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BATTLING AROUND THE TRUTH OF THE GMOS

A content analysis about the role of truth and power

as a means of creating governance and resistance

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### Tiivistelmä:

This master's thesis approaches the debate around biotechnology, genetically modified organisms (GMOs) and the notion of food sovereignty as they are addressed by an Indian, food sovereignty activist group called Navdanya. Basing on the material produced by Navdanya, I am determining, by the means of a theory guided content analysis, what kind of an alternative food sovereignty is. Furthermore, I am examining how food sovereignty can be considered as a means of resistance to the impacts of the GMOs in India. I am arguing that the introduction of the GMOs to India created an opportunity to govern populations and furthermore life and nature.

I am examining this by utilising Michel Foucault's theory of biopolitics as a theoretical framework. In order to find out how governance and resistance are practiced, I utilise Foucault's notions of truth and power by illustrating how they can be utilised as a means to create governance and resistance. Therefore, I formulated a "truth regime of biotechnology" to represent the governance, operated by the actors supporting the utilisation of the GMOs, as well as to describe how the governance is created and justified under the regime. As a means of resistance, Navdanya produces alternative truths and puts into practice an alternative of food sovereignty – "the new politics of truth".

Navdanya succeeds in its resistance by managing to create the alternative truth of food sovereignty, which does not utilise or reproduce the truths of the biotechnology regime. Navdanya does this by managing to detach the power of the biotechnology regime's truths from their economic and political roles they play in society. The traditional complexity with resistance, in relation to the State of India, is present, which can be however explained by utilising the new ways in approaching the notion of resistance in the context of the Global South.

Asiasanat: biopolitics, food sovereignty, truth, power, resistance, governance

### Muita tietoja:

Suostun tutkielman luovuttamiseen kirjastossa käytettäväksi\_X\_

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## 1. Introduction

Food and the questions related to what we *really* eat and *how* the food we eat is produced have become, in increasing amounts, debated topics around the world. One of the most controversial topics concerning to global food production have aroused due to the introduction of genetically modified organisms (GMOs). Genetic engineering due to the improvements in biotechnology has enabled the modification of nature's products and production of genetically modified food products. Nowadays GMO food is sold in super markets and the GMOs are widely utilised as a part of food industry and industrial farming. However, the genetically modified (GM) products are considered as inventions, which is why they can be patented and thus privately owned. This has created the opportunity to profit from nature's products, such as plants or seeds, as they are considered as privately owned commodities that can be sold in the markets. However, genetically engineered food is often praised as a solution to world's hunger and the cultivation of the GM seeds is introduced as improvement to farming. Often this type of information about the GMOs is given in terms of food security.

The utilisation of the GMOs and the modification of nature have, as well, aroused many concerns and led into different disputes about the ethical, moral and monetary questions related to it. For instance, what is often presented is the fact that genetic engineering is still a relatively new invention, which has not yet been studied much. This is why the long term effects and consequences that may result in from the modification of food products and nature are unknown. Likewise, another big dispute is caused due to the patenting of GMOs, which, in turn, enables the creation of private ownerships of the modified nature's products. This is why, along with the safety concerns of the GMOs, it has also been argued that the genetic engineering has enabled profiting from nature's products. Similarly, McMichael (2000, 21) has defined food as powerful factor in nowadays global politics as money. In fact, the utilisation of the GMOs has already showed its impact, as it has created great social consequences in many different areas. This type of a critical discourse of genetic modification is often presented by groups that represent an ideology called *food sovereignty*.

Food sovereignty movements have become one of the most visible critics towards the contemporary food production. Likewise, the ideology of food sovereignty itself has become

a widely discussed phenomenon in the nowadays global politics as well as in academia. In this thesis, I am approaching the problematic with the GMOs and global food production, presented by an Indian food sovereignty and women activist group called Navdanya. Navdanya was founded by Vandana Shiva in India, in 1982, after the announcement of the first news regarding to the development of genetically modified seeds. After its establishment in 1982, the larger scale activism of Navdanya began not until 1998, when an American multinational corporation, Monsanto, started importing genetically modified Bt Cotton seeds to India. After this, the activism expanded rapidly as Monsanto's activities and the performance of the GM seeds in India started to be realised, and to reveal the other side of the GMOs as well: the promised improvements to farming and the increase of the crop sizes actually turned out creating even more challenges and more distress.

Therefore, the starting point to this case, as well as to this whole thesis, are the impacts that the introduction of genetically modified *seeds* created in India, which I am approaching from the point of view of a food sovereignty movement, Navdanya. The role of the seeds as the basis of the food production chain has put them into the centre of an attention in this case. Similarly, the modification of seeds by the means of biotechnology has created new ways of power and control that, in turn, influence the whole food production chain, from seed to table. When considering on a larger scale, the genetic engineering of seeds, can consequently enable the governance of people – and even nature and life, as it is changing something so basic in such a fundamental way. Likewise, due to the opportunities created by the patent laws and the intellectual property rights, it has been presented that who – if anyone – should have the right to own seeds that are the basis of the food production chain. As a matter of fact, it has been argued that the problem with the seed technology is that it has become a way to make money rather than ensuring the well being and nourishment of people (Kloppenburgh 2004/1988, 8). As a proof of this problematic, the amount of lawsuits and other disputes around the world are increasing. Thus, it can be argued that the fundamental problematic with the GM seeds arises due to the attempts to govern and claim ownership over nature – and over life.

In India, the introduction of the GM seeds created especially huge impact on farmers. However, it needs to be taken into account that the situation of farmers in the society has been poor even before the introduction of the GMOs. Since, despite of the importance of farmers as food producers, the status of farmers in India is one of the lowest and its permanence is ensured by the still functioning, however abolished, caste system. Anyhow, the need to improve the position of farmers and give more recognition to them is more or less permanent

political and publicly acknowledged issue. Moreover, there are various complexities in India that further complicate the status of farmers. One of the biggest of them is the growing landlessness among farmers. The main causes for landlessness are the government lead development projects that justify the claiming of “unused” land for city development projects, where however, many people live and farm. Likewise, the old customs in India have a strong influence on the creation of landlessness. Traditionally, father divides his land equally among his children, who all get their piece of land to farm. But, as the practice continues long enough, the pieces of land shrink and there is no land to be shared and to be given to everyone, when the rest becomes landlessness. What is more, there is another law in India, which restricts the size of the area of land that can be cultivated by one farmer. Due to this, farmers cannot cultivate large areas even if they wanted to or were capable of it. Consequently, all this together – the poor social status of farmers, the influence of the GMOs to farming, landlessness and the land laws, combined with uncertainty of weather conditions, creates the particularly vulnerable position of farmers in India’s society. And what makes the situation even more severe is the fact that 70% of India’s population lives in rural areas (See for example, Trading Economics) and gets their living, in one way or another, from land.

On the other hand, when approaching to this problematic, the reality of India being a huge country with the second largest population in the world, has to be taken into account. The large population needs to be fed somehow, which is a specially challenging task due to the wide underdevelopment, especially in agriculture which is still strongly relying on traditional methods. Due to this, farming is highly vulnerable to unpredictable weather conditions, such as changes in monsoon. Thus, when approaching the problematic from this point of view, the introduction of the new technical solutions to farming, such as GM seeds, seem like the only reasonable option to improve farming and create resistance against the unpredictability of nature. This as well illustrates the complexity of the different means and the aims utilised by food sovereignty and food security, which both ultimately are aiming at solving the same problem – to ensure the sufficiency of food. However, of those two, the role of food sovereignty and its means for achieving change have remained more unclear, which, however, is what I am trying clarify in this thesis. And, in fact, an urgent need from different fields of study have been presented for the further conceptualisation and theorisation of the role of the food sovereignty movements, both in general as a phenomenon, and as challengers in the global food production. (See for example Sommerville et al. 2014, 248). Similarly, there are

only a few studies where food sovereignty have been scrutinised from the point of view of biopolitics, which as well represents the framework of this thesis.

Hereby, as the most central issue in this case seems to be culminating around the questions of *how* to organise the food production in India and *what* is the real influence and the “truth” about the GMOs, I have decided to examine this problematic by utilising Foucault’s notions of truth and power. Likewise, I perceive the situation between the food sovereignty movement Navdanya and the side introducing GMOs to India as a situation of governance and resistance. Therefore, to illustrate the side of power and governance in this case, I formulated *a regime of truth of biotechnology* that consists of the activities of Monsanto in India and the other actors in this case who support the utilisation of GMOs. As a means of governance, the regime of truth of biotechnology have created and utilises its truth about the GMOs, with what it justifies as well as enables the governance operated by the biotechnology regime. Whereas, Navdanya, as a food sovereignty movement, challenges the governance of the biotechnology regime enabled be the prevailing truth, by creating and presenting an alternative truth as its means of resistance. Thus, I find Foucault’s notions regarding to truth and power suitable to illustrate this complexity: “[t]here is a battle ‘for truth’, or at least ‘around truth’ - - a battle about the status of truth and the economic and political role it plays” (Foucault 2000, 132).

Therefore, in order to find out the status and the role of both of the competing truths in this case, my research question is as follows:

*How producing the ‘new politics of truth’ of food sovereignty can be seen as a meaningful way to resist the governance of the truth regime of biotechnology?*

By the supporting questions, I am illustrating the difference between the parties, as well as that how the difference between them is created. I am doing this by asking:

*What is a ‘truth regime of biotechnology’, what are the characteristics of it, and how is the truth regime sustained?*

Furthermore, the other supporting questions illustrate how the resistance is carried out and whether it can be characterised as food sovereignty, which I am investigating by asking:

*How and what kind of alternative truth Navdanya produces as a means of resistance and how it represents the ideology of food sovereignty?*

My hypothesis is, that the “truth” that prevails regarding to the GMOs and the organisation of food production in India is dominated by the truth of the biotechnology regime. Navdanya, as a food sovereignty movement, manages to resist the governance of the biotechnology regime by creating an alternative that challenges the prevailing truth of the biotechnology regime. In larger scale, I see Navdanya representing the agency, and the goals and the ideology, of many social, and food sovereignty moments that challenge the prevailing truths of societies and seek to “change the world” by creating actual alternatives and by producing alternative “truths” to the prevailing ones.

However, to carry out the research in this context, there are some important notions to keep in mind. Despite of that Foucault’s conceptualisation of *truth* appears surprisingly often in his texts as well as it is closely related to his most well-known notions of power, knowledge and subject, the notion of truth has nevertheless remained quite incomplete and little utilised and elaborated in research. Likewise, in this thesis, I am utilising Foucault’s notion of resistance, which is a largely used, criticised and further developed concept. However, I am proposing a new way to utilise the notion of resistance by presenting the creation of the new politics of truth of food sovereignty as a means of resistance. Moreover, what needs to be taken into account in explaining the governance and resistance in this case is that it is occurring in a still developing country, India, which is an old colony. This is why governance and resistance must be explained by taking into consideration the presence of liberal, neoliberal and post-colonial practices of governance (Seppälä 2014, 92; Odysseos 2011, 441). As well, when utilising Foucault’s theories to explain occurrences in developing countries, it is important to be aware of that Foucault, and his notions, have been criticized for Eurocentrism, elitism and too much of theoreticism (See for example Seppälä 2014, 93, 99; Richmond 2011, 421.) This is why a researcher from the Global North needs to be aware of his/her privileged position in relation to the Global South and recognise the power to strengthen or weaken this separation (Seppälä 2014, 93). Moreover, what is interesting in this case, is the emerging importance of the ‘feminisation of resistance’ to explain the activism of contemporary social movements (Seppälä 2014, 89).

### *Research material and method*

As a research material I utilise diary notes that are all published on the homepage of Navdanya (<http://www.navdanya.org/>), under a link *The Navdanya Diary*. From all the diary



material, I limited the research material and only chose the posts categorised under the classifications called *Voices of the seed* and *GMO*, as seeds and the genetic manipulation of them, are the main reasons why I became interested in this case, as well as they represent the fundamental problematic in it. Furthermore, from these categorisations, I chose only the material that was produced by Navdanya. The material is consisted of different types of “diary notes”, such as columns by Vandana Shiva, of which most of them were also published in a newspaper *the Asian Age*. Along with the columns, the material is also consisted of different statements, responses or letters regarding to several issues. Therefore, I am scrutinising this case and presenting my findings basing on material that is produced by, and from the point of view of, Navdanya. Thus, the conceptualisation of the truth regime of biotechnology represents how Navdanya experienced the governance and the effects of it, as well as what is the biotechnology truth regime in this specific case. The oldest diary note in the research material is published on 10<sup>th</sup> of February, 2010, and the latest is on 7<sup>th</sup> of February, 2015. I finished collecting the material on 9<sup>th</sup> of March, 2015.

As a research method I utilise content analysis, or more specific, theory-guided content analysis. In theory-guided content analysis the bigger theoretical framework guides the research and the empirical findings made from the material, and are then categorised and explained basing on the theory (Tuomi & Sarajärvi 2011, 117). I utilise the theory of biopolitics as the theoretical foundation, on which I base the empirical notions made from the research material. I categorise the empirical notions according to whether they represent the resistance and the alternative truth of Navdanya, or, the governance and the prevailing truth of the biotechnology regime. I explain the differences and categorise them basing on the different conceptualisations of Foucault that I utilise in this thesis. Thus, the bigger theoretical framework is set on Foucault’s notions of biopolitics and truth, in order to find out how truths are utilised as a means of governance and resistance. The analysis of the research material is carried out by basing on these concepts, which, however, leaves room for critique and the emergence of new conceptualisations.

## 2. Previous research

I am writing this chapter from the point of view of biotechnology resistance and food sovereignty that represent the angles from which I stated to approach this topic. During my readings on these topics, I noticed that there is a connection between biotechnology resistance and food sovereignty, as in many cases, food sovereignty is provided as a solution to the problems caused by biotechnology. Also, I found out that this connection has been inspiring researchers for a long time already and that research around these topics has been made. Often food sovereignty is perceived as a productive way to counter biotechnology, because with the idea of food sovereignty, the activists actually provide another solution – an alternative – to the prevailing situation. Moreover, biotechnology resistance, as well as food sovereignty, are in many cases related with the resistance to the power of multinational corporations. However, as I am approaching this whole issue from a biopolitical point of view, I was also trying to find previous research written from that perspective. I managed to find only one article that is about biopolitics and food sovereignty, which hence illustrates that these topics need to be explored more. Next I am presenting my findings about biotechnology resistance, which expresses the main idea and the problematic that leads to contesting the reliability of the bioengineered products.

### 2.1. Biotechnology resistance

As presented earlier, the bioengineering of seeds – and subsequently affects even life – is the controversy from which this whole issue derives. Relating to the biotechnology resistance, I am presenting the problematic with patenting or, “patenting life”, which has derived from the loosening of the patent regulations. This is questioned by many authors as they present different cases that have derived even in juridical proceedings as well as the issue with life-patents is often problematised with moral and philosophical questions in mind. The debate is going around the fundamental question whether anyone has the right to own the basic instruments of life such as seeds, or genes. As well, a lot of research related to this topic is done from the point of view of the Global South, by presenting case studies of the different problems that are occurring due to the introduction of biotechnology.

In her article *Dancing life into being: Genetics, resilience and the challenge of complexity theory* Doerthe Rosenow examines the different practices that are visible in the debate around GMOs. By utilising the notion of complexity theory, she challenges the whole idea about the possibility of modifying and stabilising nature by genetically modifying it. She develops her idea by presenting the emergence of complexity theory as a challenger to the traditional approach to life that trusts in the possibility to control and predict nature. However, she presents the contradictory of how, while in the era of neoliberalism, a new paradigm of understanding of life has emerged, which derives from complexity and resilience theories. However, in spite of that, in some areas of science, the understanding of life remains the traditional one. Rosenow describes the traditional understanding of life as “static-linear” approach, which, according to her, also affects to the regulation procedures of GMOs. According to her, the “complex-dynamic” approach would better represent the new kind of understanding of life and its processes nowadays. (Rosenow 2012, 531–532.)

Hence, the traditional understanding of nature, that sees natural processes as predictable and stable is, according to Rosenow, as a way of thinking comparable to the functioning of totalitarian governments and also outdated. On the contrary, Rosenow argues that natural processes are better explained by the emerging new paradigm of life, or to call it differently – with the new ecological systems approach that are characterized by the notions of complexity and flexibility. According to her, the new ecological systems approach belongs to liberal-democratic systems. In liberal-democratic systems the decisive function of societies and the duty of “natural selection” in ecosystems are fulfilled by the markets. (Rosenow 2012, 536.)

In the article, Rosenow also presents the problems that derive from the patenting of biotechnology, which requires products to be stabilized inside certain boundaries in order for them to get patented. She illustrates the problematic by the means of complexity theory that presupposes the fundamentally dynamic and changeable characteristic of nature. By arguing this, Rosenow presents complexity theory as nature’s built-in characteristic to resistance to the unnatural stabilization of life. She also points out that as patenting is strongly related with market economy, it always entails profiting from the patented products. What is more, she presents another interesting qualification that the GM products must meet to get patented. For, in order to the patenting to become approved and the regulating of the GMOs to be easier, the products have to, despite of the modification, remain identifiable to the nature’s equivalent. (Rosenow 2012, 534.)

In their article *The biopolitical imaginary of species-being* Michael Dillon and Luis Lobo-Guerrero examine life and its changeable nature from the point of view of biopolitics. They focus specially on the ongoing transformation of the bioeconomy regime, which is done by comprising the changing nature of living things, as well as the modification of life under one determiner, which is the monetary value. This enables the new type of commodities to take place in the current global capitalism. (Dillon & Lobo-Guerrero 2009, 2.) Moreover, the authors conceptualise that what is needed to be fulfilled in order to exist as species, or, furthermore, in order to exist as economic species or political species. According to the authors, to exist as species, one has to be classifiable and to be able to be compressed into an informational code. And, in order to obtain monetary value, one has to be part of the circulation. (Dillon & Lobo-Guerrero 2009, 5.) Dillon and Lobo-Guerrero approach life from ethical and philosophical point of view and are in the core of defining the limits of nature. Or, to put in other words, they are asking how “parts of nature” can become defined as “things” and, then, how can they be given monetary value.

In his article, *The mutability of biotechnology patents: From unwieldy products of nature to independent ‘object/s’* Michael Carolan presents the basic problematic that comes up with GMO technology. As well, he asks whether natural products can be patented and, if so, under which circumstances patenting can be allowed and what criteria the products must meet. He points out that patenting serves the interests of capitalism, as by patenting some “thing”, it is made a product, which, consequently, enables the patented products to be sold. However, he criticises that, as the materialisation and patenting of natural products cannot be made completely without problems, and due to the many disputes of this matter, he claims that the nature’s artefacts can actually perceive of having their own “politics”. (Carolan 2010, 110.)

To approach the problematic of patenting, Carolan states one of the biggest problems with that being, that “- - patents presuppose the stability of the object” (Carolan 2010, 111). Carolan’s arguments are strongly tied to the basic assumptions of nature, the ontology of nature, which he describes to be changeable and mutable. According to him, this makes patenting biotechnology products difficult – or nearly impossible – since biotechnology patents oblige certain amount of flexibility in order to meet the patenting requirements. Thus, the stability of biotechnology products has to be produced artificially, since they are not products or “things” by their fundamental nature. Due to the flexible nature of biotechnology patents, there has been, and there are, many ongoing disagreements and lawsuits with patent violations. (Carolan 2010, 111.) Carolan also presents how, in the US Patent law, there is a

clear consensus on that the laws of nature are beyond patenting, which leads to a debate whether genetic information can be seen as a law of nature (Carolan 2010, 119).

Carolan also gives an interesting example of how complicated things can get with patenting disputes and he presents a case that occurred between a multinational biotechnology corporation Monsanto and a Canadian farmer. The farmer had found GM canola growing in a ditch next to his fields, which, eventually, Monsanto found out, and sued the farmer for patent law violations. The court made the decision in favour of Monsanto, and thus, basing to this conclusion, everywhere where the patented gene existed, like seeds, plants or the DNA, is thereby seen as property of Monsanto. This case illustrates “the mutability of biotechnology patents”, when not only the original, patented product is under the patent law but also the other, “natural”, plant that has somehow got “infected” by other GM plant. For example, the pollen of GM plants may spread and mix GM plants with non-GM ones, and hence bring them under the regulations of patent law. In these kinds of occurrences, companies are legally allowed to sue farmers. (Carolan 2010, 122–123.)

Thus, as Carolan puts it, the complexity arises from the fact that “[t]he mutability of biotechnology serves the interests of patentees, for it allows their patent to be many different ‘things’” (Carolan 2010, 123). Deriving from the previous, Carolan finally comes to a conclusion that, as a matter of fact, material artefacts themselves can have their politics and laws since the products have, for example, the power to cause conflicts of ownership. This leads him to ask that then *who* should take part in the decision-making process concerning the design of biotechnology products, as they seem to have such power which not many have realised yet. (Carolan 2010, 125). Also, as a consequence of the previous, Carolan predicts that legal conflicts over biotechnology products will become more frequent in future (Carolan 2010, 124).

In their article *Making Biotech History: Social Resistance to Agricultural Biotechnology and the Future of the Biotechnology Industry* Rachel Schurman and William Munro are scrutinising the procedures and the politics that influence behind the acceptance of GMOs, which also guides the operation of the biotechnology industry. The authors also present how the introduction of the GMOs to the developing countries was done via development organizations, such as U.S. Agency for International development (U.S.AID). (Schurman & Munro 2003, 111.) According to the authors, the U.S.AID promotes the spreading of

biotechnology in the developing countries through agricultural programs and projects, or, indirectly by supporting international organizations (Schurman & Munro 2003, 128).

Moreover, the authors underline the importance and the significance of social activism, as well as emphasise the NGOs as critical actors in shaping the patterns of the whole food production system. The authors state that, as a matter of fact, the activism has really succeeded with its goals and the demands by activists have really had consequences in governments and multinational corporations' policy making. But the most important job that the activists have done is that they have informed the whole world about the issue with the GMOs and made the complexity of biotechnology industry know to the world. (Schurman & Munro 2003, 112–113.) In addition, the authors make an interesting notion of the “labelling” of the actors of the activists groups. Often the anti-GMO activists are wanted to be seen as anarchists or unprofessional actors despite of the fact that in many cases the resistance groups are consisted of scientists or experts in their own fields who are expressing their opinions and concerns from their professional point of view. (Schurman & Munro 2003, 114–115.)

In the article *Biotech battles: Plants, power and intellectual property in the new global governance regimes* Kathleen McAfee focuses on the controversies that biotechnology has caused between the United States, Europe and the Global South. She describes how the opponents of gene technology, especially in the Global South, are arguing against bioengineering. According to McAfee, the opposition to bioengineering is caused by the introduction of “life patents”, as they restrict the farmers' rights to collect and exchange seeds. This as well as bypassing of the value of indigenous knowledge of food production can result in weakening the conditions of food security. Also, she points out the troubling situation with the reliability of biotechnology research due to the public institutions need for cooperation with privately funded research companies, in order to get the access to the latest knowledge about the GMOs. (McAfee 2003, 175.)

In a book *In the Chamber of Risks: Understanding Risk Controversies* William Leiss especially focuses on introducing Monsanto's proceedings regarding to patenting of its products and introducing them to the markets. According to Leiss, Monsanto did not carry it out the best possible way, which resulted in massive public manifestations against the GMOs, which also had an influence to the future marketing of biotechnology products. Another reason for the public concerns arises from the fact that, at the same time when Monsanto introduced its products to the markets, the procedures for testing GMOs were not ready yet,

which caused that the products were never thoroughly examined. Therefore, it can be argued that Monsanto failed right at the beginning in gaining the consumers trust, of which the whole biotechnology industry is still suffering. (Leiss 2001, 18, 21.) As a conclusion, Leiss presents that in order to achieve the trust of the public, there needs to be founded an independent research institute without any ties to the biotechnology industry to carry out a thorough investigation on the GMOs (Leiss 2001, 38–39). Thus, as the summary of the previous research on biotechnology resistance illustrated, the main reasons for the resistance to evolve are the concerns towards the safety of the GMOs as their testing has, at least partially, been incomplete. Also moral and ethical reasons are triggering to resistance as the right for patenting and owning life is questioned. Next, I am presenting the previous research on food sovereignty and the different point of views from which it has been scrutinised.

## 2.2. Food sovereignty

The whole idea of food sovereignty is a controversial concept, which during its existence has awakened plenty of debates for and against it both in the academic world as well as among activists. Most of the research is focused on the “founder” of food sovereignty, a peasant movement *La Vía Campesina* – ‘the peasants’ way’ – which was founded in 1993. However, there are other influential and visible groups, too, but *Vía Campesina* has gained the special attention as it “- introduced the concept of *food sovereignty* in 1996 in resistance to the expansion of capitalist agricultural production and neoliberal globalisation, which it holds responsible for widespread poverty, hunger and landlessness” (Burnett 2014, 365). This is why food sovereignty is a concept often related to social activism and it has been utilised as a means to counter and criticise the operations, which are often used as a means to achieve food security.

The notion of food sovereignty can be easily confused with the concept food security, and it is argued, whether food sovereignty is a necessary concept at all, as the critics are questioning whether it is capable of offering anything new that cannot be done by food security (see for example Boyer 2010). Furthermore, food sovereignty can be seen as having emerged from the notion of food security, as previously it has been included to food security as a notion to local self-sufficiency (Boyer 2010, 333). To clarify the difference between the concepts, I am presenting the conceptualisations of both of them. There are multiple of definitions of food

security, but I am using the one proposed by the World Food Summit in 1996, which is actually the same conference where the first conceptualisation of food sovereignty was made. The definition of food security by the World Food Summit is following:

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. (WFS 1996.)

The notion of food security takes into account the problems that occur due to the unavailability and the low quality of food, whilst it lacks some crucial remarks, such as cultural and environmental differences. Due to this, food security has been criticised that “[t]he definition purposely ignored how or where food is produced” (Boyer 2010, 325). Furthermore, the concept of food sovereignty can be seen of having emerged as a response to the effects of neoliberal development and the inclusion of agriculture into the world trading system (Lee 2007, 5). As a result, *Vía Campesina* presented the first conceptualisation of food sovereignty in 1996, which, after that, have been reconceptualised and redefined many times. This is why I am not presenting the original definition by *Vía Campesina* and, instead, I will present the definition conceptualised by the Forum for Food Sovereignty in 2007, which has been widely accepted and utilised as a definition of food sovereignty. According to the Forum for Food Sovereignty:

Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation. It offers a strategy to resist and dismantle the current corporate trade and food regime - -. (Forum for Food Sovereignty 2007.)

Both of the preceding conceptualisations of food are aiming to circumstances where food is available to everyone and no-one has to suffer on shortages. However, the difference between the concepts arises from the fact that how and where the food production is organised. This illustrates the problems that food sovereignty is trying to solve by recognizing the specific challenges of each country and, then, trying to find the best way to organize the agriculture in the area. Another point that is interesting in this definition of food sovereignty is that it



incorporated resistance as a part of it. However, as I am approaching this whole debate of food sovereignty from the point of view of biopolitics, I was able to find only one article written in this context. Often food sovereignty is described as a means of resistance in a more general level. Next, I am presenting the previous research of food sovereignty, which illustrates the most common causes for the activism and the criticism presented by the activists.

In the article *Food security and food sovereignty* Richard Lee compares the different conceptualisations of food security and food sovereignty and illustrates their difference by bringing them into the discussion of the GMOs. Lee begins by introducing the most common contradictions related to the GMOs and food production and thus illustrates where the problematic derives. One of the issues is caused by the legislation of the Intellectual property rights and the Agreement on Trade-Related Aspects of Intellectual Property Rights. The treaties have not been made as food and agricultural products as their primary targets, which is why they are unsuitable for regulating and supervising the trade and safety of the GMOs. Another problem with the regulating of GMOs is caused by the uncertainty of the roles and responsibilities of international organisations, such as The Food and Agriculture Organization of the United Nations (FAO). And, what is more, due to the liberalisation of the trade of agricultural products, the uncertainty relating to the GMOs has been spread worldwide due to the lack of global regulation. (Lee 2007, 9–10.)

When it comes to the differences between the notions of food sovereignty and food security, Lee states that “- - they are represented as opposing paradigms of food production” (Lee 2007, 12). Lee explains this by illustrating how, in the framework of food security, the model of agricultural production is perceived as productivist and industrial and the trade model is liberalised, whereas the idea of food sovereignty supports the model agro-ecological farming and protectionist trade. Likewise, the food security approach supports the utilisation of plant genetic resources and intellectual property rights, whereas food sovereignty perceives everything as communal and thus does not support, for instance the private ownership seeds. (Lee 2007, 12.)

In his work, Lee makes a strong separation between the concepts but, at the end, he brings together the main goals and the fundamental ideas behind both of the concepts. He illustrates this by representing a definition by FAO: “Both food security and food sovereignty are concepts concerned with how agricultural production ought to be configured in order to best

address the plight of 800 million people who are classified as undernourished” (FAO 2006, cited in Lee 2007, 13). This citation brings oneself back to the basis of the whole food debate but, which, at the same time illustrates the problematic from which the main differences between the concepts derive. Lee (2007, 4) explains this by notifying how the liberalised trade regulations of agriculture and the growing control done by food security increase and create the possibility for food sovereignty activism to emerge. This illustrates why food sovereignty is perceived of being more of a political and cultural approach, whereas food security is considered to be more of a technical concept that functions according to law (Lee 2007, 4).

I have found one article where food sovereignty is approached from the point of view of biopolitics. In the article, *On the politics and possibilities of locavores: situating food sovereignty in the turn from government to governance* Gwendolyn Blue, introduces the concept of “locavorism”, which is a movement that supports local food consumption, which is furthermore utilised as a means to describe the resistance to neoliberal governance. Blue explains that in the era of globally controlled, corporate driven food production, different food movements have recently gained remarkable popularity and “locavorism” have emerged to be seen as a meaningful way to counter this development. (Blue 2009, 76.)

According to Blue, one becomes a “locavore” due to the prevalent neoliberalist practices that shift the responsibility for achieving “a better world” to a conscious consumer. Moreover, she illustrates how, according to the logic of neoliberalism, the activity for creating the better world has began to be seen as a voluntary choice instead of it being something that concerns everyone. Therefore, when resisting neoliberal governance, it is important to be concerned not to actually reproduce the governance practices of neoliberalism, which, unfortunately is relatively common, since “[f]ood activism discourses uncritically incorporate a range of neoliberal characteristics that place the onus of responsibility on the consumer” (Blue 2009, 73). This is why the activists often fail in their attempts to resist the neoliberal governmentality by eating differently, since, by becoming a “locavore”, the activist counter biopower with their whole live and thus let the whole life to become governed by the movement. (Blue 2009, 76.)

However, as a conclusion, Blue states that “[f]ood sovereignty, in other words, aims to reconfigure power relations so that access to agricultural land as well as fresh, healthy and locally produced food products become a right rather than a luxury” (Blue 2009, 69). According to Blue, food sovereignty is a useful way to awaken the consciousness and

discussion about food, as well as to modify the power relations to actualise the situation in which food belongs to everyone as a basic right. Likewise Blue connects food sovereignty with the practice of resistance to the power of global multinational corporations, states and other global regulative bodies of food production, in which she stresses the importance of the *local* level agency. (Blue 2009, 69.) In addition, with Blue's work I noticed interesting similarities with the declaration by Forum for Food Sovereignty, which states that, food sovereignty “- - offers a strategy to resist and dismantle the current corporate trade and food regime - - “ (Forum for Food Sovereignty 2007). This illustrates how fundamentally resistance is perceived of belonging to food sovereignty and how the battle is often seen as local versus global.

One good example of a case study is an article *Food Security, food sovereignty, and local challenges for transnational agrarian movements: the Honduras case* by Jefferson Boyer. In his article, Boyer presents the struggle of Honduran peasant activists against a neoliberal agricultural reform in Honduras, as well as the consequences of it that created a chain of events which finally resulted into the birth of one of the most well known food sovereignty activism group, *Vía Campesina*. Boyer also explains the confusion and controversies that the birth of the idea of food sovereignty generated for Hondurans. This article well describes the conditions that usually lead to food sovereignty activism as well as the problems that may occur after it.

Boyer explains that during 1960s and 1970s Honduras faced many political and economic problems that were partly deriving from the over export of agricultural products, due to the United States led model of “economic diversification and expansion”. This reform aroused many concerns among the local peasants, concerning to issues such as land security and the sufficiency of food for local purposes, as well as it raised new concerns of the maintenance of the good cooperation between landlords and peasants. To the farmers, one of the most unfortunate features of the reform was the privatisation of the public land, which drove many farmers out of their cultivations. Gradually, as the impacts of the US led agriculture reform began to show, also the major peasant unions around Honduras started joining together in order to counter the reforms on land. (Boyer 2010, 323–324.)

During 1980s, what Boyer describes of having been the most difficult time for Hondurans, the U.S. Department of Agriculture presented its conceptualisation on food security, which “- - for a household meant access by all members at all times to enough food for an active, healthy

life” (U.S. AID, cited in Boyer 2010, 324–325). After giving the definition, also many development organisations, such as USAID, the World Bank and the UN agencies, joined to the talk on food security and adopted it as their main goal of development (Boyer 2010, 323). Boyer continues by reflecting this to the situation that was prevalent at the time in Honduras, and, showed how the reforms in the name of food security actually did not improve the well being of the people but did the opposite:

In Honduras and other agrarian societies, the US policies of agribusiness-led free trade and the land titling programme - - were patently serving to increase *food and life insecurity*. (Boyer 2010, 325, emphasis in the original text.)

According to Boyer, despite of the good intentions of food security and the US policies, the reforms did the opposite and “increase[d] *food and life insecurity*”. This case resembles the issue of Monsanto and the GMOs in India, too, where the food security reforms also created insecurity among farmers that finally resulted in, for instance, farmers’ suicides. Boyer (2010, 330) describes, how this type of development finally lead Vía Campesina to present the first conceptualisation of food sovereignty at the World Food Summit in Rome, in 1996. According to that proposal, food sovereignty is:

The right of each nation to maintain and develop its own capacity to produce its basic foods, respecting cultural and productive diversity [and] the right to produce - - own food in - - own territory. (Cited in Boyer 2010, 330.)

And, four years later, Vía Campesina added to the definition: “The right of peoples to define their agriculture and food policy” (Boyer 2010, 330). According to Boyer, food sovereignty was seen as a direct attack to the official practice of food security and to the problems that it caused for the local food production. It was also criticised that due to food security, the management of the global food production and distribution became too much committed to the politics of the US and the practices of neoliberalism. (Boyer 2010, 330–331.)

However, despite the problems with the food security reforms in Honduras, of the idea of food sovereignty, distributed by Vía Campesina’s, did not completely succeed either. The farmers had difficulties in signifying the meaning and the difference of the similar sounding concepts of food sovereignty and food security. The farmers were more prone to the idea of food security since they had familiarised positively with it earlier when Honduras underwent a national agrarian reform to ensure land security and national food self-sufficiency. Then,

when *Vía Campesina* introduced the new concept of food sovereignty, it caused confusion among many peasants. For some peasant leaders the difference between food sovereignty and food security was not clearly set out and, due to this, they were not convinced that food sovereignty could better help them in their struggles over the control of land. (Boyer 2010, 319, 332–333.) To summarise the confusion of the peasants, Boyer explains that “- - sovereignty is not a term that expresses the concerns of everyday rural life in the same manner that security does” (Boyer 2010, 333).

Boyer presents another problematic that occurred with the introduction of food sovereignty, which is the confusing nature of the word *sovereignty*. The word sovereignty did not make it clear for the peasants that what is the meaning or the goal of the movement. Likewise, the word sovereignty usually connotes to the sovereignty of states, which is why it was often thought that food sovereignty activity had something to do with the power of nation states. Moreover, the word sovereignty might shift the idea of the level of the agency too far away, out from the reach of the everyday lives of the farmers and the rural poor. So, the main problem for *Vía Campesina* with the word sovereignty was that the word had different meanings for the peasants and the activists. Boyer also points out that, by establishing food sovereignty as a replacer to food security, *Vía Campesina* tried to balance some ideological tendencies for their own benefit. Likewise he added that the concept may seem appealing to populist or anarchist movements due to the notions of sovereignty and autonomy. (Boyer 2010, 319, 321, 333.)

Boyer’s article showed, how both of the sides, the peasant networks who were more prone with the concept of food security, and *Vía Campesina*, who introduced food sovereignty, had similar goals to improve the quality of the everyday lives of the farmers and resist the neoliberal development. This shows that the everyday life and survival against the hegemony of the agriculture companies was the most important objective. To fulfil that, many of the peasants just chose the “side” they felt more connected with and which they believed could best advance their goals. However, what needs to be remembered, the case took place before the “birth” of food sovereignty as a movement, which is also why the farmers had created stronger bonds with the concept of food security. In addition, as a critic, Boyer reminds that in spite of how interesting and inspiring food sovereignty for activists and scholars may be, it can prove to be unable to work in reality, especially at the grass-roots level. Likewise Boyer argues that the actualisation of a state of food security cannot be guaranteed just by relying on food sovereignty. Related to this, he reminds that food sovereignty requires large agrarian

reforms, as well as “radical democracy” to function, which is why there is a danger that food sovereignty can be seen as, or that it can become, a counter-development or anti-development movement. (Boyer 2012, 331, 334.)

In their publication *Food sovereignty and uncultivated biodiversity in South Asia: Essays on the poverty of food policy and the wealth of the social landscape* (2007) by Farhad Mazhar, Daniel Buckles, P. V. Sathees and Farida Akhter introduce food sovereignty as it happens at the grass-roots level and describe it from the point of view of local farmers. What is important to notice is that these essays are written by researchers from the Global South, so their point of view is “local”. The authors have interviewed the local farmers in India and Bangladesh, of which especially one statement is memorable. A 62-year-old female farmer argued against the use of pesticides by questioning the need to get rid of the weed in the first place. She continued by saying that everything that grows in their land is edible – if not by humans then the cattle will take care of it (Mazhar et. al. 2007, 18). This is an interesting contradiction that how differently people in the West and the South evaluate the importance of the same thing and what kinds of priorities are guiding the actions. The authors give an answer to this juxtaposition and explain that this type of valuing things differently in the North is caused by the need for efficiency in food production, which has also resulted in to the creation of monocultures in farming (Mazhar et. al. 2007, 18).

This previous research chapter on food sovereignty illustrates that the topic has been widely covered but not really from the point of view of biopolitics. Often the activities in the name of food security are the main causes for food sovereignty activism to emerge. On the other hand, the difference between the concepts and the need for the new ideology of food sovereignty has been questioned as well, since both of them seem to want the same thing. However, food sovereignty is a highly disputed topic and in many cases it actualises as social activism and resistance to neoliberal development and biotechnology. Next I am presenting the theoretical framework of this thesis.

### 3. Theoretical background

#### *Biopolitics introduction*

Biopolitics is a theory, conceptualised by Michel Foucault, of a model of politics that started to develop in the 18<sup>th</sup> century (Foucault 2007, 1). The biopolitical era began in societies when the target of states' politics shifted, and it took human life and its basic biological features as its main focus of politics. Nurturing life became the political object of states, contrary to what it had traditionally been, when the sovereign has the ultimate power, and the right, to decide over death. (Foucault 1990/1976, 138, 145.) Subsequently, the sovereign could use its power and decide whether to kill or not to kill – to “*take* life or *let* live” (Foucault 1990/1976, 138, emphasis in original). However, as the biopolitical shift occurred, also the character of the power of the sovereign ruler altered, and its focus shifted from death to an exercise power that protected life. Hence, with the practice of biopower came “a power that exerts a positive influence on life, that endeavours to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations” (Foucault 1990/1976, 137). Keeping the population alive became essential for the practice of biopower, since with the new type of power, death became the limit for the exercise of power. Therefore, as long as the population was alive and well, it could be governed, which, in turn, made the survival of populations more important than the expansion of sovereign power. (Foucault 1990/1976, 138.)

Consequently, as fostering and taking care of populations became the main target for biopower, the processes and statistical aspects of human life, such as birth rate, longevity, housing and migration, became the interests of biopolitics, and economics, too. The analysis of the basic features of human life made possible to capture the essential nature of them, which then enabled the exercise of power over the basic processes of life. The goal thus became to achieve control over bodies and populations by affecting the basic functions of life. Different institutions emerged during the 18<sup>th</sup> century, along with new techniques of power, to support and direct this new type of biopower over the whole society. The institutions, such as family, army, school and university, were harnessed to exercise biopower in practise, by disciplining and controlling bodies, and thus making the regulation of the whole population possible. Biopower is also closely related to the development of capitalism and, actually it has made capitalism possible. Since, in order for capitalism to emerge, there was a need for similar governance and regulatory mechanisms of population, which, then, biopolitics made

possible. (Foucault 1990/1976, 140–141.) In fact, for Foucault liberalism represents how the governance practices of biopower are carried out, as he remarked of the importance of “[s]tudying liberalism as the general framework of biopolitics” (Foucault 2008, 22).

In this thesis, however, I am not only focusing to biopolitics in general and to the governance of populations it includes, but I am also interested in the role of “truth”, and the production of it, within the frame of biopolitics. During my readings of Foucault, the question about “the truth” has appeared to be more dominant than I could have imagined, for actually, truth has its effect everywhere in a society as it is strongly bound to power. Hence, “[t]ruth is a thing of this world: it is produced only by a virtue of multiple forms of constraint. And it includes regular effects of power” (Foucault 2000, 131). Foucault has approached the question of truth from many different angles, through many different conceptualisations, which I am trying to present as extensively as it is possible in this thesis. However, some of the theorisations of truth are not completed by Foucault (about the regimes of truth, see for example Weir 2008), as well as some of the conceptualisations. Nevertheless, there are similarities too, within and between the conceptualisations and ideas, regardless that they are sometimes called by different names and yet meaning the same or having a similar functioning. However, next I am proceeding to go through how Foucault conceptualised the different notions of “truth”.

### *Truth and power*

For Foucault, truth and power are interconnected and power always has its effects on the truth, since “- truth isn’t outside of power or lacking in power - - [a]nd it induces regular effects of power” (Foucault 2001, 131). Power thus influences the formation of truth and there is no truth without its connections to power. This is why, when looking at the relationship between truth and power, the important question to ask is not “why” but “how of power?” (Foucault 2003, 24). By looking at the “how of power”, it is possible to examine the mechanisms according to how power is limited and produced by truth, how the “truth-effects” of power are carried out, and, in turn, how the “truth-effects” renew the power that produces truth (Foucault 2003, 24). This notion of “how of power” is also connected to the possibility for resisting the truths, by finding out how the exercise of power is connected with truth (Foucault 2000, 132).



There are different ways for producing the truth and, in a way, there is the truth that belongs to politics and then there is the one of philosophy, which I am going to discuss more later. However, according to Foucault (2000, 131–132), the “political economy” of truth is produced in institutions, such as university, in a form of scientific discourse. This kind of scientific discourse of truth is then often forwarded, for example, through media and writing, as “true” scientific knowledge. The different interests of political, economic and institutional powers have their effect on the formation of truths, as well as these interests are often interconnected to each other. Hence, truth has its political and economic role in societies. A certain type of production of truth, and governance by means of truth, both form and take place in a certain regime of truth. I will present the idea of regimes of truth later.

Another definition of truth is as follows: “‘Truth’ is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation, and operation of statements” (Foucault 2000, 132). Thus, according to Foucault, truth is a “system” that is built by statements, in which the truth is constructed, under the influence of a certain formula and influence of power. Certain procedures are bound to the constituting of truth, which also sustain the truth. The procedures for constituting different truths vary according to each time and space. Also different truths are formed by different means. (Foucault 2000, 131–132.) This notion of the formulating of truths is similar to the way how discourses are produced in a society. Actually, discourses have a central role with the formation of truth, which I am presenting next.

### *Discourses of truth*

According to Foucault, a “discourse [is] a group of statements - - [which] belong to the same discursive formation” (Foucault 1972, 117). Conversely, a discourse is constructed by a group of statements that are connected due to the similar means that control the production and the utterance of statements as they belong to the same discursive formation (Foucault 1972, 115–117.) Discourse has a great role in constituting of “truths” and the “regimes of truth” as well. Clifford describes the role of a discourse as follows: “Discourse is where truth happens - - as statements are bound together by their sameness, constituting a community of truth, a domain of knowledge in which, and only in which statements make sense” (Clifford 2001, 30–31). Hence, the discourses of truth are the discourses that distribute the truth inside a certain regime, domain or community of truth, in their context, under commonly accepted rules that

can make the discourse function as “true”. Also, the notions of ‘a community of truth’ and of ‘a domain of knowledge’ by Clifford relate to Foucault’s concept of ‘regimes of truth’.

In Foucault’s early work, there is another notion of discourse that can be considered as an early sketching of the notions of genealogy and regimes of truth. It is called a ‘discursive practice’ that, after Foucault is “- - a body of anonymous, historical rules, always determined in the time and space that have defined a given period, and for a given social, economic, geographical, or linguistic area, the conditions of operation of the enunciative function (Foucault 1972, 117). Thus, it is possible to see the connection between his earlier conceptualisations and how they are similar to newer ideas and the notions concerning to truth. For, what Foucault described as ‘discursive practice’, can be seen as relating to his idea of genealogy and ‘regimes of truth’, since, as described, the discursive practice is formulated historically and it is taking place in certain places and times. Also there are similarities with the practices for formatting truths and the same contextual requirements are presented.

However, in order to comprehend the functioning of the discourses of truth, it is essential to look into the aforementioned relationship between truth and power, and to the outcomes of it. Discourses of truth influence everywhere in societies and are crucial for power, since:

There can be no possible exercise of power without a certain economy of discourses of truth which operates through and on the basis of this association. We are subjected to the production of truth through power and we cannot exercise power except through the production of truth. (Foucault 1980, 93.)

For power to be exercised in society, it needs “a certain economy of discourses of truth”. This means that in order to exercise power, there must be certain discourses of truth established in the society that support the exercise of power. Similarly, as power is circulating everywhere in society, also the discourses of truth are to be put in circulation in order to utilize their power effects and their ability to construct power, which is a reciprocal function. Everyone in society is affected by the discourses of truth and is bound to the production and reproduction of the true discourses. Discourses of truth entail certain effects and mechanisms of power, which can be used as instruments, or as justifications for certain practices. (Foucault 2003, 24–25.)

In fact, “truth lays down the law; [as] it is the discourse of truth that decides, at least in part; it conveys and propels the effects of power” (Foucault 2003, 25). Hence, the formulation of

laws is influenced by the truths that are prevailing in each time, in each society. Subsequently, these truths, and the power of the truth, get transferred into structures and institutions of society that make truth circulate in society, in the same way as power. (Foucault 2003, 25.) Thus, the true discourses of power carry with them the specific effects of power, but they are, in a way, above the exercise of power. Consequently, true discourses have a great power in people's lives as they have the power to influence decisions and forward information, as well as to define and structure societies with the power that is tied to the discourse. (Foucault 1980, 93–94.) In this thesis I am looking at how power is connected to the discourses of truth and what kind of practices are argued for in the discourses. Also, I am interested in how the discourses are put in circulation as well as how they are produced and used to sustain the regime of truth, or as a means of resistance. Next I am presenting the concept of regimes of truth.

### *Regimes of truth*

Over the past centuries, there have been different regimes of truth, which have had their own truths and principles that have affected to the operation of each regime. The truth regime that Foucault examined and described, is the truth regime of liberalism, which he also suggested to be viewed as the 'frame of biopolitics' (Foucault 2008, 22). The development of the regime began in the middle of the 18<sup>th</sup> century, along with the emergence of political economy and at the same time with biopolitics. The remarkable change occurred when the power to limit the governance shifted from the rule of law to the political economy and, subsequently, to the markets. The self-limiting function of governance became the most important feature of the liberal governance, for it was developed to limit politics and hence, the government. Subsequently, the markets became the place for the formation and verification of the true and false discourses. (Foucault 2008, 13, 19 & 30.) Actually, Foucault also makes a connection between the production of truth and the production of wealth: "We have to produce the truth the same way, really, that we produce wealth, and we have to produce truth in order to be able to produce wealth" (Foucault 2003, 25). This relates with the ideology of the new truth regime of liberalism as it illustrates how, and with what, the production of truth got connected with the new way of thinking.

Regime of truth is something that exists in every society and it includes the aforementioned interplay between truth and power, and the discourses of truth that influence in societies and direct subjects by the power of truth. Hence, according to Foucault:

Each society has its regime of truth, its “general politics” of truth – that is, the types of discourse it accepts and makes function as true (Foucault 2000, 131).

The general politics of truth, or the regime of truth, contains the political effects that result from the production of truth as well as the genealogy of the regime of truth. The genealogy – the historical development of a regime of truth – defines, what kinds of truths are accepted to be produced within the regime, which thus also affects to the political outcomes of the formation of truths. (Oksala 2013, 56.)

However, according to Foucault, there is only one regime of truth that is characteristic for every society, but contrary to Foucault, in this thesis, I am following the idea presented by Lorna Weir (2008, 380), of multiple or simultaneously existing and competing regimes of truth in a society. Also, I am following Oksala’s, specification about the relationship between liberalist truth regime and neoliberalism, where she argues that neoliberalism “can be viewed as an extreme form of the liberal regime of truth regulating our current governmentality” (Oksala 2013, 54). Furthermore, neoliberalism can be seen as a truth regime of its own, as there is the genealogy and the political and economic practices that are characteristic to neoliberalism, and thus forming a regime of truth of neoliberalism (Oksala 2013, 56). Hence, I am arguing that the truth regime of biotechnology is consisted of different types of governance practices and methods and it has features from other truth regimes as well. Otherwise, I am following the definition of regimes of truth by Foucault.

Another definition about the regimes of truth illustrates the circulating nature of truth. Truth circulates within a regime of truth in a similar way as power circulates in societies:

“Truth” is linked in a circular relation with systems of power that produce and sustain it, and to effects of power which includes and which extend it – a regime of truth (Foucault 2000, 132).

After Foucault, power and truth are central in constituting a regime of truth, as well as the ‘systems of power’ that are interconnected with the discourses. Within a regime of truth, the discourses are granted their power to operate as a *true* discourse. The truthfulness or falsehood of statements, which construct the true discourses, is defined by certain

mechanisms in every truth regime. The mechanisms and procedures for evaluating the “right” or “wrong” practices and the discourses of truth, are determined according to the genealogy and by the mechanisms to separate the true or false in every truth regime. In every regime there are also persons whose “truth” has more “value” according to their position in the regime. The production of truth is carried out according to the “political economy” of truth that I mentioned before, which is particularly found in the liberalist regime of truth. (Foucault 2000, 131.) The idea of regimes of truth is more of a political than philosophical conceptualisation regarding to truth, as the truths play a political role.

In Foucault’s further conceptualising of regimes of truth he developed the idea of how discourse is crucial for the functioning of a truth regime as it brings together the different practices and justifies the use of them:

“- - a discourse that, on the one hand, constitutes these practices as a set bound together by an intelligible connection and, on the other hand, legislates and can legislate on these practises in terms of true and false (Foucault 2008, 18).

As Foucault stated, a regime of truth is constructed basing on a discourse that has the power to evaluate the practices as “good” or “bad” or true or false. Discourse is also crucial as it can be used as a tool in establishing connections between certain practices and institutions that function according to the truth. (Foucault 2008, 18.) In a regime of truth, it is the task of political structures to put the discourses of truth into practice over the whole society (Clifford 2001, 99).

As there is power everywhere that governs in the prevailing regime of truth, there is also a possibility for resistance. But as Foucault’s conceptualisation of resistance is often criticised to be vague and not completely theorised, so is his conceptualisation regarding to resistance to the prevailing truth or to the whole regime of truth. Foucault has stressed more of the importance of finding out *how* the power and truth are connected and *how* to criticise that relationship, instead of delineating directly *how* the resistance, and the production of alternative truths, should be carried out (Smart 1986, 167–168). One of the ways to resist, however, is to ensure the possibility for new kinds of truths to emerge:

The essential political problem for the intellectual is not to criticize the ideological contents supposedly linked to science or to ensure that his own scientific practice

is accompanied by a correct ideology, but that of ascertaining the possibility of constituting a new politics of truth (Foucault 2000, 132-133).

This, however, introduces some problems, since how is it possible to resist by creating alternative truths without continuing the “biopolitical cycle” of power and truth. I consider this as one of the major problems concerning to resistance and truth. However, as I am also arguing further in this thesis, I think that there, nevertheless, exists the possibility for resistance. The ‘new politics of truth’ can detach the “new truth” from the previous practices of governance and offer a new way of thinking, where the governance practices that are resisted, do not exist anymore. Thus, I am arguing that by constituting the ‘new politics of truth’, it is possible to get rid of the models of governance that are justified by the prevailing truth, in the prevailing truth regime, and thus it is not renewing the governance with the truth. I will present my argumentation in the empirical chapter of Navdanya’s resistance.

### *Genealogy*

Genealogy is a combination of history, discourse and practices that have formed the historical framework for constituting societal concepts. Genealogy thus is the historical development of social concepts. Genealogy can be used as a tool to discover *how* the concepts, for example subjects, are historically constructed and what has affected their composition. (Clifford 2001, 6–7.) Genealogy is also a way to discover the “subjugated knowledges” that are hidden and are not recognised in the prevailing scientific knowledge as “true” knowledge. Genealogy is a combination of scholarly knowledge, local memories and the knowledge of people, which it uses to unveil the subjugated knowledge jointly with critique and knowledge. Genealogy thus is a way to give voice and recognition to the subjugated knowledges that are left out from the “general” history. Thus, genealogy also makes the emergence of alternative “truths” possible. (Foucault 2003, 7–11, 178.) Subjugated knowledges can thus be utilised in revealing the technologies of power of all their existing forms, as power can be hidden in the institutions, policies or theories (Richmond 2011, 422). The study of genealogy also enables us to discover how, for example, the relationships between power and resistance are developed through history and how the acts of dominance are argued for with the historically justified divisions of “true” and “false” (Smart 1986, 171). In this thesis, I am utilising the notion of genealogy only to briefly describe how the governance of global food production and the truth regime of biotechnology emerged and how it is justified in the history.

## *Truth games*

Game of truth is “a set of rules by which truth is produced” (Foucault 1997, 297) and in its operation it also acknowledges “a whole series of social and economic processes at a given time, but also - - institutions and practices of power” (Foucault 1997, 296). Truth games thus always occur in a context, where the role of prevailing knowledge is in the centre, as well as its relation with power. Through this interplay of power, knowledge and the given time and space, the truth games constitute “general truths” that, subsequently, constitute subjects who are part of the game in society. For example, the process for the specification of madness as a mental illness can be described as truth game. The utilisation of medical knowledge justified the use of power over subjects with certain features, and made it possible to define someone mad. The treatment for the new mental illness required the establishment of new institutions, which thus institutionalised the illness. The truth game enabled the formation of the “general truth” about madness, which defined the practices, knowledge and institutions, and thus, how subjects constitute themselves in contrast to the phenomena. (Foucault 1997, 290–291, 296–297.) Thus, the game of truth describes the process of how the general truths are produced in their context, in a society for example, and how everything that is included in that game, such as subjects, medical conditions and actions related to this, become defined in the game according to the truth. Due to this, games of truth, and all the features it includes, can only occur under the prevailing regime of truth, as well as all the action and practices, must be articulated and take place through the “general politics of truth” (Bratich 2003, 73).

The game of truth also constitutes subjects in relation to the society and the truths that exist there, as well as the subject constitutes itself in the game of truth, under the influence of, and in relation to, the truths that prevail in each time. Knowledge and power can be used as tools to analyse the relationship between subject and truth. This relationship between subject and truth was one of the most fundamental for Foucault, (Foucault 1997, 290–291, 296–297) which I will address under the topic of *parrēsia*, too. Games of truth thus are something where subjects constitute themselves through their conduct to self and to the others, and this constitution requires constant problematisation of the self (Bratich 2003, 73). Games of truths try to commit the subjects to constitute and govern themselves by involving them in the game, where the active development of the self through truth is possible (Bennett 2003, 53). Games of truth are thus also games of governance that are played with the assistance and guidance of truth that, at the same time, produce and reinforce the truth. Also, mechanisms of power are

defined and to put in use in relation to the procedures, instruments, means and objectives that are verified by the different knowledge systems (Foucault 2007b, 61).

However, in the games of truth there is always a place for resistance too. Due to the character of the games of truth, they offer the possibility for the emergence and development of alternative truths. The change can lead to a completely new game of truth by describing or constructing the alternative. In the games of truth, the critique to the prevailing truth has to be argued for with knowledge. The practice of ‘the care of the self’, as well as understanding the management techniques of the game, makes it possible to play the games of truth with as little domination as possible. Sharing of knowledge and teaching in a certain game of truth is also possible as long as the relationship does not turn into a relationship of dominance. And, as domination does not mean same as power, so it cannot be univocally defined either as good or bad, and power is utilised in the games of truth as games of strategy. (Foucault 1997, 295–299.)

However, the resistance can never fully work if the opposer fails playing the game, by playing it exactly the same way. The resistance has to bring an alternative to the game and in that way change the whole game, or to play a completely different game with alternative arguments:

Thus, one escaped from the domination of truth not by playing a game that was totally different from the game of truth but by playing the same game differently, or playing another game, another hand, with other trump cards. (Foucault 1997, 295.)

Hence, it is important to offer an alternative to the prevailing game of truth, produce an alternative discourse of truth, and to “play” that alternative game in different manner compared to the opposed one. For Foucault, however, the most important in the resistance and, in posing the critique towards the game of truth, is to reveal and to understand *how* the games of truth are arranged and *how* power is related to this process of the formation of games of truth as well as the forming of truths in general. (Foucault 1997, 295-296.) As just criticising the truth, and the practices that are justified by the truth, is not going to change anything, but instead showing *how* the truth and *how* the power are made and interconnected, can reveal something more fundamental of the relationship and create alternatives. I am describing Navdanya’s resistance by utilising the games of truth in describing how they use the alternative knowledge in arguing for the establishment of the new politics of truth.



### *Care of the self*

For Foucault, the practice of ‘care of the self’ is something that, in a way, prevails over the truth and thus, in a way it prevails over everything. In fact, Foucault presented a question about this matter, where he is asking that: “Why are we concerned with truth, and more so than with care of the self? And why must the care of the self occur only through the concern for truth?” (Foucault 1997, 295). The care of the self means that one must know oneself, but also to recognise and to have the “- - knowledge of a number of rules of acceptable conduct or principles that are both truths and prescriptions. To take care of the self is to equip oneself with these truths - -“ (Foucault 1997, 285). This means that one must both know oneself as well as to understand how truths are shaped by power. Also through the care of the self, it is possible to perceive how the truths affect our action in a society, both in our relations to others as well as to our relation to the self. The care of the self can assist in the games of truth to play the game under as little dominance as possible.

Care of the self is a crucial part of the truth games as well as playing a role in the pursuit of “good” practices of power. For example, in order to be a good ruler, one has to take care of the self, to be capable to exercise power according to the “good” practice of power. To exercise power wisely, one has to use “power over oneself that thus regulates one’s power over others” (Foucault 1997, 288). This way the exercise of power does not turn into an abuse of power as one’s desires to misuse power are controlled by the care of the self. Also, a philosopher has a role in the practice of care of the self. The philosopher becomes a guide to a ruler, both in truth and in the care of the self. (Foucault 1997, 288, 293.) Care of the self is related to the idea of *parrēsia*, where also the question between subject and truth is pivotal, which I will discuss more next.

### *Parrēsia*

Basing on the latest studies of his career, of Ancient Greece, Foucault introduces the concept of *parrēsia* that means ‘free-spokenness’ or ‘free speech’. Parrhesiast is the person who uses *parrēsia* to speak the truth. *Parrēsia* is thus a certain way to tell the truth and hence it is to be considered as the discourse of truth or the “true discourse in the political realm”. (Foucault 2010, 6.) Discourse of truth of *parrēsia* can exist when the truth is always present in the discourse and it becomes the permanent function of the discourse (Foucault 2010, 331).

Consequently, *parrēsia* does not appear in demonstrating or in persuasion, nor is it a rhetorical or a teaching method. Neither *parrēsia* is just a discussion or a discourse, since in order for a discourse to be a true discourse, it has to be a parresiastic discourse. (Foucault 2010, 43, 52, 56.) Furthermore, “*parrēsia* is a virtue, duty, and technique which should be found in the person who spiritually directs others and helps them to constitute their relationship to self” (Foucault 2010, 43). *Parrēsia* is thus similar to ‘the care of the self’ as it includes the relation to another person and to self, but what makes *parrēsia* different is that it is something a more all encompassing practice.

In order to find out the essential character of *parrēsia*, it is necessary to look at the effects that the act of truth-telling may cause to the speaker, which is, in fact the most fundamental determiner of a parresiastic act. To be characterised as parrhesiast – the one who commits to the act of *parrēsia* – the act of truth-telling must be somehow risky to the speaker, since: “telling the truth - - opens up a space of risk for the person who tells the truth; it opens up a danger, a peril, - - and that is what constitutes *parrēsia*” (Foucault 2010, 57). The presence of danger comes along with *parrēsia* as the act has its tendency of surprise. The act of *parrēsia* is unexpected towards to whom it is indicated and hence the act always specifies a new, open situation that, due to the interlocutor’s reaction, it can be risky to the parrhesiast. The outcome of the act of *parrēsia* is never constituted beforehand. (Foucault 2010, 62.)

The verification of the truthfulness of the act of *parrēsia* is in its essence of creating danger to the parrhesiast. Likewise, the verification for *parrēsia* is the commitment that a person does with himself/herself to the truth by accepting the danger, and hence is fully behind the truth of what he/she is saying. Thus “the parrhesiastic enunciation is the affirmation that in fact one genuinely thinks, judges, and considers the truth one is saying to be genuinely true” (Foucault 2010, 64). The person accepts the consequences that the truth-telling may cause and ties him/her to everything the truth includes and represents. This commitment to the truth requires the truth-teller to develop a certain relationship to him/her too, so as to be ready and “qualified” to tell the truth. Thus,

- - *parrēsia* is a way of binding oneself to oneself in the statement of the truth, of freely binding oneself to oneself - - in the form of courageous act. *Parrēsia* is the free courage by which one binds oneself in the act of telling the truth.” (Foucault 2010, 66.)

Parrhesiast thus must be *courageous* enough to commit *parrēsia* as well as to be ready for facing everything that the act of free-spokenness may encompass. *Parrēsia* thus requires enough courage and commitment of the speaker in relation to the truth, in which the speaker builds a certain relationship with him/herself. In *parrēsia* “- - one constitutes oneself as the person who tells the truth - -“(Foucault 2010, 68). Thus, the social status of the speaker is not restrictive as long as the speaker fulfils the other qualifications, such as telling the truth what a person sincerely thinks is true and thus is telling everything related to the truth, as well as accepts the unexpected consequences that occur from the free-spokenness. *Parrēsia* also requires frankness that guarantees that everything is being told and nothing is left without saying. (Foucault 2010, 65–66, 299.)

Even though the social status of the speaker does not matter, *parrēsia* can only take place when there is freedom and the parrhesiast is free: “- - the parrhesiast is someone who emphasizes his[/her] own freedom as an individual speaking” (Foucault 2010, 65). Thus, *parrēsia* can only exist when there is freedom to tell the truth, and only a person who is free can be parrhesiast, which limits the possibilities for free-spokenness. However, I perceive this situation similarly with the notion of resistance. As in order for resistance to occur, there has to be freedom, as well as in order for power to be exercised, there must be freedom since without freedom, power is not “power” but dominance (See for example Foucault 1997, 292). Similarly, the act of *parrēsia* can only take place in freedom, and the persons who are not free, and are under dominance, cannot be parrhesiasts. Actually, Foucault remarked that the whole question of *parrēsia* is about the highest exercise of freedom by binding oneself to the truth (Foucault 2010, 67). In this thesis, I am using the notion of *parrēsia*, the act of truth-telling, as a mean to describe the *how* of resistance and *how* to tell the truth.

However, *parrēsia* itself is not an act of resistance, nor it is an exercise of power, but

- - *parrēsia* is - - a form of discourse which will exercise power in the framework of the city, but of course non-tyrannical conditions, that is to say, allowing others the freedom to speak, the freedom of those who also wish to be - - in the front rank of this sort of agonistic game - -“(Foucault 2010, 104)

Why *parrēsia* can be considered as resistance, is the freedom it leaves for other people to speak and also the freedom to obey, albeit that they are persuaded by the discourse. There is also always the possibility for the failure of own discourse in comparison to other discourses, as well as the risk of danger due the failure of a discourse. But what makes the act of free-

spokenness so crucial, is that the most important “function of *parrēsia* is - - to be able to limit the power of the masters. Parrhesiast - - will stand up, speak, and tell the truth - - against the master’s foolishness, madness, and blindness, and thereby limit the master’s madness” (Foucault 2010, 161). The opposition of the master is justified because it is opposed with truth, with *parrēsia*, that can be as well considered as a duty to tell the truth.

There is also a problematic with the true discourses given as *parrēsia*. *Parrēsia* can only exist in democracy as well as there cannot be democracy without the existence of *parrēsia*. This, however, can open an opportunity to misuse the true discourse, as in the discourse also the procedures of power and governmentality can be justified. (Foucault 2010, 184.) However, there is an answer to this problem with democracy and politics, which is philosophy, since: “- - truth-telling in the political realm can only be founded on philosophy” (Foucault 2010, 217). Yet, it is not the task for philosophy to tell how to use power, but it has to act as a truth-teller in politics (Foucault 2010, 286). This marks the separation of philosophical and political *parrēsia*, as neither of them disappear or prevail over the other, but function in different fields with different status.

*Parrēsia* can also be defined as “the discourse addressed by the weaker to the stronger” (Foucault 2010, 135) which also indicates suitability of the act of *parrēsia* as a means of resistance. The discourse of *parrēsia* usually takes place when the weaker has no other means left than *parrēsia* as the opposer is too strong and powerful. Thus, despite of the weakness or the injustice done to him/her, the one must have the courage and criticise the stronger, which thereby makes the act *parrēsia*. (Foucault 2010, 133-135.) The possession or access to the “right” truth is proved by the moral qualities of parrhesiast as well as with the courage the truth-teller has: “The fact that a speaker says something dangerous – different from what the majority believes – is a strong indication that he[/she] is a parrhesiastes” (Foucault 2001, 15). Hence, secure life and *parrēsia* cannot exist at the same time and thus the parrhesiast is endangering his/her own life for the truth. As Foucault put it, the parrhesiasts “- - risk death to tell the truth instead of reposing in the security of a life where the truth goes unspoken” (Foucault 2001, 17).

The notion of the “security of life” versus the “life of parrhesiast” leads to what *parrēsia* is ultimately about as they both cannot exist at the same time. With the notion, Foucault also defined the role of a philosopher – and of himself too – in a society, and philosophy’s relation to truth. *Parrēsia* thus becomes something that begins to guide the life of parrhesiasts, the

philosopher, by making him/her “- - an agent of the truth - - [that] will not just mean claiming that one can state the truth in teaching, in advice one gives, and in speeches one makes, but that one really is in fact, in one’s life, an agent of the truth. *Parrēsia* as a form of life - - “(Foucault 2010, 320). The truth of parrhesiast becomes “alive” in the life that one is living; the parrhesiast is living the truth.

In this theoretical discussion I have tried to cover the main features related to truth that appear in Foucault’s thinking. The definitions of truth are varying from each other, but also they are all connected to each, and also the evolvement of the concepts can be seen in the different conceptualisations. In Foucault’s writings, one of the main differences between the notions of truth, is that how the truths are produced in different ways, in the different “domains” of truth. There is the truth of the political sphere that is connected to the power of truth that governs with the practices of politics and economics. And then, there is the “philosophical truth”, to which Foucault focused more in his late work. However, these different types and practices of truths have connections to each other, which happens, for example, in the games of truth.

The possibility for political resistance, however, is connected to the arena of political and social truths as the philosophical and political truths are formed in different realms under different principles. The question of how “true” and “false” are defined is in the centre of the difference, as well as the different mechanisms of *how* truth is defined in the different realms. In the political realm, there are the regimes of truth that have their own mechanisms for defining the “good” and “bad” practices and the discourses related to truth. Then there is the truth that is related with the ‘care of the self’, as well as to the practice of *parrēsia* where the role of philosophy is more central. According to Foucault, the philosophical truth is superior and just simply different comparing to the truths in the political realm, since the real nature of truth, and the “rightness” or “wrongness” of the procedures related to truth, can only be revealed by philosophy, as “philosophy is the discourse of truth par excellence – to establish the limits of right - -” (Foucault 2003, 24).

#### 4. The truth regime of biotechnology

The main reason why I got interested in this topic in the first place is the problematic concerning to the changing role of seeds due to genetic modification, which has attached a new type of power to the GM seeds. In this chapter, I am presenting how this type of modification and governance of seeds and life became possible, which I am explaining by presenting it as a function of the biotechnology truth regime that is justified by the formation of certain truths. The GM seed is one of the key factors in this case, which is why I am examining how the truth of the GM seed got established, since it is essential “- - to study power by looking - - the places where it implants itself and produces its real effects” (Foucault 2003, 28). Consequently, I am arguing that by beginning the cultivation of each type of seed – the GM seed, or, the native Indian seed – one also begins a certain life path that comes along with the cultivated seed. Therefore, in this chapter, I am focusing on the relationship between the GM seed and the biotechnology truth regime, and that how the GM seed became a means of governance. I am examining this by analysing how the truth of the GM seed is created as well as the whole truth regime of biotechnology, and moreover, how that truth justified the control over seeds, and thereby over life. Likewise, I am presenting what kind of practices of governance are utilised and justified under the truth of the biotechnology regime, and what kind of consequences the governance is causing. I am going to explain this by presenting how truth and power are bounded together in the creation of the practices of governance as well as in the creation of the biotechnology truth regime.

The empirical analysis is going as follows. First, I am presenting the emergence and the creation of the truth regime that includes presenting the institutions and the practices of economics, politics and the rule of law that create and sustain the regime. Also I will present the discourse of truth of the biotechnology regime, where the truth gets manifested. In the next part of this chapter, I am presenting what kind of governance occurs inside the regime of truth and how the governance practices are justified and verified as “true”. The truth regime of biotechnology has features from the truth regimes of liberalism and neoliberalism, which I am describing basing on Foucault’s conceptualisations. Also I am utilising Nally’s notion of ‘corporate biopower’ to describe the type of governance that is justified by power and truth in the biotechnology regime of truth. According to Nally, ‘corporate biopower’ is “a practice of social control that targets everything from the farming systems to abiotic stresses and from

seeds to intellectual property rights - - at every level of the modern food system, from production, to manufacturing, to consumption - -“ (Nally 2011, 48).

#### 4.1. How is the truth regime of biotechnology established?

##### *The emergence of the biotechnology truth regime*

As in this thesis, I am approaching this case about the role of truth of the GMOs, from the point of view of an Indian activist group; consequently, I am presenting the emergence of the biotechnology truth regime, as everything else in this thesis, basing on the material written by Navdanya. Hence, this conceptualisation of the biotechnology regime of truth is sketched from an Indian point of view, when some of the features can be more evident than the others. One of the aspects that is really apparent in the formation of the truth regime of biotechnology, is India's history as a former colony of the British empire. This is why there are many similar features between India and other former colonies of the Global South, especially regarding to the historical development of food production in the countries and the global influence to it. Therefore, the genealogy, or the history, of the biotechnology truth regime can be seen tracing back to the colonial times. For Example, Nally illustrates how the formation of the division between the Global South and the North has its roots in the colonial times, and how the separation between the positions as producers and consumers of the global food production got established (Nally 2010, 40–43).

As I mentioned that there are many similarities between the governance practices of colonialism and the biotechnology regime, likewise Nadanya mentions the same. They describe in the material, how the biotechnology regime utilises the collection of royalties as a similar, but modernised method of control compared to the colonial practices:

The British took 50% of every farmer's crop. This sort of taxation, in today's India has taken the form of royalties, especially in cotton. Even before the seed has been planted, money has left the farm and made its way to St. Louis. It can't be difficult to see the similarity between seed monopolies and colonialism. (Seeds of truth.)

Even though colonialism has officially ended, it can be still considered to be continuing, just existing in another form. Thus, due to the similarities between the procedures and practices of

control, the emergence of the biotechnology truth regime can be considered of having begun already in the colonial times. Moreover, this shows how the biotechnology regime is consisting of different, previous or still existing, regimes of truth. The similarity with the earlier, colonial practices, to the nowadays “colonialism” is evident in another citation from Navdanya. In the citation is also illustrated how the coming to the country is often justified as an act for help that would be beneficial to the receiving country. Navdanya, however, describes how this activity often means the opposite, and describes it being just “- - the strategy of seemingly ‘helping’ India while extracting, like colonizers, capital and natural resources from the colonies” (Seeds of truth). Hence it can be argued that the biotechnology regime continues utilising the same truth with the former colonisers, and thereby, due to the similar (historical) background justify the utilisation of the similar practices. Nally (2010, 41–42) also describes how the creation of the relationships of global governance of food is set in history, in the early colonial practices. He as well traces the beginning of the global period of modern industrial agriculture to the establishment of the colonial plantations, which were the first to focus on monocultural farming. Nally suggests that the plantations can be considered as “laboratories of modern governmentality”, as a precursor or as an experiment before the actual beginning of biopolitics. (Nally, 2010, 41–42.)

The latest development of the biotechnology regime, as well as the last period of the evolution of modern agriculture, began with the so called “Green revolution” in the 1960s. The Green revolution introduced the advances of modern agronomics to the world, such as chemical fertilisers and herbicides along with biotechnology (IFPRI 2002, 2). The achievements of the Green revolution have, however, been highly debated for and against since its beginning. It is celebrated for its improvements in farming that were made at the beginning of the revolution, as they resulted in bigger crop sizes and thus reduced hunger and poverty. On the other hand, the Green revolution has also created many social problems that have, in turn, led again to hunger and poverty. (IFPRI 2002, 3.) Therefore, I see the phenomenon of the Green revolution as another example and the latest phase in the global governance of food, and which exemplifies the actual beginning of the biotechnology truth regime. And what is worth noticing is that while the Green revolution occurred around the world, the most severe impacts it however caused in the Global South (IFPRI 2002, 4).

This expresses the importance of understanding the signification of the Green revolution to farming, especially in the context of the Global South, which is also addressed in the research material by Navdanya. According to Navdanya, “‘Green Revolution’ is the name given to



chemical agriculture, based on seeds adapted to the chemicals and not to the local ecosystem” (Seeds of slavery). The statement illustrates the shift that occurred in the actual practices of farming: the farming shifted from the natural way of cultivation to the farming that is dependent on chemicals. Consequently, if the basis of farming changes that much that the seeds comply with chemicals instead of nature, I see that as a great marker for the beginning of a new type of a truth regime regarding to agriculture.

McMichael presents a similar point of view to the industrialisation process of food production. He marks the beginning of the industrialisation of food and the change of the mindset related to food, to the industrial revolution that began in Britain. After the industrial revolution, the word ‘development’ became associated as something technical and rational; the process of industrialisation began to signify development. This industrialisation process with urbanisation, slowly created a clearer separation between the urban and rural spaces as well as it resulted in creating a completely new category of industrial workers. Within the process, food and farming got gradually separated and moved away from the everyday life of an urban, industrial worker, which slowly turned food to be perceived just as an industrially produced necessity that could be bought from supermarkets. (McMichael 2000, 21.) Or in other words: “- - food was removed from its direct link to local ecology and culture, and became an input in urban diets and industrial processing plants” (McMichael 2000, 21). As a result, the reality and the everyday practices related to food and food production altered and began gradually shifting them away from the everyday life of majority of people. This process helped with the establishment of the division between the ones who produce food and who are the consumers of it as well as it enabled the contemporary industrial food production with its byproducts such as factory farming. Hence, the development of the biotechnology truth regime follows the same process regarding to global food production that began in the colonial times and got altered due to the renewals that industrialisation provided to agriculture, and which finally resulted in to the emergence of biotechnology due to the new inventions in biosciences.

### *Discourse of truth in the biotechnology truth regime*

The biotechnology regime creates a certain discourse of truth, through which the “right” truth about biotechnology is formulated and distributed and which, in turn, supports the objectives of the regime. The relations of power of this case can be seen in the discourses of truth as well

as they are utilised to redefine and sustain the power relations according to the truth of the biotechnology regime. The governance and the agency of the biotechnology regime are justified by the formation of the certain truths. For example, the right for entering, and introducing the GMOs to India is justified in the discourse, which also presents the power of the truth behind the act. Another discourse of truth is produced to define the truths concerning the agency of the biotechnology companies as well as the farmers, with what it is possible to set the actors in different positions, which, in turn, enables and justifies the use of the different governance methods. The target is to create and distribute the kind of discourse of truth that sets the biotechnology regime in a position, where it is seen as indispensable for the evolution and development of nature. Moreover, by the discourse of truth, the regime wants to promote itself and biotechnology as a solution to the global food crisis as well as to climate change. The formation of the discourse of truth is supported by science and it is distributed through media.

The first example of the discourse of truth is related with the earlier introduced notions about the similar practices of colonialism and the biotechnology regime. According to Navdanya, the biotechnology regime uses similar discourse to the European colonisers with what they justified the colonisation of land:

Just as the jurisprudence of Terra Nullius defined the land as empty, - - the jurisprudence of intellectual property rights related to life forms is, in fact, a jurisprudence of “Bio Nullius” – life empty of intelligence. The earth is defined as dead matter, so it cannot create. And the farmers have empty heads so they cannot breed the seeds. (Seeds of freedom.)

Terra nullius is an expression in Latin, which means “land belonging to nobody”. It refers to land that no sovereign state has claimed belonging to itself, and thus, that land is considered free to be occupied by colonial powers. (Terra nullius.) Hence, it can be argued that the power of the formerly accepted historical colonial practice supports the creation of the truth about “Bio Nullius”. The practice of Terra nullius was justified by legislation, similarly that “Bio Nullius” is enabled by the legislation of Intellectual property rights (IPR). Hence, as nobody had yet claimed governance over life forms, the biotechnology regime had the justification by the law to act as coloniser of life forms, and claim “Bio Nullius”. The biotechnology regime thus claimed sovereignty over life forms with the assistance of the legislation of Intellectual

property rights, which, in turn, supports the truth of the biotechnology regime and hence justifies the activity of owning lifeforms.

In addition, to what Navdanya referred with the notion of “Bio Nullius”, ‘life empty of intelligence’, relates with the “rule” of colonialism, which stated that if land was empty, it was allowed to be claimed as someone’s own. However, in many cases the land was not empty and, instead was inhabited by the indigenous people (Terra nullius). The same type of contradiction appears with the importance of recognising the input of indigenous knowledge related to the cultivation and evolution of seeds and other lifeforms. Similarly, as the indigenous people inhabited the colonised land before the colonisers, also the indigenous knowledge has given its contribution to the development of lifeforms, before claiming them under someone’s ownership by the IPR laws. By the notion of “Bio Nullius”, and thus by questioning the intelligence of nature, Navdanya also illustrates how nature’s ability for creation is denied as well as the farmers’ long contribution and skills with the refinement of seeds.

Hence, the biotechnology regime produces a discourse that supports their attempts to turn the farmers as the objects of the development, who just have to adjust by their guidelines of farming, which are settled by the use of the GM seeds. By the discourse and the practices that are tied to the truth of the biotechnology regime, the farmers have been taken away the position to act as initiative makers and to be the ones telling to the markets what kind of seeds they need for ensuring the best farming results. This type of discourse enables the biotechnology regime to bypass the farmers’ knowledge and experience regarding to farming and seed breeding that finally set them, as well as nature, aside from the development, into a role of a bystander. As a result, the biotechnology regime gets promoted as the inventor and the operator of life, who can claim having the knowledge of how life operates and what kind of improvements people need into their lives.

There is a similar example of the discourses of truth that are produced to justify the utilisation of land. This is done, as expressed by Navdanya, as follows: “Corporations view the 75 per cent of the biomass used by nature and local communities as “wasted” (Seeds of injustice). The discourse of truth represents the neoliberal discourse of truth as the use of land is justified in the name of “utility”. The utility is, in turn, verified by markets that emphasise to role of the companies as the rightful user of land, which, again, does not recognise the intrinsic value of nature or the indigenous peoples’ right to their land. The development of the type of

discourse that is centred around the notion of utility, is explained by Oksala as follows: “From the beginning of the nineteenth century the key questions addressed to government were: Is it useful? For what purpose is it useful?” (Oksala 2013, 58). This represents the logic behind the practices of the liberal, as well as the neoliberal regime of truth, where the usefulness of practices, and things, or even humans, began to be evaluated basing on their usefulness or utility. Or to put it conversely: if something is not evaluated useful according to markets, then the practice is not perceived as “good” and subsequently, not compatible with the truth of the truth regime. Therefore, as described by Navdanya, the 75 per cent of biomass that is not in the use of the markets but, instead, is used by the indigenous people and nature makes it to be regarded as useless. This discourse therefore justifies the taking of the “useless” land into use. This notion of the untapped land can be seen related to the market-based utilisation of seeds as well.

The biotechnology regime also creates a discourse of truth to define the role of the activists who resist its operation. By the discourse of truth, the biotechnology regime aims to address the anti-GMO activism as ‘anti-developmental’ and, actually, as a security threat. Navdanya presents, how in the report, published by the Intelligence Bureau of India, was named “seven agitations pursuing ‘anti-developmental activities’”, that placed the activism against the GMOs in the third place of the ranking (Generously motivated). Hence, also the internal security service of India promotes the biotechnology regime by creating a discourse against an anti-GMO activism. By the discourse, the opposition to GMOs is wanted to be labelled as an anti-developmental activity, which is in fact, perceived as a security threat, and thus can be argued as “wrongdoing” by the discourse of truth. Other citation shows how in the discourse of the biotechnology regime, the anti-GMO activists are as well defined as old fashioned or even ignorant who do not understand the advancements of modern science. This is done in a sense of giving an advice to the unaware activist by saying that “- - it is superstitious to oppose GM seeds - - [and as a reminder] that developments in science and technology should not be blindly opposed” (GMOs). Thus, the truth of the biotechnology regime is argued for with the possession of the “right” knowledge and practice of the “right” kind of science that leads to the “right” type of development. The biotechnology regime’s discourse about the anti-GMO activism creates a truth about the GMO opposition as unscientific activity that bases its claims on superstitions, which it uses to blindly oppose the advancements of the “true” science and technology.

There is another article where the role of activism is defined by producing a discourse of truth. The article is a comment by Navdanya related to an interview of the former Indian Prime Minister Dr. Man Mohan Singh, where he presented his thoughts about the role of NGOs regarding to the development of biotechnology and nuclear power in India. In the interview, the former Prime Minister “identified NGO’s as blocking this ‘development’, and involv[ing] the foreign hand” (Science and democracy). According to Navdanya, what the former Prime Minister did by his utterance, was “[t]o label the democratic voices of the citizens of India as ‘foreign’ and ‘unthinking’” and, due to that statement he “is misleading the nation by making it appear that the only voices raising caution in the context of these hazardous technologies are ‘foreign funded NGO’s’” (Science and democracy).

Thus, by the discourse, the biotechnology regime attempts to make the opposers of the biotechnology and nuclear power development appear as “foreign agents” who do not belong to India and thus have no right for saying their opinion about India’s future. Hence, the discourse creates a truth that labels the voice of the opponent as “foreign” that thus has no truth value. In fact, just recently, the government of India blocked the bank accounts of many of the NGOs who operate in India and receive foreign funding, among which was, for example, the Greenpeace India that has already for a while been struggling with the Indian government (Al Jazeera, 27.5.2015). According to Navdanya, this kind of development and “- - attack on movements - - needs to be viewed in the larger context of the mega bucks foreign corporations are looking at by pushing GMOs and nuclear power plants in India” (Science and democracy). This describes how power is connected the formation of the truth as the discourse defines the NGOs as “foreign agents” and the multinational corporations as the ones who are bringing development to India.

The biotechnology regime as well produces and utilises the typical liberal and neoliberal discourse about freedom that promotes the benefits of the free market economy. According to Navdanya, by the freedom discourse the actual truth about *whose* freedom the discourse is about, is disguised:

Freedom in our times has been sold as ‘free market democracy’. - - ‘Free market democracy’ is in fact an oxymoron which has deluded us into believing that deregulation of corporations means freedom for us.” (The 99 per cent).

Still in the 19<sup>th</sup> century, the regulation of markets was operated by states. However, nowadays this process has altered in favour for markets, since now states, jointly with institutions,

modify the construction of states to improve the operation of markets. Due to the huge influence of some multinational institutions, such as the WTO, which has strong connections to the influential multinational corporations, states are in many cases voluntarily giving some of their sovereignty away in order to be taken part into these organisations or other international treaties. (McMichael 2010, 23.) Hence, it can be argued that “[t]he process whereby markets are reconstructing states is largely corporate driven” (McMichael 2010, 23). And often this process is argued for and justified with the neoliberal discourse of truth of how development is carried out to bring more freedom to people.

As I have presented, the power of discourses is really evident in the formation of truths and in sustaining the whole regimes of truth. There is a citation, in an article written by Vandana Shiva, where this power of truth and its capability for fundamental changes is well-elucidated:

- - I feel compelled to reflect on how fictions and abstract constructions are ruling us; the nature of being and existence is being refined in such fundamental ways that life itself is threatened. (Corporate fiction.)

The citation illustrates the essential nature and the power of truths in a fundamental way. It presents how truths are constructs that are tied to power and how they are defined in the interaction with power. Consequently, in different times and spaces also the relation between truth and power is different, which is why there are different regimes of truths that follow different truths. Thereby, the production of different discourses of truth can produce different effects of truths in different times. In the citation, it is illustrated how the truth regime of biotechnology produces a discourse of truth with what it is claiming the ownership and control over lifeforms. The discourse enables the creation of the new “truths” that justify the new types of practises of governance and the formation of the whole regime of truth that is able to rule and influence life with the “fictions and abstract constructions” as it is presented by Vandana. This situation can be explained as a game of truth as well, since in the creation of the regime of truth, all the “players” of the truth game are present. The new concepts – or truths – construct the subjects in this case, according to the true discourses that are produced, which are dependent on the context in which they are made.

### *Scientific discourse*

The biotechnology regime is supported by several institutions, organisations and universities that are, with assistance of science, producing and sustaining a discourse that supports biotechnology. The role of science is important behind the formation of truth, since “[t]ruth’ is centered on the form of scientific discourse and the institutions that produce it; it is subject to constant economic and political incitement - -” (Foucault 2000, 131). Truth, however, is not necessarily scientifically proven but its formation is supported by science, and the distributing of it is done by media. The formation of truth in the scientific discourse is also influenced by the political and economic situation, which can affect to how, and what kind of, science is practiced and supported. (Foucault 2000, 131.) Hence, next I am going to present how this type of scientific discourse is formed in the biotechnology regime, and how its formation and continuity is supported by political and economic institutions and other influential actors.

An article from Navdanya introduces the establishment of an international partnership called *One Agriculture-One Science: A global educational consortium* that was established to advance and to further develop biotechnology in the Global South. As a matter of fact, the consortium was founded by the same institutions that contributed to the planning and realisation of the Green revolution in the 1960s. However, in July, 2014, this new partnership was launched by actors world-wide, from India, Africa and the US, as their goal to develop one agricultural model that would fit for all the participating countries. According to the institution, the cooperation is “- - specially focusing on addressing changes required for agricultural education to better contribute and more effectively impact development goals, particularly the attainment of food and nutritional security along with sustainable agricultural production in developing countries” (ICRISAT, 21.6.2014; the same quotation can be found also in the article ‘Seeds of slavery’ by Navdanya).

Therefore, the truth of the biotechnology regime is distributed through education that is aimed at the people in the developing countries. The technique that is being taught is coming from the Global North, as it is the origin of many biotechnology companies. As often is the case, the improvements are made in the name of ‘food and nutritional security’, as the word ‘security’ makes it sound convincing and necessary for people to adopt the new methods introduced by the biotechnology regime. Moreover, often the words ‘food security’ and ‘food sovereignty’ are perceived as opposites to each as the concept of food security is often related

with the neoliberal development of the global food trade (Conway 2015, 2). In the citation is also presented how the consortium aims to influence development by distributing a model for 'sustainable agricultural production'. In these days it is beneficial to utilise a word such as 'sustainable', as it is associated with something that is environmental friendly, which thus makes possible to gain broader support for the proposed model of farming. Hence, it can be argued that the truth of the biotechnology regime is manifested in the discourse with what they aim at branding themselves as operators of a 'secure' and 'sustainable' model of agriculture. These examples of the distribution of truths correlate with Foucault's notion of truth how it is "- - circulating through apparatuses of education and information - -"(Foucault 2000, 131).

Moreover, the consortium represents the typical 'monoculture mindset' of the biotechnology regime, as it is describing itself with words "One agriculture-One science". According to the monoculture ideology of the consortium, the same agricultural model fits for all of the participating countries, despite of the regional differences between, India, Africa and the US. But, however, this I am discussing in more detail in the coming chapter. Finally, to combine all the notions together about the consortium of 'One agriculture-One science', it is evident how it represents the traditional, liberal as well as the neoliberal model of development that is presented under a discourse of 'sustainable development'. The combination of these models of sustainable development represents a liberalist and Eurocentric way to provide development that relies on economy, which is perceived as an instrument for security, and for saving nature and people, and therefore, for securing the whole life (Reid 2013, 107-108).

Relating to the scientific practices however, the quality of the scientific proofing of the GMOs is one of the major problems concerning to the trustworthiness of the biotechnology regime. Navdanya presents one of the problems regarding to the legislative practices of the regulation of biotechnology:

The strategy of the global GMO seed industry with their patents & IPRs (Intellectual Property Rights) is to bend regulation and influence governments and regulators to approve GMOs, by-passing scientific, transparent and independent safety testing. (Foreign hand in the IB report?)

Hence, according to Navdanya, the whole biotechnology regime is relying on truth about the GMOs that is not verified by full scientific testing. This perfectly illustrates how truths are not necessarily scientifically confirmed to have the status of truth and how truths are affected by



economics and politics (Foucault 2000, 131). Another influential actor that has effected to the formation of the truth about the GMOs is the World Trade Organisation. I presented this connection between the WTO, GMOs and the food sovereignty movements in the chapter of previous research. The next citation however presents how the biotechnology regime, and Monsanto, got the verification for the truth concerning the procedures related the GMOs, as well as it presents how that truth became implement globally through the institutional power of the WTO:

Monsanto wrote the World Trade Organisation treaty on Intellectual Property which forces countries to patent seeds. - - They defined a problem, and for them the problem was that farmers save seed. They offered a solution, and the solution was that seed saving and seed sharing should be defined as intellectual property theft and criminalized. (Create food democracy.)

This describes the actual procedures of the formation of power and truth, as well as it illustrates the institutional power regarding to the establishment of a regime of truth. Monsanto's proposal for the truth got enforcement in a form of a treaty, which then got a confirmation and world-wide institutional power to support the truth, which then became implemented applying to everyone who cultivates the GM seed. Therefore, finally the truth proposal by Monsanto got verified as a good practice, and as truth, which thus defined the traditional practices of seed sharing and saving as criminal.

In the research material there are more examples of this how the distribution of the truth is backed-up with influential actors and institutions. Also the media plays an important role in the formation and the distribution of truths. There is an example of this in a form of a reply to an article about Vandana Shiva that was published in the New Yorker, named "Seeds of Doubt". According to Shiva, the article was not objective, since it was not written according to what she had said and, instead of "- - serious journalism, the article was intended as a means to strengthen the biotechnology industry's push to 'engage consumers'- -(Seeds of Truth). With regard to the article, the 'battle for truth' as well as 'the status of the ones speaking the truth' concerning to the publication can be seen from the case. In the reply to the article, Shiva comments on how the article was meant to be about and for food sovereignty, but instead it turned out to be the opposite and to present the truth of food sovereignty to avail different purpose. Hence, it is evident how there is the 'battle for truth' and how the economic and political interest influence to the competing interests of producing the different truths.

Also the media plays a great role in the formation of the truths and truth regimes as it has the power to define ‘the status of those who are charged with saying what counts as true’ (Foucault 2000, 131).

## 4.2. Governance within the biotechnology regime

In the previous chapter, I presented the discourses of truth of the biotechnology regime as well as that how they became actualised as truths in the procedures of institutions, legislation and in the agency of other actors taking part. Likewise I presented how the production of the discourse of truth creates and re-creates the truths of biotechnology regime, which, in turn, sustains the regime. Also, I have illustrated how the creation of truths is supported by the power of the institutions and legislation and, in turn, how the truth renews these powers. In this next chapter, I am presenting what kind of practices and mechanisms of power and governance are justified by the truth of the biotechnology regime, and how is it done. I am addressing this by utilising the notions of the liberal and neoliberal regimes of truth by showing how, within them, the truth is connected with the mechanisms of power and what kind of governance methods are justified and utilised. However, the liberal and neoliberal governance practices are closely interrelated as neoliberalism can be seen as a continuum to liberalism, which thus makes it hard sometimes to describe the practices unequivocally either liberal or neoliberal governance. However, there is, for example the traditional, liberalist notion of scarcity that I am utilising to describe how the biotechnology regime creates artificial scarcity as a means of monopoly and also, as a means to create artificial scarcity of nature, too. Then, there are the governance practices that are characteristic to neoliberalism, which I am presenting, for example, to describe how the practice of ‘care’ through subjectivation is carried out according to neoliberalism. Hence, I am arguing that the governance of the biotechnology regime of truth is following the model of liberal and neoliberal governance and is thus a combination of both of the regimes of truth.

I explained earlier in the theory chapter, how the evolvement of the liberal and the neoliberal regime of truth became possible due to the emergence of political economy and the more central and special role that was granted for the markets. Moreover political economy established a new kind of a relationship between political power and economic knowledge, which made it possible to scrutinise the political and economic questions separately from each

other. The separation between politics and economics then enabled, with the assistance of economic knowledge, to make science based claims of truth about economics. Due to this separation and the ideology of liberalism, economics and economic questions became to be considered as “neutral”, as if they existed without any political influence. Conversely, political questions were not considered as neutral and, therefore, all the political decisions have to fall in line with the economic truth. (Oksala 2013, 59–61.)

Hence, this created a “market based” verification method for governance, which is carried out with the guidance of economic truths, and with the regulation of the “invisible hand”. This method, due to the neutrality and objectivity of economics, is trusted as an actor for the good for all, which therefore leaves no need for politics. Consequently, the markets became the place for the formation of truth and the verification of “true” and “false” practices and methods of governance. (Oksala 2013, 59–61.) Therefore, the “truthfulness” of the practices of governance were justified by the markets, since “- - the market constitutes a site of - - verification-falsification for governmental practice” (Foucault 2008, 32). The shift to the liberal governance thus gave the markets a strong decisive role in societies, since the free functioning of the markets decides what practices are “good” for governance and then to be put in practice and, conversely, what practices are considered “bad” and not utilised. Since the markets have become the place for the formation of truth, then what was perceived as “good” for the markets, became the object of the governance. “The market now means that to be good government, government has to function according to truth” (Foucault 2008, 32). This means that the government – or politics – became subaltern to the markets, since the markets were the place for formation of truth, which, as well, granted the markets a great power and a role as a limiting actor for governance.

The markets also became a site of justice or, more precisely, a site of ‘distributive justice’, since “the rules of the market operated to ensure that, if not all, then at least some of the poorest could buy things as well as those who were more well-off” (Foucault 2008, 30). This utilisation of the ‘distributive justice’ in the functioning of the markets, gives a huge power to the markets as they are not necessarily expected to provide for everyone. Hence, it can be argued that if some of the poorest cannot buy things, it is just the truth verified by the markets. Also, when concerning to the nowadays global trade practices, the notion about Foucault’s conceptualisation of the differences between the ‘people’ and the ‘population’ becomes crucial in order to illustrate the operation of global liberalist governance and the free trade of food. For example, Nally has utilised this notion of the people and the population, to

explain how the division between the Global South and the North got established and, how, by that division, the different statuses and treatment of people got justified (Nally 2010, 43). This, however, I am presenting in more detail in the discussion about scarcity in the next section.

### *Scarcity of life as a means of governance*

The most tangible example of the governance practices of the biotechnology regime is the GM seed. The seed is where the actual practices of power and control, as well as the “truth” of the biotechnology regime, are culminating. The governance is achieved by creating scarcity both to the markets and to nature. The scarcity in the markets, due to the lack of alternatives, slowly leads to a situation that compels everyone to purchase the only alternative that is available, which is the GM seed. Moreover, the manipulation of nature and the creation of monocultures will, in the long run, create scarcity of nature, too. Next, I am presenting some theoretical discussions about scarcity, after which I am illustrating how the biotechnology regime actually creates scarcity in India.

There are similarities between the governance methods of the biotechnology regime with Foucault’s notions of scarcity. The basis of Foucault’s notions about circulation and scarcity are connected to the practices before liberalism that were carried out for the security of a state, and more specifically, to the actualisation of food security. For the state, it is important to try to avoid scarcity, since it is both a crisis for the population as well as to the government. The population, whose well-being is to be ensured, is in danger in the food shortage situation due to the lack of food, which, in turn causes trouble to the state, due to the revolting masses, the ‘people’. Thus, it is important for the state to maintain the security of the state and the population, and to avoid scarcity by ensuring the availability of seeds. (Foucault 2007a, 30.)

Against scarcity, in order to ensure the availability of seeds, there was invented a system which included political and juridical legislation or, in other words, “a system of regulations” and “a system of legality”, to prevent food shortages. (Foucault 2007a, 31–32.) The ‘anti-scarcity’ actions were taken by the political and legal institutions of a state and they were meant to prevent shortages from occurring again. The traditional, anti-scarcity actions are “- - price control, and especially control of the right to store; the prohibition of hoarding with the consequent necessity of immediate sale; limits of export - -“(Foucault 2007a, 32). All these

actions were carried out to prevent scarcity and unrest in society. However, these state-led scarcity preventive actions were dismantled along with the emergence of the free trade practices, as the shift to the idea of free circulation of grain, marks the shift from the mercantilist trade practices to liberalist thinking and, accordingly to liberal governance (Hansson & Hellberg 2015, 25). Moreover, this ideology of freedom of circulation enabled the development of modern, capitalist, form of economy (Foucault 2007a, 48).

However, as Foucault reminds, the phenomenon of scarcity is necessary for the control of markets and population and thus should not be getting rid of completely; “The scarcity-scourge disappears, but scarcity that causes the death of individuals not only does not disappear, it must not disappear” (Foucault 2007a, 42). Actually, Foucault argues, that scarcity is a chimera – what implies to something that is imagined and is not true – but the existence of this scarcity chimera makes possible and gives an excuse for different kinds of market regulations and control of population (Foucault 2007a, 38–39). Thus, according to this, some part of the population is allowed, and is necessary, to be sacrificed in order to ensure the overall security of a state and population; “- - letting people to go hungry so as to prevent something else happening - -“ (Foucault 2007a, 45). This notion reflects to the liberalist practices of free trade that are especially evident in the global trade of food that requires the establishment of the division between people and population as well as requires the utilisation of the scarcity.

Hence, setting up the division between the people and the population is crucial for dealing with the phenomenon of scarcity as well as for explaining the acceptance of planned scarcity in the global free trade of food. The situation got justified by the creation of the separation between the people and population, since the population needed to be protected and its well-being ensured against the revolting people, who did not accept the new system that removed the scarcity preventive systems and created ‘planned scarcity’. Thus, the apparatuses of security and other regulatory and control mechanisms were created to ensure the well-being of the population as well as to securize it from the threat of the revolting people, who, in turn, refused the regulative actions of population and, hence, refused to belong to the population. (Foucault 2007a, 43–45 & Nally 2011, 40.)

As along with the emergence of liberalism, the free trade practices were spreading around the world, and gave the separation between the people and population a change for further, globally valid classifications. Therefore, as the well-being of the population was to be

ensured, consequently, the people became labelled with the act of “letting die”, which means that they can be sacrificed for the well-being of the population. The separation was backed up with notions of the “backward” populations and with the ideology of developmentalism that allowed the intervening and the regulatory acts for the people and populations globally. Finally, with these notions, the separation between the different practices regarding to trade and the division of well-being concerning to the Global South and the North got justified. This division determined the consumers in the North as the population that needs to be secured, whereas the producers of the Global South are the people, or the “letting die”, that can be sacrificed for the greater good and the welfare of the population. (Nally 2011, 40, 43.)

Next I am presenting how the biotechnology regime utilises the scarcity practices and that how they actually create artificial scarcity of seeds. According to Navdanya, Monsanto controls the price of the seeds in India, which it has achieved by establishing a monopoly of its products which, in this example, are the Bt Cotton seeds:

After Bt Cotton was allowed to the market Monsanto started to strengthen its monopoly through (i) ‘Seed Replacement’, in which Monsanto would swap out farmers seeds with their own, claiming superiority of their own ‘product’, and (ii) ‘Licensing agreements’ with the 60 companies that were providing seeds in the Indian market at the time. (Seeds of truth.)

By the practice of ‘seed replacement’ and with the help of creating an image of the GM seeds as superior ones, the biotechnology regime managed to achieve monopoly of the Bt Cotton seeds in India. The ‘licensing agreements’, on the other hand, helped removing alternative options from the seed markets as the seed retailers replaced their products with the ones provided by Monsanto. Due to the monopolisation of the seed markets, price control, and the elimination of alternatives, the farmers in many areas become compelled to turn to Monsanto’s products and to purchase the seeds, pesticides and fertilisers offered by Monsanto. Also, the seeds were marketed as a cheaper option in comparison to the other seed types available, since they were said in a long run reducing the total cost of farming.

However, according to Navdanya, the price of the seeds increased 71,111% after Monsanto arrived to India (Seeds of truth). Also, in the same article, it is presented how the State of Andhra Pradesh and Navdanya, together with the court order managed to make Monsanto to lower the price of the Bt Cotton seed and make it a bit cheaper for the farmers. What is interesting related to this process is Navdanya’s notification that: “Monsanto did not wilfully

reduce its prices, nor was an ‘Invisible Hand’ at work” (Seeds of truth). Thus, this demonstrates how Monsanto is actually acting against the principles of liberalism that lets the market decide by the regulation of ‘invisible hand’, and is, instead, creating a seed monopoly and a situation of artificial scarcity to India with the help of the ‘anti-scarcity’ methods such as, the legislation of the Intellectual property rights. Thereby, the biotechnology regime controls farmers by creating artificial scarcity to the seed markets by relying on the anti-scarcity methods, which lets them to decide the price of the seed as well as to deny the farmers from ‘hoarding’, or saving the seeds.

In fact, the whole occurrence of scarcity can be seen as a wider, global phenomenon, as well as the creation of the artificial scarcity as characteristic to the whole global food system. In the global food system, artificial scarcity can be used as a method of governance, which in turn, can be further utilised in other type of governance, such as in a form of food aid. Navdanya also mentions artificially created scarcity as the main instrument for the food market speculations as well as one of the main causes for famines. Navdanya reminds how “- - a lack of political and economic entitlement to food – rather than lack of food supply – is often the cause of famine” (Killing the messengers.) Thus, this shows how scarcity is a chimera that is actually a political and economic creation of control. Furthermore, the practice of planned scarcity that the biotechnology regime utilises to govern the global food system, is illustrated by Navdanya as follows:

- - [H]unger is a structural part of the design of industrialised, globalised food system. Hunger is an intrinsic part of the design of the capital-intensive, chemical-intensive monocultures of industrial agriculture, also called the “Green Revolution”. - - This is a design for scarcity. (Hunger, by design.)

Hence, according to Navdanya, the Green revolution is a means to sustain, as well as to establish another kind of a way to control food production globally. The Green revolution just introduced a new arsenal of methods, such as the advancement of biotechnology and the chemical based agriculture, to control and govern the global food production. Thus, the Green revolution can be seen as another means for planned scarcity. However, often, in the discourse of the biotechnology regime, the GMOs are presented as solutions to famines and the opposers of the GMOs as the creators for scarcity: “- - the GMO industry now claims that opposition to GMOs could lead to famines” (Setting the record straight on GMOs). The citation again illustrates the truth of the biotechnology regime that creates an image of the

GMOs as a miraculous way to counter all the possible threats, such as climate change, malnutrition, and famines, etcetera, that the global food production is facing nowadays. The discourse of the biotechnology regime often claims, too, that the opposers of the GMOs are willing to deteriorate the situation of those who are already suffering, since, according to them, the only solution to hunger is the advancement offered by the use of biotechnology.

The phenomenon of artificial scarcity is closely connected to the need for food aid as well, which can be seen as a method of governance too. This type of a relationship has a long history between the Global South and the North, and the importance for its existence has been argued for with the ideology of ‘developmentalism’ as well as with the ‘humanitarian discovery of hunger’ in the 19<sup>th</sup> century (Nally 2011, 43). Thus, the operation of the global food system with the artificial scarcity creates the need for food imports, which leads a country dependent on foreign help and influence. Often food aid is offered to a country after natural disasters, for instance, when the national food supplies have been destroyed, which makes the act seem as a good example of a global solidarity. However, the problem that has occurred with the food aid is that the receiving countries have often noticed that the aid that is offered to them, is often proved to be genetically modified, even despite of the country’s forbiddance to the GMOs. Therefore, the biotechnology regime has its role in the distribution of global food aid. According to Navdanya, a similar occurrence took place after a natural disaster, in the state of Orissa, in India, in 1999:

The shipment - - under a humanitarian guise, was an attempt to circumvent India’s ban on the import on GMOs. - - . We tested this mixture and found it to be genetically engineered corn and soya. (Seeds of truth.)

In this case, the imported food was genetically modified, which, according to Navdanya, was against the regulations of the GMOs in India. Thus, the offering for humanitarian aid can act as an easy way to push the GMOs into a country and introduce them to the markets. Also, the GMOs are often offered to a country as an easy and fast way to survive natural disasters or as a means to solve the malnourishment problems of the population. For Navdanya, the main problem with the food aid was that the truth about the GMOs in it was not told. Also this type of procedures concretely expresses the power relations between the helper and the helped, as the one in the weaker position just have to accept the help without questions. Navdanya also reminds that what happened in India, is not a onetime occurrence, but is actually a quite common, world-wide phenomenon, as: “Monsanto, through its influence in USAID, has used



every natural and climate disaster to push its GMO seeds on devastated countries, including Haiti after the earthquake” (Seeds of truth). This notion emphasises the importance of the role of humanitarian organisations too, since often they have the authority to decide over what kind of help is offered and, consequently, what kind of food is imported to the country.

Liane Loots describes how similar situation occurs in Africa with the development aid and how large a problem it is. According to Loots, in many of the countries in Africa, and especially in South-Africa, the GMO food aid is a problem since the labelling of genetically engineered food is not required by law, which thus makes it easier to import food aid that contains GMOs. This has raised cautious voices in many African countries about the intentions of the Northern multinationals for using African countries as dumping and testing grounds for the GMOs. These fears, however, have led to a total ban of the GE food in several African states. Also the sustainability of the GE aid is questioned due to the seeds’ non-reproductive characteristics of which cultivation requires constant monetary input. Since, after all, how a seed that cannot be saved for next year’s sowing and is needed to be bought every year can be sustainable. (Loots 2011, 86, 88.)

### *Neoliberal governance*

Along with the traditionally liberal practices of governance, the biotechnology regime utilises the governance methods of neoliberalism, too. The shift from liberal governance to the neoliberal governance changed as the role of markets in society altered again. The markets were allowed a greater role in society due to the transference of the whole society under the influence of markets. Oksala points out how the markets have been granted the central role in the neoliberalist rationality of governance since, according to logic of neoliberalism, “the ‘health’ of the markets implies the health of the population” (Oksala 2013, 55). Thus, the main functioning of the neoliberal governance is that market

- - has to intervene on society as such, in its fabric and depth - - so that competitive mechanisms can play a regulatory role at every moment and every point in society and by intervening in this way its objective will become possible - - a general regulation of society by the market” (Foucault 2008, 145)

Neoliberal governance emerged from liberal governance, where the most important directive is that government should not regulate the markets. Nevertheless, in the liberal governance, a

certain relationship between the state and the markets remained and the government played a role as a contrast to the economic processes. Whereas in the neoliberal governance the markets become the regulator of the whole society and the government must ensure the free operation and the regulation by the markets that acts as a cross-section to the whole society. (Foucault 2008, 145.) Also, to describe the governance of the biotechnology regime, I am utilising a notion of “bioeconomy”, which is “- - a form of power that captures life through the very process of managing ‘the economy’- -” (Nally 2011, 48). The concept of bioeconomy illustrates how life is governed through, and due to the processes of economy. For example, the inventions of biotechnology in the industrial agribusiness have led to the commodification of food, which, in turn has its effects to the availability and the quality of food (Nally 2010, 48).

The shift to the neoliberal governance is often argued for as it brings more freedom and less governance to the people in comparison to the traditional liberal governance. But, after all “- - neo-liberal governmental intervention is no less dense, frequent, active, and continuous than in any other system” (Foucault 2008, 145). In fact, Oksala stresses the importance of scrutinising neoliberalism as “a comprehensive framework for understanding ourselves and the political reality we live in today” (Oksala 2013, 54). Hence, neoliberal governance is to be considered as something that has an influence on everything in a society from the construction of subjects to the creation of the whole political rationality of a society. What is also typical to the neoliberal governance is that while one is governed and directed, the same time the individual has to protect oneself, by one’s own, against the risks that the new type of governance may create. (Foucault 2008, 145.) The neoliberal governance thus does not include any responsibility from the one who is governing towards the governed, and instead, the governance is emphasising the importance of “self-care” against the problems and risks that appear in societies (Lemke 2001, 201). Next I am presenting how the neoliberal governance is utilised for altering the subjectivities of the farmers as well as their position in the society. Also I am presenting the methods with what this type of governance is achieved.

### *Creating of neoliberal subjects as a method of governance*

One of the most evident governance methods of neoliberalism is the creating of certain “neoliberal” subjects who are governed through the subjectivation process. The neoliberal subjects are rational individuals who have to lean on their own (economic) knowledge to best

survive in the societies as economy has begun to guide the whole society, including the politics and the subjects. Many of the formerly shared and mutually solved social and political issues are left on the responsibility of the individuals, as they are expected to secure themselves by insurances or self-help against the risks that may occur in societies. Thus, the survival in society has become something that is on one's own responsibility. (Oksala 2013, 66–67.)

In an open letter from Navdanya to India's agriculture minister, Sharad Pawar, Navdanya criticises Pawar's views on GMOs, as the views illustrate the logic of neoliberal governance. In the letter, Navdanya presents a citation from Pawar that is presented in his blog text, where he shares his views about the introduction of the GMOs. Here is what the Agricultural minister said, as it was presented in the material by Navdanya: "I believe that a farmer is the best judge to decide on the adoption of a new concept of ideology. Let me tell you that 90 per cent of the India's cotton farmers have already adopted the GM technology." (Response to India's Agricultural minister on GMOs; the original source: <http://www.beingsharadpawar.com/2013/10/food-for-thought-part-2.html>.) This citation illustrates the neoliberal logic behind the introduction of the GMOs. The decision for the adoption of a new technology is made to seem as an act of free will, as if the farmers had carefully evaluated all the choices they have and then selected the best suiting option for them. The discourse is produced to make the farmers appear as actors guided by free will, who is 'the best judge to decide' about his/her own life. By his notion, the agriculture minister aims to disregard the reality – the lack of other options, which actually guides the farmers to choose the GMO option. Producing the type of discourse that emphasises the words such as "freedom", "choice" and "liberty" is typical to the discourse of neoliberalism, which is done in order to hide the reality that it actually produces, behind the repetition of the words (Oksala 2013, 56).

Moreover, in the reality, the farmers have not been given the freedom to choose the seeds they want to cultivate but, nevertheless, the position of a farmer has changed due to the neoliberal governance of the biotechnology regime. The role of a farmer has changed drastically due to the restrictions that the cultivation of the GM seeds includes. Navdanya expresses the change as follows: "The creative work of farmers as custodians and renewers of soil and biodiversity is replaced by deadly chemicals (We are the soil). Thus, by introducing the chemical based industrial agriculture, the role of the farmer shifted, from a position where the farmer possessed the knowledge that was needed for cultivating and seed breeding, into a position,

where the farmer has to follow a method that relies on chemicals and which is predefined by the type of the cultivated seed. Thus, actually, the shift to the cultivation of the GM seeds does not give more freedom of choice to judge the best suiting option, since the creativity of the farming process has been turned into a process of mechanical adding of chemicals and other substances needed to produce harvest. Hence, the position of a farmer shifted from an independent position of a creator of his/her own work, into a relationship of dependence, where the farmer's knowledge and the "expert position" of his/her own work is disregarded. The power of the biotechnology truth regime thus occurs through the governance process of producing the new kinds of subjectivities which alter the role of a farmer in society from self-governance, under the control of the biotechnology regime, which is achieved by the means of the GM seed.

According to Navdanya, there is another wider and more all-encompassing, ongoing process that aims to control the availability of knowledge related to farming, which thus influences the position of farmers too. According to Navdanya, the biotechnology regime practices control over the knowledge concerning to seeds and the GMOs, which it achieved as follows:

GMOs have been deployed to privatise knowledge and seeds through Intellectual Property Rights (IPRs) - -. While on one hand, this is blocking public research on plant breeding, on the other it is denying farmers right to save seed, to share and continue the evolution of the seed and their knowledge. IPR also deny the collective, cumulative innovation of indigenous cultures and promote biopiracy. (GMO: The biggest food con.)

The Intellectual property rights are affecting to the lives of the farmers extensively. Their right to the indigenous knowledge about cultivation and seeds, as well as the utilisation of this knowledge, is made prohibited by putting it under the Intellectual Property Law legislation. This limits the farmers' possibilities for action and thus limits their agency. Also the subjectivity of a farmer is being re-shaped by the governance as the traditional way of farming, seed breeding and cultivating, is precluded by the legislation and by altering the reproduction methods of the GM seeds. As a matter of fact, according to Navdanya:

The instruments for this new dispossession are - - patents and IPRs [that] are being used to own seeds, life forms and traditional knowledge. Piracy of traditional knowledge is not an invention; it is theft – we call it biopiracy. (Seeds of injustice)

Navdanya describes how the biotechnology regime actually utilises the patents and the Intellectual property rights as instruments to govern knowledge, life forms and seeds, which can be then utilised to govern the farmers too. Conversely, as the biotechnology companies claim the ownership over traditional knowledge with the assistance of the instruments of governance that justifies them to define farmers' as thieves, Navdanya accuses the biotechnology corporations for biopiracy. Navdanya expresses in turn how it is the biotechnology regime that commits an illegal activity of thievery and copying by claiming their products as an invention. However, by this process of how the biotechnology regime manages to create the new instruments of governance and by the means of them claims the ownership over the certain products of nature and knowledge, the power of the truth of the biotechnology regime becomes distinctly demonstrated.

This chain of events also well illustrates the functioning of truth games in society. The truth of the biotechnology regime is manifested in the truth game by the utilisation and governance of knowledge. By governing the knowledge of farming, it is possible to alter the position of the subjects – the farmers – in this game. The governance of the farmers was justified by the utilisation of knowledge that supported the legislation of the Intellectual property rights laws, which was carried out by the institutions that support the same truth with the biotechnology regime. This game of truth resulted into a position, where the indigenous knowledge of farmers' and their position as the developers of the seeds got disregarded and, instead, the biotechnology regime promoted as the rightful owner and utiliser of the knowledge. The truth game thus determined the position of subjects, the role of knowledge and institutions, and the “right” type of truth to attach with power, and to enforce it with legislation and institutions, and vice versa.

One of the most severe outcomes of the governance is the “debt trap”, occurred due to the monopolisation, which can result in suicides of farmers. One example of this illustrates how the Bt Cotton farmers in India ended up to this “debt trap” as well as it presents the methods of neoliberal governance, and particularly its effects:

A Bt Cotton farmer starts the cultivation season with debt and completes the cycle with the sale of the crop after multiple applications of fertiliser and pesticide acquired on more credit. - - This cycle of high cost seeds and rising chemical requirements is the debt trap, from which the farmers see no escape, and which drives these farmers of the cotton belt to suicide. (Seeds of truth.)

With the purchase of the GM seed, a farmer's future, at least for a short term, has been decided. One reason for this is that the cultivation of GM seeds requires continuing use of pesticides and herbicides, which requires a constant input of money. Another reason is that Monsanto's control over the cultivated seed does not stop at the moment when the seeds change the owner. Due to the royalty payments for Monsanto, the farmers have to pay "charge" for the use of the seeds. All these practices of control bond the farmers into an ongoing relationship with Monsanto, where, in spite of the tight control and relationship, the outcome of a successful harvest is not guaranteed. Furthermore, along with the royalty payment relationship to Monsanto, a farmer might also have a debt to pay to the seed retailer. In such a situation, the farmer has no room for any kind of failures in farming, and he/she is forced to produce crop that is sufficient for paying back his/her debt, and the royalties for Monsanto. Thus, the risk of the crop failures, or changing environmental conditions, or even the possible unavailability of pesticides or herbicides, is on the farmer. Therefore, the farmer has to make enough money with the crop in order to be able to pay and, subsequently, to secure him/herself against the possible risks.

This above-mentioned chain of events is what Navdanya calls the "debt trap", which has resulted in an occurrence of a "suicide wave" among the Bt Cotton farmers. Also, this chain of events represents the procedures and practices of neoliberal governance, where everything is evaluated basing on its value and usefulness. Hence, in the truth regime of biotechnology, the value and the usefulness of the farmer equates to his/her monetary capabilities that are needed for paying for the royalties and for purchasing the products from Monsanto. As illustrated before, many of the farmers have not been able to pay their debt, what has led them into a debt cycle and desperation which finally made them to commit suicide. Thus, it can be argued, that according to the procedures and valuing practices of the truth regime of biotechnology, the life of a farmer is worth of the amount of his/her debt. Also, what is worth noticing is that the actual practices of the biotechnology regime are contradicted with the discourse they produce about the utility and beneficial nature of their products for the farmers. Thus it represents the model of neoliberalism that only governs without providing care, and a person has to provide care for oneself, by oneself, while being governed (Foucault 2008, 145).

There is another example that well-illustrates the mindset of the neoliberal governance, where the burden of risks, which can be related to the cultivation of the GM seeds, is given to the farmers. In the citation is also described the "monoculture mind-set" of the biotechnology regime that describes the mindset of neoliberalism, too. But, most importantly, the citation

illustrates the problem with the GMOs that how they are not necessarily fully suitable and adaptable to their environment, but nevertheless, they are sold for the customers, when again the risk for the failure is on the farmers:

- - Indian farms are too small to leave land just to delay the failure of an inefficient technology for pest control. Monsanto is using the failure to sell its second generation Bt crops with two Bt genes instead of one. - -. For Monsanto, the failure of the Bt crops means selling more costly seeds to farmers. The ecological failure becomes a market success. (Ban Bt crops.)

This illustrates how the biotechnology regime relies only on the one truth that it has perceived to be the most useful and beneficial for it. Despite of the crop failures and farmers' suicides, it is not willing to alter its procedures, since the procedures are functioning according to the truth that is verified as "good" by the mechanisms of the regime. Hence, after a failure of the first generation seeds, Monsanto utilised the same methods to produce a second generation seed that has the same way of acting. Thus, as the citation presents, the risks for failures are on farmers' responsibility as the solution that Monsanto offers, is not changing the situation or altering the cultivation methods. As a matter of fact, Navdanya suggests that the failure of the products is only beneficial for Monsanto, since they can take the advantage of the situation and sell more seeds, pesticides and herbicides. This again proves, how the practices related to the GM seeds are functioning according to the truth of the biotechnology regime, since according to markets, the practice that increases sale would be evaluated as a "good".

### *'Monoculture of mind'*

Another typical governance method of neoliberalism is demonstrated in the production and distribution of a discourse that emphasises economy as the only true solution to everything. Since, according to the ideology of neoliberalism, for example political questions should be left to be answered by the regulating effect of economics. Eventually, this can lead to narrowing the way of thinking, which does not acknowledge, or does not want to take into account the existence of alternatives, other than the economic truth that is considered to be the only truth and solution. (Oksala 2013, 60–61.) This type of thinking is evident also in the biotechnology regime of truth. The ideology that is lacking of alternative ways of thinking can be seen especially from the methods that are offered for solving the problems caused by

the genetic engineering of seeds. This is also the reason why the alternative truth, offered by Navdanya, can work as a means of resistance, since it is not aiming to fix the problem with the same mindset that has created the problem. Navdanya's resistance, however, I will describe more in the next chapter, and now, instead, I focus on describing the mindset that directs the governance and the discourses of the biotechnology regime. According to Navdanya, the mindset that illustrates the functioning of the biotechnology regime is:

“[a] system that is blind to the need for diversity, quality and nutrition of food for a balanced diet. The reductionist mechanistic paradigm that I have called the **Monoculture of the Mind** promotes monocultures focussing only on the yield of a few commodities. (Golden rice: myth, not a miracle, bold in original.)

The 'monoculture of the mind' represents the ideology behind the biotechnology regime of truth as well as it represents the ideology of neoliberalism that tends to lack alternatives other than the economic truth. The 'monoculture of the mind' represents how the biotechnology regime relies on the creating of monocultures in farming and monopolies in the seed markets as a means to govern what is cultivated. Also, the 'monoculture of the mind' illustrates how the creation of monocultures and genetic engineering are provided as an answer to the malnutrition problems, which are caused by the lack of necessary vitamins and minerals. Thus, the 'monoculture of the mind' ideology illustrates how the biotechnology regime trusts on centralisation of the markets and farming around a few commodified and genetically enriched products that are marketed to farmers as easy solutions to fight malnutrition.

However, the biotechnology regime has not considered all the possible outcomes that the creation and cultivation of monoculture may produce, which subsequently have created problems with the controlling of the GE products as: “- - herbicide resistant crops have led to evolution of super weeds, and pest-resistant crops have led to creation of super pests. - -. When super weeds started to overtake crops, Monsanto introduced Round-Up Ready II.” (Seedy deals.) The 'monoculture of the mind' ideology is excellently illustrated here in the biotechnology regime's answer to the problem that was caused by the monoculture mindset, since the solution to the problem represents the same monoculture mindset. This type of thinking will not stop the problem from occurring and instead, it is just renewing the problem and making it even more severe. Also, this illustrates how the truth of the biotechnology regime is renewed in the practice of monoculture as well as it illustrates how the practice



represents the mindset of the biotechnology truth regime that does not want to recognise any other alternative than the truth of the biotechnology.

### *Commodifying as a means of governance*

Commodification of food can be viewed as a practice of governance of the biotechnology regime, which also relates with the procedures of the whole global food production model. Relating to the same issue, Kloppenburgh (2005, 8) points out how, in fact, the whole branch of science of biotechnology have become connected with the capitalist economy due to the intervention of capitalism to agricultural science that has been utilised to turn seeds into commodities of the capitalist production. The same mechanism of commodification can be perceived as a governance method of the biotechnology regime as well, as the genetic modification of seeds by biotechnology enables selling of them as a means for profit and as a means for creating monopolies. Navdanya presents how this has enabled the global control over food, how it has been achieved as well as justified by altering that how food is perceived – by turning food into a commodity:

Industrialisation and globalisation of food and agriculture has transformed food from a source of life into a commodity, and as a commodity, food is divorced from its sources - -. Industrialisation of agriculture and commodification of food is justified on grounds of producing more food and reducing hunger. (No therapy in retail.)

The citation represents many of the methods of control that the biotechnology regime utilises. For example, food is no longer perceived as ‘a source of life’ when it is a fundamental right, belonging to everyone, but instead, it is treated as a commodity, a good in the markets, which makes it only available for those who can afford it. Also, by industrialisation, the production of food is removed from the everyday lives of many people that makes the commodification easier. Furthermore, the whole process is justified by the discourse of improvements, which promises that the availability of food in the markets will increase that thus will reduce hunger.

The biotechnology regime also aims at producing a discourse that acknowledges their products “as nature made them” (Fine print of the food wars). Appointing them as nature’s products is essential when introducing the products to the customers in order to try to eliminate the possible suspiciousness of the customers towards the products. In order to avoid

the suspicion, the whole biotechnology regime is needed to support the same truth, which is presented by Navdanya as follows:

When biotechnology corporations claim to have ‘invented’ the seed and courts and governments uphold this fiction, millions of years of evolution and thousands of years of agricultural history gets erased. (Corporate fiction.)

Similarly, how the discourse and practices of the neoliberal governance alter the subjectivity of farmers, the commodification of seeds affects that how nature is perceived as the operator of evolution. By claiming seed as an ‘invention’, the necessary work of nature that is done through the history of evolution is disregarded. However, regardless to the possible suspicion from the customers, in order to turn a seed into a commodity, it needs to be patented and thus, it has to be regarded different from a “product of nature”. To enable the patenting of seeds, the biotechnology regime created a “truth” about the GM seeds as “machines”, which got verified the first time in a court case that is illustrated, as follows, by Navdanya:

- - [T]he American laws treat the transgenic seed as a ‘machine’ invented by corporations. This position of seeds as machines and corporations as inventors was elaborated in the US Supreme Court case of *Bowman vs Monsanto*. (Corporate fiction.)

In this case, *Bowman versus Monsanto*, Bowman had bought a batch of mixed soybeans from a grain elevator and, in this way, tried to avoid the legislation concerning the planting of the patented seeds. However, by following Monsanto’s rules concerning to the GM seeds, Monsanto sued Bowman and won him in the court because of having planted the second generation soybeans instead of purchasing the seeds directly from Monsanto. (The New York Times 5/2013.) Hence, the legislation and the juridical system in the US contributed to the formation of the truth about the GM seeds as machines and thus, it can be argued that they are sustaining and producing the power of the truth of the biotechnology truth regime. The actual practice of how power is connected the formation of the truth can be seen from the process of *how* the legislation and the court rule managed to turn a seed, which is a product of nature, to be considered patentable invention in a similar way with machines. The patenting process requires certain conditions to be fulfilled, such as stabile and a clear definition of the patentable product and verification that the product clearly is an invention. After all, according to the court rule, the requirements for patenting were fulfilled, since, by planting the second generation seeds, Bowman was judged guilty of “- - a ‘replication of a machine’

invented and patented by Monsanto” (Corporate fiction). Thus, after this case, the “status” of a seed was changed, due to the operations of genetic manipulation and patenting that enabled the commodification of seeds. The “goodness” of the new “status” – or the new “truth” – concerning to the seeds, got justified by the legislation and by the institutions that support the biotechnology regime. Besides, there are several other court cases between farmers and Monsanto where the truth of the new status of the seeds is renewed. This “truth” of seeds as commodities also represents the logic neoliberalism according to which practices are verified as “good” or “bad” by their utility and usefulness. By the commodification of seeds, they can be utilised commercially in the markets, which thus makes them useful.

The new truth of seeds as “patentable machines”, however, creates some fundamental issues regarding to seeds as the whole process of commodification alters some of the basic features of seeds. This is explained by Navdanya in the following way:

The commodified seed is ecologically incomplete and ruptured at two levels: First, it does not reproduce itself, while by definition, seed is a regenerative resource. Genetic resources are thus, through technology, transformed from a renewable into a non-renewable resource. Second, it does not produce by itself; it needs the help of purchased inputs. (The great seed robbery.)

Thus, by the court rule, the essential character, and the “truth” of seeds as “natural products” got altered and seeds became referred as “machines”, which can be sold as commodities, but which however cannot be reproduced in natural ways. Thus, in this process the status of the seed altered as well as the status of everyone who is somehow interrelated with the commodified GM seeds. This new status and relationship with seeds produced new types of power relations and new forms of governance which I have been presenting in this thesis. The status of a farmer altered as a result of the commodification of seeds, which will also have an effect to the role of nature perceived as a creator, as well as it will effect to the whole process of evolution. The commodification permitted the companies an access to the every phase of cultivation that enables keeping farmers dependent on corporations from the planting of the seeds to the harvest. This dependency was created for instance by criminalising the attempts to circumvent this relationship of dependence. Since, actually, “[t]he commercialisation of seeds criminalises redistributive anti-scarcity practises, like seed-saving and seed-sharing, thereby eroding non-market access to food in self-provisioning societies” (Nally 2010, 47). Now, after presenting the governance of the truth regime of biotechnology, I am proceeding

to present what kind of alternative – or a ‘new politics of truth’ – Navdanya’s proposal of food sovereignty can offer.

## 5. Creating the new politics of truth as a means of resistance

In this chapter I am illustrating what kind of an alternative Navdanya produces to counter the governance of the biotechnology regime of truth, and how the ‘new politics of truth’ is compatible with the concept of food sovereignty. Hence, in this chapter, I am evaluating how the alternative truth by Navdanya illustrates the functioning of food sovereignty, as well as I am evaluating how food sovereignty as an alternative can resist the governance of the biotechnology regime. Food sovereignty has gained a lot of support around the world, and actually it is operating as a global network, which is why I am also contrasting the activism of Navdanya to the larger context of food sovereignty and other social movements that are resisting neoliberalism.

In the theory chapter I presented some conceptualisations by Foucault concerning to the resistance to the prevailing regime of truth. For Foucault, the resistance to truths is not a struggle of ideologies nor is it important only to present and criticise the practices of power. But the most important thing for resistance is to ensure the possibility for creating something new – to provide an alternative to the prevailing truth. Therefore:

The essential political problem for the intellectual is not to criticize the ideological contents supposedly linked to science or to ensure that his[/her] own scientific practice is accompanied by a correct ideology, but that of ascertaining the possibility of constituting a new politics of truth. (Foucault 2000, 132-133.)

As I presented earlier, the crucial question to ask, when scrutinising the relationship between power and truth, is *how* are the power and truth created and then, *how* are they connected to each other. Since, in a regime of truth, truth is connected with power as well it functions in similar circulating way with power in society, which thus makes it important to examine *how* truths, and power, are produced and sustained in society. In societies therefore exists the opportunity for the constitution of the ‘new politics of truth’, which is possible by:

[C]hanging - - the political, economic, institutional regime of the production of truth - - [by] detaching the power of truth from the forms of hegemony, social,

economic, and cultural, within which it operates at the present time (Foucault 2000, 133).

Hence, I am going to present how the alternative offered by Navdanya – the ‘new politics of truth’ – which can be also viewed in the wider context of food sovereignty, can be utilised as a means to resist the governance of the biotechnology regime of truth. I am scrutinizing this by illustrating what kind of an alternative truth Navdanya produces, and whether they are creating the alternative truth that is not reproducing and sustaining the power of the truths of the biotechnology regime. Moreover, I am showing how the constitution of alternative truths is done by changing ‘the political, economic and institutional regime of the production of truth’. Hence, I am especially interested in whether or not the same power that is utilised in creating the truths of the biotechnology regime is as well utilised in creating the alternative truths that Navdanya represents.

As economics is in the central position in the verification of the truths and “truthful” practices in the biotechnology regime, thus, in order to resist the truths it produces, it is essential to question the position of economics in society. According to Oksala, “[w]e must question the political neutrality of economic knowledge and analyze the way in which economic truths produce political effects” (Oksala 2013, 71). Hence, as I have illustrated in the earlier chapter, the truths of the biotechnology regime that are verified as “good” by economics and markets, provably have political effects too, even if they are not considered while making the decisions basing only on the neutrality of economic knowledge. Moreover, Oksala reminds about the importance of questioning the necessity for maximising the material well-being of population, since it is not the only means to ensure and measure welfare. Also, Oksala notifies how subjects are in a crucial position in the resistance towards neoliberal governance, as the neoliberal practices of governance function through the process of creating certain types of subjects. (Oksala 2013, 71.) This latest notion correlates with Foucault’s notion about the position of subjects in the production of truths, as everyone in society is subject to truth and is forced to reproduce the truths of society, and, moreover, this correlates with the notion of how the truths must be produced to produce wealth (Foucault 1980, 93). Next I am presenting what kind of a discourse of the new politics of truth – of food sovereignty – Navdanya produces both to express the need for a change and to propose the ways how to actualise the change.

## 5.1. The discourse of change

Navdanya's discourse of truth, that is produced to counter the discourse of the biotechnology regime and to present the need for a change, is similar with the discourse of food sovereignty. To actualise all these improvements presented in the discourses of truth, Navdanya implements procedures that express food sovereignty and are thus typical to other food sovereignty movements, too. A citation by Navdanya illustrates why it can be defined as a food sovereignty movement: "Food security is food sovereignty; it includes the production and supply of healthy, nutritious, safe, and culturally appropriate food at affordable prices" (Food politics). By the definition Navdanya illustrates how food sovereignty is the only way to achieve food security, which is a typical discourse for other food sovereignty movements. As well, the citation includes the notions of the importance of understanding the varying cultural contexts in relation to food. In this context for Navdanya, food security is a situation, where the supply of food is ensured by the functioning of food sovereignty and, the notion to food security is not referring to the neoliberal discourse of it. Hence, for Navdanya, to actually achieve a situation that is secure in terms of sufficient supply of food, can only be done by the means of food sovereignty.

In the material, Navdanya presents a distinct critique towards the biotechnology regime of truth, which is however answered with the conceptualisation of the need for an alternative to counter the prevalent truth considering to the global food production. Most of the critique is pointed towards the development occurring under the current regime of truth, as well as towards the effectiveness of the regime's attempts to fix the environmental and food production related problems. The problems of the biotechnology regime are presented in a citation where Navdanya questions its attempts for achieving change by the creation of concepts such as "green development" and "green economy", which are contrasted with the alternative model offered by Navdanya:

Now, what is this 'green economy' and what is the 'institutional framework for sustainable development?' If the answers are offered within the old paradigm of market-driven solutions, which have failed to protect the Earth, 'green economy' will mean more of the same - -. If the 'institutional framework for sustainable development' creates a 'World Environment Organisation' along the line of the World Trade Organisation, based on the commodification of, and trade in nature's

gifts, and trade wars as part of global environmental management, we will further impoverish the Earth and local communities. (How green is our economy?)

The citation by Navdanya perfectly illustrates the *need* for the ‘new politics of truth’ if something is wanted to be changed concerning to the current global food production. According to Navdanya, the present systems and institutions that have created the “problems” cannot be the ones fixing them, since the changes would be made under the same mindset and paradigm, which will result in the creation of concepts such as ‘green economy’. Here, what is questioned is the idea whether the words ‘green’ and ‘economy’ can exist in the same phrase that is aimed at fixing the problems caused by a truth regime that is guided by the “economic truth”. As well, there is the question whether the word ‘green’ is just there to “greenwash” the economics, which illustrates the utilisation of the neoliberal discourse that is utilised in order to disguise the actual procedures related to economics and to the governance in the biotechnology regime. Therefore, it is evident how “[f]ood sovereignty counterpoints corporate relations of production and consumption of food, and its enabling neoliberal infrastructure and discourse of ‘food security’” (McMichael 2007, 35). That is why, according to Navdanya, there is a need for an alternative that does not recognise economics as the main driver of action. However, according to Navdanya, this is already happening as the social movements globally have begun to counter the neoliberal development:

Movements worldwide have started to say no to the “green economy” of the “one per cent”, because an ecological adjustment is possible and it is taking place. This adjustment involves seeing ourselves as part of the fragile ecological web, not outside and above it, and immune from the consequences of our actions. (Green greed.)

By the discourse, Navdanya emphasises the importance of recognising everyone as part of nature and thus, underlines the need for a different kind of ecological adjustment that is not connected with economics. Thus, according to Navdanya, there is a need to set the Earth as the centre of everything and to recognise the Earth as a basis to everything, since: “[w]e mismanage the Earth when we do not recognise nature’s capital as the real capital and everything else as derived. If we have no land, we have no economy” (How green is our economy?). In the discourse, Navdanya emphasises the importance of taking care of the Earth, since even in order to have economy, it is necessary to protect the Earth. As well in the discourse, the intrinsic value of nature is emphasised, which can be seen countering the

discourse and practices of neoliberalism, and the biotechnology regime, that only evaluates things basing on their usefulness and their use as a utility. Another fundamental issue that, according to Navdanya, has failed in the prevailing paradigm is deriving from the mindset that relies on technology as a fix to everything. The problems with this belief are occurring as it has ignored the mutuality of the processes on the Earth:

No technology can claim to feed the world while it destroys the life in the soil by failing to feed it on the basis of the Law of Return [Law of giving back to the soil]. This is why we claim that the Green Revolution or genetic engineering feeds the world is false. (We are the soil.)

According to Navdanya, the biotechnology regime fails to take into consideration the basic functioning of the Earth that is the essential connection between the vitality of the soil that enables food production and thus life, which is also why the biotechnology regime cannot be trusted as a sustainable provider of food. This is caused by the technology based mindset that represents the ideology that began with the industrial revolution, according to which technology equals development and technological development became the centre of it. Thus, according to Navdanya, technology too, needs to be sustainable and with the technological development also the interconnectedness of everything and balance needs to be acknowledged. This is why Navdanya argues that the Green revolution or genetic engineering is false, as they are made possible by the separation between technology and soil that breaks the balance and does not fulfil the Law of Return.

In order to stress the importance of creating balanced technical development, Navdanya creates a discourse that puts the Earth to the centre by emphasising the unity of everything and the necessity for humans to realise it. The discourse of truth for unity is produced to counter and challenge the reductionist and monoculture mindset of the biotechnology regime, which enables the modification of nature by considering its different phenomena existing as discrete from each other. Thus, with the new discourse, Navdanya aims at distributing the connectedness of all life on the Earth as a fundamental truth, and to be regarded as the basis of life, since:

We are made up of the same five elements – earth, water, fire, air and space – that constitute the Universe. We are the soil. We are the earth. What we do to the soil, we do to ourselves. - - This ecological truth is forgotten in the dominant paradigm because it is based on eco-apartheid, the false idea that we are separate and



independent of the earth and also because it defines soil as dead matter. (We are the soil.)

One of the methods of governance of the biotechnology regime is based on the scrutinising things as separate from each without seeing the interconnections, which enables for example the genetic modification of seeds. Hence, the production of the discourse of truth that acknowledges the connections and the complexity of nature, provides an alternative and opposite truth to the truth of the biotechnology regime, which has enabled the governance of nature. Therefore Navdanya manages to create the competing discourse of truth that acknowledges evolution and ‘the intelligence of earth’, as well as the contribution of the farmers and the role of women behind the evolution of seeds, which it utilises to counter the discourse of the biotechnology regime that aims at making nature to be perceived as stable and controllable. Furthermore, Navdanya backs up the formation of the alternative truth with the historical evidence to illustrate the reality of farming and seed breeding:

For thousands of years farmers, especially women, have evolved and bred seed freely with the help of nature to increase the diversity of what nature gave us and adopt it to the needs of different cultures. Biodiversity and cultural diversity have mutually shaped one another. (Seeds of freedom.)

In Navdanya’s discourse, the argumentation ends up to emphasising the importance of acknowledging the relationship between farmer and nature, and the influence of different cultural contexts to it and thus different practices and methods concerning to cultivation. Nature offered the diversity of seeds to farmers, everywhere around the world in different cultures, to be freely utilised and benefited from, as seeds are recognised as the foundation of life. With the discourse, Navdanya also emphasises how nature has been the one taking care of people in different cultures by offering livelihood and seeds. Thus, the discourse of truth by Navdanya, similarly to the discourse of food sovereignty, acknowledges the cultural differences regarding to food production and therefore emphasises the importance of self-governance of the people to decide about the food they eat. Likewise, the discourse accentuates how the governance of the biotechnology regime that it exercises over life, concerns everyone on the globe. This is why Navdanya has launched a seed saving campaign at the global level, too:

Saving seeds and defending our seed freedom has become a survival issue.  
Control over the seed is a control over food and control over life. - - This is the

reason I am starting a Global citizen's campaign on Seed Sovereignty. (Create food democracy.)

The campaign represents the network-type of functioning of food sovereignty movements as well as the importance to counter the globally occurring governance at the global level, too. This as well represents the current development of feminisation of resistance and the growing influence of the activists from the Global South in global resistance (See for example, Seppälä 2014). In India too, according to Navdanya, the main actors who have contributed the most in the struggle against the governance of the seeds, and thus the biotechnology regime, are the NGOs. Hence, Navdanya raises the NGOs in India as the main actors of the resistance:

NGOs saving Indian seed and food sovereignty: [- -] All that stands between corporate takeover of our seeds and agriculture is the committed and exemplary work by the not-for-profit sector that helped create an informed debate on GMOs and has postponed, even stopped government action from introducing them for over 15 years. (Navdanya, 2014 Foreign hand in the IB report.)

In the citation, Navdanya emphasises the importance of the NGOs as providers of the alternative knowledge that is essential in order to counter the knowledge of the biotechnology regime. According to Navdanya, the struggle against the GMOs in India would have been lost 15 years ago without the activity of the NGOs. In the citation is illustrated how the NGOs, and Navdanya, are resisting both the biotechnology regime, as well as the state of India, which is a complicated issue that I will discuss later in this chapter. However, what is evident in the citation is the essential role of the NGOs as producers and distributors of the alternative knowledge, since, according to Navdanya, without the work done by the NGOs there would not even be the discussion and debate around the GMOs.

### *Food sovereignty by Navdanya*

Then, what actually is the 'new politics of truth' of food sovereignty, which is the new paradigm that the food sovereignty movements, including Navdanya, are after. Therefore, in order to provide an answer to this, and to the earlier discourse that stressed the need for an alternative, Navdanya answers as follows:

If on the other hand the answers are offered in the context of the emerging paradigm of the rights of Mother Earth, then the green economy is Gaia's economy, and the institutional framework is "Earth Democracy" – democracy from the bottom up and a democracy rooted in the Earth. (How green is our economy?)

If the task for the individual resisting the dominant truth was to detach the effects of power from the truth and change the framework that supports and renews the prevailing truth, then 'the new politics of truth' by Navdanya manages to do it. The emerging new paradigm shifts the Earth into the centre of the new politics instead of the economics, which can be done by adopting the green economy of Gaia (Gaia is the Greek goddess of the Earth) and the institutional framework of 'Earth democracy'. Moreover, in order for economy

[t]o be green, economics needs to return to oikos. Both economy and ecology are derived from the Greek oikos, which means 'home'. - - When economics works against the science of ecology, it results in the mismanagement of the Earth – our home. (How green is our economy?)

With the discourse, Navdanya emphasises the historical connection and the same origin of both economics and ecology, which it uses to explain the problems on the Earth due to their functioning against each other. Hence, the solution from Navdanya is that if economics and ecology do not contradict each other and instead function as unified for the same purpose, then the Earth will not be mismanaged as economics does not function against people and nature. This shift would also question the "neutrality of economics" as in the new paradigm economy is directly connected with ecology, which thus emphasises the importance of taking into consideration the Earth and other political, social or environmental questions. Likewise the 'Earth Democracy' emphasises the importance of diversity as the basis of the life on Earth, which, as well, counters the discourse of the biotechnology regime:

Centralised, monoculture-based, fossil fuel intensive systems including GMO agriculture, are not flexible. They cannot adapt and evolve. We need flexibility, resilience and adaptation to change reality. This resilience comes from diversity. This diversity of knowledge, economics and politics is what I call Earth Democracy. (Safety in diversity.)

The biotechnology regime relies on the centralisation and governance of knowledge with the help of the monoculture mindset, which does not recognise the need for diversity or alternatives. Whereas, the Earth democracy utilises the diversity offered by the Earth, which is also the solution of how food sovereignty movements plan to carry out the food production for the world. What is notable, is that one of the most central concepts of the new paradigm of the Earth democracy is the notion of sovereignty, that is composed of notions of “[s]eed, food, water, forest and knowledge sovereignty [that] are living systems to stopping hemorrhage of resources by exploitation of monopolies by corporations“ (Earth democracy). Hence, for Navdanya, once the seed, food, water, forest and knowledge sovereignty are fulfilled, they can all together create the greater paradigm of change and prevent the further abuse of the Earth. Likewise, all these different types of sovereignties are acknowledged as the central concepts of food sovereignty movements in general. Consequently, the concept of Earth democracy, with the different notions of sovereignty can be regarded as instruments of the food sovereignty movements to counter the governance of the biotechnology regime. According to Navdanya, knowledge sovereignty and freedom are, however, the most essential and central concepts for the actualisation of food sovereignty, since “[w]ithout knowledge sovereignty there is no food sovereignty. Without knowledge freedom there is no freedom and democracy.” (GMO: The biggest food con.) And moreover, according to Navdanya, food democracy is fulfilled if a person knows what he/she is eating, since: “Denying citizens the right to know violates the fundamental principles of food democracy” (Create food democracy).

As knowledge sovereignty is one of the most important prerequisites for food sovereignty, Navdanya produces an alternative discourse of truth to appreciate the indigenous knowledge that recognises the history and the long process related to cultivation, which, on the other hand, the biotechnology regime tends to disregard. By the food sovereignty discourse, the role and the work of farmers are given recognition beside nature’s work and evolution regarding to seeds as the key to everything:

Every seed is an embodiment of millennia of nature’s evolution and centuries of farmer’s breeding. It is the distilled expression of the intelligence of the earth and intelligence of farming communities. Farmers have bred seeds for diversity, resilience, taste, nutrition, health and to adapt it for local agro-ecosystems. (Seeds of freedom.)

The discourse emphasises the importance of the farmers as the ones operating the seed breeding, which is contrary to the truth by the biotechnology regime that tends to make itself appear as the one responsible of this development. Navdanya as well stresses the importance of relying to the expertise of the farmers and ‘the intelligence of the Earth’ regarding to the processes of nature. Likewise, as patenting and commodifying of seeds are methods of governance of the biotechnology regime, Navdanya produces a discourse of truth to question the right to own the commons, such as the seeds. Therefore Navdanya produces the discourse of truth that stresses the importance of recognising biodiversity as commons:

Biodiversity is the basis of life; it is our living commons. We are part of nature, not her masters and owners. We need to recognise the sovereignty of diverse knowledge systems, including traditional knowledge. And we need to reclaim our biological and intellectual commons - -. (Seeds of injustice.)

According to Navdanya, biodiversity is something that belongs to everyone and it cannot be controlled by anyone. The basic idea of this counters the logic of neoliberalism and the truth of the biotechnology regime that aims at valuing everything and creating ownerships. By the discourse of truth Navdanya appoints biodiversity, and thus seeds and nature, as commons that belong to everyone and, therefore, cannot be bought or own by anyone. Hence, the new model of cultivation that manages to take into account all the previously presented conditions, is the new farming method of agroecology:

Through ecology and new biology we know that life is self-organised complexity – life makes itself; it cannot be ‘manufactured’. This also applies to food production through the new science of agroecology. (Fine print of the food wars.)

Agroecology is an all-encompassing way to organise agriculture in society as it takes into account the influence and the different operation of society, economics, culture and ecology. As well it utilises traditional knowledge and the expertise of locals regarding to the varying circumstances relating to cultivation. (Agroecology homepage: <http://www.agroecology.org/>.) Agroecology is a model of farming that follows the same guidelines with food sovereignty, regarding to the arrangement of agriculture in society, and, thus represents the truth of food sovereignty.

However, the best way to illustrate the character of resistance, and the entire problematic relating to the debate about the truth of the GMOs, is to present a sentence that captures the

role of nature in the resistance against genetic engineering: “The reality is that living systems are self-organised, interactive, and dynamic. The genome is fluid.” (Women ecowarriors.) This citation illustrates the potential of nature’s own resistance which should not be forgotten in this case. The resistance of nature derives from its complexity, which can be perceived as a means to counter the artificial stagnation done by genetic modification. Since, after all, the most fundamental character of nature is the constant change and evolvment, which is designed to take care of the “flaws and errors” of nature. In fact, there is already some evidence of how biotechnology has failed in controlling and stabilising nature, as the GE crops and pests have grown resistance to the mechanisms that were developed to control them. And, moreover, if the genome is fluid, and the fundamental character of nature is fluid, then, the interesting question here is that how is it possible to control something that is fluid. Certainly, there are ways to alter the state of fluid and stop it momentarily, but ultimately, fluid will return back to its uncontrollable nature.

### *The role of women in food sovereignty*

Navdanya emphasises the important role of women in the actualisation of the ‘new politics of truth’ and as the ones to carry out the actual changes in agriculture. According to Navdanya, the problematic that derives from the practices of the biotechnology regime is caused by the modern, male dominated “masculine science” and “patriarchal economy which defines the economy only as the economy of marketplace” (Women ecowarriors). Therefore, as the ‘masculine science’ and the ‘patriarchal economy’ have only resulted in creating problems regarding to the food production, then, the solution to this is to recognise the role women and their knowledge concerning to agriculture, since:

- - it is women who rise up to the crisis, and to defend the Earth and lives. Women are leading the paradigm shift to align the economy with ecology. After all, both are rooted in the word ‘oikos’ – our home. - - [I]t is women who bring the alternatives through biodiversity and agroecology that offer real solutions to the food and nutrition crisis. - - [I]t is the subjugated knowledge and invisible work of women based on co-creation and co-production with nature that will show the way to human survival and well being in the future. (Women ecowarriors.)

Navdanya implies that as the male dominated paradigm of development has resulted in the current situation, then the women lead change can bring the real paradigm shift as the approach is something new that has not been experimented before. The recognition of subjugated knowledge of women is crucial here, which is why ‘it is women who rise up to the crisis’ instead of men. The recognition of the new role of women and the subjugated knowledge questions the validity of ‘patriarchal economy and science’, and supports in carrying out the practices of change ‘to align economy with ecology’. Therefore, Navdanya perceives the utilisation of the subjugated knowledge of women as a means to provide and actualise change as an alternative and as a challenger to the knowledge and the paradigm that prevails in the biotechnology regime.

Related to this, Medina (2011, 13) makes a notion about the utilisation of knowledge in general, and, especially, the utilisation of the subjugated knowledges as a means of resistance to the monopolisation of knowledge. According to Medina, knowledge can be utilised against knowledge by pointing it against itself, or by using different knowledges against each other. Because of this, the subjugated knowledges are in a central position in the struggle against monopolisation of knowledge. (Medina 2011, 13.) In this case, the knowledge of women can be considered as subjugated knowledge regarding to the global food production. The utilisation of the subjugated knowledge challenges the dominant paradigm and makes room for the alternative knowledge – the alternative truth of food sovereignty – to emerge. However, Medina also reminds about the possibility of renewing the knowledge monopoly by producing new knowledge that creates new forms of dominance, which yet can be avoided by ensuring the possibility for presenting alternative knowledge that comes from below (Medina 2011, 20–21). These notions about the alternative knowledge production represent the means which Navdanya utilises in creating the ‘new politics of truth’ that also can be considered as a means of resistance.

However, food sovereignty has been criticised due to the type traditionalism it represents and the traditional roles and agency that comes with how it sees the organisation of food production. The notion that the women are the ones ‘to align economy with ecology’ implies that they are the only ones capable of doing so and which is why it is women to carry out the paradigm shift. This also implies that women are somehow intrinsically closer to nature, and thus understand it better, whereas men go together with technology and “modern development”. Similarly, food sovereignty movements have been criticised on how some of the discourses and activities rely on traditions too much and enable the restriction of the

agency of women to their homes, kitchens and fields. This type of a central role of women as providers of food is not really an empowering one, at least when considering the issues against which feminist have traditionally been fighting for.

Nevertheless, food sovereignty can argued of having a completely opposite influence to the agency and the roles of women. As Conway (2015, 15) presents, women actually are also willing to stay in the kitchen and they enjoy the preparation of food, since by doing that they can utilise the knowledge they have and get recognition for it. Moreover, as in many countries the rapid spreading of the junk food industry have caused problems, the preparation of traditional food by women have become considered as a means to counter the consequences of industrially produced food, which is often provided as an easy solution for everyday life. But, according to Conway, what actually is that most of the women want is the recognition for the often “invisible” work done at home, as providers of care, or, as farmers in the fields. In fact, by bringing this invisible work of women to the centre of food sovereignty and making it public, it is possible to alter and influence the position and the subjectivities of women in societies. (Conway 2015, 15.) Moreover, this discussion about the roles of women represents the ideology of food sovereignty that emphasises self-determination and the possibility to define the food production methods by oneself, as well as it lets the women to determine their roles by themselves.

## 5.2. The actual practices for creating the alternative

The role of knowledge and science are central in this case, as the biotechnology regime wants to control the knowledge of the seeds and utilise it in genetic modification. Hence, as one of the governance methods of the biotechnology regime is the governance of farmers by altering their position from being the “experts” in farming into subjects who just have to accept all the changes as improvements, similarly, the position of nature, seeds and evolution has been altered due to the governance that is produced by the control of the knowledge and the science enabled with it. Thus, in order to counter the governance of the biotechnology regime, Navdanya established the ‘Earth University’ to be a place for the production of alternative knowledge that recognises the importance of indigenous knowledge and regards the central role of a farmer in cultivation. Likewise, at the Earth University, the production of alternative research and science is done for the Earth that represents a different kind of aspiration for



making of science compared to the one of the biotechnology regime. For example, at the Earth University, Navdanya organised a course of Earth democracy, which is aimed at “[d]efending the Rights of Mother Earth and the Human Beings” (Earth democracy). Hence, in the ‘new politics of truth’, the Earth and the human beings are being put in the centre, which is the contrary to the truth of the biotechnology regime.

However, as after Foucault, “[t]he essential political problem for the intellectual is not to criticize the ideological contents supposedly linked to science or to ensure that his[/her] own scientific practice is accompanied by a correct ideology but that of ascertaining the possibility of constituting a new politics of truth“ (Foucault 2000, 132–133). Nevertheless, in this case I perceive the new scientific practice as essential for ensuring the opportunity for a new politics of truth to emerge. And what is making it really ‘new politics of truth’ is that the practices are evaluated by putting the Earth to the centre, contrary to the methods of the biotechnology regime where the practices are evaluated by markets. Hence, I am arguing that Navdanya manages in “detaching the power of truth from the forms of hegemony, social, economic, and cultural, within which it operates at the present time” (Foucault 2000, 133) as it is, for example, not operating the University for the monetary profit, but instead for the survival of the Earth and against, not for, the governance of the commons, such as seeds and nature.

In order to counter the governance that is based on the monoculture mindset and monocultural farming, Navdanya has carried out research and actual farming methods that relies on diversity and cultivation of various different crops. The alternative scientific practices that separate the power of the truth from the governance methods of the biotechnology regime, are presented by Navdanya followingly:

“Yield per Acre” measures a part one crop grown in a monoculture. This ignores the lost nutrition in the displaced biodiversity. - - Navdanya’s “Health per Acre” shows that a shift to biodiverse organic farming and ecological intensification increases output of nutrition while reducing input costs. When agriculture is measured in terms of “Health per Acre” and “Nutrition per Acre” instead of “Yield per Acre”, biodiverse ecological systems have a much higher output. (Seminar on Health per Acre.)

The crucial shift that the model of Navdanya offers is focused on quality instead of quantity. The monoculture model is focused on producing large quantities to the detriment of the diversity of cultivated plants. Whereas the model offered by Navdanya is focused on

biodiverse cultivation with small quantities that, however, due to the diversity can fulfil the nutrition requirements. With the notions and practices of diversity, Navdanya detaches the power from the truth of the biotechnology regime that is connected to monocultures based farming that produces masses of the same, commodified products. Moreover, the new cultivation practices by Navdanya do not rely on the power of the same institutions or legislation that enabled the genetic modification and commodification of seeds, as well as the monoculture farming of them.

In her article, Selmeczi gives a similar example about an establishment of a university as a place for the production of alternative knowledge as a means of resistance. She presents how the slum dwellers in South Africa established the University of Abahali as a place to produce knowledge about the daily life and the struggle in the slum, so that the acts of governance towards them cannot be argued with having a “better” knowledge about the life in the slums. By the establishment of the university, the slum gets regarded as a place for knowledge production and the slum dwellers as the ones with the knowledge about their own lives, which in turn can be utilised in dismantling the power relations that are based on the possession of knowledge and on making separations between the recognised places for learning. Thus, the establishment of the university enables the slum dwellers to resist the governance that is justified under the ideology of developmentalism that has created the duty for “educating the poor”. The establishment of the university is a call for the recognition of the knowledge of the slum dwellers since they are the ones who have the best knowledge regarding to their situation. Moreover, in many cases, the “education” is aimed at educating the poor how to survive and adapt in the present situation, instead of actually improving the lives of the poor, or in other words, to teach them resilience. (Selmeczi 2014, 242, 251-254.)

In addition to the Earth University, there are other practical solutions offered by Navdanya, to enable the actualisation of the ‘new politics of truth’. One of these solutions are the ‘Gardens of Hope’, which Navdanya presents as an answer to the biotechnology regime’s claims about the benefits and hunger alleviation capabilities in the case of monoculture farming of “Golden Rice” that is enriched with Vitamin A by gene technology to fight the Vitamin A deficiency. Therefore, instead of relying to a technological fix of the biotechnology regime, the solution by Navdanya relies on nature’s capabilities as it supports the establishment of “‘Gardens of Hope’ everywhere, in villages and cities, in backyards and rooftops, in schools and communities are the answer to Vit. A and other nutrient deficiencies” (Golden rice).

Thus, instead of answering to the malnutrition problems with the means of the biotechnology regime, which would be the creating of another genetically modified plant that is enriched with the vitamin that people are lacking, Navdanya offers a solution, the creation of ‘Gardens of Hope’, of which effect is based on the ability of the diversity of nature to cover the lacking of vitamins. Gardens of Hope will make the diverse food available to everyone as well as it will transform cultivating into a practise that is available to everyone. Thus, Gardens of Hope will both support small scale farming and reduce the dependence of the monoculture farming model of the biotechnology regime. As well, they will not create same type of relations of dependence as the GM monoculture faming creates. Hence, the alternative truth concerning to the model of farming will detach the power of truth of the monoculture-based farming by offering an alternative that supports small scale farming that is available to everyone. Also, against the subjectivation practices of neoliberalism and the biotechnology regime, the Gardens of Hope encourage people to work together for food and, by establishing the gardens everywhere in the cities, the cultivation will became closer to people instead of being separated from the everyday life of most of the people. Similarly, the idea of urban agriculture has recently became recognised as a means to prepare, especially, for urban food crisis as well as a means to answer the challenges of the growing demand for food due to the growing migration to cities from countryside (See for example Drescher, Axel W., Petra Jacobi & Joerg Amend/ RUAF Foundation 2014). Nevertheless, there are some issues with this type of farming too. For instance, how can it be ensured that, with this cultivation method, enough food is produced, for instance, if people are not willing to cooperate for the shared gardens and, likewise, how can it be ensured that these gardens are being established in sufficient amounts.

Another actual practice that Navdanya carries out, and which represents the practices of food sovereignty, as well as it can be seen as a means to resist the governance of the biotechnology regime, is the establishment of seed banks: “We have created 66 community seed banks, saved 3000 rice varieties, stopped laws that would prevent us from seed saving, fought against Biopiracy” (Create food democracy). Hence, with their activism of seed saving and the establishment of seed banks, Navdanya has actually countered the monopoly and the artificial scarcity of seeds that the biotechnology regime utilises as a means of governance. Navdanya offers an alternative against the monopoly of seeds, as well as it counters the scarcity of seeds and nature by providing methods that are different from the ones of the biotechnology regime. Navdanya provides native Indian seeds that are not genetically modified and hence can be

grown without the use of chemicals. Also, the organic seeds are reproductive and thus do not create any longer term relationship of dominance between the seller and the purchaser in the form of a royalty payment. Hence, it can be argued that the power of the truth of the GM seeds as non-renewable or requiring for chemicals and constant monetary inputs, is detached from its power in the ‘new politics of truth’ offered by Navdanya.

In the material, there is a good example of a truth game and how Navdanya plays it and distributes the new ideas through it, even at the global level. The opportunity for the truth game for Navdanya occurs when the

US President Barack Obama will be the chief guest of our Republic Day celebrations. It is time to start a planetary dialogue and a civilisational exchange based on us all being part of the Earth family; and based on our inalienable right to Swaraj, including “bija swaraj (seed democracy) (Corporate fiction.)

The comment, ‘is time to start a planetary dialogue and a civilisational exchange’ can be seen as the beginning of the “truth game” that includes all the parties as part of it. The game takes place under the “rules” of the dominant regime of truth, where Navdanya takes part by playing it with ‘other trump cards’, which are the concepts of food sovereignty. The objective of Navdanya is to begin an interaction that is based on the idea of the Earth family, which implies to the aim of globally spreading and implementing the ‘new politics of truth’. This game of truth aims at global level change as it involves one of the most influential person, and a country, of the world, which both can be indirectly perceived of representing the biotechnology regime as well. Thus, Navdanya begins the game by stepping into the “opponent’s” game of truth, but instead of playing the same game, it plays the same game but differently, with different concepts, such as ‘the Earth family’ and ‘bija swaraj’ by which it aims to modify the character of the game from inside. Thus, with the ‘other trump cards’ in the game, Navdanya modifies the roles that subjects, knowledge, power, and truth play in the game, redefines them, and thus can achieve the emergence of the ‘new game of truth’, or the ‘new politics of truth’. Relating to the function of the truth games and to that how they can be played everywhere, McMichael (2000, 22) makes a notion how the same level actors influencing in the global food politics, can between each other and within, have completely different ideas about the operation of global agribusiness. Therefore, he reminds that resistance can occur inside the corporate food regime itself, for example in the legislative processes and in the planning of international agreements. So it is not only the counter-

movements that are resisting the development of the current global food regime. (McMichael 2000, 22.) This represents how the truth games can be played everywhere, where subjects interact with power, truth and knowledge, and vice versa.

### *Parrēsia as a means to articulate resistance*

There are characteristics in Navdanya's resistance that represent the truth telling practise of *parrēsia*, which can be utilised to describe how the truth is presented and how, due to the character of *parrēsia*, the utterance of the alternative is justified. Therefore, I am presenting next how Navdanya's truth telling can be considered as *parrēsia* and thus how the truth telling practise of Navdanya differs from the biotechnology regime. The *parrēsia* is carried out by Navdanya, as well as it can be seen encouraging for the creation of a global movement of *parrēsia*, as well. But where the *parrēsia* is really culminating, is the parresias agency of Vandana Shiva and the full commitment with her whole life to the truth. This is illustrated in a citation by Shiva where she explains why and how she is committed to the truth (of food sovereignty):

- - I consciously gave up a 'career' in 1982 for a life of service. The spirit of service inspired by the truth, conscience and compassion cannot be stopped by threats or media attacks. (Seeds of truth.)

Thus, the activity of truth-telling of food sovereignty can be seen guiding Shiva's life, which also illustrates the agency of a parresias. In the citation is also illustrated the danger that the commitment to *parrēsia* will create, as Shiva explains how she has been threatened and attacked by media due to the truth that she tells. Hence, it can be argued that the truth that Shiva and Navdanya have told, has been a speech act of *parrēsia*, as it has caused an open-ended situation, to which the opposite side reacted in an undefined and surprising manner, which, in turn, created danger to Navdanya and to Vandana Shiva. Therefore, it can be argued that Navdanya succeeded in *parrēsia*, which can be considered as a means of resistance, too, since they managed, with *parrēsia*, to present the type of sincere and frank truth, which made the biotechnology regime to react. Moreover, Shiva's refusal of "career" represents the characteristics of a parresias too. She explains her decision as follows: "I consciously made a decision to dedicate my life to protect the Earth, its ecosystems and communities" (Seeds of truth). This illustrates how the truth telling begins to influence the life as a whole, and thus the

life itself begins to represent the truth. Moreover, the power of the sincere and frank truth and the full dedication to it can provide a great strength to the one committing *parrēsia*:

Attempts to ridicule or silence her [Shiva] will not have the intended effect. Instead, they will only increase her visibility and thus her ability to speak forcefully on behalf of those struggling to survive the capitalistic monopolies of Monsanto et al. (Setting the record straight on GMOs.)

The citation illustrates how *parrēsia* can be utilised to criticise power and how the parresiasitic critique comes from below. Also the former, as well as the next citation, illustrate how it is the duty of a parresiasitic to limit the power of the master and tell the truth that the other denies seeing. This is well-illustrated in a citation by Navdanya where it sets itself into a position comparable to the struggle for truth of Galileo that he went through against the prevailing truth of the world of his times. This comparison illustrates the parresiasitic nature of Navdanya's resistance as follows:

With genetically modified organisms, we could be having another Galileo moment. American biotechnology corporation Monsanto and its lobbyists are today's Church. And independent scientist speaking the truth about GMOs and their impact on society, health and environment are today's Galileos. (The Galileo syndrome?)

In the citation is presented how the 'independent scientist' is the one speaking the truth about GMOs and is alone countering the powerful actors of the biotechnology regime for behalf of everyone else. By referring to Galileo, Navdanya illustrates the typical setting for *parrēsia* how the power comes from below and how the parresiasitic is always in a weaker position. Also the citation illustrates the tendency of the situation of the truth-telling against the biotechnology regime to create an unexpected situation, and even danger of death, similarly as it created to Galileo. Thus, the citation illustrates how both Galileo and Navdanya feel similarly guided by the truth and feel the duty to commit *parrēsia* and leave nothing without said regardless the consequences. This is also an example of the existence of *parrēsia* in different regimes of truth, in different times, where the evolvment of truths is influenced by different powers and institutions. Moreover, the citation demonstrates the power of *parrēsia* as a means of resistance in articulating the truth, since, as we all know, the truth of Galileo's finally succeeded over the truth of the church. And, similarly, as Galileo's truth about the world finally became recognised worldwide, there are similar attempts to create a global

*parrēsia* of speaking the truth against the biotechnology regime. This represents the agency of the food sovereignty movements as a global network and the attempts to create GMO free zones, which is already taking place. Also Navdanya takes part to the creation of the global *parrēsia* by organising a conference in India:

GMO free zones and regions have emerged as the democratic response to defend seed and food freedom worldwide. [Local and regional] Governments and Citizens who have pioneered the GMO free movement in creative and innovative ways will share their experience at the conference. (Navdanya announces international GMO conference in New Delhi).

The global *parrēsia* in the form of the GMO free movement can be perceived as the truth teller of the GMOs, and the GMO free zones as embodiments of the act of *parrēsia*. The people come to the conference under their free will to tell about their actions against the GMOs, so they participate to the conference as free citizens who are willing to tell the whole truth. The conference is public that makes the act of truth telling public as well, which, in turn, can create danger to the ones telling the truth, which thus labels the truth-telling and the whole conference as *parrēsia*. However, there are also regional governments who are participating to the conference, and therefore to the *parrēsia* as well that can be considered as resistance, which is a setting that represents the most contradictory relationship too in this case. However, often the participating governmental actors are small, local governments, who act at the local, grass-roots level instead of operating directly with the state. Anyhow, they commit *parrēsia* by participating to the conference, which creates the same possibility of danger and threats despite of the speaker's political or social status. Hence, it can be argued that the commitment to *parrēsia* enables resistance even to some governmental actors, who act within the system, since it is the type of the truth-telling act that defines something *parrēsia*.

Likewise, Taylor utilises the notion of *parrēsia* as a means to describe the resistance of a Canadian women activist group, 'the Garneau Sisterhood', in their campaign against sexual violence. In the sisterhood's resistance, Taylor describes the utilisation of *parrēsia* not directly as *parrēsia*, but as a 'disobedient articulation of truth'. However, similarly to Navdanya, the sisterhood's objective was to tell publicly the whole truth about sexual violence without allowing nothing to be hold back or left without saying. The sisterhood does not seek any institutional power to legitimise its truth telling and it operates as a grass-root

organisation, when the truth that it represents is bounded to the organisation itself. Also the sisterhood have faced attempts of silencing it that has been done by defining the whole group as a threat. Moreover, with their resistance campaign, the sisterhood also constructed new types of subjectivities of women and established new spaces and opportunities for action. (Taylor 2013, 100–101.) This can be seen relating with how Navdanya articulates the resistance in order to present the possibility for the emergence of the new truths of food sovereignty since, according to it, the old ways for dealing with food production are not functioning. Thus Navdanya's acts of *parrēsia* can be considered as a means to construct and make room to the new truths of food sovereignty.

Then, as I have presented how Navdanya's resistance can be described as an act of *parrēsia* and how the characteristics of parresias illustrate the commitment of Vandana Shiva with her whole life to the truth, the interesting question arises whether the biotechnology regime can be described with the same terms. An argument, where Navdanya defends its views against a New Yorker article about Vandana Shiva elucidates the problematic concerning to this question:

Our goal in putting together this response is to highlight the manner in which GMO companies and their supporters demean their critics by ignoring facts, setting up “straw man” arguments and engaging in perfidious attacks. They pretend to have the weight of truth and science on their side but, as we have shown, they ignore many important facts and questions. (Setting the record straight on GMOs.)

As Navdanya presents, the biotechnology regime ‘demean their critics’, whereas, in order to be real parresias, the speaker must have *courage* and *frankness* to present one's critique, instead of acting in a manner of ‘perfidious attacks’. Also, the biotechnology regime ‘pretend to have the weight of truth - - on their side’, what explains how they are not being open and sincere as a parresias ought to be, by speaking all about the truth. So, as the biotechnology regime leaves something unspoken, and, according to Navdanya, it is not telling the truth, is why the biotechnology regime cannot be a parresias. Anyhow, in the next chapter, I am evaluating whether the alternative truth by Navdanya really manages to offer the instruments for achieving change, which I am carrying out by presenting the problematic of sovereignty that has occurred along the thesis regarding to Navdanya's relationship to the State of India,



which however also represents the typical problematic regarding to the other food sovereignty movements.

### 5.3. The problematic of sovereignty

A typical situation for many of the food sovereignty movements, when examining them in terms of biopolitics and resistance, is the complicated relationship between the state and the movement. The movements carry out their resistance quite independently but, after all, at some point of their struggle, they tend to turn to the states for enabling the realisation of a greater change. This is why, food sovereignty movements have been criticised for aiming to the transformation only by reforming the state, without actually inventing anything new (See for example: McMichael 2007, 36). Navdanya as a food sovereignty movement operates in a similar way regarding to the relationship to the state but, however, it can be argued that it manages to introduce some new ideas as well. Anyhow, the basis of this complicated situation, and the difficult question of food sovereignty to be answered, can be tracked down to this citation by Navdanya:

No one will provide 1.2 billion Indians with food. We have to provide it ourselves. This implies food sovereignty. Only food sovereignty can ensure food security. (Food politics).

In the citation is illustrated how Navdanya acknowledges the complex situation in India, as well as the problematic of all the (sovereign) countries concerning to the provision of food for its citizens. Likewise, to take into consideration the reality of India being one of the most populated countries in the world, with a great scale of social problems and malnutrition, the question of the arrangement of the provision of food becomes even more central. Thus the problem in this case arises from the problematic of who should be concerned about the matter of providing food for 1.2 billion Indians, and, then, how to solve the problem and actualise the situation where food is provided to everyone. Therefore, the question is whether to execute it by the means offered by the food sovereignty movements, when the states collaborate with social movements and food is produced locally, or, whether to rely on the methods offered by the concept of food security, when the food provision is carried out by global food markets and private corporations who operate in a country under a permission of a state and international organisations. According to Navdanya and other food sovereignty movements,

self-determination regarding food is the key in order for the country, or the individuals, to be able to define the method for sufficient and secure food production which is, after Navdanya, provided by the means of food sovereignty. Due to this, Navdanya is trying to involve the state of India to support the idea of food sovereignty as a means to achieve food security, instead of supporting the way to food security provided by the biotechnology regime.

In bigger picture, the “problem” with the relationship between the state of India and Navdanya when considering resistance, can be argued to derive from the greater shift to the global neoliberal governance, which has altered the role of the states and thus caused this new, and problematic, situation to be considered in terms of resistance. According to Prozorov (2007, 73), basing to his argumentation on Hardt and Negri’s notions of the Empire, there has been a long lasting debate, for and against, about the decreasing, or increasing influences of neoliberalism to the sovereignty and the power of states. Neoliberalism has, for example, altered the welfare systems of states to be based on the subject’s own capabilities for securing oneself in the market based, privatised society, which is why it can be argued that states have lost some of their power to the markets. But, on the other hand, states have managed to increase their power and influence in the neoliberal governance through the collaboration of states’ and markets’ mechanisms of control. Also, the states have grown their influence in the field of internal and external security. (Prozorov 2007, 73.) In this changing relationship between the private corporations and states, the role of social movements and citizens in general, becomes a really intriguing one. This complex situation is, for instance, well illustrated in this case, between the State of India, the biotechnology regime and Navdanya. Often the main problematic appears in the relationship between the state and social movements as state acts as the one taking away rights, but also the one granting them. Conway (2015, 13) notifies relating to the same topic of how the discourses of sovereignty, especially in the Global South, often entail the older discussion about the sovereignty of states in colonial times that has then evolved into another type of dominance of people, jointly by the post-colonial states and corporations. This complex situation between the different actors is illustrated by Navdanya too, as they present the functioning logic of neoliberal governance and what it means to the different actors:

- - as Free Trade shows, corporations want **more, not less** government to police and regulate the citizens, to enclose the free spaces of the commons and threaten other countries to grab their resources and markets, through trade and military. They want **more, not less** government for corporate welfare. - - But they

[corporations] want **less** government for public welfare. They want **less** government for protecting citizens from the corporate harm. (What is freedom.)

What is presented by Navdanya, illustrates the exactly same definition by Prozorov regarding to the logic of neoliberalism and the power of corporations in it. According to Navdanya, however, there is a solution to this situation, which can be done if there is “[r]egulation by the state of those who can cause harm to others creates the context for the practice of freedom in people’s space” (What is freedom). By this, Navdanya questions the situation where corporations are allowed more freedoms to operate, but the people are not allowed freedoms of *not* to be controlled and *not* to experience the consequences of corporations’ activities. Therefore, Navdanya’s objective is that the state grants freedom to the people to self-govern, instead of states using its power for granting corporations more opportunities to govern. Thus the state should act as a regulator between the corporations, people and nature, etcetera, and grant some rights for people too. For example, according to Navdanya and along with the ideology of food sovereignty, commons are to be granted a special situation here, which, on the other hand, can ensure food sovereignty:

Commons are spheres of life self governed by local communities. They are not governed by the market or the state. The state, at best can recognize the rights of local communities, but it cannot prohibit the freedoms of communities to self govern the commons. There is a difference in laws of recognition, and laws of prohibition. While laws of recognition of people’s sovereignty at higher levels strengthen people’s sovereignty, laws of prohibition extinguish it. (What is freedom.)

According to Navdanya, commons are something that only belong to the local level and thus can only be controlled locally. Therefore, the commons are to be left to be self-governed by the local communities whose rights for the governance the state have to acknowledge. However, Navdanya demands for legislation by the state to enable the sovereignty of people and therefore food sovereignty. Then seeds and biodiversity would not be controlled privately or by any other authority but, instead by the people at the local level, since:

Seed and biodiversity is the ultimate commons, and commons are governed by local communities through local self rule and self governance, not by markets through privatization, nor through centralized authority and its bureaucratic apparatus. (What is freedom.)

Thus, the case with freedom and sovereignty as well as governance and resistance, is a very complex one. On one hand, Navdanya demands for the recognition of the commons and the local communities by laws of recognition, which leads to turning to the government for care. But, on the other hand, Navdanya defines seed and biodiversity as the ultimate commons, and the basis of everything, which makes the difference. So, according to Navdanya, what food sovereignty is all about is that the farmers are able to rely on the seeds and their capabilities for providing crops and thus sufficiency of food. This is why the seeds are needed to be protected against biopiracy as it can alter the characteristics of seeds in unfamiliar ways, since:

For farmers varieties conserved, used, bred as a commons, means the self organization and self rule at the level of local communities. At national and international levels, it includes the obligation of governments to protect the freedoms of biodiversity and people by regulating corporations to prevent them from undermining people's sovereignty through Biopiracy on the one hand, and threats to Biosafety from Genetically Engineered seeds and crops on the other. (What is freedom.)

Hence, food sovereignty, and the self rule and self organisation, are fulfilled if seeds are under control of the local communities, recognised as commons, and the opportunity for biopiracy is prevented by legislation by the state. Therefore, the state has to ensure by legislation the commons to be free from the consequences that derive from the modification of seeds by the corporations, instead of how it is done now, where the state enables the freedom for the modification of the commons. Conway (2015, 13) points out a similar shift in terms of how the discourse on sovereignty has shifted, from emphasising the sovereignty of states to emphasising the sovereignty of peoples and communities. But most of all, food sovereignty is about self-determination that is the most important right recognised by the food sovereignty movements. (Conway 2015, 13.) Likewise, Navdanya emphasises the importance of self-determination and the self-rule of the commons at the local and regional level.

This type of resistance that is characteristic for Navdanya, can be described in terms of 'critical agency' as well, which is based on Foucault's notion of "the art of not being governed quite so much" (Foucault 2007b, 45). According to Richmond, critical agency represents a new type of everyday, small scale, grass-roots resistance that is practiced by actors from the margins of societies, which, however, can have its influence at states and

international levels. Critical agency acknowledges the various forms of agency and its varying local and contextual possibilities for carrying out resistance. In fact, critical agency aims at collaborating with institutions in local, state, or international levels and then, from inside the institutions, aims at changing them. This is particularly typical in post-colonial states where a new type of ‘revolutionary subjectivity’ emerges as communities or individuals connect politics to everyday practices, when they are answering to social problems from their own contexts. This type of here and there occurring small scale activity can eventually evolve and combine into a larger scale resistance that appears as a movement of refusal. (Richmond 2011, 428, 432–433.)

Similarly to the notion of critical agency, Seppälä (2014, 96) introduces the concept of ‘autonomous resistance’ that has gained a lot of support, especially in the Global South, as a means to actualise resistance. The resistance is carried out at the local level, on the streets and villages by the ones, such as farmers, low caste people and the rural poor, who are suffering the most from the neoliberal development projects. Actual struggles and action at the local level against the problems of neoliberal development is perceived as more fruitful than aiming resistance directly at the government or trying to influence through politics. Therefore, resistance through participation to social movements is perceived as a fruitful, local and autonomous way to make a greater change possible and enable people’s democracy. Since “- - social movements can allow people to create new forms of participation, and make up new rules and alternatives on their own, a process which enables transformative practices” (Seppälä 2014, 96). This type of mindset about activism through social movements is similar to how Navdanya operates and creates new forms of activism. Furthermore, Navdanya is not only resisting the government but is actually creating something new – an alternative of food sovereignty that enables the creation of new ways of participating, and new rules regarding the functioning of the movement – and society. Due to this, the conceptualisation of ‘autonomous resistance’ by Seppälä resembles with its practices the resistance to the prevailing truths – and the creation of ‘the new politics of truth’. Since, by constructing the new rules and alternative forms of participating and operating, it is possible to detach the power from the truth, which defines the food production practices and thus provides an alternative that does not renew the former power of truth.

However, Navdanya’s activism is not completely autonomous as they are turning to the state and trying to involve the state to support the idea of food sovereignty, which is actually a typical situation in India when considering to social movements. According to Seppälä (2014,

96), many of the movements are concerned on how the neoliberal governance enables the governance of the states by global forces outside of India, which is why some activists are calling for a full reconstruction of a society to counter the neoliberal development and its lamentable side effects. This can partly explain Navdanya's endeavour to engage the state to 'the side of the movements' rather than to 'the side of global corporations'. And, in fact, it has been argued that if the movements are not willing to take any power, no greater changes are possible to be carried out (Seppälä 2014, 97). This resonates with Navdanya's pursuit to create 'the new politics of truth of food sovereignty' as a means of resistance, by engaging the state of India, which will thus change the whole functioning of society.

And, after all, a complete escape from power that is resisted is never fully possible (Seppälä 2014, 98) and it has been debated whether it is even fruitful in order for life itself to go on (Prozorov 2007, 77). But, however, there is a possibility to escape biopower – and the governance of the biotechnology regime – which can be done as Prozorov (2007, 76) suggests, by making the power to be without any significance. Then the power must be rendered to “- - a power that simply *is* without *being anything* - -“ which can be done by “the reduction of power to sovereignty that achieves a *weakening of all power*“ (Prozorov 2007, 76). Therefore, biopower can be resisted when power only exists in sovereignty as the power is exercised over death instead of being interested in nurturing life. This leads to a conceptualising of a form of resistance that is described as 'counterproductivity' which means that the resistance does not participate to the maintaining or reproduction of power as it does not give any value to it (Prozorov 2007, 67).

There is one actual practice offered by Navdanya that represents the idea of 'counterproductivity' as it will render the power of the biotechnology regime, meaningless. It also represents critical agency in a form of everyday resistance as it questions the constant pursuit of growth that is one of the most important objectives of the biotechnology regime, and neoliberalism. Thus, in order to put in practice the refusal of participating to the production and renewal of governance, and the whole biotechnology regime, there “- - is the paradigm of voluntary simplicity – of reducing one's ecological footprint and ensuring the well-being of all. - - [V]oluntary simplicity enables us all to adjust ecologically, to reduce over-consumption of the planet's resources and create a path for economic adjustment based on justice and equity.” (Green greed.) Hence, voluntary simplicity is a means to resist the logic of governance that is based on consumption of the products of the biotechnology regime, which reproduces and sustains it due to the methods of governance, such as royalty

payments and the non-renewable seeds. Therefore, voluntary simplicity is a way to refuse of being part of the governance that is based on consumption and monetary evaluation of everything. Voluntary simplicity also represents critical agency as it is an everyday practice of something that everyone can do, at a local level, from where it finally can emerge into a larger movement. The larger movement – of food sovereignty – can then be described in terms of counterproductivity since it is aiming at changing the whole prevailing paradigm by means that will render the power of the biotechnology regime useless.

Similarly, if biopower can be resisted by rendering the power to sovereignty, or by making it to be ‘without any significance’ by the means of counterproductivity, then the resistance to the biotechnology regime, and neoliberalism, can be done according to the guidelines of food sovereignty that emphasises the self-governance. Since in food sovereignty, the power of states is rendered to support the idea of food sovereignty instead of enabling the functioning of the biotechnology regime, which thus will render the power of the biotechnology regime and the prevailing economic paradigm useless as it does not have any significance in the new politics of truth of food sovereignty. The new paradigm of food sovereignty is bounded to the Earth, when it is not interested in reproducing the power of the biotechnology regime that is connected to economics and to the pursuit for constant economic growth. And in this case, as the resistance is considered towards the biotechnology regime, then Navdanya’s alternative can work as anything that the biotechnology regime produces and then utilises as a means of governance, is not needed and thus not reproduced in food sovereignty. As a matter of fact, there is a citation by Navdanya that can be utilised as a conclusion to describe the resistance of Navdanya, or this struggle around the status of truth that it plays in this game. Since, according to Navdanya:

- - there is only one way to defend freedom in the face of unjust laws – Satyagraha – the Fight for Truth. We are being called on to practise Seed Satyagraha and Food Satyagraha to defend our every day Seed Freedom and Seed Sovereignty, and Food Freedom and Food Democracy. (What is freedom.)

By referring to Satyagraha – a practice of non-violent resistance by Gandhi, Navdanya reminds that similar situations of resistance have occurred, and succeeded, in India before. As well, the notion about Satyagraha, is in a way invoking the state to the same battle of truth with Navdanya by reminding it about the historical events of how the whole state joined behind Gandhi against the British. And as a matter of fact, Navdanya’s resistance can be

described in terms of Satyagraha as one of the features of it elaborates that “- - if situation so demands, satyagrah even goes to the extent of cooperating with the opponents to meet the end objective” (Gandhi Research Foundation). This notion illustrates the resistance of Navdanya and many other movements too, especially in the Global South, as illustrated before. This type of explaining of resistance also presents the challenges that are commonly faced when tried to explain resistance in Foucauldian terms.

However, ‘the fight for truth’ in a way represents what this case is all about. This is a struggle around the truth to define the way to carry out the global food production: whether to produce food by the means of the new truth of food sovereignty or by relying to the dominant truth of food security paradigm and following the means it offers to carry out the global food production. Moreover, it can be argued that the notion of the fight for truth represents the everyday critical agency that everyone can do. For example, everyone can be critical and address criticism towards the truths, and to be aware of the power of truths and that, of how power is connected to them. Therefore, everyone is free to practice his/her own fight for truth, in their everyday actions by being aware and questioning the power of truths. This again is a practice that can evoke larger, local level motions and eventually evolve into a bigger movement, which represents for example the spreading of the idea of food sovereignty.

As a matter of fact, Foucault sets power, truth and the subject in the centre for explaining the power of critique, which in this case explains the resistance and the creation of the new politics of truth by Navdanya. Since, according to Foucault, “- - critique is the movement by which the subject gives him[/her]self the right to question the truth on its effect of power and question power on its discourses of truth. - - [C]ritique will be the art of voluntary insubordination - - (Foucault 2007b, 47). Hence, the only way to resist the power of truth is our ability to question the existing truths and to examine the relations of power and the ways in which they are connected to truth. Therefore, our ability to resist the power of truth comes from our capability to critically evaluate the world and thus acknowledge the power of truth. Therefore: “Critique would essentially insure the desubjugation of the subject in the context of what we would call, in a word, the politics of truth” (Foucault 2007b, 47).



## 6. Conclusions

Now I am in India, finalising my thesis here. Coming to India has really been an eye-opening experience and I have understood better the whole complexity of food production and food sovereignty movements in the challenging context of India. The status of farmers in the society is, and has always been challenging and it can be argued of having even worsened after the introduction of the GMOs to India. Therefore, in order to change the situation, and the prevailing truth regarding to the GMOs and food production, a total change in the society would be needed. Thus the question naturally to be asked here is whether food sovereignty proposed by Navdanya, can offer a way for achieving such a great change. Creating change in a society like India is not an easy task as the social problems and inequality are so deeply embedded into the structures of the society, of which the strongest influence is created by the – although abolished – caste system. Due to this, achieving actual social changes that will have their influences on the lives of rural poor and farmers is difficult since not many of the ones benefitting the system are ready to actually give up their privileges that are enabled by it. However, if the changes proposed by food sovereignty are carried out and the Earth shifted into the centre of politics instead of the markets, it can be discussed whether that can trigger for the emergence of change.

Therefore, another interesting question concerning to the reality of India is whether the proposition for *the new politics of truth of food sovereignty* has the possibility to really actualise. I have come to a conclusion that, nevertheless, India has the potential and the basic requirements fulfilled for food sovereignty to come true. There are a lot of smallholder farmers around the country that can provide the whole country with food. Also, the political atmosphere and the political will is the right at the moment, due to the present Prime Minister, Narendra Modi, who speaks for protectionist politics and creates new initiatives to support production in India to increase self-sufficiency and reduce dependency. Thus the production in India is supported instead of the utilisation of products of multinational corporations, which however, does not mean that the “shifting” to the new truth of food sovereignty will actualise and that the GMOs will be given up. Likewise, the prime minister’s politics is criticised of being only populist without so many actual improvements. Moreover, when considering the reformation of agriculture – as well as the whole society – the size of India and the time that the reforms take, needs to be taken into account as well. Likewise, food sovereignty can create even more problems to the farmers and to the rural poor if it is implemented by the

means of protectionism and isolation from the rest of the world, as it can result in regression and slowing down the country's development. Similarly, this again will leave the poorest of the population into the worst position in society, as well as it can result in the flowering of traditions which, in turn, can worsen the position of rural women and girls especially. But, after all, there is no escape from the fact that India's society needs some kind of reformations for the social problems are so visible and tangible here. In this thesis I have evaluated the means for carrying out the change provided by the truth regime of biotechnology and food sovereignty.

Therefore, as a summary of my findings about the truth of the biotechnology regime, I present how the prevailing truth of the biotechnology regime was created, how the governance of it was enabled and to what consequences the governance resulted in. First, the biotechnology regime and the governance were created by, and in, the discourse of truth of biotechnology. The discourse of truth is based on the utilisation of the similar discourse that justified colonialism as well as on the traditional liberal and neoliberal discourses that evaluate everything based on their utility and monetary value. The means for justifying the colonial discourse are the claims of "empty" lands and "life empty of intelligence", of which influence is strengthened by implementing laws, such as the intelligent property rights. The neoliberal discourse of truth is utilised to create the farmers as "neoliberal subjects" who by themselves, with their lives, bear the risks that the introduction of the new GM products creates.

The practices of governance of the biotechnology regime are the creation of artificial scarcity of seeds, and subsequently nature and life, which, in turn is utilised in creating seed monopolies, monocultures in farming as well as it relates with the monoculture mindset of the biotechnology regime. The monoculture mindset represents the ideology of neoliberalism that lacks of other options, or, at least denies seeing them. As well, the biotechnology regime utilises governance by creating knowledge that disregards indigenous knowledge and the expertise of the local farmer and, instead, emphasises the biotechnology regime as a creator of life. Science plays an important role in knowledge production, which is supported by different institutions. Also patenting of the GM products is supported by different institutions, as well as it is enabled by the creation of legislation. Commodification of seeds is made possible by changing the status of seeds from natural products into "machines" which can be given monetarily value and then to be sold in the markets. Finally, all these practices of governance and the discourses of truth are evaluated as "good" or "bad" in the markets basing on their utility. This summarises how the governance of the biotechnology regime is enabled and

justified by the creation of the prevailing truth, as well as it illustrates the political and economic roles that the truths play.

As a resistance to the prevailing truth of the biotechnology regime as well as to the governance that it enabled, Navdanya created a competing alternative truth, the new politics of food sovereignty. I am arguing that Navdanya succeeded in its resistance by creating the alternative, with what it managed to detach the power of the truths of the biotechnology regime from their political and economic roles that they play in society. In Navdanya's new politics of truth of food sovereignty, the Earth is in the centre instead of the markets, according to which the discourses and practices of truth are evaluated. Thus, the new politics of truth is based on Earth democracy and the functioning of the economics follows the guidelines of Gaia's economy that recognises the importance of ecology, and the necessity to act jointly with it. Science plays an important role in the creation of the new politics of truth as well, which Navdanya have acknowledged and established different institutions, such as the Earth University. As a practical means to counter the monoculture mindset of the biotechnology regime, Navdanya establishes seed banks and encourages to the establishment of Gardens of Hope. This illustrates the idea of seeds as commons which belong to everyone, as well as it prevents the opportunities of control of the food production as diverse food is produced everywhere despite of the attempts to centre it into monoculture based farms. Similarly, to counter the governance and the subjectivation that is done by the utilisation, or, control of knowledge, Navdanya has recognised the importance of alternative knowledges, such as the indigenous knowledge of seed breeding and the subjugated knowledges of women and local farmers which stresses their expertise and self-determination.

In order to operate the practical means to counter the truths of the biotechnology regime, such as the monoculture mindset, Navdanya as well created its discourses of truth to distribute the new ideas. By the discourse of truth, Navdanya recognises the intelligence of nature and introduces the need for biodiversity as well as emphasises the complex, uncontrollable and fluid-like state of nature. Finally, the notion of *parrēsia* has an important role to play in the resistance. *Parrēsia* represents the spirit to speak out the resistance – the alternative truth – as a “disobedient articulation of truth”. As well the utilisation of *parrēsia*, in a way, justifies the resistance for *parrēsia* always comes from below and it can be considered as the duty to tell the whole, frank truth that leaves nothing unspoken. Food sovereignty movements and Navdanya can be considered as global *parrēsia* too, as both of them operate as global networks. Moreover, *parrēsia* represents how truth becomes to guide one's life as the

parresias becomes committed with his/her whole life to the truth and the truth becomes manifested in the life of a parresias.

Thereby, it can be argued that Navdanya managed to play the truth game, to introduce some new concepts to it and thus pose critic and challenge the prevailing truth. Knowledge, along with subjects and power has an important role in the truth games, to all of which Navdanya managed to create change. By producing the alternative knowledge, Navdanya redefines the position of subjects in society and thus alters the role of truth and power. Likewise, the economic and political role that the prevailing truth of the biotechnology regime has, becomes meaningless due to the alternative truth of Navdanya that influences subjects, knowledge and power. Furthermore, this affects the whole society and creates the opportunity for the new truths to emerge. After all, the most important in Navdanya's activism, and in food sovereignty, is the enthusiasm for seeking change and creating alternatives by questioning the prevailing practices, and the power of truth.

However, as I have presented earlier, the traditional problematic with biopolitics and resistance is also present in the relationship between the State of India and Navdanya. The problematic occurs, as in order for Navdanya to carry out the resistance completely and end the "cycle of biopower" by refusing from the government's care, in which, Navdanya does not completely succeed, however. This is the reason why often the *sovereignty* of food sovereignty movements is questioned. It however is a common phenomenon with resistance, but it contests that what or who then is the sovereign if not the movements, and likewise, how then sovereignty should be achieved. Regarding to this problematic, Navdanya's relationship towards the state of India differs concerning to different issues or cases. Sometimes, the state is presented as a companion in the struggle against the biotechnology regime, and, at times the state equals with the biotechnology regime. Thus, it is not completely clear whether, according to Navdanya, the State is on the same "side" of the "truth" with the biotechnology regime, and, whether Navdanya manages, or even aims, to operate an autonomous resistance with regard to the state.

Similarly, this problematisation of resistance brings these complexities into a practical level, which makes it also relevant to question that what is the most important purpose of resistance after all: Whether it is important for the resistance to be carried out by utilising the *right means* or whether only the *right outcome* of the resistance matters. In this case, as well as among other food sovereignty movements, the field of resistance is often multifaceted and

social movements utilise several different methods and tactics to carry out the resistance. As well the movements often have to choose between two powers of governance the one that is “less evil” and then try to collaborate with it, or at least utilise its power to begin a greater change. This is also the case with Navdanya and it is evident how the resistance to biopower does not completely succeed according to the “rules”. This problematic has often resulted in criticism towards Foucault and his narrowly defined notion of resistance.

Therefore, maybe resistance in the Global South cannot be considered in the same terms with the resistance movements in the Global North. Since, after all, as the concept of resistance is elaborated in the North, by a northern scholar, who as well has been criticised of being Eurocentric (See for example Seppälä, 2014, 93). This is why it is important to take into account that there can be new ways and approaches to consider and carry out resistance as well. For, there is the inequality and the segregation between the Global South and the North, which enforcement can be explained by the notions of the ‘people’ and the ‘population’, so, therefore, why not the notion of resistance could also be different in the Global South. Similarly the influence of the colonial history to this relationship should not be forgotten. Therefore, due to these separations and differences between the Global South and North, also the resistance practices as well as the general doing things differently in the Global South can be perceived as a way to challenge the practices of the Global North.

Therefore, Navdanya’s resistance, and food sovereignty activism, in the context of the Global South can be better explained with Foucault’s notion of counter-conduct, as well as with concepts of critical agency and autonomous resistance which were further elaborated from the concept of Foucault. The notion of critical agency, elaborated by Richmond, occurs as a local, small scale and, grass-roots level activism, which, however, has the potential to grow into a larger, worldwide movement, along with it cooperates with different actors that it sees can best advance its goals (Richmond 2011, 428, 432–433). Likewise Seppälä’s notion of autonomous resistance can be seen representing the resistance of Navdanya. Autonomous resistance encourages the doing this differently, by creating new rules and new ways to participate and operate resistance, which thus will inspire in creating larger changes in society (Seppälä 2014, 96). Furthermore, the notion of autonomous resistance resembles the process of the creation of the new truths. Moreover, Prozorov’s idea of counterproductivity can be utilised to describe Navdanya’s resistance to the biotechnology regime but it also can be seen representing the final outcome that food sovereignty at its best can accomplish. The objective of counterproductivity, and food sovereignty, when considering in terms of resistance, is to

make the power of biotechnology regime just to exist, without it having any significance, or, in other words, to make the power of the biotechnology regime “powerless” (Prozorov 2007, 76). Similarly, the implementation of the new truth of food sovereignty will make the truth of the biotechnology regime and its means of governance *only to exist* without having any meaning in the global food production. This also illustrates how food sovereignty movements have the possibility to expand their agency into an existence of a world-wide network, as the alternative that they provide, can make the power of the global, industrial food provision systems to just *be without having any significance*.

However, what needs to be remembered is that every truth, even the alternative truths utilised as a means of resistance, always benefit someone. However, the difference comes with the remark that every truth has the different mechanisms of power to ensure the functioning and implementation of the truths. But nevertheless, this also illustrates how power cannot be escaped – as it is everywhere – but also that the alternative truth of food sovereignty utilises certain type of power. Due to this complexity, it can also be questioned whether food sovereignty movements after all can be examined in terms of biopolitics as power seems to be everywhere and even resistance movements need to utilise it. But this, however, often is the case about resistance in the Global South – and India, as the movements often somehow (need to) collaborate with the state (Seppälä 2014, 89–90). Prozorov has also problematised this issue with escaping biopower, to which his answer is to diminish all power to sovereignty, where biopower does not exist. However, the weakening of all power can be considered as a utopia, since the disappearance of biopower would not present limitation of power but instead represent the final fulfilment of men’s will to power, as all the power is gone. (Prozorov 2007, 77.)

Therefore, maybe food sovereignty should also be considered as a utopia of a “better future”. Since, the truth of food sovereignty emphasises the importance of self-determination of people and self-governance of the commons according to which the sufficiency of food should be achieved without the influence of global market economy, or any other power to it. Since, food – and seeds – should not be considered as something to be used as a means of profit, as they are something belonging to everyone as a fundamental right, as everyone needs them in order to live. This also creates other difficulties for the consideration of food sovereignty in terms of biopolitics and resistance as the main goal of the movements after all is to ensure the well-being of people. And, a political practice is to be considered biopolitical as long as it is interested in caring and providing well-being (See for example: Prozorov 2007,

66). However, this problematic can never be fully answered or “escaped” but it can only be recognised and accepted, since “- - movements can never be fully external to the forces and power relations they seek to counter” (Seppälä 2014, 98).

For the field of study of international relations, the topics of food sovereignty and the GMOs offer great opportunities for further research. The questions about privatisation of nature and the GMOs are gaining more and more visibility every day, as the attempts to extend this development of privatisation are getting more evident. For example, the most recent concerns, along with the issues of the GM seeds, have aroused due to the attempts to privatise groundwater supplies. These attempts of privatisation can have a huge effect on global politics as well as it can create great disputes over the privatised natural resources. Similarly with the issues of privatisation of nature, the question of food sovereignty has not yet been covered much in international relations, and especially not from the point of view of biopolitics. These topics offer a great scale of possibilities for further research both, in practical terms, and in philosophical discussions, for example about the right of creating ownerships over nature and life. Likewise, when considering Foucault’s concepts of truth and power, I found them very little studied, especially when taking into account the importance and the fundamental nature of them, both in Foucault’s work as well as in international relations in general. As well, when considering Foucault’s, almost infamous, concept of resistance, the utilisation of the creation of the alternative truth as a means of resistance can provide a new point of view to the study of resistance, which is something at least I have not found to be done earlier. Therefore, I am arguing that this thesis managed to give important, new contributions to the older discussion of resistance by introducing a new twist to it by utilising the notions of truth and power. As well this thesis takes part to the possibly increasing discussions about food sovereignty to which it introduces new possibilities of approach in the upcoming research.

After all, what I see as the most important tasks of a food sovereignty movement is to pose criticism and present alternative truths regarding to the food production, but also to create alternatives that can actually work. These all are tasks in which I consider Navdanya having succeeded. However, the accessibility to the information shared by the food sovereignty movements can be questioned, since at least in India the new truth of food sovereignty is not known in a large scale yet. This is also why from the point of view of an Indian consumer, the main interest regarding to food is likely not whether food is produced in advance of gene technology or not. And this exactly illustrates why sharing the alternative information and

making it known really matters, since it has the power to influence food production practices, and furthermore the lives of farmers, which again determines the type and quality of food we eat. This is why I perceive the work of food sovereignty movements and Navdanya important as they are the ones bringing these alternative truths to be known so that people would be interested in what they eat and, so that the farmers would not need to pay the unbearable high price for the cultivation of the GMOs. As a matter of fact, as I have presented earlier, the same type of resistance has already occurred in India when Satyagraha inspired by Gandhi took place and led to the independence of India and marked an escape from another type of governance. Thus, the battle around the truth of the GMOs is important to bring known for as many people as possible, so that everyone can critically evaluate the truths and thus formulate their own truths about the GMOs.



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