by author)

## 9. SOURCES

Ashwanden. 2019. *Permaculture and Healing — Part 2*. accessed on:
https://www.permaculturenews.org/2019/06/12/permaculture-and-healing-part-2/

Bilharz, M., & Schmitt, K. 2011. Going big with big matters. The key points approach to sustainable consumption. *GAIA-Ecological Perspectives for Science and Society*, 20(4), 232-235. Blackwell.

Boserup, E. 1965. *The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population* Pressure. Routledge.

Brown, H., & Nading, A. M. 2019. Introduction: human animal health in medical anthropology. Medical anthropology quarterly, 33(1), p. 5-23. https://doi.org/10.1111/maq.12488

Cole, Jennifer. *2019. Planetary health: human health in an era of global environmental change.* CABI Publishing, London.

Csordas, Thomas, 1994. *Embodiment and experience: The existential ground of culture and self.* Cambridge, UK: Cambridge Univ. Press.

Deem, S. L., Lane-deGraaf, K. E., & Rayhel, E. A. 2019. *Introduction to one health: An interdisciplinary approach to planetary health*. John Wiley & Sons.

Descola, Philippe. 2005. *Jenseits von Natur und Kultur.* Suhrkamp: Berlin

Diamond, J. 1987. The Worst Mistake in the History of the Human Race. *Discover*, 8(5): 64–66.

Donna Haraway. 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective *Source*: *Feminist Studies*, Vol. 14, No. 3, pp. 575-599

Douglas, Mary. 2003 3rd edition (orig. 1970). Natural Symbols Explorations in Cosmology. Routledge

Emerson, Robert, Rachel Fretz and Shaw, Linda. 1995. From Field to Desk. In: R. Emerson et al. Writing Ethnographic Fieldnotes. Chicago: Chicago Press. S. 39-65.

Eriksen, Hylland Thomas. 2016. Overheating: an anthropology of accelerated change. London : Pluto Press, 2016

Escobar, A. 2017. *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds.* London: Duke University Press.

Escobar, Arturo. 2016. Thinking-feeling with the Earth: Territorial Struggles and the Ontological Dimension of the Epistemologies of the South. Revista de Antropología Iberoamericana Volume 11 Issue 1. Madrid: p. 11-32, accessed on: http://www.aibr.org/antropologia/netesp/numeros/1101/110102e.pdf 09.5.18

Farquhar, Judith, and Margaret Lock. 2007. *Beyond the body proper: Reading the anthropology of material life.* Durham, NC: Duke Univ. Press.

Fassin, Didier, Amy Jacobs, and Gabrielle Varro. 2007. *When Bodies Remember: Experiences and Politics of AIDS in South Africa.* 1st ed. University of California Press.

Ferguson RS and Lovell ST. 2017. Livelihoods and production diversity on U.S. permaculture farms. *Agroecology and Sustainable Food Systems* 41: 588–613. Routledge.

Festinger, L. 1957. *A theory of cognitive dissonance* (Vol. 2). Stanford University Press.

Foucault, M. 1967 *Madness and Civilization*. New York: Mentor.

- 1975 The Birth of a Clinic. New York: Vintage.

- 1979 Discipline and Punish. New York: Vintage.

- 1987 Shamanism, Colonialism, and the Wild Man: A Study in Terror and Healing. Chicago: University of Chicago Press.

Gobo, Giampietro. *2007a. Entering the Field.* In: Gobo, Giampietro*: Doing Ethnography*. London: Sage Publications. S. 118-134.

Gobo, Giampietro. 2007b*. Ethical Dilemmas*. In: Gobo, Giampietro: *Doing Ethnography*. London: Sage Publications. S. 135-147.

Goodman, Alan H. and Joseph L Graves. 2021. *Racism, Not Race: Answers to Frequently Asked Questions.* Columbia University Press

Harmon-Jones, E., & Mills, J. 2019. *An introduction to cognitive dissonance theory and an overview of current perspectives on the theory.* Routledge.

Holmgren D. 2002. *Permaculture: Principles and pathways beyond sustainability*. Hepburn, Vic: Holmgren Design Services.

Holmgren, D. 2011. Weeds or wild nature: a permaculture perspective. *Plant Protection Quarterly*, 26(3), 92-97.

Holmgren, D. 2020. *Essence of permaculture*. Melliodora Publishin, Seattle.

Illich, Ivan. 1976 *Medical Nemesis*. New York: Pantheon.

- 1973. *Tools for Conviviality*. New York: Harper & Row.

Ingold, Tim. 2011. *Being Alive: Essays on Movement, Knowledge and Description*. London: Routledge

- 2000. *The Perception of the Environment. Essays in Livelihood, Dwelling and Skill.* London: Routledge

- 2011. *Worlds of sense and sensing the world: A response to Sarah Pink and David Howes*. Social Anthropology 19.3: 313–317.

Jackson, Michael. 1989. *Paths toward a Clearing: Radical Empiricism and Ethnographic Inquiry*. Bloomington, Indiana: Indiana University Press.

- 2012. *Between One and One Another*. Berkeley: California University Press.

Kitanaka, Junko. 2012. *Depression in Japan: Psychiatric cures for a society in distress.* Princeton, NJ: Princeton University Press.

Kollmuss, A., & Agyeman, J. 2002. Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental education research*, 8(3), 239-260.

Krieger, Nancy. 2001. Theories for social epidemiology in the 21st century: an ecosocial perspective. *International Journal of Epidemiology* 30: 668 – 677

Krzywoszynska, A. 2016. What farmers know: Experiential knowledge and care in vine growing. *Sociologia Ruralis* 56(2) 289-31

Larsen, C.S. 1995. Biological Changes in Human Populations with Agriculture. *Annual Review of Anthropology,* 24(1): 185–213.

Lebov, J. et al. 2017. A framework for One Health research. *One Health*, 3, 44-50.

Lentz, Carola. 1989. Feldforschung als Interaktionsprozess: Erfahrungen in indianischen Dörfern in Ecuador, *Sociologus*, 39, 123-151.

Lerner, H., & Berg, C. 2017. A comparison of three holistic approaches to health: One Health, EcoHealth, and Planetary Health. *Frontiers in veterinary science*, 4, 163f

Lindner, Rolf. 1981. *Die Angst des Forschers vor dem Feld: Überlegungen zur teilnehmenden Beobachtung als Interaktionsprozess*. Zeitschrift für Volkskunde, 77, 51-66.

Lock, Margaret, and Vinh-Kim Nguyen. 2010. Anthropologies of Anthropologies of medicine. In *An anthropology of biomedicine*, pp. 57–82. Oxford: Wiley-Blackwell.

Lock, Margaret. 1993. Cultivating the body: Anthropology and epistemologies of bodily practice and knowledge. *Annual Review of Anthropology* 22:133–155.

Low, Setha M. 2003. Embodied Space(s). *Space & Culture* vol. 6 no. 1, 9-18. SAGE, DOI: 10.1177/1206331202238959

Mascia-Lees, Frances E., ed. 2011. *A companion to the anthropology of the body and embodiment.* Malden, MA: Wiley-Blackwell.

Mason, Jennifer. 2002. Observing and Participating. In Mason, Jennifer: *Qualitative Practice. Fieldwork and the Ethnographic Method*. London: Berg. S. 86-106. Routledge.

Mauss M. 1954 [1925] *The Gift.* New York: Norton

Meloni, G. et al. 2018. Beyond Anthropology. A Conversation with Tim Ingold. *Historische Anthropologie*, 26(2), pp. 245-250.

Mol, Annemarie. 2002, *The body multiple: ontology in medical practice* Durham: Duke University Press.

Mollison B. and Holmgren D. 1978. *Permaculture one: A perennial agriculture for human settlements*. Tyalgum: Tagari.

Morel, Ferguson, Léger. 2018. Permaculture. *Encyclopedia of Ecology*, 2nd Edition https://doi.org/10.1016/B978-0-12-409548-9.10598-6

Nelson, M. 2018. Embodied ecology: The eco-somatics of permacultur*e. Choreographic Practices*, 9(1), 17-30.

Nieswand, Breidenstein, Kalthoff, Hirschahuer. 2013. *Ethnografie. Die Praxis der Feldforschung*. Springer VS, Wiesbaden

Noske, Barbara. 1993. The Animal Question in Anthropology: A Commentary. In Barbara Noske (ed.) *Society and Animals,* Vol. 1, No. 2. Netherlands: p.185 – 190.

O'Donnell, A.G., et al. 2001. *Plants and Fertilisers as Drivers of Change in Microbial Community Structure and Function in Soils." Plant and Soil*, 232(1–2): 135–145.

O'Reilly, Karen. 2005. Interviews: Asking Questions of Individuals and Groups. In: O'Reilly, Karen: *Ethnographic Methods.* London: Routledge. S. 112-138.

Okely, Judith. 2012. Participant Observation Examples. In: Okely 2013. *Anthropological Practice: Fieldwork and the Ethnographic Method.* London, New Delhi, New York: Bloomsbury Academic

Parker, Melissa, and Ian Harper. 2006. The Anthropology of Public Health: *An Introduction. Journal of Biosocial Science* 38(1): 1–5.

Passmore, R., & Durnin, J. V. 1955. Human energy expenditure. *Physiological reviews*, 35(4), 801-840.

Prescott, S. L., & Logan, A. C. 2019. Planetary health: from the wellspring of holistic medicine to personal and public health imperative. *Explore*, 15(2), 98-106.

Rabinowitz, P. and Conti, L. 2013. Links among Human Health, Animal Health, and Ecosystem Health. *Annual Review of Public Health, 34(1): 189–204.*

Rashid, N. R. N. A., & Mohammad, N. 2012. A discussion of underlying theories explaining the spillover of environmentally friendly behavior phenomenon. *Procedia-Social and Behavioral Sciences,* 50, 1061-1072.

Rhodes, C. J. 2015. Permaculture: Regenerative–not merely sustainable. *Science progress*, 98(4), 403-412.

Rhodes, Christopher. 2012. Feeding and healing the world: through regenerative agriculture and permaculture*. Science Progress* (2012), 95(4), 345–446, doi: 10.3184/003685012X13504990668392

Rockström, Johan et al. 2009. Planetary Boundaries: Exploring the Safe Operating Space for Humanity. *Ecology and society*, Vol.14 (2), p.32. Routledge.

Salleh, A. M., Rosli, et al. 2018*.* Permaculture design: Linking local knowledge in land use planning for house compound. *In SHS Web of Conferences* (Vol. 45, p. 03003). EDP Sciences.

Scheper-Hughes N. 2001 Bodies for Sale – Whole or in Parts. *Body & Society*. 7(2-3):1-8. doi:10.1177/1357034X0100700201

Scheper-Hughes, Nancy. 1990. Three Propositions For a Critically Applied Medical Anthropology. Accessed on https://digitalassets.lib.berkeley.edu/anthpubs/ucb/text/kas069_070-006.pdf

Seligman, R. A. 2017. "Bio-looping" and the psychophysiological in religious belief and practice: Mechanisms of embodiment in Candomblé trance and possession. In The Palgrave Handbook of *Biology and Society* (pp. 417-439). Palgrave Macmillan

Stellmach, D., Beshar, I., Bedford et al. 2018. Anthropology in public health emergencies: what is anthropology good for? *BMJ global health*, 3(2)

Taussig, M. 1978 Nutrition, Development, and Foreign Aid. *International Journal of Health Services*. 8(1): 101-121.

Thogersen, J. 2002. Cognitive dissonance and sustainable consumption. *ACR Asia-Pacific Advances.*

Thurston, T.L. and Fisher, C.T. 2007. Intensification, Innovation, and Change: New Perspectives and Future Directions." In T.L. Thurston and C.T. Fisher (Eds.), *Seeking a Richer Harvest: The Archaeology of Subsistence Intensification, Innovation, and Change* (pp. 249–259). New York: Springer.

Tsing, Anna. 2013. More-than-Human Sociality: A Call for Critical Description in Kirsten Hastrup (Ed.): *Anthropology and Nature*. London: Publisher. p. 27 – 43

Veteto JR and Lockyer J. 2008. Environmental anthropology engaging permaculture: Moving theory and practice toward sustainability. *Culture and Agriculture* 30: 47–58.

Victora, C.G., Adair, L., et al. 2008. Maternal and Child Undernutrition: Consequences for Adult Health and Human Capital. *The Lancet*, 371(9609): 340–357.

Wolf, M. 2015. Is there really such a thing as "one health"? Thinking about a more than human world from the perspective of cultural anthropology. *Social Science & Medicine*, 129, 5-11.

## URL – INTERNET SOURCES

URLreGENeration: https://learn.ecovillage.org/course/regen-nations/

URLpermaculture&philosophy: https://www.permaculturenews.org/2012/01/11/permaculture-and-philosophy/

URLdeepgreenpermaculture: https://deepgreenpermaculture.com/

URLvikalp: Vikalp Sangam: https://vikalpsangam.org/about/the-search-for-alternatives-key-aspects-and-principles/, also see https://wsimag.com/economy-and-politics/68872-the-flower-of-transformation

URLWaiora:

URLwellness: https://wellnessland.org/#welcome-to-wellnessland

URLontology: https://www.britannica.com/topic/ontology-metaphysics

## 10. APPENDIX

~   FIELDWORK STAY: from 11.2 – 22.2.2022

~   INTERVIEWS:

1. In-Person Interview with Debora, in Gaia Terra Debora's room on 20.2.2022

2. Zoom Interview with Debora 28.3.2022

3. Zoom Interview Andreas Haller 27.3.2022

4. Zoom Interview with Alberto 20.3.2022 and met in person before in *Gaia Terra*

5. Zoom Interview with Romy Paredes on Philippines (GMT+8) 31.3.2022

~   ReGENeration meeting on 26.3 – invitation from GENOA, the GEN Oceania, per email. "Grounding in Regeneration | Info Session Follow-Up"

~   Gaia University, online: https://gaiauniversity.org/

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~   COURSE CONFIRMATION, PERMAKULTUR AUSTRIA, VALERIE SEITZ

## NOTE DI INGRESSO AI VOLONTARI A GAIA TERRA

- Abbiamo scelto di vivere in modo semplice, ti offriamo lenzuola pulite e ti invitiamo a tenere lo spazio in cui dormi pulito e in ordine. Questo è un luogo pubblico e molte persone passano a visitarci è importante per noi dare un senso di **ordine e pulizia**.
- Abbiamo scelto di rispettare l'ambiente e la natura per cui cerchiamo di **non sprecare acqua**; di non sprecare **energia elettrica** (se vedi luci accese di giorno spegnile); di **non usare carta** né in cucina né ~~poca~~ in bagno (chiediamo di non usare carta igienica, ma di lavarsi con acqua), ti possiamo fornire un fazzoletto di tela per il naso; di **non usare saponi chimici** né per la cura della persona né per la cura della casa, di pulire le docce dopo l'uso e comunque di lasciare sempre pulito dietro di sé, anche con l'utilizzo del FERVIDA. Chiediamo di fare possibilmente la pipì fuori e di segnare il gancio dove appendiamo l'asciugamano in bagno con il proprio nome.  BICI E CUSTODIA
- Abbiamo scelto di apportare naturalmente nutrimento al nostro orto attraverso gli **avanzi di cibo fresco della cucina** (COMPOST ROSSO) che vanno sparsi direttamente sulle baulature. Il compost dal tappo BLU contiene: agrumi, cibo cotto e bustine di tè, sacchetti materbi e pezzi di cartone danneggiati, poco graditi ai microrganismi utili all'orto, questo va vuotato nel buco all'interno della recinzione vicino all'orto.
- Abbiamo scelto di lavorare sulle relazioni umane in una situazione di **mutuo aiuto** e di **ascolto** reciproco. C'è una TABELLA TURNI per le necessità del vivere quotidiano (pulizia e pasti), al termine dei pasti tutti sono invitati a dare una mano alla pulizia dei tavoli è della cucina. Se hai bisogno di collegarti a internet abbiamo un router. Chiediamo di iscriversi alla nostra associazione (5€), contribuire con 90€ al mese e un minimo di 6 ore al giorno per 5 giorni a settimana per aiutarci a realizzare il nostro sogno! Abbiamo scelto di accettare il tuo aiuto volontario facendoti sentire il più possibile a tuo agio, rispondendo alle tue domande e curiosità per condividere con te le nostre conoscenze ed imparare da te se hai suggerimenti da apportare. Se ti capiterà di avere problemi potrai richiedere del **tempo per parlare** con Debora, Damiano o Daniele.
- Dall'esperienza di avere tanti volontari a Gaia Terra ci sentiamo di consigliarti di vivere questo tempo qui serenamente, costruttivamente, nel rispetto del consenso degli altri e in sobrietà (sesso, droghe, alcol, sonno). Ti invitiamo ad esprimerti in maniera **trasparente e sincera**, raccontaci di te e noi ti racconteremo di noi!
- Durante la settimana (da lunedì a venerdì) abbiamo ogni giorno un incontro alle 9:00 dove condividere le attività giornaliere. Almeno 1 volta al mese ci incontriamo in un "cerchio emotivo" e 2 volte al mese ci incontriamo per un "cerchio casa" dove discutere dell'ordine del giorno (ODG) al quale tutti possono aggiungere degli argomenti di interesse.
- Abbiamo deciso di rispettare gli altri esseri viventi che condividono la vita su Madre Terra ed è per questo che **non mangiamo animali** e i loro prodotti. I nostri pasti sono completi perché attraverso l'assunzione di cereali integrali, legumi, semi oleosi e oli di buona qualità assumiamo le proteine necessarie al nutrimento delle nostre cellule. **Ringraziamo il cibo** che riceviamo prima dei pasti riconoscendo il suo valore e gli sforzi che sono stati fatti per ottenerlo e quindi non lo sprechiamo e non lo buttiamo via.
- Prima della tua partenza ti invitiamo a lasciare un **feedback** nel nostro quaderno verde, staccare il tuo nome dalla tua tazza personale e attaccarlo sul nostro poster.
- Il giorno in cui riparti ti invitiamo a portare le tue lenzuola ed asciugamani che hai usato nella sala tecnica affianco alla lavatrice e lasciare pulita, libera ed ordinata l'area attorno al tuo letto. Grazie!

FEED

~   Based on Holmgren (2020) the following Permaculture Princicples are explained.

1.Observe and interact: Taking the time to observe nature, results in finding solutions that are tailored to the situation at hand. This can create sustainability and lead to a healthy planetary future.

2. Collect and store energy: As soon as developed systems that store energy are abundant, the aim should be to store the energy and release it when needed.

3. Obtain a yield: Human actions should create a plus in a form that benefits us as human beings, but which does not destroy the source of the margin.

4. Apply self-regulation and accept feedback: Eliminating not needed activity in order for systems to function well in the long-run, where learning from the past is key.

5. Use and value renewable resources and services: Using the abundance as resourceful as possible to reduce any wasteful consumption and dependency on non-renewable resources.

6. No waste: As soon as one values and uses all the resources available, then there will be no waste in an ecosystem.

7. Design from patterns, then details: Taking a look from the distance, once will be able to perceive the overlying patterns in nature and society. These will become the basis of ecological designs, which then will be built and thought through with great detail.

8. Integrate rather than segregate: As soon as the correct aspects and materials are placed in the right place and situation, relationships between these can develop so that all beings support each other.

9. Use small and slow solution: Small and slow systems are easier to manage than large ones, there ecological managers can use local resources and increase the production of sustainable returns.

10. Use and value diversity: The diversity of elements in natural systems makes these more resilient. It also brings advantages of understanding the uniqueness of each environmental habitat.

11. Use edges and value the marginal: Impact happens at borders and interfaces, where change is wanted. Often precious, diverse and productive elements and materials of a ecological system are at unexpected places.

12.Creatively use and respond to change:  One can positively influence the inevitable

Change, as soon as it is carefully done and only intervenes at the right time.

~ Own PHOTOS

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