

gardeners

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gaertner

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# I. Introduction

Thinking back on my childhood now I remember afternoons spent adventuring in the woods, weekends catching fish with my dad at a nearby lake, bonfires and sky watching at night, digging holes into my parents' never too tidy lawn. Occasionally helping my mum plant tomato bushes in her greenhouse but more often just reading a book amidst the greenery of our backyard garden. The sound of laughter and play filling the narrow residential streets of the small town in rural Bavaria I grew up in.

A mighty romantic view on my own childhood; encouraged in parts by my current situation of living in the city, spending my time on designated bicycle lanes, in movie theaters, at university. Surrounded by concrete and colorful advertisement. Thinking about not spending time in nature. My thoughts about nature being filled with daunting visions for the future and unclear ideas of the concept itself and how we as a society are supposed to treat it. Caught up in this helpless unclarity I often times wish for a simpler reality. One that allows me to act on my worries and to connect myself more directly to the land. Something that will help me to quiet down my bad conscience in relation to the environmental problems we face.

Endowed with a sense for discovery I set out to find that reality I am so longing for. A journey of mind just as much as a journey in its literal sense. Travelling the world in the deliberate slowness that is required to allow the mind to keep up with all those new experiences and ideas, I finally realized that I'm not alone in my search for a meaningful way to act upon environmental worries. The world is brimful with caring people united in their pursuit to make it a better place. I became more and more aware of and participated in efforts to do so: urban gardening, switching to organic and fair trade products, buying less clothing, beach clean-ups, avoiding plastic packaging, raising awareness through rallies, sharing information and inspiration online, signing petitions, living a more environmental aware life through outdoor activities like surfing and hiking.

However, in the end all that activism allowed me only small glimpses into a life more connected to nature, where the sole mention of the word environment won't cause negative thoughts but rather a feeling of awareness and appreciation for the intricate way in which environmental processes shape our world and everyday lives. More often my activism would make me even more aware of environmental problems and over time I started to feel rather ridiculous and pretentious talking and writing and pretending to do something about these problems, surrounded by - without a doubt well meaning and idealistic - city dwellers, mostly academics talking and writing about these same problems and possible solutions without any real change taking place.

My own ridiculousness becomes especially tangible when talking to my family members. While I more or less successfully try to raise even just a handful of fresh herbs on my balcony with the intention to save the world, they harvest - and have been doing so for decades - most of their vegetables and fruits from their own backyard gardens. Continually growing their knowledgebase on environmental systems and safeguarding social-ecological knowledge. Nourishing a naturally grown connectedness with their surroundings, shaping them at the same time, leading a life that I feel might be the modest answer to at least some of our environmental and social problems.



Still little attention has been paid to rural backyard gardeners and their way of seeing nature and interacting with it. Consistent with my role as the theorist in my own family I feel an urge to explore this natural and unquestioned connectedness I briefly got to experience as a kid by giving the gardeners in my family a voice and providing outsiders and myself with a fresh view on rural backyard gardening. I'm trying to give this voice not because they need or want or even ask for one. They simply deserve a voice. And some of us may learn from it.

Is this connectedness I feel exists a reality beyond personal experience? How does it play together with practical and theoretical knowledge about gardening and ecosystems? What role does intergenerational knowledge-transfer – put in train hundreds of years back - play in safe-guarding these different kinds of knowledge and connectedness that I feel are and will be an important resource for the protection of environmental systems and processes?

# II. Family

While almost everyone in my family is helping out in the two backyard gardens – my grandfather Michael's and my mother Marianne's – in the small Bavarian town Rain am Lech there are three family members from different generations who show a particular interest in gardening and spend a significant amount of time on it: my grandfather Michael, my mother Marianne and my brother Jakob. What follows is an exploration based on tours of their gardens, interviews, photographs and historical research into garden and landscape studies.



Jakob

Marianne's son. Has enjoyed helping in the family's gardens since he was a little kid and has now taken up an apprenticeship as a landscape gardener.



Marianne

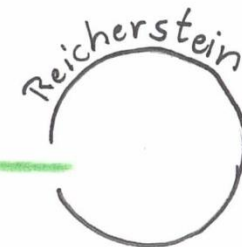
Michael's daughter and Jakob's mother. Has been harvesting vegetables from her own backyard garden in the rural town Rain for 25 years.

Rain am Lech



Michael

Marianne's father. Moved to Rain from the farming village of Reicherstein in 1964. Has been working in his backyard garden in Rain for 49 years.



„Wir haben auch einen [Gemüse-] Garten gehabt. Für mich ist das nichts Neues. Das war schon immer so.“

*„We also had a [vegetable] garden. That's nothing new for me. It has always been like this.“*

Michael

Michael grew up on a farm in the village of Reicherstein where he had to help not only in the fields but also in the vegetable garden. He then moved to Rain together with his wife - who was also a farmer's daughter - where they bought a small house and continued to grow vegetables in the backyard. The practice of rural backyard gardening can thus be seen in the tradition of so called “Bauerngärten”. Vernacular garden with a similar plant composition and layout, sprinkled with flowers and herbs, found around farmhouses<sup>1</sup>.



# III. Tradition

In the past the most commonly used term for rural gardens associated with farmhouses in Germany has been *Bauerngärten*. The ideal *Bauerngarten* – though not an undebated concept - is characterized by a specific composition of plants and a certain layout that has developed through time<sup>1</sup>.

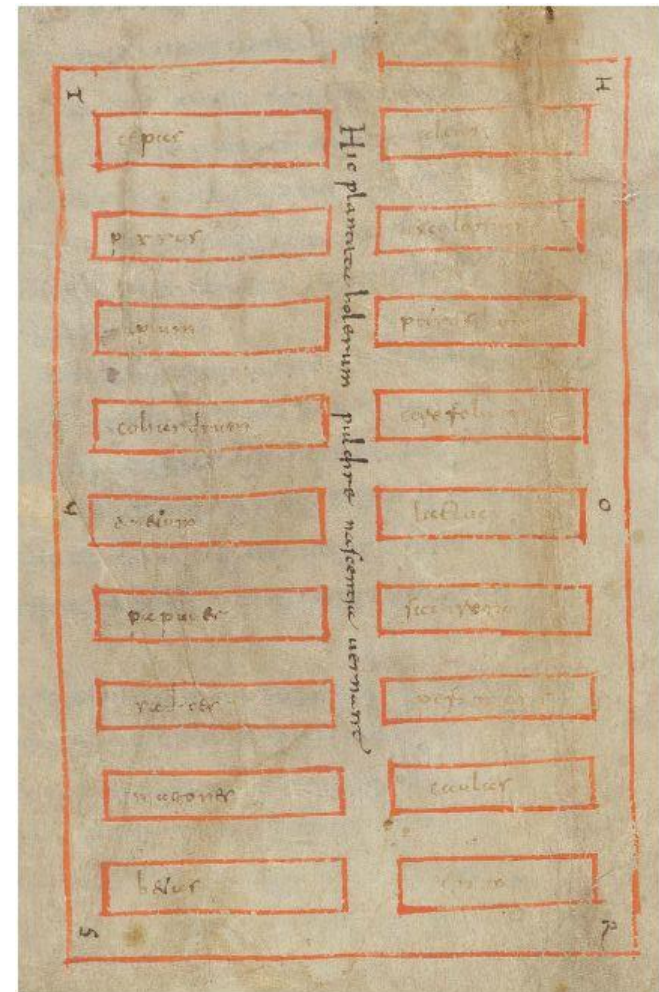
Stemming from the Indo-European word 'gher' meaning to girth a garden has always been an piece of land that had been fenced with the purpose of keeping damage from the plants that grow within and to keep animals and other humans out. During Germanic times these plants were mainly medical herbs that didn't grow wild in the vicinity of the house and highly nutritious plants. The only fruit tree planted was the apple tree. With the Romans arriving new species of plants travelled north from the Mediterranean region. Coriander and dill, cherry and apricot trees...<sup>1, 2</sup>

Much of these accomplishments were lost during the Migration period known as *Völkerwanderung*. And while little is known about the design of *Bauerngärten* during the medieval ages it is assumed that it has been influenced by the monastery gardens of the time in plant composition and layout<sup>1</sup>. Although it can be argued that the layout in its simplicity didn't actually need a model but originates from practical considerations alone<sup>3</sup>.

The few existent written sources about medieval gardens have all been produced by monasteries, based on the study of ancient Roman and Greek knowledge and only sometimes practical experiences. Most of them describe a rather similar set of plants, mainly medical herbs, vegetables and fruit trees. Some of them seemingly unsuitable for the climatic conditions in Central Europe. Only few flowers – rose and lily with their symbolic meaning - were appreciated for something else but their healing properties<sup>2</sup>.

A design for the monastery of St. Gall in Switzerland from the early 9th century helps to visualize what a medieval garden might have looked like. The garden is split in three sections: a medical herb garden (Herbularius), a vegetable garden (Hortus) and an orchard that also served as cemetery. There is no reference to the source of water for gardening<sup>2</sup>.

**Right** – Vegetable garden in the plan of St. Gall<sup>4</sup>



A factor that contributed to the spread of rural gardens during the medieval period was land rights. While a tenth of all yields from jointly cultivated farm land had to be delivered to the landlord, garden produce was often exempt from additional taxation. In their fenced off gardens farmers could plant whatever they wished. Intruders – animals or humans - faced severe punishment<sup>2</sup>.

The late medieval ages (circa 1250 to 1500) finally saw the introduction of flowers. Their beauty first allowed them access into the gardens of the rich bourgeoisie from where they seeped through into *Bauerngärten*. Peony, marigold, lavender, hollyhock... In the 16th century bulbous plants arrived from today's Turkey. The Age of Discovery led to the introduction of more and more new crop and ornamental plants. Most prominently the acceptance of the potato first into gardens later into the farmers' fields<sup>1, 2</sup>.

In the 19th and 20th centuries only few new discoveries found their way into rural gardens. During a time with little change it seemed the ideal *Bauerngarten* – rectangular structure with crossing pathways and a traditional set of plants - had been found and at the beginning of the 20th century these features had become so essential to the concept that worries about the disappearance of *Bauerngärten*, caused by the introduction of new species and a growing love of order and sterility spilling over from the house to the garden, grew loud<sup>1</sup>.

Helped by the widespread availability of mineral fertilizers and herbicides rural gardens did indeed change their face and are only now in some places back on their way to an unruly jumble of herbs, flowers, vegetables, fruits and animals that is supposed to be characteristic of *Bauerngärten*<sup>1</sup>. Whether a certain garden – associated with a farmhouse or not – should be called *Bauerngarten* ultimately depends on personal opinion. While our mental images of the ideal *Bauerngarten* may correspond in some aspects they will always differ in others. It becomes clear that rural gardens – regardless of their exact size, layout and composition – have always been shaped by social and economic realities and most of all by practical considerations, leading to their widely varying, ever changing faces where some features are common and long-established while others are specific and innovative.



**Left to right** - Blooming sage, red radish and young pears in Marianne's garden



# IV. Backyard Gardens

Though I wouldn't call Mariannes's and Michael's backyard gardens *Bauerngärten* I feel they can certainly be seen in their tradition as they accomodate vegetables, fruit trees and herbs as well as flowers. Many of the species that can be found in their gardens do have a long tradition in rural gardens. Sage as a medical herb and flower, radish and pear trees amongs them. While Mariannes's garden is an unruly jumble spilling out around crossing pathways and limited by a fence, Michael's garden is to a greater extend shaped by a love for order. Innovation, rediscovery and ulitimately change is mainly induced by practical considerations and coincidence.

*„Die Quitte habe ich gepflanzt. Die habe ich geschenkt bekommen.“*

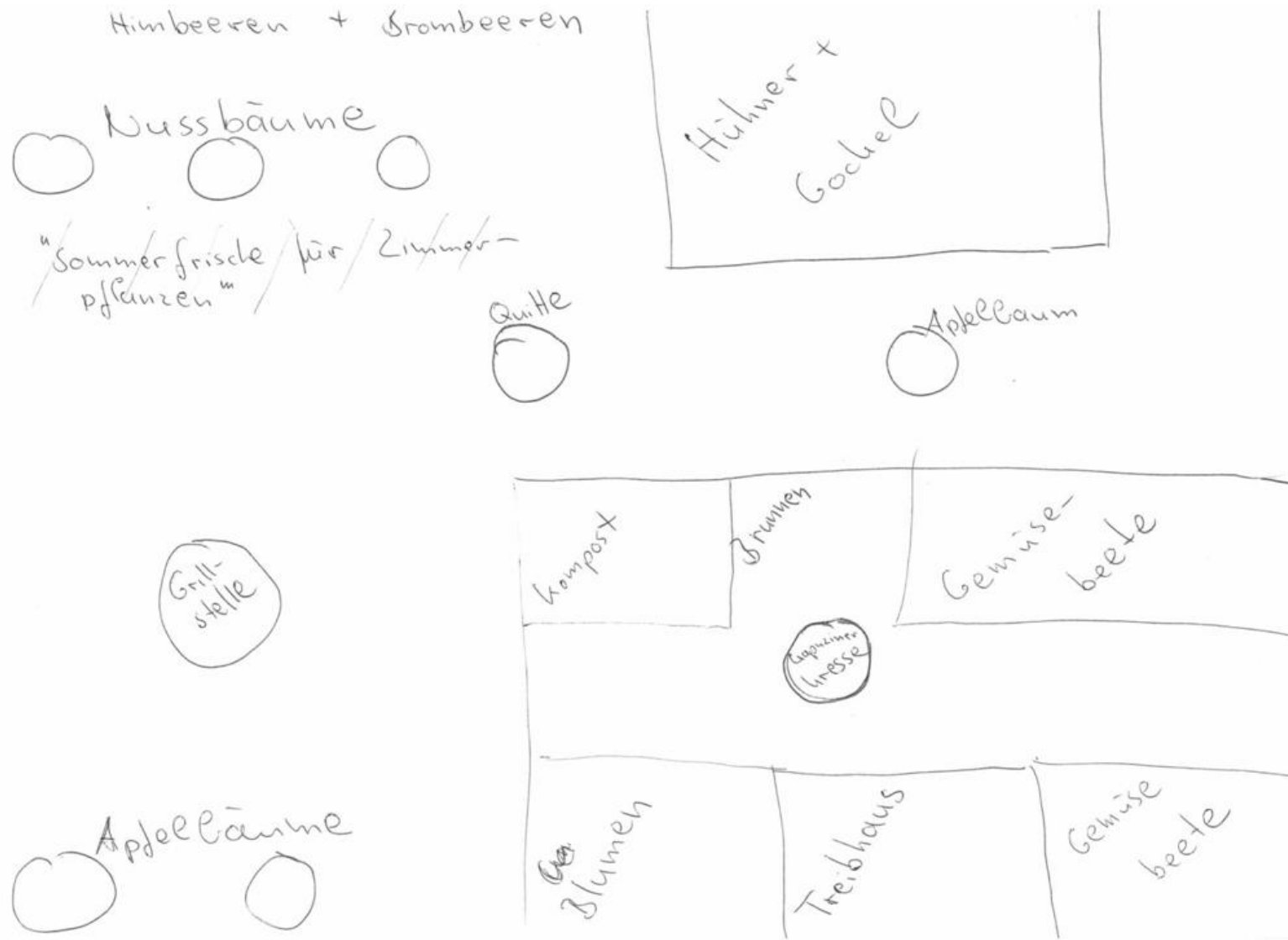
*„I planted the quince tree. It had been given to me as a present.“*

*Jakob*

*„Neue Sorten baue ich oft an weil ich sie in Rezepten gefunden habe und verwenden will“*

*„I often plant new varieties because I stumbled upon them in recipies and want to use them“*

*Marianne*



**Above** – A mental map drawn by Marianne detailing the layout and plant composition of her garden.



„Mein Garten ist immer ziemlich voller Unkraut. Mir ist es nicht das Wichtigste, dass er ganz ordentlich ist. Ich schaue immer am Anfang wenn ich pflanze, dass das Unkraut kleiner bleibt als die Pflanze“

*„My garden is quite full of weeds. It's not so important to me that it is too tidy. When I just planted something I pay attention that the weeds stay lower than the plant.“*

*„Stockrosen und Akeleien, die lasse ich dann an manchen Stellen wachsen. Die wuchern nicht so wild. Die sind dann doch schön dazwischen.“*

*„Hollyhocks and granny's bonnets, those I let grow in some places. They don't sprawl all over the place and they are beautiful after all.“*

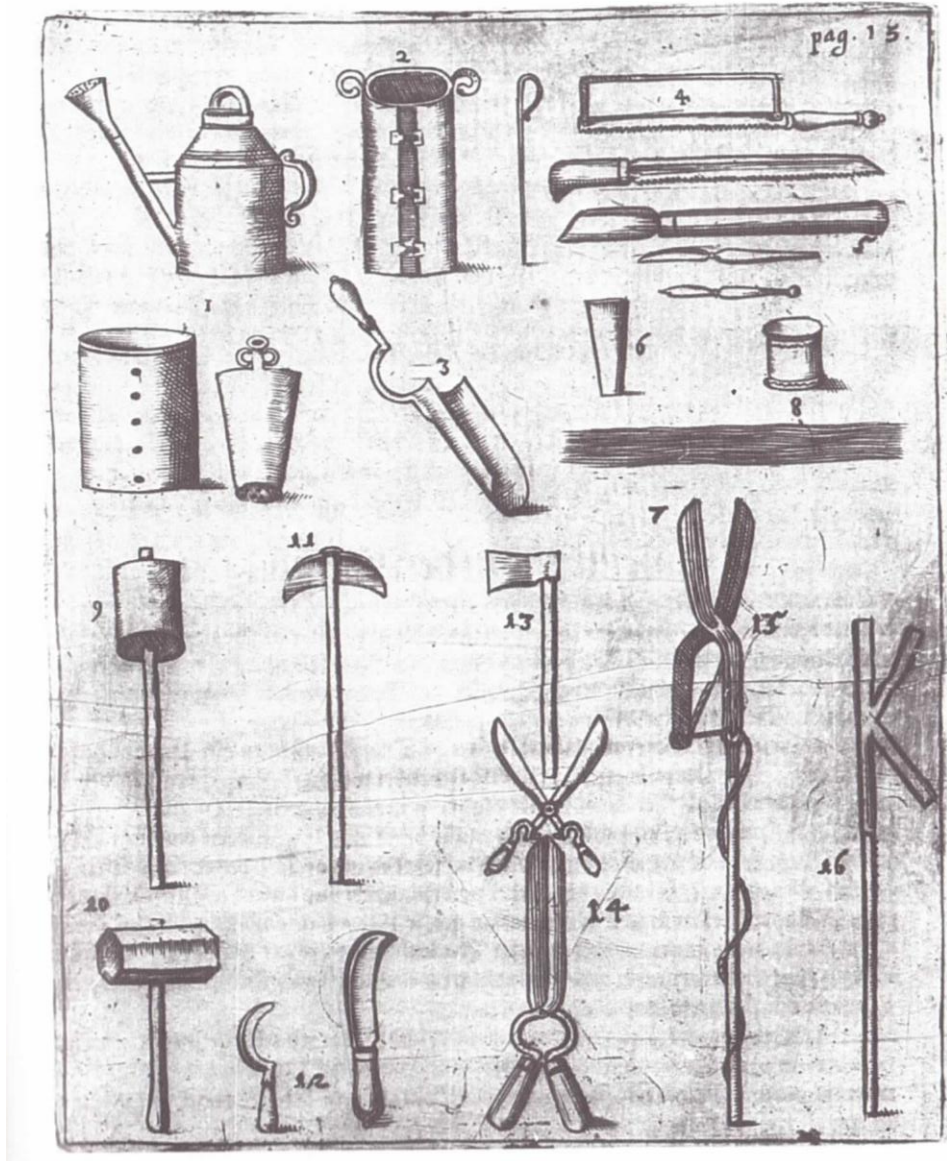
Marianne



# V. Knowledge

The study of the history of gardens is more concerned with plant composition and layout than the practice of gardening itself. It seems however that the practical aspects of gardening might have been the more important ones to a rural population that relied on garden produce for nutrition<sup>3</sup>. From the 16th century on printed copies of books on gardening became available to a wider audience, allowing the acquisition of theoretical knowledge. Still much of the knowledge was generated by trial and error and passed on from one generation to another, from neighbor to neighbor, by jointly working in the gardens. Changes were caused not only by the introduction of new species but also by the invention and adoption of new techniques and tools like hotbeds, compost piles, glasshouses, iron spades and later on garden hoses and lawnmowers<sup>2</sup>.

This act of passing on knowledge that has been shaping gardening practice and gardens as long as they exist is still alive in rural backyard gardens. It is thus fair to assume that the knowledge that is being passed on today through various ways<sup>5</sup> - the imitation of working methods, proverbs, the application of certain tools and seeds, and through direct advise - has been acquired, transformed and enriched or at least influenced by several hundreds of years of gardening practice.



**Left** – Elßholz, 1664. Gardening tools<sup>2</sup>. Notable similarities with today's set of tools exist.



„Ich hab das immer bei meinen Eltern gesehen. Ich hatte daheim schon ein Beet wo ich einzelne Sachen angebaut habe. Und dann habe ich eben durch Versuch und Irrtum gelernt.“

*„I noticed what my parents did. I used to have my own bed where I would plant a few things. And then I learned through trial and error.“*

„Vor den Eisheiligen kann ich nicht so viel pflanzen.“

*„Before the ice saints haven't passed I can't plant a lot.“*

Marianne



„Das Arbeiten im Garten habe ich auch von meiner Frau gelernt. Sie hat immer gesagt, dass ich nicht richtig hacken kann. Kartoffeln hacken ist was anderes als Hacken im [Gemüse-] Garten.“

*„I also learned about gardening from my wife. She always used to say that I cannot hoe properly. Hoeing potatoes is different from hoeing in a [vegetable] garden“*

Michael



„In der Arbeit lerne ich viel über Teiche und die Gärtnerei. Gestalterisches und über Pflanzen. Über Dünger, Rückschnitt, und Böden; pH-Wert und Bodenzusammensetzung.“

*„At work I learn a lot about ponds and gardening. About design and the plants themselves. About fertilization, pruning and soils; pH level and soil composition.“*

Jakob







„Ich habe viel von meiner Mama und meinem Opa gelernt. Wenn mich ein Thema besonders interessiert lese ich auch Bücher um etwas Neues zu lernen“

*„I learned a lot from my mum and my grandpa. When I'm especially interested in a specific topic I also read books to learn new things.“*

„Dem Opa zeige ich manchmal schon Sachen. Zum Beispiel wie er seine Bäume zuschneiden muss und welche Pflanzen an welcher Stelle besonders gut wachsen.“

*„I sometimes show things to my grandpa. For example how to cut back his trees and in which places certain plants will grow especially well.“*

Jakob



Passing on knowledge about gardening seems to be a naturally occurring process of which the gardeners only become aware when prompted to think about it. The gardeners are part of a so called community-of-practice<sup>6</sup> where they make up, contribute to and learn from the community that in turn is able to refine its practice, in this case the practice of gardening. While in the past this process of refining might have been a necessity for rural gardeners in order to maximize their yields and support their household<sup>3</sup> today's backyard gardeners are free from that need. Their gardening is merely a recreational activity. And while harvesting some fruits and vegetables is essential to the experience<sup>7</sup> missing items can easily be bought at the local supermarket.

In a time where most consumers of vegetables and fruits never even see the place in which their food grows communities-of-practice in gardening can however play an essential role in safe-guarding knowledge and practices<sup>5</sup>. Knowledge we might come to need and appreciate during future – if not present - times of crisis. This is especially true when the community has been operating in a certain place for an extended period of time<sup>8</sup> and has thus been able to subconsciously develop an intimate connection with its surroundings and a deep knowledge of local conditions and ecological processes.

# VI. Nature

While Kant already expressed the opinion that the garden is a place where a relationship between man and nature can flourish in 1790<sup>9</sup>, how and whether such an intimate connection with nature is formed through gardening is not undisputed. In fact the concept of nature itself is contested<sup>10</sup>. It means different things to different people in different places and times. Some regard it as intrinsic, external and universal<sup>11</sup> and thus set themselves strictly apart and sometimes above it, others think of it as a social construct and stress the shaping power humans and non-humans have over their surroundings<sup>12, 13</sup>, a train of thought that - if thought further - blurs the line between humans, non-humans and ultimately their non-living surroundings<sup>10</sup>. What then does nature mean to gardeners and do they experience their gardens as such?

„Für mich ist ein Garten Natur, aber weniger als die freie Natur. Ein Garten ist nicht so ganz natürlich. Er ist mehr gestaltet.“

*„For me a garden is nature but less so than open nature. A garden is not altogether natural. It's more designed.“*

Jakob

„Ich sehe mich nicht als Teil der Natur sondern außerhalb davon.“

*„I don't see myself as part of nature but apart from it.“*

Marianne

These personal statements may not be representative of gardener's impressions in general. They do however stress the individual character concepts of nature do hold. Yet, a survey conducted in 2007 in the US amongst a larger number of recreational gardeners does observe a similar notion of nature: the participants do see their gardens as part of nature while they associate it with their houses and thus with man-made structures to a slightly higher degree. In other sections of the survey they did even state that the observation of nature and natural processes at work are one of the major benefits of gardening<sup>7</sup>. In general it seems gardeners do see their practice in rather close relation with nature. And they believe it to cause a greater connectedness with nature<sup>7, 9</sup>.



„Durch das Gärtnern habe ich einen besseren Kontakt zur Natur. Die Erde an den Händen. Die Tiere die man sieht.“

*„Through gardening I'm in better contact with nature. Soil on the hands. Watching animals.“*

Marianne



„Es ist schön in den Garten zu gehen und dann eine Gelberübe zu essen. Man ist so stolz, dass da was gewachsen ist. Das man etwas ernten kann ist für mich das Wichtigste.“

*„It's great to go into your garden and eat a carrot. You are proud, that something has grown there. Being able to harvest something is most important to me“*

Marianne



„Wenn man gärtner hat man einen bessern Kontakt zur Natur und man versteht sie auch besser wenn man in ihr arbeitet als wenn man nur in ihr ist.“

*„Through gardening one is in better contact with nature and one also has a better understanding for it if one is working in it instead of just being in it“*

Jakob









# VII. Ecosystems

Many studies have been done on the positive physiological and psychological effects gardening has on people<sup>14</sup>, but does it have positive effects on ecosystems? Not only gardeners view their gardens in more or less close relationship with nature. From my impression for many of my non-gardening friends and myself to think about gardens evokes a mental image of a rural idyll largely devoid of environmental problems. A deceiving image. Not all gardeners strive for an ecological gardening practice often they are planting invasive species, use excessive amounts of water and toxic chemicals to enhance growth and fend off weeds, clearly harming ecosystems<sup>7, 15</sup>.

Still it is assumed that a greater connectedness with nature as felt by many gardeners does strengthen the wish to learn about ecosystems and to protect them<sup>16, 17, 18</sup>. And indeed gardeners do demonstrate a rather exceptional awareness of and knowledge about ecosystem processes, especially considering that most of them do not have any kind of professional training in gardening or ecosystem sciences and are sometimes not even aware of the significance their knowledge holds<sup>5</sup>. This also became apparent when interviewing my family. While Michael does use chemical fertilizers and herbicides especially Marianne and Jakob who work in an ecological garden do have extensive knowledge about ecosystems that seems to be produced simply from observations made during gardening and from subconsciously comparing theirs with other gardens and with what they would call open nature. It lets them draw conclusions that support them not only in their gardening practice but also in activities, e.g. fishing, that take place beyond the limits of their gardens.



„Weil ich das Unkraut immer wenig konsequent verfolge samt das glaube ich mehr aus als in anderen Gärten. Es ist immer viel Unkraut da.“

*„I think that because I'm not as efficient as I could be when it comes to weeding the weeds spread through seeding more than in other gardens. There are always many weeds here.“*

Marianne



„Im Frühjahr muss man die Beete vorbereiten. Ich mache da immer Kompost oder Hühnermist rein. Damit die Pflanzen ein bisschen Dünger haben.“

*„In spring you have to prepare the beds. I always mix in some compost or chicken manure. That way the plants have some fertilizer.“*

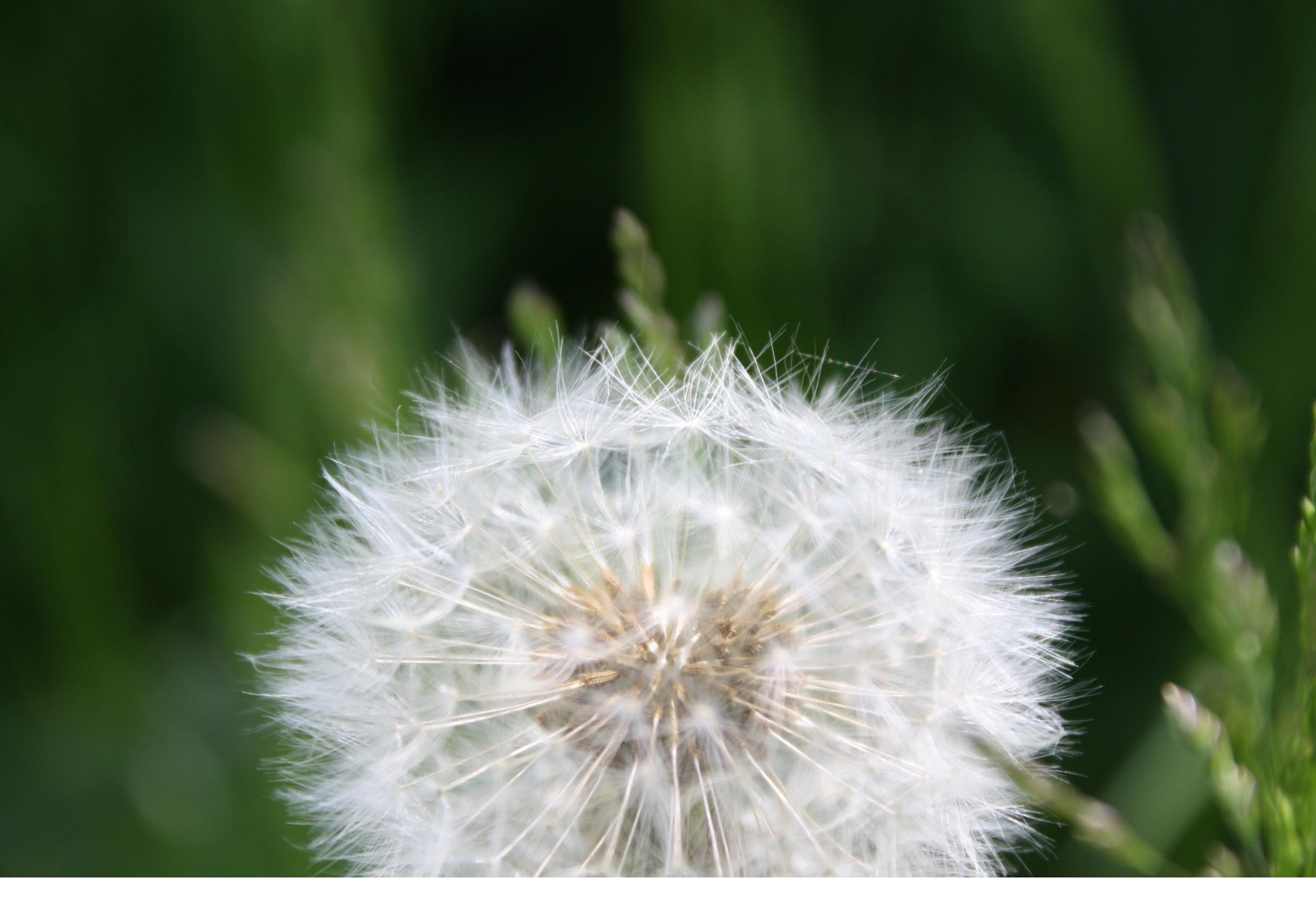
Marianne



„Man kann die Hühner kurz nach dem Winter über die Gemüsebeete drüber lassen. Dann fressen sie alle Schneckeneier und Nacktschnecken auf.“

*„You can let the chickens run free in the vegetable garden shortly after winter and they will eat up all the snail eggs and snails“*

Jakob







„Wasser ist sehr wichtig in meinem Garten. Im Teich kann man den Wasserlebewesen zuschauen. Zuckmückenlarven, Bachflohkrebsen und den Fischen. Wenn die Koikarpfen nach dem Winter zum Fressen anfangen weiß ich das ich draußen am Weiher Fische fangen kann.“

*„Water is very important in my garden. In the pond you can observe aquatic organisms. Chironomid larvae, freshwater shrimps and fish. When the koi carps start to feed at the end of winter I know that I will be able to catch fish in the lake.“*

Jakob





# VIII. Water

Concentrating on a particular aspect - that of water - how do practical and theoretical knowledge on gardening and ecosystems, nature connectedness and intergenerational knowledge-transfer play out in the garden and outside of it?

It seems Michael, Marianne and Jakob agree that that water plays an important role in their gardening practice, especially in that it allows plants to thrive and grow. While both gardens do have a well, equipped with an electrical water pump, Michael seems to place more importance upon that feature. For once this might be deduced from the well maintained and orderly condition of the assemblage of manual and electrical water pump and rain barrel around his well but he also uses considerably greater amounts of groundwater for watering. Marianne recognizes the importance of ground water for additional water supply in times of intense heat and little rain, she is however convinced that in general rain fed gardening is possible, and considerably less labor-intensive, in her garden's location.



„Ohne Wasser wächst nichts. Man sieht es im Treibhaus. Da muss man täglich gießen. Alles andere muss man in unseren Breiten nur gießen wenn es mal länger nicht regnet.“

*„Without water nothing grows. You can see it in the greenhouse. In there you have to water the plants everyday. In our latitudes everything else only has to be watered when it doesn't rain for a longer period of time.“*

Marianne

„Alles wird mit dem Brunnenwasser gegossen. Das ist schon gut wenn man selbst ein Wasser hat.“

*„Everything gets watered with water from the well. It's good to have your own water.“*

Michael

„Hier gibt es eigentlich immer genug Wasser. Man muss nur zwei Meter tief graben dann kommt schon das Grundwasser“

*„There's always enough water here. You only have to dig two meters deep to reach the ground water.“*

Marianne

„Wir gießen mit Grundwasser aus dem Brunnen. Manchmal fällt der Spiegel etwas aber es ist immer was da.“

*„We water our plants with groundwater from the well. Sometimes the level drops a little but we always have enough“*

Jakob



In line with the creation of water features such as ponds connected by a little waterfall by Jakob he appears to appreciate water mostly for its ability to create and define ecosystems. He also pays great attention to fluctuations in ground water level even when no worries about water availability exist. This attentiveness does likely stem from and is transported beyond the limits of the garden as he actively engages with aquatic ecosystems when fishing. Only he voiced the opinion that a greater sense for the value of water arises from gardening.

„Ich glaube Leute die im Garten arbeiten haben ein besseres Bewusstsein für den Wert von Wasser.“

*„I feel people working in the garden are more aware of the value water has.“*

Jakob

Even with the same amount of rainfall available and a shared history of gardening differences in perception in relation to water simultaneously caused and expressed by differences in practice seem to arise. Despite those differences an appreciation for clean water is present in all three generations. It may be induced in parts by societal values but explicit practical considerations expressed by the gardeners do suggest that it might well be the other way round; the value society places on water in parts influenced by gardener's practical experiences and perceptions. The way in which water is viewed by the gardeners might then be seen as an example for intergenerational transfer and creation of nature connectedness and knowledge with regards to ecosystems and gardening practice that has the potential to be vital for the well-being of society as a whole and the environment.

# IX. Epilogue

While I feel such a connection and the greater meaning of gardening for society is well worth further exploration gardening is in its core a rather personal endeavor, practiced and appreciated for various reasons ranging from the ability to harvest fresh produce of high quality from one's own land to the creation of positive social relationships with one's neighbors<sup>5</sup>. Rarely does gardening – with the exception maybe of community gardening – explicitly seek to cause societal change. On the contrary, while change does happen in rural backyard gardening it is strikingly deep rooted in tradition. On the surface it is mainly a way of life that is being passed on from generation to generation. Only upon digging deeper underlying ideas and concepts communicated through practice and attitude become apparent. And while my relatives make no explicit efforts to protect the environment or to „change the world“ their way of life makes - if nothing else - a tiny but real difference: vegetables and fruits, suitable for climate and location, are being produced locally and consumed in season.

„Meine Lieblingsarbeit ist es die Tomaten in meinem Gewächshaus in die richtige Form zu bringen und auszugeizen.“

*„My favorite task is bringing the tomato plants growing in my greenhouse into their right form and to pinch off their side shoots.“*

Marianne





Like most things rural backyard gardening or gardening in general is not a blue-print solution. It does however sustain, produce and provide a source of knowledge that has the potential to promote the solution of sustainability issues. It is however easily overseen. Only recently has there been a growth in interest for gardening, farming and connecting oneself more directly to the land.

Coming back to my wish for a simpler reality I have come to accept that neither does rural backyard gardening provide such a thing nor is it – due to its lack of greater scope – able to bring on fast change for the whole of society with its diverse variety of environmental and societal problems. Then again my new insights allow me to appreciate afresh the role idealistic thinking and patience have to play.

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