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Living in the Anthropocene, urban gardening
and its relationship with democracy

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Think global, act local

Patrick Geddes

Introduction

At the very moment in which I am writing these lines¹, hundreds of wildfires are destroying the west coast of North America all the way from Vancouver to San Diego. The current air quality is reported to be the worst on Earth. I took a screenshot of the situation on the website of PurpleAir, which is a real-time air quality monitoring². The numbers in the circles represent the air quality index (AQI). As we can see from the map, many places are above 401, which represents “*Health warnings of emergency conditions if they are exposed for 24 hours. The entire population is more likely to be affected*”. The fire season is far from being over and yet, the gravity of the fires has already risen to record levels.

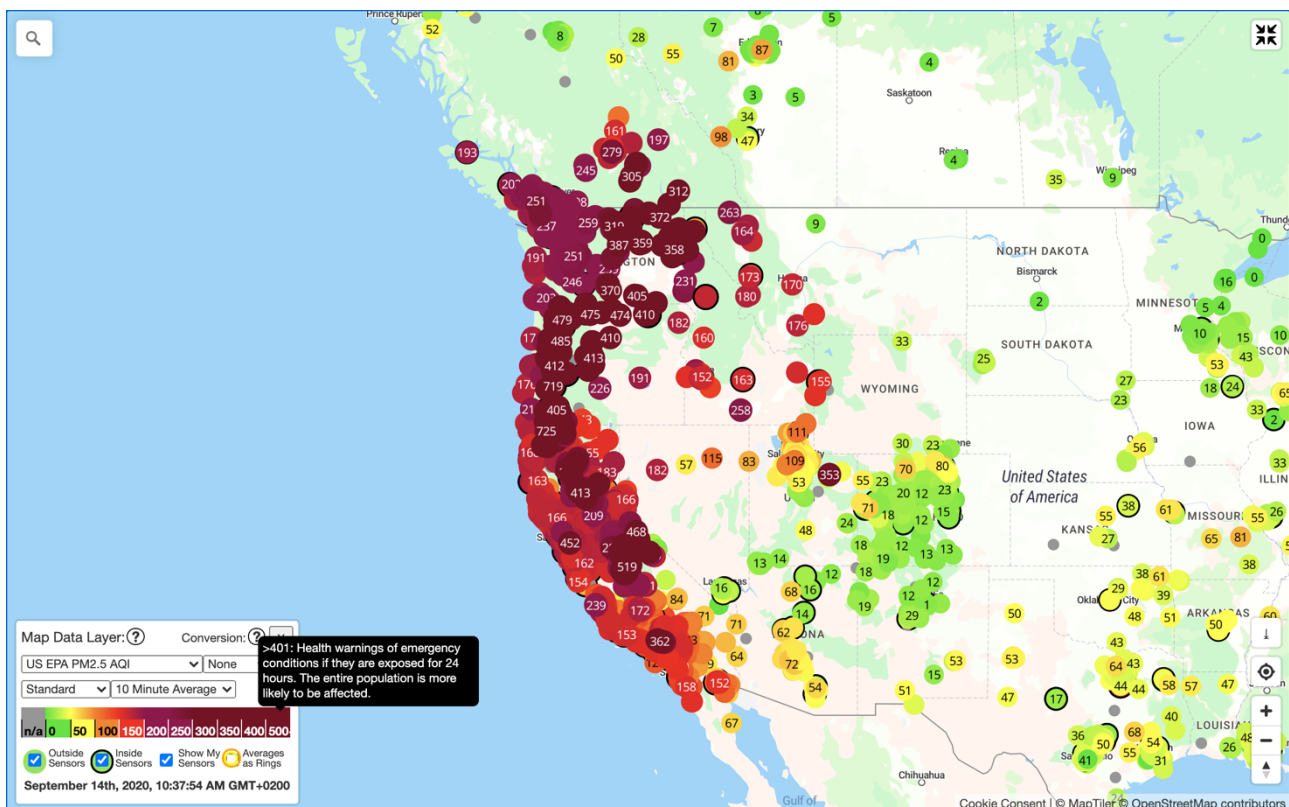


Figure 1 Screenshot of The PurpleAir air-quality map on Monday, Sept. 14, 2020, shows most of the west coast with threatening levels of pollution from wildfire smoke.

I wanted to start this introduction with a recent news event. It happened to be about wildfires but it could also have been about floods, hurricanes, records of high temperatures... Newspapers report many singular events of climate perturbation, but the problem is rarely presented as a whole. These extreme weather events are caused by climate change. One of the main drivers of climate change is the increase of CO₂ in the atmosphere which warms the planet. What is the greenhouse effect? In a nutshell, the sun rays reach the surface of the Earth and radiate back to warm the atmosphere. Part of these sun rays are then supposed to escape into space. However, an increase in carbon dioxide causes

¹ September 14th, 2020

² PurpleAir Map <https://www.purpleair.com/map?opt=1/mAQI/a10/cC0#1/25/-30> Accessed September 14th

more heat to be retained which increases the global temperatures. The more carbon dioxide is released, the more heat is trapped in the atmosphere.

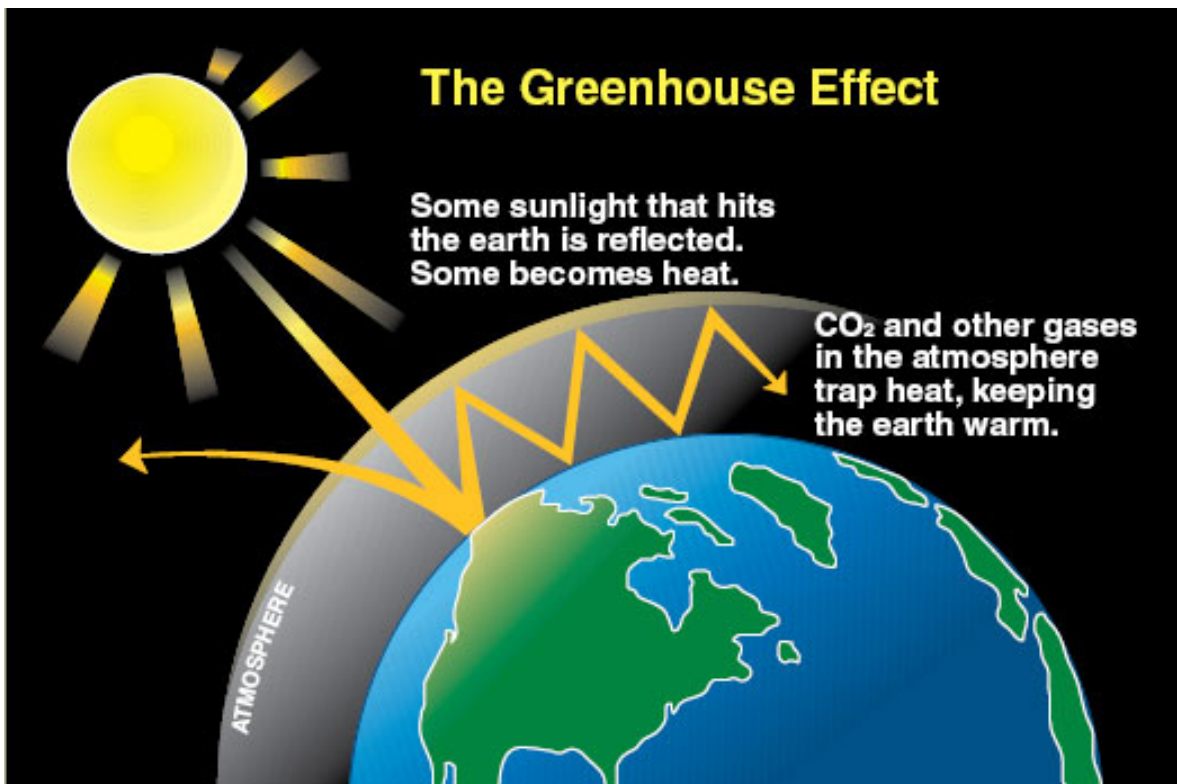


Figure 2 The Greenhouse Effect simplified³

The increase of global temperatures triggers the stability of the planet causing extreme weather events like wildfires, acidification of the oceans, ice melting, extinction of many species such as polar bears... The goal of this thesis is not to explain what climate change is and how it materializes on earth. Thus, I will stop here and focus on the actions that can be taken to limit damages. One might rightfully think that it is the responsibility of the states⁴ to regulate concerning global warming. However, at an international level, I will show that many powerful actors are involved and that states have less bargaining power than they used to have. The Climate scientist James Hansen called the COP21 “*a fraud, worthless words*”⁵. At an internal level on the other hand, the introduction of laws aiming at limiting the use of fossil fuels would compromise greatly the liberties of citizens of liberal democracies, as most harmful behaviors are performed in the private sphere. States have collected little credibility through the years partly because of their incapacity to respond to climate change urgency. Sixty-six percent of the respondents of the Edelman Trust Barometer⁶ responded positively to the statement: “*I do not have confidence that our current leaders will address our country’s*

³ From the website Fresh Air. The scent of Pine, accessed September 14th <https://scentofpine.org/gw101-1/>

⁴ Throughout this thesis when I mention “the state”, I am referring to Western liberal democracies.

⁵ Oliver Milman, “James Hansen, father of climate change awareness, call Paris talks ‘a fraud’” *The Guardian* December 12th, 2015

⁶ 2020 Edelman Trust Barometer report, website accessed September 14th <https://www.edelman.com/trustbarometer>

challenges". It is clear from the foregoing that we are facing both a crisis of democracy and climate. I will subsequently develop my argument based on a bottom-up approach, centered on citizens' initiatives and observe if these two crises can find answers coming from civil society. Community gardening could be the right activity, addressing both very actual and relevant issues of climate change and states' legitimacy deficit.

To write this thesis, I chose to use a funnel method, starting from the general to the more specific. The first chapter contains information about the era in which we are living, the Anthropocene. This era is characterized by overconsumption of resources and polluting behaviors. The evolution of the climate is for the first time driven by the behaviors of humans. In the second chapter, I will present a technique that counters our harmful behaviors towards the environment. Indeed, in our society, it is almost impossible to live without damaging the planet and it would require huge sacrifices not to do so. Self-offsetting consists of adding positive actions in our everyday life to counterbalance our ecological footprint. The two last chapters focus on the core idea of my thesis, that is, the positive effects of urban gardening. First of all, I will try to demonstrate that urban gardening is an effective offsetting practice, through the production of one's own food. Then, I will focus on aspects of community gardening related to democracy such as inclusivity, education and bottom-up solutions to address the problem of the legitimacy that people have towards their institutions. This thesis aims at proposing a way for citizens to contribute to large scale problems and make a difference, both concerning climate change and democracy issues.

1 The Anthropocene

Have we moved from the Holocene to the Anthropocene? The Holocene started approximately 10.000 years ago, following the last glacial era. Ten thousand years ago, agriculture started with the domestication of animals like cows and the farming of wheat and barley. Most human activity occurred during the Holocene and this era is characterized mostly by stability, in particular concerning the climate. The chemist Paul Crutzen at the beginning of the 2000s carried on researches⁷ of another scientist Eugene Stoermer and made public the term “Anthropocene” to characterize the epoch in which we are living. Their researches consisted of showing that the Earth is today fully under the influence of human activity, challenging the forces of nature. However, we must keep in mind that the Anthropocene is not the era in which people have reached control over nature. Humans do not master planet Earth. Their actions influence the course of things, yet there is no way to undo what has been done so far or to reverse the current trend. We are condemned to see materialize the damages that humans have done to the environment during the last centuries and especially during the last 50 years. The expression Anthropocene suggests two notions: first that “*the earth is now moving out of its current geological epoch, called the Holocene*” and second that “*human activity is largely responsible for this exit from the Holocene.*”(Will Steffen et al. 2011, 843). Even though the term is not recognized officially yet by the scientific world, its democratization is mushrooming. Crutzen and his colleagues decided to take the year 1800, characterized by the Industrial Revolution and obviously the beginning of the use of fossil fuels, to be the starting point of this new era. From that time on, the consumption of energy and resources has kept augmenting, until a period called The Great Acceleration, in which every human activity increased strongly, from the 1950s to this day. For example, cars were only 40 million at the end of the Second World War and reached more than 700 million by 1996 and this number keeps growing (Will Steffen et al. 2011). Today the number of cars in the world has surpassed 1 billion according to Ward’s, an American organization covering the automotive industry⁸. One of the main drivers of this Great Acceleration is the progression of urbanization, which consequently increases consumption as migration to cities eventually leads to a higher income. The two world wars have maybe delayed the Great Acceleration. Yet, an important factor that contributed to boom the ecological footprint of human activity is the progress of new technologies, first developed to sustain the war effort and afterward adapted to the civil economy. Little by little, the growth and especially GDP growth became at the center of the political and economic goals, pushing to produce more with fewer costs (fossil fuels provide cheap energy), to

⁷ Will Steffen, Jacques Grinevald, Paul Crutzen and John McNeill “The Anthropocene: conceptual and historical perspectives” 2011 *Philosophical transactions of the royal society*

⁸ John Sousanis “World vehicle population tops 1 billion units” accessed August 10th

<https://www.wardsauto.com/news-analysis/world-vehicle-population-tops-1-billion-units>

consume more. Meanwhile, the environmental problems caused by these unsustainable practices were essentially marginalized or ignored at least until the 1990s.

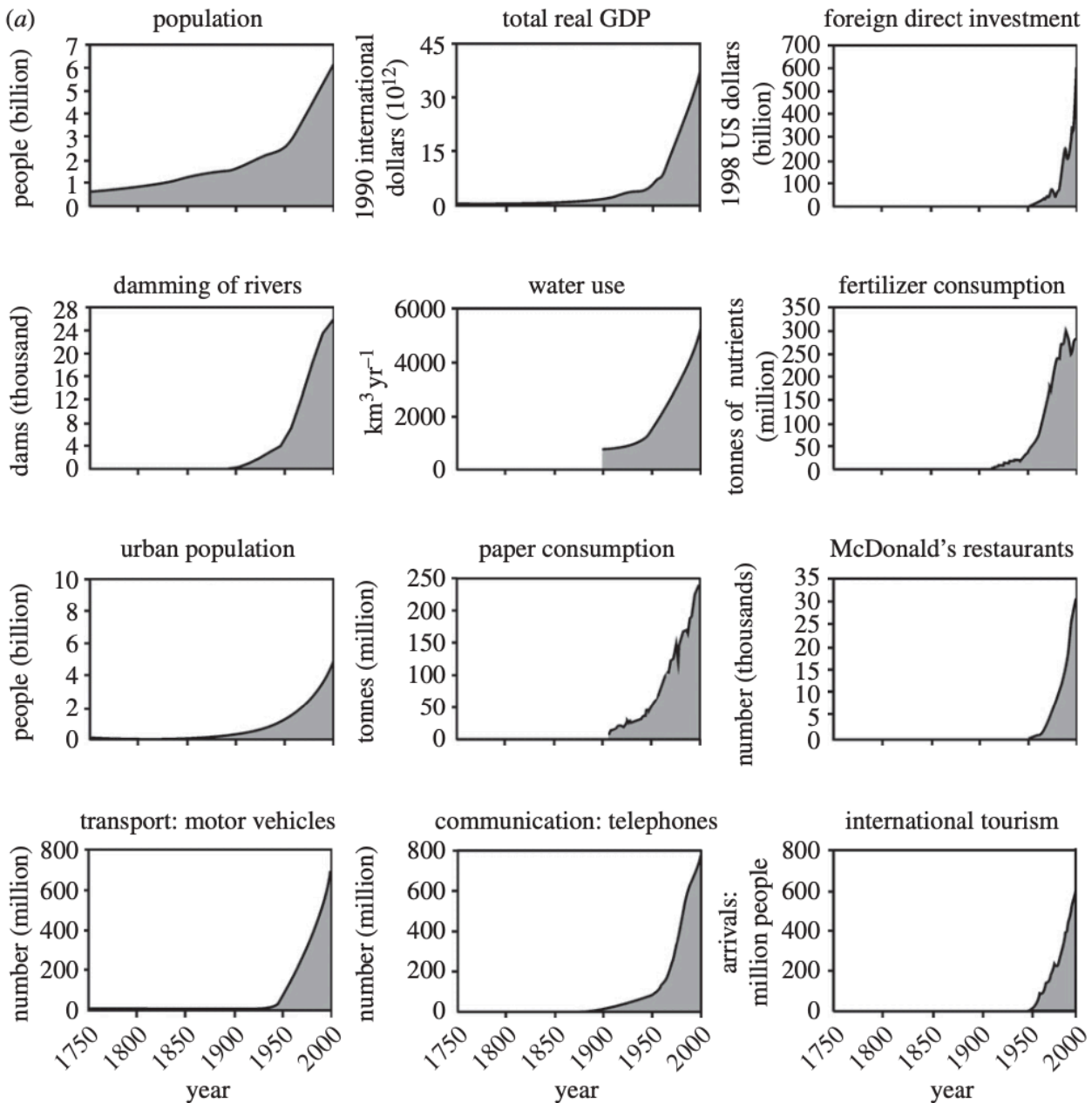


Figure 3 The increasing rates of change in human activity since the beginning of the Industrial Revolution. Significant increases in rates of change occur around the 1950s in each case. (W. Steffen et al. 2011 p. 848)

From the 2000s, some modifications occurred in the trajectory of the Great Acceleration. A larger part of the world population is included in the growth rate. Some big developing countries as China or India are experiencing rapid developments. “From a long-term perspective, developing countries have accounted for only about 20 percent of the total cumulative emissions since 1751, but contain about 80 per cent of the world’s population.” However, dramatic changes have occurred in the

twenty-first century and “*China has now become the world’s largest emitter of CO₂, and India has overtaken Russia as the third-largest emitter*”. (W. Steffen et al 2011, 853)

What could we expect for the years to come? Many climate agreements have been signed in the last decades. Still, very few changes have taken place to meet their goals. In the Kyoto Protocol of 1997, 2 degrees Celsius of global warming represented a line that should not be crossed. Nineteen years later, as the Paris agreements were signed, 2 degrees appeared as an ambitious objective, the best-case scenario. According to the United Nations, if we continue at this pace, 200 million climate refugees are predicted by 2050 and we are due to not less than 4.5 degrees of warming by 2100. It can be complex to understand what 3 or 4 degrees of warming signifies. David Wallace-Wells⁹ helps us picture some of the consequences of global warming corresponding to its magnitude. “*At two degrees, (...) 400 million more people will suffer from water scarcity, major cities in the equatorial band of the planet will become unlivable, and even in the northern latitudes heat waves will kill thousands each summer*”. Here is the best scenario that we could expect, yet it is very unlikely to happen. According to The United Nations’ Intergovernmental Panel on Climate Change (IPCC), if all of the commitments from the Paris agreements were respected from now on, it is expected to reach 3 degrees of warming anyway. And 3 degrees means that “*southern Europe would be in permanent drought (...) the areas burned each year by wildfire would double in the Mediterranean and sextuple, or more, in the United States*”. If 4 degrees are reached, we are facing “*permanent food deficit and the Alps as arid as the Atlas Mountains*”. (D. Wallace-Wells 2019, 16-18)

Is there a way to do something on a personal level? We saw earlier that international treaties have had little influence on governments. Then, following a bottom-up approach, individuals can lead the way and perform coordinated local activities such as self-offsetting, which in return will have global positive consequences.

⁹ David Wallace-Wells (2019) *The Uninhabitable Earth*

2 Self-offsetting

In our everyday life, it is simply impossible not to contribute to climate change and precisely global warming. We could be the most careful person, we perform harmful acts for the planet daily such as switching on a light, browsing the internet or buying a pair of jeans. Even though these actions seem completely harmless, performed at a planetary scale by billions of people, they accelerate global warming. Still, it would be very inconvenient to cut all ties with the outside world to diminish our ecological footprint, meaning that we would not perform these actions having negative consequences on the environment. It represents a huge sacrifice for most human beings as such life can only be lived in the margins of our society. Furthermore, it is pretty inefficient too. What could we do to have some control over the consequences of our actions that contribute to climate change? Self-offsetting is one of the solutions to “neutralize” our polluting actions (the ones whose cost is too high to be stopped) and it consists of counterbalancing these emissions in accomplishing activities having a positive impact on the environment. Indeed, the most common synonyms of offset are “counterbalance” and “compensate”. I will only take into consideration practice-based self-offsetting consisting of doing something personally for the planet. Self-offsetting as giving money to associations that are engaged in sustainable activities will not be taken into account, as it is considered controversial¹⁰. It could be a means for individuals to keep engaging themselves in very polluting activities while clearing their conscience from the impacts of such. Self-offsetting can take a lot of different forms. Some people could decide to sell their car and use only public transportations to go to work or some others could clean up beaches during their summer vacation for instance. Later in this paper, I will show that being part of a network of citizens involved in growing their own food is a very efficient self-offset.

2.1 Episodic and systemic lives of our actions

In the previous paragraph, I mentioned very briefly the idea of episodic and systemic lives. It is a concept of utmost importance and deserves to be developed here. Marcello Di Paola, in his book *Ethics and politics of the Built Environment* defends that many common actions that we execute every day have two lives, an episodic one and a systemic one. The episodic life of our actions is pretty innocent, and especially under our control. By taking a hot bath or simply driving to go to work, I want to wash and go to work. The goals of my actions are clear and known, I own my actions, at that precise moment when I perform them. I do not take into consideration the consequences of these behaviors, performed by me and millions of people every day, harming the planet. It is the systemic life of our actions that harm it. “*By performing theses episodic actions that also have a systemic life*

¹⁰ Hyams Keith and Fawcett Tina, “The ethics of carbon offsetting” 2013

I partake in, and further propel, a globalized, technologically enabled, fossil fuel system that changes climate and thus engenders harms and damages to people and ecosystems across space and time” (Di Paola 2017, 24). The systemic life exists as a consequence of an oil-dependent and globally connected world with worldwide production chains, counting on limited resources to move forward. The harm performed by the systemic life of our actions is not taken into consideration by any laws. It is in fact considered completely fine to drive around the town in a large polluting car or eat imported exotic fruits daily. What about morality, when we know that these actions participate to massive harm and damage? It can be hard to realize that as single individuals, we have a responsibility regarding global warming. A study by John Nolt¹¹ proves us wrong by exposing revealing facts: “*This estimate is crude, and further refinements are surely needed. But the upshot is that the average American is responsible, through his/her greenhouse gas emissions, for the suffering and/or deaths of one or two future people.*” (Nolt 2011, 9)

2.2 Responsibility dissolution

From the study of John Nolt, it remains little doubt that the average American is responsible for some harms caused by climate change. We can easily extend the “average American” to everyone who lives in an industrialized country. Explicitly, it means that we are personally responsible for climate change and more concretely its huge consequences. How is it even possible, as taking a hot shower in itself is completely harmless? In modern law, responsibility is attributable only when we can observe direct causation, still “*(...) most global Anthropocenic problems can be described as planetary collective action problems. These are not only impossible to solve in isolation, but also impossible to cause in isolation*” (Di Paola 2017, 25). Then, it would be better to assert that we all contribute to climate change, but no one causes it, which does not satisfy the conditions of causal responsibility. No one in particular is personally responsible for any damage, or even more complicated to determine, future damage caused by the systemic life of her actions which affected the climate and consequently, together with billions of actions performed by other people of different generations provoked a flood or a drought. Cooperation between agents represents the only response against this planetary collective action problem to fight climate change. We will see later that community gardening can be a way to cooperate at a local scale, still, with an influence more globally thanks to networking.

Jamieson in collaboration with Di Paola¹² clarified another important element to consider. On the one hand, the people responsible for climate change are impossible to identify personally but on the other hand, the victims are also impossible to determine. As a matter of fact, someone cannot die of climate

¹¹ John Nolt, “How Harmful Are the Average American's Greenhouse Gas Emissions?” 2011

¹² Jamieson and Di Paola “Political theory for the Anthropocene” 2016

change or global warming. These factors are indirect. Besides, the victims will be killed or injured in the future, and it is once again very complicated, or impossible to impute responsibility to someone for something that will occur perhaps decades after the action itself has been performed. *“If we stick to harm-causation as a condition of moral and legal responsibility, then no such responsibility can be assigned to any particular agent for climate change (...). In a traditional liberal framework, this means that no moral or legal wrongs are committed.”* (Jamieson et. al. 2016, 14). We find ourselves with very visible consequences and no identifiable wrongdoer.

2.3 Moral obligation to act against climate change

Can it be argued that people have a moral obligation to act against climate change? First of all, I will simply define a moral obligation as a duty that one should perform but to which he is not legally bound. We saw earlier that no individual can be found responsible for climate change, yet our lifestyle is causing the suffering or death of future human beings. Since the problem is planetary, it could be easy to arrive at the conclusion that individuals’ behaviors cannot make a difference. However, *“aggregate individual actions can actually have a significant positive impact on alleviating problems of collective action”* (Schwenkenbecher 2018). If people’s behaviors are harmful and there is a way to make a difference, then shouldn’t it be morally mandatory to participate in such aggregate actions? People tend to neglect the effects of a single participation on a planetary scale problem. One person less or more will indeed be insignificant, yet as many people think this way, it becomes impossible to observe a real change. Here lies the paradox of collective action. We need to rethink the concept of moral obligation to abandon the idea that if an action of mine does not make a perceptible difference to an outcome then I cannot be morally required to perform it (or to refrain from performing it). (Schwenkenbecher 2018). Coordination among citizens is the only solution to have a chance to overcome collective action problems from the bottom, without the intervention of public representatives. Even though the harm and damages would happen anyways with my participation or without it, it is morally wrong for two reasons to keep participating in this damaging system. Firstly, because it is wrong per se to participate in this huge harming enterprise even if our participation does not make a difference. Humans should refrain from being a part of the harm¹³. Secondly, the fact that many people don’t feel concerned prevents collective actions from taking place. Di Paola reformulates this moral obligation in this way: *“In other words, this system kills many people and reduces many others to moral ghosts. I have a duty to check out of it.”*(Di Paola 2017, 93). I have then two options to stop participating in systemic harms and damages. The first one is simply to stop performing actions that have a systemic life, and the second one is to add other actions, anti-systemic ones to counterbalance my consumption of electricity, meat, car... Self-offsetting is a good way to be

¹³ Christopher Kutz, *Complicity, ethics and law for a collective age* 2000 175-185

held accountable for our systemic actions. Another very important notion to consider related to the human duty to act against climate change is its intergenerational aspect. Since renouncing to some consumer behaviors has an irrational cost¹⁴ and is not convenient, the burden of fighting climate change is passed to the next generation. Discharging the costs of industrialization is inherently wrong and goes against any criterion of justice towards our fellow man. This “procrastination” dates from the seventies, the first time scientists have alarmed people about the danger of climate change, representing nearly two generations. “(...) *The people who are going to be harmed by this are your grandchildren, and they don't have any votes in the market. Their interests are worth zero. Anybody that pays attention to their grandchildren's interests is being irrational* ¹⁵(...)”

2.4 Blurred distinction between public and private spheres

Individuals navigate between their public and private lives. Some actions we perform are part of our private realm, and the state must refrain from intervening. Some others are public and the state is entitled to regulate them. The distinction between public and private spheres as we know it today was developed in the eighteenth century with the expansion of liberalism. Thomas Nagel (1975, 136), in his review of the book *Anarchy State and Utopia* by Robert Nozick provides a very useful definition to capture the relationship between the Distinction and liberalism: “*Liberalism is the conjunction of two ideals. The first is that of individual liberty: liberty of thought, speech, religion, and political action; freedom from government interference with privacy, personal life, and the exercise of individual inclination. The second ideal is that of a democratic society controlled by its citizens and serving their needs, in which inequalities of political and economic power and social position are not excessive.*” Moreover, the concept of protecting individual liberties against the abuses of others is a central idea of liberalist thinking.

What about private practices with public consequences? Two possibilities emerge. We can either consider these private behaviors as private (and it is the society we are living in), or we could determine that harmful private behaviors belong to the public sphere. In the Anthropocene, in our world, many private practices are involved as global warming is a public issue and most of our polluting behaviors are private. Think about choosing to fly to a near destination instead of traveling by train, drinking from plastic bottles every day or simply having children. All these choices about how to live our lives are part of individual liberties, a basis of modern democracy. The state has no possibility to intervene to control these behaviors, even if they are harming the planet since no one is

¹⁴ Pellegrino G. and Di Paola M. *Nell'Antropocene, etica e politica alla fine di un mondo* 2018

¹⁵“Prospects for Peace in the Middle East”, Noam Chomsky, delivered at the First Annual Maryse Mikhail Lecture “No peace without justice; no justice without truth” The University of Toledo, March 4, 2001 accessed July 2nd <https://chomsky.info/20010304/>

committing an infringement according to the law¹⁶. These actions are private and thus protected. However, the divide between the public and private realm “(...) *is always in motion due to its nature as an abstract political creation, shifting and changing as social relationships and the balance of power in society shifts and moves*” (van Aartsen , 2017). Indeed, since the seventies, the private sphere is gaining more importance over the public one. With globalization and consequently free-market doctrines, international corporations are becoming more and more powerful and are able to put a lot of pressure on states, so as to satisfy their interests.

Noam Chomsky offers helpful insights concerning the disequilibrium between the public and private realms. According to him, we are taught to destroy the environment because individuals are rational and their goal is to accumulate wealth, no matter if it is harmful; what counts is short-term profits. The market must be democratic as everyone can participate. However, some people have more “votes” in the market because it depends on money. The market is then private and democratic. Its only difference with the public sphere is that there, one vote corresponds to one dollar, and not one man, one vote¹⁷. The state is trapped because it needs to keep up with the pressure of money and capital brought by international corporations and has no leverage to regulate the protection of the environment. The circumstances of the Anthropocene put pressure on the Distinction, and as the Distinction is a core belief of liberalism, liberalism is in danger too. The ideal of liberalism of the eighteenth century is out of phase with the society of consumption that we know today. When political theories of liberalism emerged, with the idea of protecting individual liberties from the unjustified interferences of the state, surely, they did not have in mind to protect the heavy consuming habits of individuals of the twenty-first century. By deduction, the Distinction not only permits but also protects the excesses of consumption. “*Actions that contribute to climate change in the Anthropocene are often not the kinds of actions whose privateness is particularly worth defending by liberal rights (...) Liberalism is worth defending, but it may seem that at least in its present forms it is made for a different world than that of the Anthropocene*” (Jamieson 2019)

On the other hand, following the ideas of Mill concerning the Harm principle¹⁸, an action is considered private as long as it does not harm others. If each harmful private act would become public, the private sphere would almost disappear, leaving the floor to the state which could easily become paternalistic. In other words, each action having a negative systemic life would be considered public. The state would be able to regulate practically every movement of its citizens. Even if it is to save the planet, is it desirable? “*In the Anthropocene, a state willing to protect its citizens and future*

¹⁶ Pellegrino G. and Di Paola M. (2018) *Nell'Antropocene, etica e politica alla fine di un mondo* 194-201

¹⁷“Prospects for Peace in the Middle East”, Noam Chomsky, delivered at the First Annual Maryse Mikhail Lecture “No peace without justice; no justice without truth” The University of Toledo, March 4, 2001 accessed July 2nd <https://chomsky.info/20010304/>

¹⁸ Mill, John *On Liberty* 1859/1978

generations from the impact of climate change would have to dictate their lives, rationalize showers, limit substantially the use of private cars, discourage reproduction” (Pellegrino et. al. 2018, 201).

I cannot adjudicate which of the two situations is better. In our society, democracy is in crisis, the “rulers” are multinationals, driven only by profit and the citizens are consumers. In the other “prospect”, we lose democracy and liberalism for a paternalistic state, a solution which has never really worked in history, but we win some care for the planet. At this point, is there a third way?

Maybe we could reshape the Distinction, as it is not something rigid but something always in motion and define that some behaviors of consumption are not worth defending and let the state regulate them. Initially, self-expression, diversity, innovation¹⁹ were the core ideas behind the non-intervention of the state in the private realm and more than three hundred years later, these are still the features that are worth protecting. Then, it is not about abandoning liberalism, but going back to its fundamental meaning, which has somehow been lost in our society of consumption. The state still has a very important role to play and in the context of offsetting initiatives, it could for example make some lands available for urban gardening developments or provide financial support to innovative projects.

¹⁹ Dale Jamieson and Marcello Di Paola (2019) “Climate Change, Liberalism, and the Public/Private Distinction”

3 Urban gardening

“Urban gardening (...) offers a chance to individuals to gain a say on consequential local as well as global issues such as food security, food sovereignty, climate change, resource depletion, pollution, and biodiversity loss. Garden-based individual engagement with these issues thus corresponds to a wider political project centered on a participatory search for self-determination, justice, sustainability and resilience.” (Di Paola 2017, 146)

In this chapter, I would like to focus on urban gardening and its positive effects related to the new challenges that humans are facing in the Anthropocene. On a personal scale, it brings food security, a better alimentation to its users and the opportunity to do physical activity outside. At a local level, it permits the creation of a community, promotes interaction between minorities but also with the dominant group as it is an activity that welcomes every age, nationality and social status, which is the base for social cohesion. Finally, on a global scale, growing its own food is a way of stepping out of the detrimental global food industry and collectively contribute to the global climate change effort.

3.1 Local food production

Urban gardening is a practice that “swims against the tide”. It is the exact opposite of the global food distribution system promoted by colossal, almost monopolistic supermarkets. Urban gardening enables people to re-appropriate their food locally. I was lucky enough to grow up in a house with a garden. My mother loves her garden and loves to teach us everything about it. When I moved to Rome, I was surprised to hear people asking for eggplants or strawberries in February. In my opinion, in big cities, it is easy to lose the sense of seasons as people do not have any contact with the soil. The global food industry and particularly supermarkets deliberately want us to forget the seasonality of fruits and vegetables. Or maybe they only answer to the law of demand from consumers who are now accustomed to being able to buy everything all year round? This distance with agriculture among urban dwellers leads to important knowledge gaps concerning food production (Di Paola 2017). Any type of urban gardening, from growing fruits and vegetables on a small balcony to participating in community gardening help to restore this lost relation with fruits and vegetables and the soil itself. Local food production has many advantages, and it is a practice with high adaptability and resilience. Indeed, *“(...) during times of abundance, it may cost less than supermarket fare that’s come long distances, and during times of emergency — when transportation and distribution channels break down — it can fill a vegetable void”* (Royte 2015). Nevertheless, it can be overwhelming to start growing one’s own food especially in big cities where the contact with the soil is almost inexistent as I mentioned before. Community gardens allow newcomers to learn from other more experienced participants as it is a place of sharing. In Italy, for example, the foundation “Campagna Amica” puts

beginners in contact with a “personal trainer²⁰” that will give them precious advice on how to start gardening, even if it is only for a couple of square meters on their balcony.

Growing one’s own food represents a security for groups having difficulties to access fresh products. Also, buying fruits and vegetables has a high cost for low-income families and it is often one of the reasons cited to justify why they consume so few of them. Urban gardening allows to have access to this precious source of vitamins at little cost. It is possible to generate a lot of food with a low starting sum²¹. In a garden of 65 square meters in New Jersey, the participants were able to grow vegetables for a total amount of 500 dollars during an average season, while the starting sum was of only 25 dollars. Moreover, in a research from K. Alaimo et al. on fruits and vegetable intake among adults living in cities, they found that “*adults with a household member who participated in a community garden consumed fruits and vegetables 1.4 more times per day than those who did not participate, and they were 3.5 times more likely to consume fruits and vegetables at least 5 times daily*” (K. Alaimo et al. 2008). From the results of this study, growing their own vegetables increases the consumption of fresh food consequently leading to a wide range of positive consequences. It ameliorates the health of participants with the intake of quality food itself but also by performing a physical activity outside on a regular basis. Urban food production contributes to improving human physical, mental and social health and no less importantly to environmental health as well²².

3.2 Urban gardening as a possibility of self-offsetting

Multinational agri-food companies across the globe are responsible for the lack of clean water, exploitation of workers, pollution of the soils and the air, deforestation, drastic reduction of biodiversity and more. It is fundamental to look for alternatives and check out of this system. One of the ways to stop contributing is by producing part of one’s own food. By performing this activity, people can have a positive impact on their ecological footprint. In 2017, a study in the United States from Cleveland et al., showed that greenhouse gas emissions can be reduced by two kilos for every kilogram of fruits and vegetables cultivated at home, instead of bought in a supermarket (Cleveland et al. 2017). Every product that is cultivated in a local garden prevents the household to buy the same product at a supermarket. It means that at a personal level, growing your own food can make a significant difference in the mitigation against climate change. “*In an urban garden, (...) the episodic life of my actions can be said to have an anti-systemic counterpart, which reverses the wheels of the global food provision infrastructure (...)*” (Di Paola 2017, 95). Let us remind that for it to be effective,

²⁰ Campagna Amica website, accessed August 24th <https://www.campagnamica.it/2014/09/02/personal-trainer-dellorto-allena-i-cittadini-a-coltivare/>

²¹ K. Alaimo et al. “Fruits and vegetable intake among urban community gardeners” *Journal of nutrition education and behavior* April 2008

²² David A. Cleveland et al. “The potential for urban household vegetable gardens to reduce greenhouse gas emissions” *Landscape and Urban Planning* September 2016

the cultivation of one's own food must be done respecting the land, that is without using chemicals otherwise, it loses all its sense. It is however true that it remains impossible to offset one's ecological footprint entirely by growing part of her own food. Nevertheless, this activity generates lots of other positive consequences in climate change mitigation. Directly related to the food industry, I can cite the fact that eating local food reduces carbon emissions associated with transportation, cooling energy and packaging. Moreover, the food lasts longer because the time between its harvest and when it reaches our plates is much shorter, which reduces the probability of waste. Indeed, a huge part of the food coming from supermarkets is thrown away. According to an article published in the newspaper "Le Temps", in Switzerland, 190 kilograms of food per person is wasted each year, mainly due to the agri-food industry²³. Additionally, urban gardens participate to support biodiversity, improve air quality and regulate the temperatures in cities (unlike concrete which stores heat).

3.3 Community gardening as inclusive

A community garden can and should be available to anyone interested in spending some time and working there. Gardening is an activity that knows no boundaries of class, age, religion, gender or ethnicity. Gardening itself enhances inclusion. Many different people can garden together, each of them for their personal reasons and still, cooperate to perform anti-systemic practices. Community gardening offers the possibility to everyone to self-offset and "*take a stand on important local and global issues, from food security to climate change*" (Di Paola 2017, 153). Lots of studies describe the positive outcome of urban gardening regarding inclusion. Indeed, it represents a safe place where *connections between mainstream and "outsider groupings"* of a neighborhood can be built, as it provides more occasions for casual exchanges between different people (E. Whatley et al. 2015, 435). A Canadian study²⁴ presented several benefits of urban agriculture for senior immigrants. It is challenging for them to adapt and integrate into a new country where they have little knowledge of the language and only few connections. Gardening collectively offers an occasion for seniors to leave their houses and develop their social networks to overcome isolation. Food is a powerful medium to connect with people and additionally connect with their home country. The study described that seniors shared meals, exchange recipes and phone numbers and that "*there is nothing better than food to build community. (...) Moreover, many senior immigrants suffer a loss of identity after emigrating*" (Beckie M et al. 2010, 83). Growing familiar crops represents a bridge between their homeland and their new country. By the same token, the supervisors observed that the seniors made good progress in English during the months of gardening. Another study about the inclusion of people with mental

²³ ATS, "En Suisse, on gaspille 190 kilos d'aliments par personne chaque année" *Le Temps* April 2019, accessed July 12th <https://www.letemps.ch/suisse/suisse-on-gaspille-190-kilos-daliments-personne-annee>

²⁴ Beckie M et al., "Planting roots: urban agriculture for senior immigrants" 2010

and physical health problems²⁵ described that they usually “*face social exclusion because they do not have equal access to opportunities in society, including paid employment, housing, education and leisure.*” The function of community gardens in this situation is to “*increase opportunities for all to participate in civic life*” (Diamant E. et al. 2010, 85).

Gardening together reflects the objectives of an inclusive society but also the basis of democracy. In a safe place that is a neighborhood garden, participants feel respected and valued, have many opportunities of learning, working and connecting with others and their local community (Whatley E. et al., 2015). The dialogue is open and dynamic interactions between people of different backgrounds nourish tolerance and the ability to respect different opinions. (Diamant E. et al. 2010) In the next paragraph, I will present a project of inclusion taking place in my university, with young people with autism spectrum disorder, showing that self-offset knows no barriers and that the safeguard of the environment is accessible to everyone.

3.4 Autistici e Giardinieri

There is a wonderful garden at Luiss Guido Carli University. The community garden started in November 2014, with the full support of Giovanni Lo Storto, the General manager of the university. There are sessions of community gardening organized very frequently in which anyone interested can participate, from university students or staff Luiss to seniors from the neighborhood. Afterward, people can bring back home some products cultivated together in the garden. I used to work there every week, as a member of Edu LabGov²⁶, before the proliferation of the new Coronavirus in March 2020 which forced the closing of the university. During my gardening sessions, I had the chance to meet teenagers and young adults with autism participating in the project “Autistici e Giardinieri” from the association “Cervelli Ribelli” in collaboration with Luiss. Unfortunately, I did not have the opportunity to speak directly with them in the context of my thesis. However, I found some very interesting and useful content on their website²⁷.

First, I would like to say a few words about autism, or autism spectrum disorder (ASD). In advance, I want to inform the readers that I have partial knowledge of this condition and I will try to keep things simple as it is not my primary field. I found all the material on the Autistici e Giardinieri Website provided by two doctors: Doctor Luigi Mazzone and Doctor Laura Reale.

²⁵ Diamant E. and Waterhouse A. “Gardening and belonging: reflections on how social and therapeutic horticulture facilitate health, wellbeing and inclusion” 2010

²⁶ Edu LabGov is a transdisciplinary urban clinic (economics, politics and law) that carries out the University’s third mission and contributes to the creation of social and cultural public goods: public engagement, cultural patrimony, continuing education and clinical experimentation. Description found on the Luiss Website, accessed August 17th <https://www.luiss.edu/students/soft-skills-and-training-opportunities/activities-earn-credits/courses-bachelors-and-sing-1>

²⁷ Website Cervelli Ribelli, accessed August 17th <https://www.cervelliribelli.it/progetti/> and Website of the project Autistici e Giardinieri accessed August 17th <https://autisticiegiardinieri.cervelliribelli.it/>

Autism spectrum disorder is materialized in permanent difficulties that will follow the person through his life. The disorder is generally characterized by difficulties of social interaction and communication and repetitive and stereotyped behaviors and interests. Autism is a spectrum because it hits every person differently and can be very light or severe. The most common symptoms are: speech impediment, difficulties to develop emotional relationships and inadequate behaviors to the context. The cause of this disorder is unknown, but it does appear to be a genetic condition. Moreover, ASD has a very high heritability, and the risk of having another kid with autism is twenty times higher if you have already had a child affected by ASD. No cure exists but early interventions can have a positive impact on the development of the child.

The goal of the Luiss project “Autistici e Giardinieri”, in English “Autistic and Gardener” is to support and stimulate the social inclusion of young people with autism. The community garden represents a safe space where the participants can develop some skills that are exploitable on the job market and it also gives support to their families. However, it is important to mention that the objectives fixed for the program are personalized according to the abilities and preferences of each participant. It provides continuity between school and the work world. The pilot project started in 2015 until 2017. It was a success and consequently, a second edition is ongoing until 2020, with the idea of developing a model of Best Practice of inclusion and integration that could be replicable in other gardens. Around eighteen teens and young adults with ASD participate in the project. The participants are divided into two homogeneous groups according to their abilities. One group is composed of persons with higher functioning, and the other one with persons having more difficulties. Tutors, psychologists and agronomists assist them in the execution of their tasks in the garden. The different profiles of the team, with very diverse competences, are a fundamental aspect to the functioning of the project. The sessions of community gardening are divided between moments in group and activities performed individually. A typical afternoon in the garden is divided between routine activities (in which many participants do not need support and can work alone) and special activities supported by the team for a total duration of approximately three hours. If the weather is bad, some indoor activities related to theoretical notions are organized, such as drawing plants or creating of an herbarium (plants index). The parents were invited to fill a questionnaire of satisfaction regarding the outcomes of the community gardening sessions on their children with “rebel brains”. Very encouraging results emerged from the questionnaire. Indeed, two examples from both groups are mentioned in the synthesis of the project showing the improvements made from the beginning of the activities to the day of the questionnaire. The professional faculties and the ability to speak increased for one subject from the higher functioning group. On the other hand, a subject from the

lower functioning group gained autonomy, as his need and frequency of support dropped²⁸. These results show that gardening has a positive influence on young people with ASD and that it stimulates their social inclusion, which was the goal of the project.

The second edition of “Autistici e Giardinieri” represents a big step forward. The first edition was an experiment, which showed very good results. Thus, the objective is now to start a real micro-business with the manufacture of goods made of raw materials from the garden that will be sold on the market with the participation and support of Luiss students. It means a real professional insertion for the participants with autism. The first products have been sold last winter at the Luiss Christmas market. The participants faced a new challenge as they had to sell their products themselves and present the project in a few words, giving them a chance to acquire new professional skills. The project has been interrupted due to the Covid-19 crisis.

From the month of April, video tutorials on the topic of gardening are available on the YouTube channel of the association Cervelli Ribelli. These videos were realized by the organizers of Autistici e Giardinieri from their home, as a way to keep in touch during this hard time²⁹. One of the main goals of the project indeed is to support families that have a child with ASD. Yet, in my opinion, the participants can give back to their families too by promoting awareness and becoming activists of the environmental cause. In the next chapter, I will develop the importance of the concept of testimonial as environmental activism. Here it reveals that not only gardening but also consequently the activism to protect Mother Earth is inclusive.

²⁸ The synthesis of the project can be downloaded on the “autistici e giardinieri” website. Accessed August 21st <https://autisticiegiardinieri.cervelliribelli.it/sintesi-progetto/>

²⁹ Videos #tuttiacasa2020 Accessed August 20th <https://www.youtube.com/playlist?list=PLMXEOErC6BVOB5Hqju6dyjfaWifWKHt>

4 Education, garden democracy and virtues for the Anthropocene

“Just as wild nature teaches, so too does farming (...) Farming requires an understanding of vital, complex and invisible processes such as water, oxygen, nitrogen and carbon cycles. In fact, most of what we need to know to design intelligent cities can be learned from farming (...) Farms should be integrated into the everyday life of cities (...) to become part of dense neighborhoods, schoolyards, rooftops, balconies, and community gardens. (...) Provide small, urban farms, and entice the public to grow food. Engage every child in her own food production (...) The splendor of urban agriculture is that while we cultivate the land, the land cultivates our minds” (Hester 2006, 344)

4.1 Outdoor education

Children are the next generation. They will have to live with the consequences of climate change and adapt. There is an urgent need to prepare them for the life in the Anthropocene. This preparation can be done through education, at school. Still, the easy route would be to consider that everything can be cured through education and thanks to school the unsustainable way of life of developed (and now developing) countries will come to an end. Unfortunately teaching the new generation how to live in harmony with nature and in parallel keeping our old habits unchanged reminds me of the expression: “do as I say, not as I do”. Rolf Jucker (2002, 9) clarifies that all the weight cannot be on the shoulders of children. *“Education cannot do the job of politics. The highly idealistic notion – which assumes that we just need to change the way we educate our kids and students in order to make sustainability fall into our lap – is both naïve and utterly unfair on the younger generation.”* That is to say, changes must also take place in the social, political and economic systems. Sustainable education by itself is pointless. Let us not forget that a lot of persons feel animosity towards the “boomers³⁰” for their unsustainable use of resources and their very polluting habits. *“By investing education for sustainability with all our hopes for change we are in fact delegating the responsibility for this change to the next generation”* (Jucker 2002, 10), which is pretty much the reiteration of the behavior for which the boomers are blamed. Yet, children could spread the message. From my observations, many people are turning a blind eye to what is going on or simply do not know that individuals can make a difference. Children telling their experiences of sustainable education could help change their minds and maybe even start self-offset practices.

Outdoor education is a form of learning that takes place outdoors. There are no fixed methods, the only requirement is to create a connection between the surroundings and the school subject. Outdoor education is a journey-based experience in which the children go for a hike in the mountains and at

³⁰ Top definition from Urban dictionary: “A slang term for Baby Boomer, often used in a derogatory manner. *I hate boomers, all they do is complain about young people and pretend like it's not their fault the planet is dying!*”

the same time are taught about the fauna and flora of the area. Outdoor education is also kids sitting on the grass, drawing flowers and expanding their vocabulary by learning the names of the plants. Outdoor education is very adaptive and can be implemented without much difficulties not only in the countryside but also in major cities. These outdoor educational experiences support considerably the development of an environmental sensibility for children. Interaction with nature helps people recognize its value³¹. It is important to realize that human beings are part of and not separate from nature. The first step to live a more sustainable life is to understand that the actions that we perform have consequences on the environment and outdoor education is a perfect way to see how nature responds to these behaviors³². According to David W. Orr, Professor of Environmental studies³³, formal education has a moral obligation to counter the “unsustainable” culture in which we are living through the development of collaborative and experimental learning that can take the form of outdoor learning. *“The kind of education we need begins with the recognition that the crisis of global ecology is first and foremost a crisis of values, ideas, perspectives, and knowledge, which makes it a crisis of education, not one in education”* (Orr 2004, 5).

Here I want to contrast the traditional model of outdoor education which highlights the “adventure” without concern for the environment. *“It is not merely a matter of exposing people to outdoor experiences and hoping that they become infused with environmental awareness of sensitivity”* (Lugg 2007, 106). Teachers must sensitize their students to the environment surrounding them in order for the kids to develop some environmental (and also sustainable) literacy. For example, during a ski outing, the teacher should develop a broader view and talk about the shrinking of glaciers instead of focusing only on ski performance. Outdoor education is still sometimes seen with a “colonist” eye and this lets space for unsustainable practice to perpetuate (Lugg 2007). A way of practicing outdoor “as outdoor learning” (and not “as adventure”), is by building a school garden.

In the garden, the kids will be able to see the development of plants. Thanks to the proximity of the garden and its regular frequentation, the kids can realize that nature is a living entity. Nature deserves care and maintenance not only in the school garden but also in general, in the entire world. The garden is a laboratory that permits us to understand how to take care of the planet on a global scale. By taking small steps regularly in the garden, people can project what global care for the environment means. It is meaningless to hope that eventually, global warming will stop without changing our habits. People tend to be overconfident and think that technologies or simply time will solve this global climate crisis. It is irrational to consider that things will turn out fine without human efforts. The

³¹ Lugg A. “Developing sustainability-literate citizens through outdoor learning: possibilities for outdoor education in Higher Education” 2007

³² Johnson, S. “Reconceptualising gardening to promote inclusive education for sustainable development” 2012

³³ Orr, D.W. *Earth in mind: On education, environment and the human prospect* 5 2004

planet needs to be actively nurtured and sustained, like a food garden otherwise, we risk losing it. *“Any experienced gardener will advise the novice (...) to wholeheartedly accept that protection and promotion of the state and prospects of the garden require unrelenting work and effort, which cannot be outsourced. The same is true for our planet in the Anthropocene.”* (Di Paola 2017, 72). Constant work must be done in all sectors, from science to politics to conserve our planet. Gardens offer a metaphor of this necessity of stewardship and represent a perfect place to learn and educate oneself to this mindset, from early childhood. A food garden at school has many other benefits for the development of kids. First of all, it increases the kids’ preferences for fruits and vegetables (Morris JL 2002). Second, according to an interview of an Italian primary school teacher³⁴, it permits to re-establish a relationship with food. The kids have the opportunity to learn how food is created and at the same time learn patience. The teacher wanted to find a concrete activity for her students to practice collaboration, commitment and effort so she started a food garden. She said that during the activities, children also learned to marvel at the little things that surrounded them, such as a baby fig tree that had grown between the stones of the wall. The hours in the garden can be combined with classical school subjects. For example, in the interview, she explained that the students calculated the dimensions of the boxes that would contain the plants. School gardens are proliferating and with it, the creation of a community of schools willing to share their experiences and encourage others to join the movement. Internet facilitates the creation of networks of schools involved in outdoor education and just in Italy, there are more than 500 school gardens part of the initiative “Orto in Condotta³⁵” from the association “Slow Food” that promotes food and sustainable education for kids. Moreover, the initiative organizes training courses for teachers interested. Schools can become “Orto in Condotta” under a few conditions such as following organic cultivation methods or make the children aware of water scarcity. Besides, an online platform “Scuole Naturali³⁶” for outdoor education professionals has been created in 2019 with the scope of sharing their experiences and other useful information. In short, just in Italy many projects³⁷ have emerged these last years. It is possible to get global positive consequences when local anti-systemic activities are coordinated. A powerful network of gardens is a way to overcome collective action problems and schools offer an optimal structure for coordination, as it is easier to start a network from there.

As I mentioned at the beginning of the sub-chapter, kids should not have all the weight of living a sustainable life on their shoulders. Still, it was in my opinion very important to talk about education, as it is a fundamental tool to preserve a solid democracy.

³⁴ Francesco Bevilacqua, “Orto a scuola: come crescere bambini consapevoli” *Italia che cambia* June 11th 2018, accessed August 27th <https://www.italiachecambia.org/2018/06/orto-a-scuola-crescere-bambini-consapevoli/>

³⁵ <https://www.slowfood.it/educazione/orto-in-condotta/>

³⁶ <https://www.scuolenaturali.it/>

³⁷ Let us not forget the food garden at Luiss, which welcomes primary school kids frequently.

4.2 Gardens, a starting point for a bottom-up democracy

In chapter two, I mentioned the fact that with the development of globalization, the states are put under pressure. Non-elected entities such as powerful international corporations, or organizations like the WTO are gaining authority at the expense of states' sovereignty and are able to make decisions that affect everyone, with no regard to states borders. Pellegrino et al. (2018) explains that democratic legitimacy is based on the fact that there is a correspondence between the people that make political decisions and the ones that subsequently, deal with the consequences of these decisions. Thus, in a world in which unelected bodies have a great influence, the democratic legitimacy of states is weakened. The people making political decisions and those who suffer their consequences are not exactly coinciding anymore, like it could have been in the past³⁸. In the Anthropocene, the political environment is highly complex and tortuous and the link between individual voting and political decisions is increasingly lax. Some people, especially from the young generation are consequently wondering if it is still meaningful to vote (von Weizsäcker et. al. 2018). Citizens can hardly reach their institutions which consequently leads to a decline in participation and disenchantment with the system. Following a top-down methodology, one would have to hold office and promote the implementation of environmental policies in order to counter the ineffectiveness of politics concerning global warming. However, assuming a public function requires to be "*fairly educated, properly informed and appropriately motivated*" (Di Paola 2017, 100) and this is simply not accessible to most citizens as it is a quite elitist vision (and requires full devotion).

Therefore, it seems evident that a top-down approach to address the issue of global warming is pretty inefficient and little desirable too. Moreover, most of the problems of the Anthropocene come from personal behaviors and their formal regulation would compromise drastically the liberty of individuals. It seems clear that an effort coming from the civil society is required to counter this legitimacy crisis of democracy and promote sustainability. If the state would regulate some harmful behaviors, such as restricting the utilization of private cars, it would represent a severe breach of the liberty of its citizens and the risk to shift to a paternalistic state is high. On the other hand, if avoiding these behaviors are the fruit of people's personal decisions, it becomes a virtuous habit, a kind of ecological activism.

A network of community gardens offers a satisfying starting point to train citizens to a bottom-up concept of democracy. "*Some of the socializing taking place in (...) community gardens, involves decision-making and planning processes that require consensus, and this make community gardens important places for fostering democratic values, interpersonal and intercultural respect, and citizen*

³⁸ In fact, it has never really corresponded (I am thinking about working class, black people, women, etc.) yet, today white males from upper classes also suffer this lack of correspondence.

engagement. (...) This provides ammunition to the long-standing idea, diffused among advocates of urban gardens – that gardening is a school of engaged and participatory democracy.” (Di Paola 2017, 52). Participating in a community garden gives the opportunity to the members to learn some important values for democracy, intrinsically linked to cultivate the land. The philosopher Paul B. Thompson (2010) brought out two of these values. First, gardening provides autonomy and self-determination to its adepts through their own food production. Indeed, people can apprehend their dependence to corporations concerning food and realizing that they are able to grow their own products is a very empowering act. Cooperation between people is the second value highlighted by Thompson. As I mentioned in the previous subchapter, this era is highly connected, and cooperation can happen not only on the ground but also through communication technologies.

Even though I chose to focus on a bottom-up approach with initiatives coming directly from engaged citizens, institutions still have a fundamental role to play. They should actively support and promote the development of citizens initiatives. For example, by making some land available for the creation of a community garden or subvention universities to develop platforms of exchange of information.

4.3 The comeback of individuals in the public sphere, inspired by virtues of classic philosophy

Participating in a community garden is a political act and is therefore part of the public life of citizens. In any kind of garden, but to larger extents in community gardens where lots people meet, takes place a special kind of activism for the Anthropocene. As the garden represents an accessible, inclusive realm for individuals, unlike the actual public institutions, participants have the opportunity to let their voice be heard on issues such as global warming or access to fresh food. Many exchanges happen, especially if the garden is part of a network of gardens where people can gather physically but also virtually. As expressed by Pellegrino et. al. (2018, 229) *“the garden can become a kind of public sphere”*. It is very important to bring the individuals back to the public domain of the society and empower them. Their participation in the public life is one of the most fundamental aspects of democracy. Yet, the lack of this participation and the feeling of helplessness from citizens are characteristics of politics in the Anthropocene. In the second chapter, I introduced the disequilibrium between the public and private sphere, the fact that the markets and big corporations are gaining a disproportionate importance over the public institutions. In the last Report to the Club of Rome, I found a passage that illustrates perfectly the changes that need to take place: *“The agenda of rebalancing the public with the private good may take a whole generation (...) Neither purist market ideology nor pure state dominance will be acceptable, but very considerable synergies between the two can emerge from a suitable and balanced division of labor. This will only be possible with an engaged citizenry, able to hold leaders of both the public and private sectors to account.”* (von

Weizsäcker et. al. 2018, 70-71). Community gardens can indeed represent a starting point for the engagement of citizens in the public sphere.

Let us go back to the concept of episodic and systemic lives of our actions. Almost every action we perform have systemic consequences for the planet. These consequences are part of the public realm as they will affect the planet and its inhabitants. Me as well, in front of my computer writing these lines, together with millions of people doing similar things, consume energy coming from fossil fuel that accelerate global warming. In a garden, my actions also have two lives. The first one, episodic, represents the action that I own privately. I plant tomato seeds at the beginning of spring to be able to eat the tomatoes in June. That is my objective. On the other hand, this action has a systemic life too, that belongs to the public sphere. By executing gardening activities, I participate to something bigger, I perform a political act of high public interest relevance.

In a community garden, participants share their gardening tools and observations with others while making a helpful contribution in the fight against climate change by self-offsetting. These attitudes not only help to distance themselves from their own personal life and overcome self-interest and individualism but also help develop a sense of accomplishment in the protection and promotion of the common good (T.D. Glover et al. 2007; Di Paola, 2017). Anyone can start self-offsetting practices and The Club of Rome invites us to “Come On!” as they decided to entitle their Report. According to the authors, progress do not have to be driven by selfishness and greed, like it is nowadays. These behaviors still have a positive connotation as they seem to be ingredients of success. Yet, “*Progress can flourish just as well in a civilization that fosters solidarity, humility and respect for Mother Earth and for future generations*”. (von Weizsäcker et. al. 2018, 67). Melissa Lane (2012) shares the same point of view and articulates that our vision of what is normal or even admirable has to evolve, since the ecological results of these behaviors are simply unaffordable. We can find inspiration about what values should surround the Anthropocene in classic philosophy.

For a Greek or a Roman, the small personal life mattered very little. What mattered was the community. Their goal was to fit into the community. Citizenship was the most important thing. We see it very clearly in Crito, written by Plato for example, when Socrates would rather die than be exiled. He is nothing without his citizenship. Citizenship is intrinsically linked to identity itself. There is little notion individual among the Greeks and Romans. It has no social weight, quite the opposite of today. The exercise of citizenship was a very important source of pride for individuals back then. Today, one can find personal pride in the support of public interest by self-offsetting in a community garden for example. I want to show one more source of inspiration from the Ancients, about a vice that should have the same connotation today that it had in classical times. This vice became acceptable in our capitalistic society. I am referring to the desire to own more than one’s share, the pursue of

one's own interest with indifference for the rights of others. It was perceived as one of the worse threat to civic order, and in my modest opinion it is also the case today. This philosophical concept is summarized by the Greeks with a single word *Pleonexia*, that we should keep in mind in our political education for the Anthropocene (Lane 2012, 32).

Professor Pellegrino (2018, 230) decided to conclude the last chapter of his book *Nell'Antropocene, Etica e politica alla fine di un mondo* with this very idea, the one of the revalorization of citizenship over individuality like it was in the Antiquity. I will humbly follow this choice and conclude this chapter with his words. "*The environmental policy of the Anthropocene, (...) will have an ancient flavor for many – it will recall the ideas of classical political philosophy, in which individual life was intertwined with the exercise of citizenship. Those were typical ideals of small communities, such as the Athens of the 5th century.*"

Conclusion

This thesis aimed at proposing a way for citizens to participate in the resolution of two very actual large scale problems – climate change and democracy turmoil. Human production and consequently consumption boomed over the last decades and GDP growth became a central goal of politics. These behaviors happened at the expense of the environment, causing irreversible damages as excesses of CO₂ in the atmosphere. Global warming must be contained otherwise, we are heading straight for disaster. Regarding the other side of the problem – democratic legitimacy – politic life has become very complex and the institutions are hardly accessible to citizens. Moreover, states face little choice but to satisfy the expectations of non-elected multinational corporations, sometimes marginalizing their citizens. These citizens feel left out of the public realm for multiple reasons and seek satisfaction and success in their individual lives, which often means in materialism, at the expense of the planet. As most of these harmful behaviors are private, regulation of the latter by the state would limit greatly individual liberties. A paternalistic state is not an enviable solution, yet something must be done. I definitely found answers to these very relevant issues in community gardening. Gardens are inclusive safe spaces for dialogue and cooperation. They foster democratic values and citizens can feel that their voices are heard while participating in offsetting practices. Community gardening offers a different paradigm, one in which the individual re-appropriate the public space without having to navigate through the formal political system. The Anthropocene era is still to be explored, yet antique values such as operating for the common good could help us apprehend it.

Nevertheless, my work only consisted of a literature review on this subject. In my opinion, direct contact with people involved in community gardening along with having the possibility to ask them questions related to my thesis would have been instructing. I could not help but wonder: Is it community gardening that brings out the virtues of its participants or is it the other way around? Is it because these people have democratic values and want to fight for the planet that they get involved in gardening? I guess this is the same story as the chicken and egg situation.

I proposed one solution, I am however aware that community gardening risks remaining a marginal activity and the chances that networks of people involved develop into a societal transformation are low. Moreover, gardening is only one way to self-offset. Many other positive actions exist to counterbalance our emissions, such as going to work by bicycle or making one's own clothes. Still, I chose to develop the concept of community gardens exactly for this possibility of the creation of a community while offsetting. I had the chance to visit some urban gardens in Rome a couple of years ago, and when I asked the members about the reason why they participate, many told me about the sense of belonging. It has been the same for me in the Luiss garden, I found a familiar place with very different people sharing the same values. I cannot wait to go back to the garden and learn more about

farming, but also about myself. I want to highlight one last time the importance of testimonial, of promotion of these activities to motivate future allies. Good examples are fundamental to create a snowball effect of self-offsetting practices and to spread civic values. Yet, History shows us that collective action problems can be overcome when people identify clearly the negative consequences of their inaction. Maybe the threat of global warming is not as manifest as the Coronavirus crisis that we are experiencing in 2020. People do not perceive the same sense of urgency as the crisis is more diffused and the direct consequences less visible. It lets us no choice but to keep perseverating and spreading the message.

Bibliography

Articles and Books

- Alaimo Katherine, Packnett Elizabeth, Miles Richard, Kruger Daniel. "Fruits and Vegetable Intake among Urban Community Gardeners" *Journal of Nutrition Education and Behavior* March/April 2008
- Beckie, Mary and Bogdan Eva "Planting roots: Urban agriculture for senior immigrants" *Journal of Agriculture, Food Systems, and Community Development* November 2010
- Cleveland, David. et al. "The potential for urban household vegetable gardens to reduce greenhouse gas emissions" *Landscape and Urban Planning* September 2017
- Diamant E. and Waterhouse A. "Gardening and belonging: reflections on how social and therapeutic horticulture facilitate health, wellbeing and inclusion" *British Journal of Occupational Therapy* February 2010
- Di Paola, Marcello. *Ethics and Politics of the Built Environment: Gardens of the Anthropocene*: Springer 2017
- Glover, T.D., Shinew K.J. and Parry D.C., C. "Association, Sociability, and Civic Culture: The Democratic Effect of Community Gardening" *Leisure Sciences* 2005
- Hester, R.T *Design for Ecological Democracy*. Cambridge, MA: MIT Press 2006
- Hyams Keith and Fawcett Tina, "The ethics of carbon offsetting" *John Wiley & Sons*, March/April 2013
- Jamieson, Dale W. and Di Paola Marcello. "Climate Change, Liberalism, and the Public/Private Distinction", *Philosophy and Climate Change*, eds. T. McPherson, M. Bodulfson, D. Plunkett 2019
- Jamieson Dale W. and Di Paola Marcello. "Political theory for the Anthropocene" *Global political theory*, 2016
- Johnson, Susan. "Reconceptualising gardening to promote inclusive education for sustainable development" *International Journal of Inclusive Education* 2012
- Jucker, Rolf. "Sustainability? Never heard of it! Some basics we shouldn't ignore when engaging in education for sustainability" *International Journal of Sustainability in Higher Education* 2002
- Kutz, Christopher. *Complicity, ethics and law for a collective age*. Cambridge University Press, 2000
- Lane, Melissa. *Eco-Republic*. Princeton University Press, 2012
- Levkoe, Charles Z. "Learning democracy through food justice movements" *Agriculture and Human Values* 2006
- Lugg, Alison. "Developing sustainability-literate citizens through outdoor learning: possibilities for outdoor education in Higher Education" *Journal of Adventure Education and Outdoor Learning*, December 2007

- Mill, John. *On Liberty*, ed. E. Rapaport. Cambridge MA: Hackett Publishing Company, 1859/1978
- Milman, Oliver, “James Hansen, father of climate change awareness, call Paris talks ‘a fraud’” *The Guardian* December 12th, 2015 <https://www.theguardian.com/environment/2015/dec/12/james-hansen-climate-change-paris-talks-fraud>
- Morris, Jennifer L and Zidenberg Cherr, Sheri. “Garden-enhanced nutrition curriculum improves fourth-grade school children’s knowledge of nutrition and preferences for some vegetables”. *Journal of the American Dietetic Association*. 2002
- Nagel, Thomas. “Libertarianism without Foundations” Review of *Anarchy, State and Utopia*, by Robert Nozick. *The Yale Law Journal*, November 1975
- Nolt, John, “How Harmful Are the Average American's Greenhouse Gas Emissions?” *Ethics, Policy and Environment*, March 2011
- Orr, D.W. *Earth in mind: On education, environment and the human prospect*. Island Press, 2004
- Pellegrino G. and Di Paola M. *Nell’Antropocene, etica e politica alla fine di un mondo*. Derive Approdi, 2018
- Royte Elizabeth “Urban farming is booming, but what does it really yield? The benefits of city-based agriculture go far beyond nutrition” *Ensisia*, April 2015
- Steffen Will, Grinevald Jacques, Crutzen Paul and McNeill John “The Anthropocene: conceptual and historical perspectives” *Philisophical transactions of the royal society*, 2011
- Schwenkenbecher, Anne “We need to rethink our moral obligations to create a better world” *The Conversation*, March 20th 2018. <https://theconversation.com/we-need-to-rethink-our-moral-obligations-to-create-a-better-world-93286>
- Thompson, Paul B. *The Agrarian Vision: Sustainability and Environmental Ethics*. Lexington: University of Kentucky Press, 2010
- Wallace-Wells, David. *The Uninhabitable Earth: Life After Warming*. Tim Duggan Books, 2019
- Whatley E. and Williams Anne E “Enabling occupational participation and social inclusion for people recovering from mental ill-health through community gardening” *Australian Occupational Therapy Journal* 2015
- Wijkman A and von Weizsäcker E.U. *Come On! Capitalism, Short-termism, Population and the Destruction of the Planet – A Report to the Club of Rome*. Springer, 2018

Websites

- “Prospects for Peace in the Middle East”, Noam Chomsky, speech delivered at the First Annual Maryse Mikhail Lecture “No peace without justice; no justice without truth” The University of Toledo, March 4, 2001 accessed July 2nd <https://chomsky.info/20010304/>

ATS, “En Suisse, on gaspille 190 kilos d'aliments par personne chaque année” *Le Temps* April 2019, accessed July 12th <https://www.letemps.ch/suisse/suisse-on-gaspille-190-kilos-daliments-personne-annee>

John Sousanis “World vehicle population tops 1 billion units” accessed August 10th <https://www.wardsauto.com/news-analysis/world-vehicle-population-tops-1-billion-units>

Luiss Website, accessed August 17th <https://www.luiss.edu/students/soft-skills-and-training-opportunities/activities-earn-credits/courses-bachelors-and-sing-1>

Website Cervelli Ribelli, accessed August 17th <https://www.cervelliribelli.it/progetti/>

Website Autistici e Giardinieri accessed August 17th <https://autisticiegiardinieri.cervelliribelli.it/>

Video from the YouTube Channel of Cervelli Ribelli #tuttiacasa2020 Accessed August 20th <https://www.youtube.com/playlist?list=PLMXEOt0ErC6BVOb5Hqju6dyjfaWifWKHt>

Personal trainer of the foundation Campagna Amica, accessed August 24th <https://www.campagnamica.it/2014/09/02/personal-trainer-dellorto-allena-i-cittadini-a-coltivare/>

Website Project Orto in Condotta, accessed August 26th <https://www.slowfood.it/educazione/orto-in-condotta/>

Website Urban dictionary, accessed August 26th <https://www.urbandictionary.com/define.php?term=Boomer>

Francesco Bevilacqua, “Orto a scuola: come crescere bambini consapevoli” *Italia che cambia* June 11th 2018, accessed August 27th <https://www.italiachecambia.org/2018/06/orto-a-scuola-crescere-bambini-consapevoli/>

Website platform Scuole Naturali, accessed August 28th <https://www.scuolenaturali.it/>

Website PurpleAir Map, accessed September 14th <https://www.purpleair.com/map?opt=1/mAQI/a10/cC0#1/25/-30>

Website Edelman Trust Barometer report, accessed September 14th <https://www.edelman.com/trustbarometer>

Abstract

Nel momento stesso in cui scrivo questa tesi, centinaia di incendi stanno distruggendo la costa Ovest nordamericana che va da Vancouver a San Diego, passando per San Francisco e Los Angeles. La qualità dell'aria è riportata come la peggiore al mondo. E la stagione 2020 degli incendi è ancora lontana dal suo termine.

Volevo cominciare raccontando un evento recente. Si parla di incendi, ma avrei potuto parlare di alluvioni, uragani, scioglimento di ghiacciai o record di alte temperature. Il problema non è mai presentato dai media come un insieme, ma solo come singoli fatti che accadono separatamente. Questi eventi estremi sono causati dal cambiamento climatico in atto sulla Terra. Uno dei fattori principali che ha portato a ciò è stato l'incremento di CO₂ nell'atmosfera che ha portato a un riscaldamento del nostro pianeta. Il cosiddetto "effetto Serra". L'incremento globale di temperatura mina la stabilità del pianeta causando eventi meteorologici avversi come incendi, acidificazione degli oceani, scioglimento dei ghiacciai, estinzione di varie specie animali come, ad esempio, gli orsi polari. Si può giustamente pensare che sia responsabilità degli Stati di porre regole e limiti riguardanti il riscaldamento globale. Però, a livello transnazionale, mosterò che molti altri attori con peso decisionale sono coinvolti e che gli Stati hanno meno potere di controllo e di negoziazione di quanto avessero in passato. Questa tesi mira a proporre una via attraverso la quale i singoli cittadini possono contribuire a risolvere problemi di larga scala e fare una differenza effettiva, sia riguardo il cambiamento climatico sia per problemi di democrazia.

Il chimico Paul Crutzen all'inizio degli anni 2000, portando avanti le ricerche dello scienziato Eugene Stoermer, rese pubblico il termine "Antropocene" per caratterizzare l'epoca in cui viviamo. Il termine sottolinea come oggi la Terra sia completamente influenzata dall'attività umana. Crutzen e i suoi colleghi decisero di considerare il 1800, periodo caratterizzato dalla rivoluzione industriale, il punto di partenza di questa nuova era. Da quel momento in poi, il consumo di energia e risorse è aumentato esponenzialmente, fino a sfociare negli anni Cinquanta del XX secolo nel periodo definito come "La Grande Accelerazione", in cui le attività umane hanno subito un aumento smisurato. Uno dei principali motori della Grande Accelerazione è stata la continua progressione dell'urbanizzazione. Nel frattempo, i problemi ambientali causati da queste pratiche insostenibili sono stati spesso marginalizzati o totalmente ignorati. Siamo e saremo condannati a vedere concretizzarsi nel futuro prossimo i danni che l'uomo ha arrecato all'ambiente negli ultimi decenni. Cosa possiamo aspettarci per gli anni a venire? Negli ultimi anni sono stati firmati molti accordi sul clima. Tuttavia, sono stati apportati pochissimi cambiamenti reali per raggiungere gli obiettivi fissati. Secondo le Nazioni Unite, continuando a questo ritmo, si prevedono 200 milioni di rifugiati climatici entro il 2050 e il riscaldamento globale dovrebbe vedere un aumento delle temperature medie di non meno di 4,5 gradi

entro il 2100. Questi 4,5 gradi significano deficit alimentare permanente e le Alpi aride come le montagne dell'Atlante (D. Wallace-Wells 2019).

C'è un modo per fare qualcosa a livello di singoli individui? I trattati internazionali hanno avuto poca efficacia sui governi dei singoli stati. Quindi, seguendo un approccio che va dal basso verso l'alto, gli individui, i cittadini, possono aprire la strada e svolgere delle attività locali coordinate che possono portare degli effetti positivi globali. Compiamo quotidianamente atti dannosi per il pianeta come accendere una luce, navigare su Internet o acquistare un paio di jeans. Anche se queste azioni sembrano completamente innocue, eseguite su scala planetaria da miliardi di persone, accelerano il riscaldamento globale. L'auto-compensazione (self-offsetting in inglese) è una delle pratiche utilizzabili per “neutralizzare” le nostre azioni inquinanti (quelle il cui costo è troppo alto per essere fermato) e consiste nel controbilanciare queste “emissioni” scaturite dalle nostre azioni quotidiane con lo svolgimento di attività che hanno un impatto positivo sull'ambiente. Di Paola, nel suo libro *Ethics and Politics of the Built Environment: Gardens of the Anthropocene* afferma che molte azioni comuni che eseguiamo ogni giorno hanno due vite, una episodica e una sistemica. La vita episodica delle nostre azioni è piuttosto innocua, e soprattutto è sotto il nostro controllo. Gli obiettivi delle nostre azioni sono chiari e conosciuti. Non prendo in considerazione le conseguenze di questi comportamenti, eseguiti da me e da milioni di persone ogni giorno. È la vita sistemica delle nostre azioni che danneggia il pianeta. La vita sistemica esiste come conseguenza di un mondo dipendente dal petrolio e connesso a livello globale con catene di produzione mondiali, contando su risorse limitate per portare avanti il sistema. Sappiamo che la vita sistemica delle nostre azioni ha un impatto negativo sull'ambiente, ma come si configura un'eventuale responsabilità personale nei confronti del cambiamento climatico? Nel diritto moderno, la responsabilità di un'azione è attribuibile solo quando si può osservare la causalità diretta, tuttavia “(...) *la maggior parte dei problemi antropoceni globali possono essere descritti come problemi di azione collettiva planetaria. Questi non solo sono impossibili da risolvere isolatamente, ma anche impossibili da causare isolatamente*” (Di Paola 2017, 25). Nessuno è personalmente responsabile per eventuali danni presenti o, ancora più complicati da determinare, danni futuri causati dalla vita sistemica delle proprie azioni che hanno influenzato il clima. Miliardi di azioni compiute da persone di diverse generazioni possono quindi provocare o aver provocato un'alluvione, un incendio o una siccità, senza però che nessun singolo possa essere accusato di ciò.

Dagli anni Settanta la sfera privata sta acquisendo sempre più importanza rispetto a quella pubblica e con la globalizzazione, e di conseguenza le dottrine del libero mercato, le multinazionali stanno diventando sempre più potenti e sono in grado di esercitare molta pressione sugli Stati in modo da poter soddisfare i loro interessi. Lo Stato si trova così nel mezzo della necessità di attrarre capitali ma

allo stesso tempo di proteggere l'ambiente, perdendo sempre più leva per quest'ultimo scopo. L'ideale del liberalismo del diciottesimo secolo è fuori contesto con la società di consumo che conosciamo oggi. In un mondo in cui gli organismi non eletti hanno una grande influenza, la legittimità democratica degli Stati è sicuramente indebolita. Nell'Antropocene, l'ambiente politico è molto complesso e tortuoso e il legame tra il voto individuale e le decisioni politiche è sempre meno netto. I cittadini difficilmente riescono a raggiungere le loro istituzioni, il che di conseguenza porta a un calo della partecipazione e a del disincanto nei confronti del sistema. Inoltre, la maggior parte dei problemi dell'Antropocene derivano da comportamenti personali e la loro regolamentazione formale comprometterebbe drasticamente la libertà degli individui. Appare chiaro che è necessario uno sforzo proveniente dalla società civile per contrastare questa crisi di legittimità della democrazia e promuovere la sostenibilità. Se lo Stato regolasse alcuni comportamenti dannosi, come ad esempio limitare il numero di viaggi in aereo per persona, ciò rappresenterebbe una grave violazione della libertà dei propri cittadini e il rischio di passare a uno stato paternalistico sarebbe molto alto. Se, invece, sono i cittadini stessi, di propria iniziativa, a evitare i comportamenti più dannosi, diventando nel migliore dei casi promotori di abitudini virtuose, possiamo trovarci di fronte a una sorta di attivismo ecologico. È molto importante riportare gli individui nel dominio pubblico della società e responsabilizzarli. La loro partecipazione alla vita pubblica è uno degli aspetti fondamentali della democrazia.

Possiamo trovare ispirazione su quali valori dovrebbero circondare l'Antropocene nella filosofia classica. Per un greco o un romano antico, la singola vita personale e privata aveva un valore inferiore rispetto a quanto viene considerata al giorno d'oggi. Ciò che importava era la comunità, la cittadinanza era il valore più importante. Lo vediamo molto chiaramente in Crito, scritto da Platone per esempio, quando Socrate preferirebbe morire piuttosto che essere esiliato. La cittadinanza è intrinsecamente legata all'identità stessa e Socrate si sente privato della sua stessa anima senza la sua cittadinanza. L'esercizio della cittadinanza era allora un motivo di orgoglio molto importante per le persone. Al giorno d'oggi, si può trovare orgoglio personale nel sostegno dell'interesse pubblico, della democrazia e della salvaguardia dell'ambiente attraverso il lavoro in un orto urbano condiviso.

Gli orti urbani possono rappresentare un punto di partenza per il coinvolgimento dei cittadini nella sfera pubblica. In un orto urbano, i partecipanti condividono le loro conoscenze, i loro strumenti di giardinaggio e le loro osservazioni con le altre persone, fornendo un utile contributo alla lotta contro il cambiamento climatico mediante una classica pratica di auto-compensazione. Queste attività non solo aiutano a frenare l'interesse personale e l'individualismo, ma servono anche a sviluppare un senso di realizzazione nella protezione e promozione del bene comune, fondamentale soprattutto in età giovane.

Un modo per praticare l'apprendimento all'aperto è attraverso la costruzione e la successiva cura di un orto scolastico. Grazie alla vicinanza del giardino e alla sua regolare frequentazione, i bambini possono rendersi conto che la natura è un essere vivente. La natura merita cura e manutenzione e il giardino è un laboratorio che ci permette di capire come prendersi cura del pianeta su scala globale. Occorre lavorare costantemente in tutti i settori, dalla scienza alla politica per conservare il nostro pianeta. I giardini offrono una metafora di questa necessità di amministrazione e rappresentano un luogo perfetto per apprendere e per educare se stessi a questo tipo di mentalità, fin dalla prima infanzia. È possibile ottenere conseguenze positive globali quando le attività antisistemiche locali sono coordinate. Una potente rete di orti è un modo per superare i problemi di azione collettiva e le scuole offrono una struttura ottimale per il coordinamento. I bambini non dovrebbero avere tutto il peso di vivere una vita sostenibile sulle loro spalle. Tuttavia, a mio avviso, è molto importante parlare di educazione, in quanto è uno strumento fondamentale per preservare una solida democrazia. I bambini di oggi sono la generazione futura. Dovranno convivere con le conseguenze del cambiamento climatico e adattarsi. C'è un urgente bisogno di prepararli per la vita nell'Antropocene. L'educazione all'aperto è una forma di apprendimento che non prevede metodi fissi, l'unico requisito è creare una connessione tra l'ambiente circostante e la materia scolastica. Queste esperienze educative all'aperto supportano notevolmente lo sviluppo di una sensibilità ambientale per i bambini. È importante rendersi conto che gli esseri umani fanno parte e non sono separati dalla natura. Il primo passo per vivere una vita più sostenibile è capire che le azioni che compiamo hanno conseguenze sull'ambiente e l'educazione all'aria aperta è un modo perfetto per vedere come la natura risponde a questi comportamenti.

L'urban gardening porta sicurezza alimentare, una migliore alimentazione ai suoi utenti e l'opportunità di fare attività fisica all'aperto. A livello locale, consente la creazione di una vera e propria comunità, favorisce l'interazione tra le minoranze ed è un'attività che accoglie persone di ogni età, nazionalità e status sociale, il che è alla base della coesione sociale. Infine, su scala globale, coltivare il proprio cibo è un modo per allontanarsi dalla dannosa industria alimentare globale e contribuire collettivamente allo sforzo per il cambiamento climatico. Ogni prodotto coltivato in un orto urbano permette a una famiglia di non acquistare lo stesso prodotto in un supermercato. Significa che a livello personale, coltivare il proprio cibo può fare una differenza significativa nella mitigazione dei cambiamenti climatici. È tuttavia vero che resta impossibile compensare interamente l'impronta ecologica coltivando parte del proprio cibo. Tuttavia, questa attività genera molte altre conseguenze positive. Direttamente correlato all'industria alimentare, si può citare il fatto che mangiare cibo locale riduce le emissioni di carbonio associate ai trasporti, all'energia di raffreddamento e agli imballaggi. Inoltre, il cibo dura più a lungo perché il tempo tra la sua raccolta e quando raggiunge i nostri piatti

è molto più breve, il che riduce la probabilità di spreco. Inoltre, gli orti urbani hanno un ruolo fondamentale nel sostenere la biodiversità, migliorare la qualità dell'aria e regolare le temperature nelle città. Un orto urbano può e deve essere disponibile per chiunque sia interessato a trascorrere del tempo e lavorarci. Il giardinaggio stesso riflette l'inclusione, qualità indispensabile per una democrazia. Il giardinaggio offre a tutti la possibilità di auto-compensarsi. Il dialogo è aperto e le interazioni dinamiche tra persone di diversa estrazione sociale alimentano la tolleranza e la capacità di rispettare le opinioni diverse.

C'è un meraviglioso giardino all'Università Luiss Guido Carli. Ci sono sessioni di giardinaggio organizzate su base quotidiana a cui chiunque sia interessato può partecipare. Ho lavorato in questo orto ogni settimana per più di un anno. Durante le mie sessioni di giardinaggio ho avuto modo di incontrare adolescenti e giovani adulti con autismo che partecipano al progetto "Autistici e Giardinieri" dell'associazione "Cervelli Ribelli" in collaborazione con Luiss.

Autistici e giardinieri, un progetto di inclusione LUISS, con giovani con disturbo dello spettro autistico, che dimostrano che l'autocompensazione non conosce barriere e che la salvaguardia dell'ambiente è accessibile a tutti. L'obiettivo del progetto è sostenere e stimolare l'inclusione sociale dei giovani con autismo. Il community garden della Luiss rappresenta uno spazio sicuro dove i partecipanti possono sviluppare svariate abilità che potranno poi essere sfruttate sul mercato del lavoro a cui si lega un importante supporto alle famiglie dei ragazzi del progetto. Il progetto pilota è iniziato nel 2015 ed è terminato nel 2017. È stato un grande successo e di conseguenza è in corso una seconda edizione che termina nel 2020, con l'idea di sviluppare un modello di best practice di inclusione e integrazione replicabile in altri orti. I genitori dei ragazzi sono stati invitati a compilare un questionario di soddisfazione riguardo ai risultati delle sessioni di giardinaggio comunitario sui loro figli con "cervelli ribelli". Questi risultati mostrano che il giardinaggio ha un'influenza positiva sui giovani con ASD e stimola la loro inclusione sociale. Uno degli obiettivi principali del progetto, infatti, è sostenere le famiglie che hanno un figlio con ASD. Eppure, secondo me, sono i partecipanti stessi, il centro del progetto, i ragazzi, che possono restituire alle loro famiglie diventando attivisti della causa ambientale. Questo rivela che non solo il giardinaggio, ma anche l'attivismo per proteggere la Madre Terra è inclusivo.

Le soluzioni proposte attraverso il giardinaggio comunitario rischiano di rimanere attività marginali e la probabilità che le reti di persone coinvolte si sviluppino in una trasformazione sociale sono realisticamente basse. Inoltre, il giardinaggio è solo uno dei modi possibili per effettuare attività di autocompensazione. Esistono molte altre azioni positive per controbilanciare le nostre emissioni. Tuttavia, ho scelto di sviluppare il concetto dei giardini comunitari perché tale attività apre alla possibilità di creare una vera e solida comunità durante il suo svolgimento. Ho avuto la possibilità di

visitare alcuni giardini urbani a Roma e quando ho chiesto il motivo per il quale le persone partecipassero, mi è sempre stato risposto del senso di appartenenza. E la mia esperienza personale nel Community Garden Luiss mi ha permesso infatti di trovare un angolo familiare con persone eterogenee che condividono però gli stessi valori. Valori che hanno il sapore di democrazia. Ed è importante sottolineare un'ultima volta l'importanza della testimonianza, della promozione di queste attività per sensibilizzare le generazioni presenti e future sull'importanza delle stesse. I buoni esempi sono fondamentali per creare un effetto positivo a cascata che, in un futuro speriamo non troppo lontano, possa permettere a queste azioni di avere un impatto sistemico.