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**Are Forest Occupations only about Protecting Forests?**  
**Exploring Forest Occupiers' Plural Valuation of Forests in Germany**

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## Abstract

Forests are vital for life on Earth. However, they are increasingly threatened, mainly by economic growth. Valuation of forests is dominantly viewed through instrumental values, which is highly problematic as forests are not seen in their complexity. This thesis understanding is based on criticising paradigms of the dominant economic and political system by mainly focusing on economic growth and instrumental valuation. Therefore, this thesis explores German forest occupiers' valuation of forests by drawing on plural values of nature, namely intrinsic, instrumental, and relational values by interviewing ten forest occupiers in Germany. The thematical analysis demonstrates the forest occupiers' plural valuation of forests, especially relational and intrinsic values. Furthermore, it shows how their participation in the forest occupation influenced their values and vice versa. Thirdly, it becomes evident how the forest occupation challenges the system's dominant paradigms, namely instrumental valuation and economic growth.

Keywords: *Forest occupation, value pluralism, relational values, instrumental values, ecological economics*

List of Abbreviations

BfJ	Bundesamt für Justiz/ Federal Office of Justice
BMEL	Bundesministerium für Ernährung und Landwirtschaft/ Federal Ministry of Food and Agriculture
BMUV	Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz/ Federal Ministry of the Environment, Nature Conservation, Nuclear Safety and Consumer Protection
BUND	Bund für Umwelt und Naturschutz Deutschland/ Friends of the Earth Germany
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
RWE	Rheinisch-Westfälisches Elektrizitätswerk

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## 1 Introduction

As different scholars argue, we have entered a new geological epoch called the Anthropocene, in which humans<sup>1</sup> have become a dominant force in shaping the conditions of this planet (Crutzen and Stoermer, 2000; Kopnina et al., 2018). This applies to forest ecosystems which have been strongly impacted by human interventions and management perpetuating the contradiction between economic growth and ecological destruction (Martinez-Alier, 2002; Watson et al., 2018: 1-2). Many actions that aim to increase economic revenues are degrading forests for example, deforestation for the industrial use of land. Additionally, according to BUND, only every fifth tree in a German forest is currently healthy (BUND, 2020: 1). Forests provide essential ecosystem services such as air supply, biodiversity, and water filtration (Watson et al., 2018: 3). Considering the destruction of forests, it is crucial to change the current unsustainable patterns, such as the anthropocentric threats like overuse of forests and the focus on economic purposes of forests, since they accelerate the climate and biodiversity crisis (Watson et al. 2018; BUND, 2020).

This thesis highlights the necessity to see forests as complex social-ecological systems<sup>2</sup>, because "[m]ost mainstream forest definitions do not consider forests as social-ecological systems" (Delabre et al., 2020: 5). Forests in Germany serve multiple roles. For instance, the forest can be used as a place to relax and meet and a source of income as well. Forestry has been associated with industrial interests centred on profitability and increasing production of fast-growing monocultures (Bjärstig and Sténs, 2018: 128) and “persistence of dominant economic perspectives” on forests (Delabre et al., 2020: 6).

Many scholars have highlighted that the dominant economic and political system in the Western world, which includes Germany, is shaped by powerful paradigms<sup>3</sup> of economic growth

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<sup>1</sup> However, it is crucial to mention that humans have different environmental impacts (Malm and Hornborg, 2014; Kopnina et al., 2018: 115-116) and that it is especially the so-called Global North controlling and destroying nature (Malm and Hornborg, 2014: 64; IPCC, 2022: 25).

<sup>2</sup> The understanding of social-ecological systems follows Fischer et al. definition of this concept as “interdependent and linked systems of people and nature, which are nested across scales. This reflects that people are part of ecosystems and shape them, from local to global scales, and are at the same time fundamentally dependent on the capacity of these systems to provide services for human wellbeing and societal development” (2015: 145).

<sup>3</sup> According to Guba and Lincoln a paradigm is “a set of *basic beliefs* [...] It represents a *worldview* that defines, for its holder, the nature of the “world”” (Guba & Lincoln, 1994: 107).

(Chapin et al., 2022: 4) and instrumental valuation of nature (Anguelovski and Martinez-Alier, 2014: 174; Pascual et al., 2017: 9). The dominance of instrumental valuation is often criticised, as it neglects comprehensive valuation language to purely economic, monetary, and instrumentally driven one (Martinez-Alier 2002; Pascual et al., 2017: 9-10). Living in the dominant Western system influences its citizens and their values (Elder-Vass, 2022: 22). This thesis draws on theory of value pluralism to investigate the urgency to change values of nature. I argue that recognition and strengthening of valuation of plural values represents one parameter to achieve more sustainable behaviour in relation to forests (Bieling, Eser and Plieninger, 2020: 188).

In what way people appreciate forests, more precisely, which values people attach to them, "[c]onsciously or not" plays a crucial role as "[t]hese values can inform their preferences and their behaviour" (Bullock, 2017: 1). Values of nature, including intrinsic, instrumental, and relational values, are used as a tool to explore how forests are valued (e.g., Goodwin, Brogaard and Krause, 2019; Inglis and Pascual, 2021). Relational values, which arise from the relationship between humans and forests, enables to see more diverse and interdisciplinary views of the appreciation and valuation of forests (Mattijsen et al., 2020: 402).

Globally social-environmental activism<sup>4</sup> and protests are increasing (Mackay et al., 2021: 1). As researched by journalists of the German magazine, the *Taz*, in the last years, the number of forest occupations as part of the environmental movement in Germany has grown exponentially (Sander, 2021). Research has shown the effectiveness of protests for the protection of forests, e.g., in the Netherlands (Mattijsen et al., 2020: 405). Hence forest occupations are an interesting phenomenon to study in the field of human ecology. Also, as the newest report of Intergovernmental Panel on Climate Change (IPCC) underlines, looking at social activism like occupations opens up new perspectives, new knowledge and alternative visions towards social-ecological transformations (IPCC, 2022: 5).

As the occupiers show a strong engagement and eagerness to protect forests, it is highly relevant to understand their valuation of forests. Therefore, this research explores the plural values of forests by studying instrumental, intrinsic, and relational values of forest occupiers in Germany

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<sup>4</sup> Although activism can take many forms besides forest occupations and is caused by several reasons, from now on in this thesis, activism is used as a synonym for forest occupations.

## 1.1 Importance for Human Ecology

through conducting semi-structured interviews. This thesis will investigate this group to understand if their involvement in the occupation and valuation of forests influence each other. Looking at forest occupiers generates intriguing perspectives for improving human connection to forests and enhancing forest preservation.

### 1.1 Importance for Human Ecology

Following Lawrence, human ecology “refers to the study of the dynamic interrelationships between human populations and the physical, biotic, cultural and social characteristics of their environment and the biosphere” (2003: 31). This thesis is positioned in the interdisciplinary understanding of human ecology (Lawrence, 2003: 31-34) as it investigates human relations to forests by considering the German dominant system and its forest occupation subculture. This thesis will draw on the broader field of ecological economics and scholarship on human-nature relations. The focus of this thesis, the forest occupiers’ valuation of forests, contributes to relevant discourses of human-forest-relations underlining the need for value pluralism. As opposed to dominant instrumental valuation, this thesis considers notions of power. The thesis departs from developing an understanding of the dominant system and its impact on forests. Moreover, the forest occupiers provide an alternative by self-organising in the forest and creating a subculture in opposition to the dominant systemic practices. Human ecology’s interdisciplinary understanding of the world (Lawrence, 2003: 39) is mirrored in this thesis by reflecting on several fields such as value pluralism and values of nature emphasising the holistic view rather than a unidimensional deep focus.

### 1.2 Research Aims and Research Questions

This thesis discusses the overarching dominant system influencing everyday life and thus also people’s valuation of forests. The paradigms of economic growth are reflected in the instrumental valuation of forests. Seeing the forest as a resource only by applying the dominant instrumental language of valuation has been connected to its destruction (Martinez-Alier, 2002: 98). Hence it is highly problematic to only apply instrumental valuation and therefore crucial to shift to a plural valuation. The purpose of this thesis is to emphasise the plural valuation of forests by finding out how forest occupiers are challenging the dominant paradigms of the system, namely instrumental valuation and economic growth. Forest occupiers were chosen as population to study as they show high engagement, create a lived alternative to the dominant

system in Germany. That is, they challenge the German dominant system by doing activism about forests and thus show how the system would need to be improved.

Researchers have pointed out a need for empirical research on plural values of nature, especially relational values (e.g., Klain et al., 2017: 2; Uehara, Sakurai and Tsuge, 2018: 1600). Therefore, the plural valuation of forest will be studied in this thesis with the aim to highlight the diverse roles of forests and values expressed towards them. Moreover, this thesis will contribute to closing this research gap from an occupier's perspective, since little research has been conducted regarding the valuation of forests (Goodwin, Brogaard and Krause, 2019: 332). Forest occupiers in Germany were chosen as a population of study since there are many current active occupations connected to forest protection. Although research has been conducting discussing the occupiers (Soer, 2019; Brown, 2020), there has not been research on their valuation of forests. Additionally, as there is no research on the values of forest occupiers in Germany, this thesis aims to contribute to fill that particular research gap. The goal is to make the occupier's relation and their valuation of forests visible. Secondly, I will investigate these values and explore the connection between values and activism. The following research questions will be the focus of this thesis:

- I. Which intrinsic, instrumental, and relational values are articulated by forest occupiers in forests in Germany?*
- II. How does the forest occupiers' valuation of forests influence their activism to protect the forest and vice versa?*
- III. How do the forest occupiers challenge dominant paradigms of the economic and political system in Germany, explicitly instrumental valuation and economic growth?*

## 1.3 Thesis Structure

Following the introduction, section 2 sets the context of this thesis is set by introducing forestry and forest occupations in Germany. After this, the theoretical framework (section 3) is laid out looking at value pluralism and concepts derived from ecological economics and the valuation of nature. Section 4 describes the process of data collection and analysis, including reflections on positionality and self-reflexivity. Based on this, the thematical analysis follows encompassing six themes, which then, in combination with the discussion, answers the three research questions. The discussion as section 5 spans larger thematic arches connected to the

valuation of forests and value pluralism found in the data. I conclude the thesis by summarizing the findings of the research questions.

## 2 Context

In this section I will provide the background knowledge of forests and forests occupations in Germany to set the context of this research. When investigating forestry, the much longer cycle of forest needs to be considered as trees become much older than humans.

### 2.1 Forests in Germany

“Extensive deforestation has been a problem for a number of societies throughout history [...], [and the] destruction of the woods and forests around all settled communities that forms the background to the development of human societies” (Ponting, 2007: 73). Germany is not an exception. Historically, Germany has been a forested country and without any human influence, Germany’s land area would be 90% forested (Mutke and Quandt, 2018: 650). However early human intervention on a high level, and weather extremes reduced the forest cover in Germany since 1000AD (Mutke and Quandt, 2018, 651-652). Since the 15<sup>th</sup> century around one third of Germany's land area is covered by forests (Mutke and Quandt, 2018: 352; BMEL, 2021: 3). However, Global Forest Watch noted that “From 2001 to 2021, Germany lost 1.14 Mha of tree cover, equivalent to a 9.1% decrease in tree cover since 2000” (Global Forest Watch, 2022). Human intervention is omnipresent in German forests, for example, causing the decrease of forests and anthropocentric change in forests. Initially, the main tree species in Germany was beech; due to human intervention, conifers now dominate, which leads to a loss of forests’ natural biodiversity (BUND, 2020: 7). The German state and its federal states play a significant role in governing and managing German forests (BfJ, 2021).

Apart from being a typical landscape, forests have held considerable importance to German society for centuries and are often perceived as an antidote to everyday life (Brey Mayer and Ulrich, 2011: 15-16). The Germans' attachment to forests seems unbroken, which is also mirrored in the allowance to enter any forest, also privately-owned ones for recreational

purposes since 1975 (Brey Mayer and Ulrich, 2011: 30)<sup>5</sup>. Also in current policies, the German state and the relevant authorities are acknowledging the role of forests for recreational purposes (BMEL, 2020: 3).

From the 20th century onwards, forests have been increasingly perceived as a place worth protecting and is vital for life (Brey Mayer and Ulrich, 2011: 30). This importance has also been reflected in early civic efforts aimed at protecting forests, e.g., in Berlin's citizen commitment to preserving the Grunewald from 1904 to 1915 (Brey Mayer and Ulrich, 2011: 30; Wilson, 2011: 219), the protection of the Whyler Wald in South Germany in 1975 or protests in Frankfurt in 1980 (Brey Mayer and Ulrich, 2011:30; Stolz, 2021).

## 2.2 Forest Occupations in Germany

In recent years several forests in Germany have been occupied by activists, mainly younger people. The *CrimetheInc.*, a blog of independent activists, reported that in the last years, a spread of forest occupations in Germany took place (CrimetheInc., 2021). Forest occupations need to be differentiated from demonstrations as they are a more persistent form of activism. They include building up structures such as treehouses, outdoor kitchens, and small campsites to prevent the logging (CrimetheInc., 2021; Soer, 2019). Furthermore, forest occupations are understood as civil disobedience, defined as “public, nonviolent, conscientious yet political act contrary to law usually done with the aim of bringing about change in the law or policies of the government” (Bedau, 1991: 104 in Brown, 2020: 30). In extreme cases, the occupier’s involvement can lead to criminal charges (Brock and Dunlap, 2018: 42).

One of the most prominent occupations in Germany in the recent years is the one in the Hambach Forest, in the West of Germany (CrimetheInc., 2021). From 2012 until today, with interruptions, this forest has been occupied by activist to prevent Rheinisch-Westfälisches Elektrizitätswerk (RWE) from logging. RWE is the biggest energy company in Germany, which wanted to cut down this old mixed forest for the extension of coal mining (Brock and Dunlap, 2018: 33; Soer, 2019: 4-7; CrimetheInc., 2021). In the last years, the occupations, especially the Hambach Forest, have been recognised by the media. 50.000 people joined the protests

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<sup>5</sup> As this thesis being part of a broader field about research about forestry in Germany, it has to be mentioned that forests in Germany have been misused as national symbols by groups positioned in Germany’s right wing historically e.g. by the nazis and also in the present (Brey Mayer and Ulrich, 2011: 22; Lehmann, 2011: 44).

against logging in October 2018 (Deutsche Welle, 2018; Agence France-Presse, 2018). “The Hambi [short for Hambach] became a national and even European symbol” (Soer, 2019: 7) in the climate justice movement. Furthermore, the Dannenrod Forest, often called Danni, got much media attention. From 2019 until 2020, occupants wanted to prevent deforestation caused by construction of a new highway. In addition to protecting the forest, many other political, societal, and ecological topics are discussed in the occupation (Soer, 2019).

Apart from influencing political decisions, one crucial factor of forest occupations, according to the blog of CrimetheInc. (2021), is the experience of an alternative reality where human well-being is appraised. Even though memories of forest occupations often include police evictions, which can be traumatising (Soer, 2019: 17), positive lived experiences in the community can be made (CrimetheInc., 2021). However, forest occupation can still be considered a niche activity with 1000-2000 active people, estimated by two interviewees.

### **3 Theoretical Framework**

In the following, I will give a short overview of human-nature relations and introduce the chosen concepts value pluralism and values for nature.

#### **3.1 Human-Nature Relations**

Relations between humans and nature are shaped through history and can take different forms. “The relation between Nature and society is historical in two senses. First, human history is played out against a background of natural circumstances, but also human history modifies Nature. Second, the perception of the relations between humans and Nature changes with time” (Martinez-Alier, 2002: 18). Within western societies nature is dominantly seen apart from humans (Escobar, 2016: 21; Fletcher, 2017: 228-229; Arora et al., 2020: 249; Stålhammar, 2020: 18). “The dualistic framing of humans and nature as two separate aspects of reality (pattern 1) presents humans as distinctly different from the non-human world” (Böhme, Walsh and Wamsler, 2022: 3). This dualism is accused to increase the feeling of disconnection to nature (Fletcher, 2017: 227). Moreover, this separation also creates a justification for domination, the believe in humans controlling nature (Escobar, 2016: 20; Böhme, Walsh and Wamsler, 2022: 3). Coming “[...] from a dualist ontology of human dominance over so-called ‘nature’ understood as ‘inert space’ or ‘resources’ to be had, the plantation can thus be said to be the most effective means for the ontological occupation and ultimate erasure of local

relational worlds” (Escobar, 2016: 20). Currently the most dominant form of human-nature relations is commodification of nature. The global awareness of these struggles is growing and “the multiple struggles for the reconstruction of communal spaces and for reconnecting with nature constitute an indubitable political activation of relationality” (Escobar 2016: 23).

### 3.2 From Value Monism to Value Pluralism

The discourse about value monism and pluralism originates from ecological economics. Ecological economics<sup>6</sup> provides essential “perspectives on economy– society–environment interactions” (Kronenberg, 2013: 75) as an alternative to neoclassical economics (Bartkowski, 2016) since its emergence in the 1980s (Martinez-Alier, 2002: 19). Ecological economics puts nature (ecology) at the centre of human actions, e.g., human economy (Martinez-Alier, 2002: vii). In this approach, the economy is embedded into the planetary boundaries of the planet Earth, encompassing social structures, power structures, and ownership (Martinez-Alier, 2002). Hence, ecological economics highlights the ever-present conflict between economic growth and ecological destruction (Martinez-Alier, 2002; Martinez-Alier et al., 2016). Taking broader theoretical fields into account one can see how ecological economics is based within fields of political ecology and political economy (Martinez-Alier, 2002: 21).

Ecological economics argues that the powerful paradigms in the current system, such as the focus on economic growth, are perpetuating themselves by the powerful single standard valuation of nature through instrumental/economic values of nature (Arias-Arévalo et al., 2018). In the current neoclassical economics, money functions as the dominant measurement. Value monism is characterised as using a single value language (Pascual et al., 2017: 9). One cannot reduce all values to a single value (Pirgmaier and Urhammer, 2015: 2). However, many ecological economists question this one-sided valuation: “Should and could all values be reduced to a super-value, so as to achieve strong comparability?” (Martinez-Alier, 2002: 28).

As it is highly problematic to rely on one measure to view the wide diversity of human valuation of nature (Martinez-Alier, 2002, 270-271; Horcea-Milcu et al., 2019: 1430), ecological

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<sup>6</sup> It needs to be considered that scholars interpret ecological economics differently, e.g., Spash (2013) is differentiating into a deep and shallow movement of ecological economics, describing the latter one as perpetuating the dominant economic system. This thesis positions in relation to deep ecological economics.



economists advocate for value pluralism based on a non-reductionist view of values (Martinez-Alier, 2002: 270). Indeed, there are “multiple values and relevant languages of valuation other than those expressed in monetary terms” (Kallis, Gómez-Baggethun and Zografos, 2013: 98). Power dynamics influence that specific languages are more considered than others: “Who, then, has the ‘procedural power’ to choose the languages and techniques of valuation?” (Martinez-Alier, 2002: 96). Procedural power means being able to implement a language of valuation that determines how the forest is seen and valued ultimately (Martinez-Alier, 2002: 271). Martinez-Alier’s definition of power includes power “as the ability to impose a decision on others” (2002: 271) in addition to procedural power.

Value monism and value pluralism are critical notions to consider because values influence how we see the world around us. “Value pluralism is not only an ethical but also a political stance, which requires political action to oppose undesirable commodification and make sure that plural values and institutions exist and proliferate” according to Kallis, Gómez-Baggethun and Zografos (2013: 100). Following the discovery of the values that various stakeholders hold for nature, a weighing of the values would be required to make equitable decisions. However, this brings a value incommensurability with it. Incommensurability means that comparing two different values is impossible (Kallis, Gómez-Baggethun and Zografos, 2013: 98; Pirgmaier and Urhammer, 2015: 5).

This research limits itself to the exploration of values for forests by applying instrumental, intrinsic, and relational values. These categories help answer this thesis research questions as they are usually used to research the valuation of nature.

### 3.3 Values of Nature

Considering the possibility of plural modes of valuation, I will deploy three categories of values regarding nature. Former research showed the successful use of these value categories to understand how people value nature. Pascual et al. call it “[t]he kaleidoscopic view on values – intrinsic, instrumental and relational – [which] permeates the ways we understand our relationship with nature” (2017: 12). The emerging concept of relational values, with its subcategories, will be used as it promises to understand the great diversity in which people value nature (Chan et al., 2016: 1465) and could therefore offer a better way to see plural valuation languages besides instrumental and intrinsic values. However, it is still crucial to rely on instrumental and intrinsic value categories, as they greatly matter in our understanding of

valuing nature (Piccolo, 2017: 10). In the following section, I elaborate on the mentioned value categories and define them for the analytical purpose of this thesis.

#### 3.3.1 Instrumental Values

Instrumental refers to "the value of the object for a person" (Chan et al., 2016: 1462). An object is, for example, a forest or a tree. Often this is seen as the dominant valuation standard (Horcea-Milcu et al., 2019: 1430), which is criticised by ecological economists (e.g., Martinez-Alier, 2002: 270-271) and scholars involved in research about relational values for nature (Chan, Gould and Pascual, 2018: 4; Unks et al., 2021: 3). The focus on instrumental values disregards the recognition of unique and complex ecosystems (Chan et al., 2016: 1463; Chan, Gould and Pascual, 2018: 3) and silences actors who are not primarily focused on instrumental values (Unks et al., 2021: 2). Instrumental values are assigned values and can also be understood as economic values (Chan et al., 2016: 1463). For example, when it comes to valuing forests in Germany instrumentally, they are employing approx. 800,000 people and generating 108 billion euros in economic turnover per year (Brey Mayer and Ulrich, 2011: 15).

#### 3.3.2 Intrinsic Values

"In contrast, intrinsic value is associated with the object itself, not its function; an intrinsically valuable object cannot be substituted by another object" (Vucetich, Bruskotter and Nelson, 2015: 322-323). In material reality, we can see how intrinsic valuation is left aside when the extraction of natural resources is preferred over preserving an ecosystem. The intrinsic value of nature is defined as the implicit value of nature (Chan et al., 2016: 1462) and contains nature's right to exist (Chan, Gould and Pascual, 2018: 3). However, certain scholars think that the intrinsic value "failed to resonate with the public and policy makers" (Piccolo, 2017: 8) by being an abstract concept. The belief in recognising the intrinsic value of nature is not sufficient to motivate behaviour for the protection of nature (Vucetich, Bruskotter, and Nelson, 2015: 327). Other scholars underline its importance and the need to value nature in that way (Vucetich, Bruskotter, and Nelson, 2015: 330). Only valuing nature intrinsically, without taking instrumental and relational values into account, could neither suffice as it could easily fall into approaches such as protected areas (Fletcher, 2017: 230) and more practically the whole system as we currently use nature's resources would be changed. Furthermore, conservation based on protected areas can accelerate new power dynamics could exclude certain marginalized people from their lands (Unks et al., 2021: 11).

### 3.3.3 Relational Values

Scholars highlight that the current value dualism (instrumental vs. intrinsic) needs to be expanded due to its limits in showing human-nature relations in their complexity (Goodwin, Brogaard and Krause, 2019: 331). Introducing relational values can help overcome this dichotomy (Saito, Hashimoto and Basu, 2021: 837).

Relational approaches, which emphasise a holistic understanding of human-nature connection have been present in sustainability science (Böhme, Walsh and Wamsler, 2022: 5). Their re-emergence in the last years (Böhme, Walsh and Wamsler, 2022: 4) also reached the discussions about the valuation of nature, whereby the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) plays a central role (Pascual et al., 2017). A well-known definition for relational values is the one of Chan et al. following: “preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms” (2016: 1462). These values “arise from a relationship with nature” (Skubel, Shriver-Rice and Maranto, 2019: 1) and “responsibilities to nature instead of values present in things” (Unks et al., 2021: 3). Relational values represent the divergence of values, to include diverse groups, and individually and collectively given values of nature (Unks et al., 2021: 3).

While instrumental values only focus on human benefits and intrinsic values on nature itself, relational values focus on the relation and reciprocity between humans and nature (Mattijssen et al., 2020: 403). Examples of relational values could be valuing the forest for the therapeutic value people get from relating to it or its value for the individual identity. There are many examples of the valuation of human-nature relations (Table in Appendix). Next to the human-nature relation human-human relations mediated by nature are also considered (Riechers et al., 2021: 2): When people meet in the forest and develop a deep connection to each other (value of social relations), or when the forest plays a crucial role in a group’s identity (value of social and collective identity) (Table in Appendix).

This new set of values has been criticised for failing to serve any purpose (Maier and Feest, 2016). However, empirical investigations have demonstrated the category's utility in examining the value of nature (e.g., Riechers et al., 2021). Therefore, the aforementioned theory will be used in thesis.

### 3.3.3 Relational Values

Based on Chan, Gould, and Pascual (2018: 3), I recreated a figure which shows how the different value categories, e.g., instrumental values, relational values, and intrinsic values overlap (Figure 1). The definitions of the included value categories align with the ones given above. As said before, nature valuation is dominated by instrumental (also called assigned) values which reflect economic paradigms. Relational values are also assigned, and thus overlap. However, relational values “are never purely instrumental (for RVs, the relationship between the subject and object matters, whereas for instrumental values the relationship is only a means to an end)” (Chan, Gould and Pascual, 2018: 6). They are given for eudaimonic reasons beyond the human benefit in an economic or hedonist<sup>7</sup> sense. “Eudaimonic values concern contributions to a good life, where that good life implies not pure hedonism but rather living in accordance with moral principles and virtues” (Chan, Gould and Pascual, 2018: 4). Relational values overlap with intrinsic values. Hence, relational values can be seen as a bridge between instrumental and intrinsic values, which are the inherent values of forests without human evaluation.

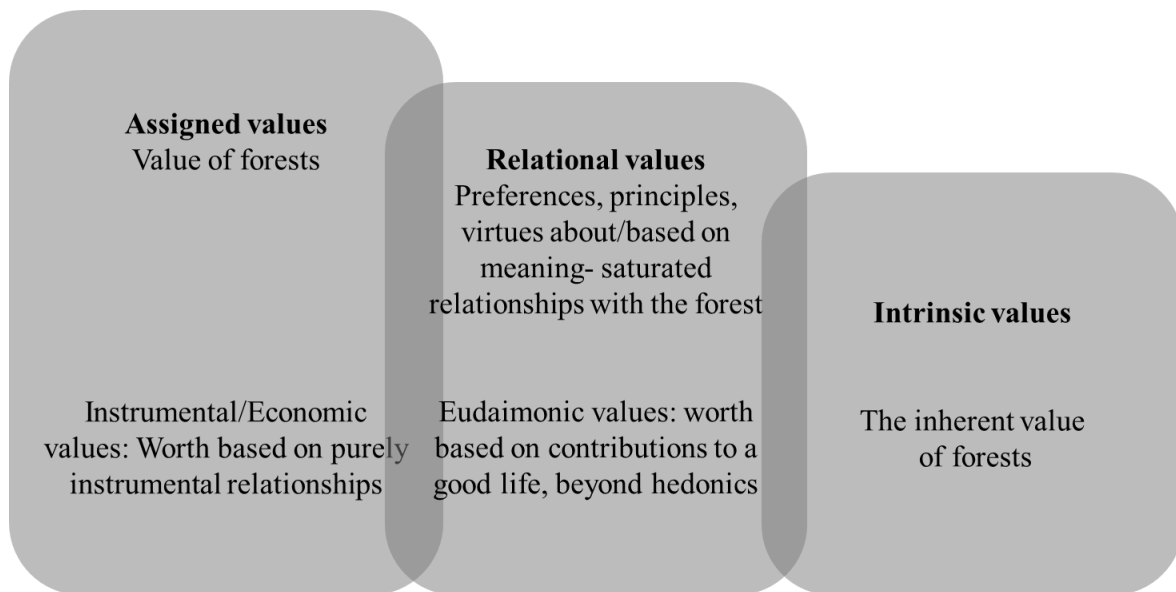


Figure 1 - Explanation of values and their overlap in forest valuation. Adapted from (Chan, Gould and Pascual, 2018: 3)

As highlighted above, this plural view of nature through three value categories instead of only one aligns with highlighting the need for value pluralism in ecological economics (Arias-

<sup>7</sup>Acting on a hedonist approach means “someone who tries to have as much pleasure as possible, according to the belief that the most important thing in life is to enjoy yourself” (Cambridge Dictionary, n.d.).

### 3.3.4 Overview of Former Research on Valuation of Forest

Arévalo et al., 2018: 31). Both theories rely on a pluralistic understanding of the world (Bartkowsi, 2016; Chan et al., 2016; Chan, Gould and Pascual, 2018).

### 3.3.4 Overview of Former Research on Valuation of Forest

Former research on the valuation of forests has highlighted the several roles forests take in peoples' lives (Gundersen and Frivold, 2008; Bjärstig and Sténs, 2017). "Forest landscapes are diverse and can be repositories of history, rituals, cultural and spiritual meanings, social and personal identities, and emotional memories" (Gundersen and Frivold, 2008:254).

The diversity of subcategories of relational values of forests have been stated by several studies (Gundersen and Frivold, 2008; Goodwin, Brogaard and Krause, 2019; Shishany et al. 2020; Zaman, 2020; Coelho-Junior et al., 2021; Inglis and Pascual, 2021). These studies laid the groundwork for this thesis for which I used the following twelve value categories; of which ten are subcategories of relational values (see table in Appendix). These ten categories of relational values are: aesthetic value, recreation value, sense of place value, social relations value, individual identity value, social and collective identity value, traditional value, spirituality value, and stewardship value. The table in the appendix shows the value categories, the used definitions, and one interview example, translated from German into English.

## 3.4 The Dominant Paradigms of the Economic and Political System

As indicated in the introduction, the current dominant system in Germany is characterised by the paradigms of instrumental valuation and economic growth.<sup>8</sup> These two paradigms influence each other.

Firstly, the dominant language of instrumental valuation, which makes one see only the benefits something has for the human (see 3.2.1). One can see how the language of instrumental valuation and the paradigm of economic growth are interwoven (Arias-Arévalo et al., 2018: 45). This is inherently connected to the second dominant paradigm, the one of economic growth directing individual, governmental, and economic decisions (Chapin et al., 2022: 4). Economic growth is omnipresent in the Western World (Escobar, 2016: 25; Chapin et al., 2022: 4). Isacs

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<sup>8</sup> This does not mean that the system is not only shaped by these dominant paradigms, however for sake of this thesis, these two were chosen, e.g., nature-culture dualism and individualism (Arora et al., 2020: 249).

argues economic growth is “increasing (virtually any) aggregate consumption and production as a normative goal” (2021: 65). Since 1940s, the growth of Gross Domestic product (GDP) has been used as the main indicator for economic prosperity (Isacs, 2021:47). Especially economic actors e.g., companies and the state follow the mandate of economic growth as most state systems are based on economic growth (Brock and Dunlap, 2021). The state as a guarantor of economic growth is directly involved in economic activities often measured in GDP. However, the concept of GDP has been increasingly problematised by scholars from various disciplines including ecological economics (Martinez-Alier, 2002:16-38; Anguelovski and Martinez-Alier, 2014: 171). There is the believe that all humans profit from the so-called “‘trickle-down’ effects of economic growth” (Martinez-Alier, 2002:16). “This paradigm has contributed to environmental degradation and inequality by accelerating resource extraction and use by those who can afford it” (Chapin et al., 2022: 4).

By drawing on the concept of value pluralism derived from ecological economics and valuation of nature applied in the context of a forest occupation, it will be shown how the dominant instrumental valuation and economic growth are challenged by the forest occupier’s valuation of forests. As Jacobs et al. emphasise “valuation approaches that target single value-types, be it economic, ecological or socio-cultural values, can only represent part of the society and its worldviews, interests and preferences” (2018: 516).

## **4 Methodology**

The qualitative research design employing semi-structured interviews will be shown and discussed in the following.

### **4.1 Philosophy of Science**

The chosen concepts, firstly value pluralism derived from ecological economics and values of nature align with pluralist approaches (Bartkoswki, 2016; Pascual et al., 2017; Chan et al., 2016; Chan, Gould and Pascual, 2018). At the same time, this thesis also underlines the influence of values by the dominant economic and political system.

Therefore, this thesis positions itself in the metaphysical paradigm of critical realism, which was theorised in the 1970s-80s by Bhaskar (Lawani, 2020: 321). This paradigm enables to grasp the research design in two ways. It enables me to see these individual and collective values in

the broader context of the economic and political system in Germany. The system is historically, structurally shaped, and influenced by power. This approach brings the opportunity to take the material reality and systems into account, hence considering realist perspectives (Lawani, 2020: 321). “Critical realism is sometimes described as a middle ground between a realist and a constructionist view” (Alvesson and Sköldberg, 2009 in Isacs, 2021: 25). According to critical realism, there is one individual reality and one shaped by history and society (Isacs, 2021: 26). Other studies have shown the suitable use of qualitative research aligning with critical realism which is the approach chosen in this thesis (Lawani, 2020: 320).

### 4.2 Qualitative Research

I have decided to do empirical research about people’s valuation of forests, by looking at instrumental, intrinsic, relational values. Research about values was explored through quantitative and qualitative approaches. Qualitative research emphasises the importance of exploring and making phenomena visible (Denzin and Lincoln, 2018: 45) and empowers “*individuals* to share their stories” (Creswell, 2013: 48). Since this is the first study on forest occupiers’ valuation, it is relevant to apply a qualitative research approach to access individual perspectives about the values and their activism (Creswell, 2013: 48). When researching human experiences many scholars argue that qualitative approaches are the “most adequate means of knowledge production” (Brinkman and Kvale, 2005: 162).

Interviews were chosen as a data-gathering tool, as interviewing is a prominent tool in qualitative research for knowledge generation (Myers and Newman 2007; Bryman, 2012: 469; Brinkman, 2018: 987-991). Former research regarding valuation of nature showed the successful use of interviews (Britto dos Santos and Gould, 2018; Uehara, Sakurai and Tsuge, 2018; Klain et al., 2017; Schulz und Martin-Ortega, 2018). Through the interviews, I can access the underlying and invisible social phenomena (Myers and Newman, 2007) e.g., in my case the way the forest occupiers relate to forests.

The preparation for (Turner, 2010: 757) and the transcription of the interviews are time-intensive but can be integrated well into the researcher’s life (Bryman, 2012: 469). An “artificial” situation compared to daily life dialogues is created which might pose limitations to the quality of data (Myers and Newman, 2007; Brinkman, 2018: 988). To enable the success of qualitative interviews, many parameters before and within the interview need to work out

(Brinkman, 2018: 1013), especially a basis of trust needs to be established (Myers and Newman, 2007; Creswell, 2013: 60).

### 4.2.1 Sampling

To reach out to interviewees, I applied snowball sampling (Creswell, 2013: 158). An outreach text in German and English was sent to friends, acquaintances and organisations involved in forest occupations. Even though I used my personal contacts for the sampling, I had no personal connection to any of the interviewees.

For the sake of the sampling and interviewing, I defined forest occupiers as adults (over 18 years) who have spent at least one night in a forest occupation. The emphasis on spending the night in the forest is because spending a night in the occupation distinguishes them from day visitors and exposes them to higher risks. First, by environmental conditions such as the weather and second the increased contact with the police (including possible criminal charges). As I know that the number of forest occupiers is comparatively small to the general number of climate justice activists, I have tried to apply only a few criteria. However even these few criteria excluded people from my group.<sup>9</sup>

### 4.2.2 Semi-structured Interviews

Interviews can take many forms. Semi-structured interviews are commonly used and an effective method in former research on values (Uehara, Sakurai and Tsuge, 2018; Bataille et al., 2021) and forests (Schelhas and Pfeffer, 2005). Semi-structured interviews are a method of qualitative research (Creswell, 2013; Kakilla, 2021). Many scholars describe them as “indispensable tools to uncover knowledge through interaction, conversations, and subjects from different life experiences” (Kakilla, 2021: 0). It offers the researcher a partial “guarantee” of answers to the prepared questions (Bryman, 2012: 471).

As Myers and Newman (2007) and Adams (2015) underline, semi-structured interviews include prepared questions and open elements. Semi-structured interviews use “a blend of closed- and open-ended questions, often accompanied by follow-up why or how questions” (Adams, 2015:

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<sup>9</sup> It should be considered that forest occupations are not accessible to everyone due to the possible criminal charges for participating (Brock and Dunlap, 2022).



493). The prepared questions of the values guarantee (in a way) accessing the anticipated answers. However, they also limit the flow of the interview and the nature flow of thoughts of the interviewees (Kakilla, 2021).

Semi-structured interviews require preparation and active listening from the interviewer (Adams, 2015). Furthermore, flexibility is crucial, e.g., to note which question might have already been answered and to alternate the order of the questions due to topics raised by the interviewee (Bryman, 2012: 471; Adams, 2015: 498-499).

This interview guideline included 24 questions to answer the research questions (Bryman, 2012: 472) (see in appendix). I started the interviews by small talk which was helpful to get to know each other in order to have a trustful atmosphere during the interview. The first question referred to the green surrounding (city forest, park), followed by questions about the meaning of forests. Then, the valuation of forest was approached (15 questions). These questions were designed by screening former research of relational valuation of forests (Gundersen and Frivold, 2008; Goodwin, Brogaard and Krause, 2019; Shishany et al., 2020; Zaman, 2020; Coelho-Junior et al., 2021; Inglis and Pascual, 2021). After this, I included a ranking and asked the interviewees to choose the five most important values for themselves. For that, little paper cards with the value on the one side and a definition on the backside have been used (see Table 1). The ranking was used as a tool to see which values are chosen by the occupiers and to compare if they chose similar values. Following Maniatakou et al. (2020: 5) the ranking of the values was used as a conversation stimulus. The interviewees were asked why they chose certain values to reflect the values' importance to them. After that, their activism (three questions) and the connection between their activism and the valuation of forests (two questions) was focused on. The interview ended with general questions on their desired shift of the handling of forests. Moreover, I offered the interview partners to get the questions in advance, approximately half of the interviewees welcomed this offer.

During the research, ten interviews were conducted in February and March 2022, varying in length from 25 to approximately 90 minutes. Before starting the interview, I walked with the interviewees in the nearby city forests and parks.

#### 4.2.3 “Walk and Talk” Interviews

All of the ten interviews were conducted in person, which enriched the data through e.g., seeing the persons’ gestures and mimics better and experiencing the person (Kakilla, 2021; Brinkman and Kvale, 2005: 157). The method of Walk and Talk, also called narrative walk or walking interview was applied. This method was developed in social sciences gaining increasing popularity (Evans and Jones, 2011: 849). A constituting parameter of this method is that the interviewer and interviewee are walking at least some parts of the interview, simultaneously experiencing the same surrounding environment (Evan and Jones, 2011: 850). “Walking has long been considered a more intimate way to engage with landscape that can offer privileged insights into both place and self” (Solnit, 2001 in Evans and Jones, 2011: 850).

I planned to conduct all interviews outside e.g., city forest or park, as the weather permitted. This method was chosen because it underlines the importance of the environment/place (Evan and Jones, 2011: 850; Clark and Emmel, 2010: 2), and the connection with the surrounding. Hence, it suits the researched topic and aligns with the theory of relational values, especially the value sense of place. The forest reflects the place where the occupiers did their activism and made memories. It can therefore be considered a similar environment taking them back to those moments and feelings (University College London, n.d.: 1). One limitation of this method is that weather conditions are relevant (Evan and Jones, 2011: 853). Due to this, one interview took place in a covered, empty outdoor area of a coffee shop in a green environment. Another interview had to be shifted inside halfway through, while one interview was fully inside. Four interviews were completed while walking outside. Two others were mostly taking part sitting in the forest with a walk beforehand. The interviews took place from February to March 2022 in different cities in Germany which can be seen in figure 2. The atmosphere during the interviews have been captured by some photos all taken by me (see figure 2). The black circles symbolize the location of Hambach forest (on the left) and Dannenrod Forest on the right.



Figure 2 - Photos of the interviews and location in Germany

#### 4.2.4 Coding and Thematical Analysis

The interviews were conducted and recorded in German. The ten interviews were transcribed in Word and coded with NVivo. Following social sciences research methods and aligning with Creswell, the analysis enables the researcher to “develop an increasingly detailed knowledge of the topic being studied” (2013: 22).

In the coding process in NVivo, inductive and deductive codes were applied in a mixed fashion (Braun and Clarke, 2006: 83-84). The codes were then merged into themes. Here, it must be underlined that the researcher herself plays a crucial role in generating these themes. As Ryan and Bernard emphasised, the found themes are highly dependent on the researchers themselves and “[t]heme identification does not produce a unique solution” (2003: 103).

I followed the guideline of Braun and Clarke’s (2006: 87) six-step-template including: 1. Getting to know the data, 2. Introductory coding, “3. Searching for themes, 4. Reviewing themes, 5. Defining and naming themes, 6. Producing the report”, and their checklist how to do a good thematical analysis (2006: 96). The themes represent recurrent patterns, or differences within the data and focus on answering the research questions (Ryan and Bernard, 2003: 100). Finally, six themes were constructed (see Table 1). All chosen interview quotes have been translated by me for the sake of presenting them in the analysis, discussion, and context.

## 4.2.5 Methodology - Limitations and Reflections

Theme		Selection of connected codes
I	The occupiers' plural image of forests	Active sensing, destruction, forest as a nice place
II	The vital functions of forests	Animals, collective reasoning, climate regulation
III	Individual importance of forests	Connection to forest, recreation, relief of stress
IV	Criticism of the current treatment of forests	Alienation, criticising overuse, instrumental value
V	Stewardship for forests	Meaningful activity, nature conservation, physical commitment
VI	Additional elements of forest occupations	Community, influence by the occupation experience, media attention

*Table 1 - Themes and selected connected codes*

Interviewees need to be seen as individuals besides being part of the community in forest occupations. All mentioned values can be strong or weak to a certain individual extent. For example, in theme IV, it became evident that most of them criticise the current system. However, there are varying degrees of radical attitudes.

## 4.2.5 Methodology - Limitations and Reflections

One limitation of this research is the definition of my population of study, as it could possibly exclude those that are active in forest occupation but have not spent the night there out of personal reasons. However, a definition was needed to distinguish between day visitors e.g., during a demonstration like in October 2018 with 50.000 attendees (Deutsche Welle, 2018) and occupiers. Due to the limited time frame of thesis, only a little number of interviews were conducted. However, the number is feasible as recurrences of mentioned themes within the interviews were observed, hence data saturation was reached. If the research would have included other personal and time parameters, more interviews could have been done. Moreover, using a second type of data material could enhance the research e.g., in further research focus group discussions could be added next to the interviews which would highlight the communal

given values for forests. However also this new type of data collection would face some obstacles.

Power structures between the interviewee and interviewer need to be reflected upon (Brinkmann and Kvale, 2005: 164; Sultana, 2007: 382; Creswell, 2013: 60; Brinkman, 2018: 991). As a researcher, I have defined the general parameters of the interview, e.g., the topic, the number of questions, the order of questions etc. (Brinkmann and Kvale, 2005: 164). This could have influenced the interviewees by disrupting their own flow of thoughts about the topics. Moreover, building trust between the interviewer and interviewee is crucial (Creswell, 2013: 60) so that the interviewees have the feeling that they can openly communicate their thoughts. Of course, it is questionable if trust can be built in such a short time.

As Sultana (2007: 376) argues, reflexivity in research requires the examination of power relations in the research process, researcher positionality and role in data collection and interpretation. Therefore, besides the limitation of this research, ethical considerations and the researcher's positionality will also be reflected upon.

### 4.3 Ethical Considerations

When doing research, it is crucial to follow guidelines enabling ethical standards (Brinkman and Kvale, 2005: 169) which also include how data is collected, stored, and used. Hence, this thesis follows the standards by the Swedish research council summarised as anonymity and confidentiality (Swedish Research Council, 2017: 40).

Before the interview started, the interviewees were asked for their consent to the interview itself and to the recording. Oral consent was chosen as the activists are cautious with giving their name and signature. Especially when working with activists, anonymity plays a crucial role. In forest occupations, which includes civil disobedience, many people use nicknames to make everyone feel safe (Brown, 2020: 61). I substituted the activists' names with numbers from one to ten. With this measure anonymity is strictly respected.

The interviewees were made aware of the interview topics beforehand. In every interview, I communicated that they could end the interview at any time and that they do not need to answer questions if they do not feel like responding them. Furthermore, I declared that the interviews will be deleted after finishing the thesis (Swedish Research Council, 2017: 42).

#### 4.4. Positionality

Following scholars like Haraway (1988) and Sultana (2007), I consider it important to reflect on my positionality as a researcher. I am influenced by the way I have been raised, educated, and socialised; by my own belief systems, experiences and much more (Creswell, 2013: 18). As a German citizen, I had the advantage of approaching them by being able to speak German and English and meeting the occupiers in person within Germany.

I have grown up in a massively forested area, which makes me really attached to this ecosystem, hence I personally have high relational values and see the need for a plural valuation of forests. This enables me to empathise with the activists protecting forests. I personally have been involved with topics around forests and have criticised the overuse of forests and deforestation. However, I am not a forest occupier myself, but an ally to forest occupiers, which might have influenced them to open up more during the interviews. My personal contacts with climate justice activists gave me an easier access to approaching forest occupiers. However, I did not interview any of my personal contacts directly. My selection of theory and point of view on the dominant paradigms reflect my critical attitude of current commercial forestry.

### 5 Thematical Analysis

In the following section I present the results from the thematical analysis, starting by shortly explaining the context of a forest occupation. Six themes were identified as predominant within the diversity of themes. They will be presented in this analysis section and in table 3. In the analysis the first research question about the articulated values of the occupiers will be answered.

Living so interconnected with nature was a significant experience for most occupiers. Compared to their “normal” life in cities, it was a new experience. Spending time in the occupation influenced all interviewees in many ways:

*Interviewee 4: “All the questions are now somewhat coloured by the occupation, which means that if you had asked me before the occupation, some of the answers would have been completely different”.*

## 5.1 Theme I - The Occupiers' Plural Image of Forests

They were also constantly confronted with topics such as the forest destruction and more extensive political topics like justice during the occupation time.

### 5.1 Theme I - The Occupiers' Plural Image of Forests

The forest is very important to every occupier interviewed. The interviewees described the forest by using different senses, e.g., sight, sound, smell, and touch. This active sensing was connected to their desire of discovering the little details in forests. Moreover, the occupiers described the forest as a silent, peaceful, and aesthetically pleasing place (aesthetic value) where they can relax and get new energy (recreation value). This strongly aligns with common depictions of the forest in former studies (Anderson et al., 2018; Bjärstig and Sténs, 2018).

*Interviewee 2: "The forest is a beautiful place where I like to be".*

Some also highlight the forest's meaning for everyone, the entire German society, and that being in the forest would be great for everyone e.g., to relax.

For all interviewed people, the forest occupation was not the first time they had been in the forest. All had spent time in forests before, for example on trips with the family or school, which shaped their images of the forest to a place to hike, relax and enjoy. Some of the interviewees felt emotionally connected to the forest before, others not. However, all agreed that their relationship got stronger through the occupation.

For many, the appreciation of forests intensified through the occupation. Out of their high appreciation they try to act gently and respectfully with the forest in the occupation e.g., using ropes instead of nails when building tree houses. However, for some interviewees, the forest carries additional significance, e.g., a place for collective action where fighting for the forest occurs. Moreover, the occupiers' original image of forests was expanded by constantly being confronted with and thinking about forest's destruction in Germany. For some, this also hindered the ability to relax in the forest. On the other hand, this omnipresent topic of forest destruction made the occupiers appreciate the forest even more. This aligns with the findings that threats against an ecosystem strengthen the protectors' connection to it (Gravante and Poma, 2017: 903).

*Interviewee 1: "and then you build up such a bond where you say, I would now defend him [the forest] with my life".*

## 5.2 Theme II – The Vital Functions of Forests

In summary, forests are still predominantly given the same a role of a beautiful and silent place, as previous research suggests (Bjärstig and Sténs, 2018), but the role of the forest as a place of action, combat, destruction did come up in this research context – which I framed as *the nice place and the fight place*.

### 5.2 Theme II – The Vital Functions of Forests

The second theme is about the ecosystem perspective of the occupiers. Here, they drew on scientific knowledge of the ecosystem forest and collective reasoning to emphasise the importance of forests. When reflecting on the meaning of forests, the occupiers emphasised the vital functions of forests for humanity, e.g., in relation to air, water, filtration, sound absorption and biodiversity. These functions were underlined by the high numbers of the connected codes such as, e.g., vital functions for humanity and the earth's dependency on forests.

*Interviewee 5: "So much depends on it, yes, water, air, climate, so nobody really wants to run out of water, which is why it is actually the only logical way to protect the forests, because we need them so urgently".*

*Interviewee 1: "When the forest is gone, so am I".*

Some framed these ecosystem functions and their meaning as “abstract”, “pragmatic”, and “rational” reasons to value forests. Some activists also assigned instrumental values to these functions of the forests that align with former research, e.g., Bieling, Eser and Plieninger, 2020; Inglis and Pascual, 2020. However, the interviewees did not frame the forest's function in an economic way; rather they appreciated these services the forest offers. Some also urged people to not frame the forest as a service giver, e.g., only in an instrumental way. Interviewees saw it problematic to frame the forest only as a solution for civilizational problems, e.g., the current dominant discourse of forests as CO<sub>2</sub> storage (Delabre et al., 2020: 4). Moreover, they refer to animals or other species present in the ecosystem, e.g., plants or fungi. The occupiers underlined the species' importance and their intrinsic value.

The interviewees stated that it should be clear to everyone that the forest fulfils essential functions for the Earth. Additionally, some stressed that this knowledge about the ecosystem forest is based on scientific knowledge which has been accumulated over the years. This perspective also supports the occupiers' opinion framing the current decisions made regarding



### 5.3 Theme III - Individual Importance of Forests

forest destruction (Theme IV) as absurd. In such a way, theme II underlines the collective dependence of the whole of Earth on the forest.

### 5.3 Theme III - Individual Importance of Forests

As indicated in Theme I, the occupiers valued the tranquillity found in forests. Often tranquillity relates to therapeutic values of nature (Goodwin, Brogaard and Krause, 2019: 335). Indeed, therapeutic values were assigned frequently, aligning with other studies (Coelho-Junior et al., 2021: 8). The forest was presented as a location where the interviewees could escape the “outside” world in which they could feel themselves and be present in the moment and relieve stress. They described the “outside” world as overstimulating and imposing societal roles on them.

Spiritual values were assigned less frequently, which was also observed in other research (Coelho-Junior et al., 2021: 9), and were not connected to the religious understanding of spirituality. They were connected to thoughts like “something bigger than the reality” or “Sense of Awe”.

The occupiers often assigned recreation values (Bjärstig and Sténs, 2018: 131), through activities like strolling through the forest; only some interviewees mentioned activities such as hiking or biking. Some occupiers described the forest as an essential part of their identity value. Reflecting upon their study and career path throughout the forest occupation, two occupiers changed their job and studies to better align with their somewhat transformed identity.

Additionally to that, several of the interviewees assigned not only the forest, but nature as an essential part of their identity.

*Interviewee 6: “Nature in general is very important to me. And to protect it, but I don't think I would exclude the forest specifically”.*

All interviewees highlighted the aspect of connection in the forest in diverse ways, e.g., with themselves (therapeutic value) and with others (value of social relations). Nonetheless, they also emphasised their desire to be alone in the forest to enjoy therapeutic values for example. The connection with the forest itself played a significant role in all interviews and was strengthened throughout the occupation.

#### 5.4 Theme IV - Criticism of the Current Treatment of Forests

*Interviewee 2: "I would say so, I would say that I have built up a stronger connection to it, simply to the forest again [...] and I have lived in the forest for a while and was very close to it somehow".*

Relating to the topic of connection to nature, some also criticised the dominant economic and political system in Germany, creating alienation from nature, and urged for reconnection to nature, inter alia, with forests. All interviewees developed a stronger connection to the forest through being in the forest for a long time. This connection was quite extensive for some, and hence some developed a sense of place (BMUV, 2016: 62). A sense of place value was given to a lesser extent to the forest itself. More often, this value was assigned to the occupation in the forest as a home which e.g., included the community within the occupation.

Interestingly, the interviewees felt close connection and heightened recreation value towards all forests. However, some of the interviewees highlighted their personal connection to specific forests, by knowing a forest longer. Some assigned a sense of place value to e.g., the Dannenrod Forest aligning with (Riechers et al., 2021: 2).

*Interviewee 7: "Every forest I come across gives me recreation [...] this forest also gives me something here. I don't have a deep relationship with it yet, but of course it gives me something [...] but of course the forest in my home is something else, or what I said before, if the Danni were still standing, that would be a completely different feeling".*

However, even though enjoying these personal relations to the forest which they value, the occupiers highlighted the collective dependence on the ecosystem, as explored under Theme II:

*Interviewee 1: "There are things you can't compare. I can't compare the necessity of life and having fun in the forest".*

#### 5.4 Theme IV - Criticism of the Current Treatment of Forests

Based on the occupiers' image of forests, the high regard for forests (Themes I, II), and their personal linked values (Theme III), the occupiers strongly opposed to how the forest was treated. They experienced it as unnatural and were saddened.

#### 5.4 Theme IV - Criticism of the Current Treatment of Forests

*Interviewee 7: "It is simply unnatural how we deal with the forest as humanity, I find it very sad and disappointing because we practically manage to destroy ourselves and the environment".*

For them, the treatment of forests was led by human control, management, overuse of forest resources, and destruction for economic benefits. Interviewee 7 titled the current treatment as a "war against nature". Within their criticism, the occupiers referred to instrumental and intrinsic values. They criticised the overuse of forests and forest's instrumental benefits, e.g., monetary benefit for wood. They did not generally reject wood harvesting in general but called for sustainable wood use, not overuse. Instead of exploitation of the forest, they demanded its sustainable treatment.

*Interviewee 6: "Yes, I think you can use it, but in a sustainable way. Just not exploit it".*

While criticising the instrumental overuse, they demanded a higher intrinsic valuation of forests by underlining the inherent right of the forest.

*Interviewee 9: "And the intrinsic value of the forest also plays a role for me, for the reason that I see it as a mistake to measure things only, or the value of things only by the benefit they bring to me personally or to people, and that there is a value of ecosystems in particular that goes beyond that and is independent of it".*

Based on this inherent right of existence and criticism, they condemned the high human intervention of controlling and managing the forest. The interviewees wished and demanded the forest to be left alone to "just" be a forest.

*Interviewee 9: "Yes, that we should also just let the forest be the forest".*

All occupiers agreed that there should be a new treatment regarding forests. Some were more radical or more direct about it than others. They declared the current decisions (to deforest) as absurd. For them, it was incredibly illogical that the forest was cut down, as this action did not align with the knowledge that highlights the vital functions of forests especially in times of climate and biodiversity crisis. Moreover, the reasons for the destruction, e.g., building a new highway and extracting coal, were "absurd" and not in accordance with climate crisis. Furthermore, some interviewees saw an entanglement between politicians and the economy,

and hence the decisions made favouring economic growth. One interviewee referred to this critique of economic growth to the global context of deforestation by stating:

*Interviewee 6: “Of course, there are laws against it and always some kind of movement [activism], but as long as economic interests prevail, the economic interests will always be granted”.*

As Brown (2020: 32) mentions, forest occupations like the Hambach Forest are highly influenced by anti-capitalist movements sharing this criticism of economic growth. The interviewees made their statement very clear. They demanded that the forest is seen as a priority and never weight against economic profit. In their criticism towards the forest destruction, it became clear that some criticised the dominant paradigm of economic growth. Due to the passivity of the general public, the interviewees had put responsibility on themselves as occupiers.

## 5.5 Theme V - Stewardship for Forests

Out of high appreciation of forests and criticism of their destruction, the occupiers stated that the situation had to change. Hence, they already put themselves in the role of becoming active, as the forest could not protect itself.

*Interviewee 7: “because it [the forest] cannot protect itself, so outside forces have to do it”.*

The value of stewardship was the most mentioned among the occupiers. This value motivated them to show such a significant commitment as pausing their life outside of activism, even though physically straining activities and encounters with the police took place in the occupations. This stewardship also played a major role in their identity. It was important for some of them, and two even described it as their job.

*Interviewee 10: “A sense of responsibility and protection of the forest. That's just a principle [...] my job, as something like a climate activist, and the tasks for which I have made myself responsible and still do [...] That's why all of this is actually more like this ideal and also the drive, the motivation, why I do what is important to me personally in my identity”.*

## 5.6 Theme VI - Additional Elements of Forest Occupations

However, taking part in occupations was only one way to show their stewardship of forests. Some also collected rubbish in the forest or wanted to plant trees which was not only about the protection of forests but the protection of nature in general.

*Interviewee 5: “I think it's more this protection of nature in general, yes. But I wouldn't say forest directly, or nature directly, but rather this protection”.*

It is essential to mention that for some, this responsibility applied to nature conservation in general and to an overall social-ecological transformation. Stewardship seems to form their identity and motivate them. However, there can be different motivations to be involved. Some also mentioned social justice, the need for considerable societal transformation and climate justice. They were taking this responsibility on themselves to fight for all. Some activists also told me about taking too much responsibility on themselves and hence struggling with mental illness due to stress. Some were aware that not everyone had time to be involved in activism due to work or marginalization. Nevertheless, they urged that more people take responsibility for preserving forests and that the German government upholds their commitment of forest protection.

## 5.6 Theme VI - Additional Elements of Forest Occupations

In addition to protecting the forest, many meanings of forest occupations have been identified as part of the forest occupation experience and hence influence the forest occupiers' valuation of forests. In particular, the forest occupation could be seen as a subculture. The forest was the central space where this subculture unfolded. Firstly, they lived in the forest to protect it. Secondly, they lived there with other people. The forest was the place where they met.

*Interviewee 1: “Especially with forest occupations or something like that, where the forest is the central theme, where this group constellation that takes place there, and the acquaintances and the energy that is brought up there, would not have come about without this forest, because the people would not have met without this forest”.*

Several interviewees emphasised the role of the forest in this way. Firstly, social relation values were assigned as the occupiers met there. Through this common goal, shared experiences were made, and people became a group. Also, Van Dam shows how the group feeling is developed “from doing things together, from ‘bonding by doing’” (Van Dam, 2016: 141-142).

## 5.6 Theme VI - Additional Elements of Forest Occupations

*Interviewee 10: “we often talk about fighting in the forest and that's also part of the group, that you have a common goal, to preserve the place where you live [...] That is what brings us together in the process. It's not like going there with a loose bunch of people and being a group straight away, a lot had to happen for us to feel like a group”.*

These individual people became a group that inherited a particular subculture, values, and behaviour regarding the forest. Here, social and collective identity values were assigned. Both social relations values and social and collective identity values make the forests' role in mediating human-human relations clear (Riechers et al., 2021: 2). Most of the interviewees emphasised that it was not only the forest protection but also the community, that made this experience of forest occupation so influential.

*Interviewee 4: “It's not just the forest, but also the social movement around it that creates identity, and that always works together, just the forest without people, without, the occupation would never be so identity-creating for me. It's always a symbiosis”.*

Besides the two meanings of the forest, the nice place and the fight place (Theme I), the forest also carried the meaning of community. The community can be described as open, politically aware and caring for each other, which aligns with the findings of Van Dam describing a squatters' community in the Netherlands as: “giving, sharing, helping each other, trust and reciprocity“ (2016: 141). These notions and especially caring creates a flatter hierarchy and minimises control over nature in a way (Arora et al., 2020: 250).

*Interviewee 5: “Yes, and I think you pay much more attention to the group staying together that you look to see if everyone is there, if everyone has enough food and drink, so somehow the group feeling is much stronger in the forest and also Danni, yes, so occupations there the group feeling is much more intense, you look out for each other so fully”.*

Another factor that highly influenced the experience is the self-organisation of the group. Most interviewees appreciated the possibility of realising a utopia in the forest as an alternative to the outside world. The previous criticism of dominant paradigm of the system such as economic growth was translated into the organisation of the forest occupation with their self-created structures such as direct democracy, money-free shops, food for all, and awareness structures. Possessing their power to decide (Martinez-Alier, 2002: 271) for themselves as a group, e.g.,

## 5.6 Theme VI - Additional Elements of Forest Occupations

about their structure and role, was motivating and created hope. Outside the occupation space the occupiers felt that roles were imposed onto them which they criticised. Similar findings were detected by Van Dam (2016: 64) giving a prominent role to “their way of life, characterized by autonomy, self-sufficiency, and difficult and uncomfortable conditions“ of living. Furthermore, the experience of the occupation enabled the occupiers to think about the German society’s alternatives for life which are often neglected in other discussions.

Even though the occupations’ main aim, to protect the forest, was not fully realised, they got media attention, which had an impact on shifting discourses. A few interviewees said that the forest protection was symbolic, and the main aim was to reach the media and therefore society to create a change in discourses and ultimately change dominant paradigms of the system. They understood this occupation in Germany as a united struggle and broader fight for climate justice, which also aligns with the findings of Brown (2020: 22). Here, and in the intracommunity care, they hold eudaimonic notions (Chan, Gould and Pascual, 2018: 4).

*Interviewee 10: “Yes, and with Danni, that's another level up (laughs), it also has a lot to do with the forest, but it also has a lot to do with ideas of changing things together and also preserving things, so that's such a funny contradiction between wanting to change things and wanting to preserve things. So, you actually want to turn society upside down in order to preserve more things”.*

Regarding power structures it needs to be added that, at the same time, the media, through framing them in a certain way, together with the police, through evictions, disempowered the occupiers. Some media presented them e.g., as violent or criminal, which aligns with strategies found by Brock and Dunlap (2018: 41) used by RWE to justify their eviction.

To conclude, the community and self-organisation played a significant role next to the forest protection itself. Their aims of preserving (forests) and changing (social-ecological transformation) may seem like a paradox at first but looking deeper allows the recognition that the societal change they advocate is intended for the preservation of forests. This contradicts dominant paradigms like economic growth that hold change as forward-looking and even questions the dominant definition of development (Escobar, 2016: 25). The occupiers challenge the binary of change/preservation by advocating for a nuanced vision of moving forward in a way that places us our political and economic system within planetary boundaries.

	<b>Theme</b>	<b>Description</b>
<b>I</b>	The occupiers' plural image of forests	This theme describes the plural image of the forests being "a nice place" (aesthetic values) and "a fight place".
<b>II</b>	The vital functions of forests	Here, the important functions of the ecosystem forest are emphasised, which are crucial for the whole Earth system.
<b>II</b>	Individual importance of forests	The forest is important for the occupiers individually. They assigned therapeutic values, spiritual values, individual identity values, and recreation values.
<b>IV</b>	Criticism of the current treatment of forests	The occupiers criticise how the forest is currently treated and how valued. They criticise the dominant instrumental valuation and demand higher intrinsic valuation of the forest.
<b>V</b>	Stewardship for Forests	Out of the appreciation, meaning and high valuation the occupiers have towards the forest, they criticise the current dominant treatment, and hence become active as forest occupiers. Stewardship was mentioned most often in this sample which is also connected to their role/ how they identify themselves as forest occupiers.
<b>VI</b>	Additional elements of forest occupations	Even though the fight takes place in the forest, and they demand changes in the forest treatment, this fight is connected to a broader change of dominant paradigms of the current economic and political system in Germany. Furthermore, the role of the community in the occupation is underlined, which for example how they feel at home in the occupation due to the community (sense of place value).

*Table 2 - Description of themes*



### 5.7 Occupiers' Plural Valuation of Forests

The first research question explores at the articulated values of the occupiers. Forest occupiers in Germany articulated intrinsic, instrumental, and relational valuation of forests (see table 2). However, relational, and intrinsic values were assigned more often than instrumental values. This coexistence of valuation was also immanent in other studies of valuation of forests e.g., in Goodwin, Brogaard and Krause (2019: 331). Within relational values, the subcategories of stewardship, therapeutic and aesthetic value have been most prevalent. Some values were individually given e.g., spiritual value and therapeutic value, while others were given collectively, e.g., values which the whole group shared. One of these collectively assigned values was stewardship, as this was deeply anchored in the group. This value was also assigned individually. The current focus on instrumental values exemplified by economic practices in the forest e.g., logging for wood production, was highly criticised by the occupiers. One of the 12 values, the one of traditional/ culture was not frequently articulated and thus do not carry any weight.

This research found that relational values can be developed and strengthened through unique experiences such as forest occupations. The occupiers connected with the forest. This connection can be seen as a driver for sustainable action (Bieling, Eser and Plieninger, 2020: 188). As Mackay et al. (2021: 1) argue, "[c]onnection to nature represents the inclusion of the self in the broader category of the natural world".

This research mirrors the diverse meanings and roles people assign to forests which were also confirmed by other studies (Bjärstig and Sténs, 2018). The forests occupiers' image of the forest as a nice place was expanded by viewing it also as a place of community and hence, to fight for the forests' protection. They fight for a better life for all, which is strongly connected to eudaimonic views (Chan, Gould and Pascual, 2018: 4). The occupiers underline the vital functions of the forests, and the importance of its protection to enable life for everyone including non-humans. In summary, this thesis contributes to current research by considering by political active individuals and the community they created. It could be interesting to do further research on political groups and their valuation of nature.

## 6 Discussion

The analysis and the six themes (Table 2) enabled me to answer my research questions. Firstly, the analysis showed the significant influence of the occupation on the occupiers' lives in many ways. In section 5.7, I already answered the first research question regarding the values articulated by the occupiers. Now, I will answer the second research question about the influence of the valuation of forests and their occupation. Then follows the third research question about challenging the dominant paradigms of the economic and political system.

### 6.1 Influence Between the Occupation and the Occupiers' Valuation of Forests

Relational values “are seen as a better representation of people's opinions and motivations” (Shishany et al., 2020: 3). The occupiers gave insights into the diverse reasons for why they went to a forest occupation. Their motivation to protect the forest seems to grow out of their responsibility, appreciation, and knowledge. Other studies emphasise the motivational nature of relational values (Mattijssen et al., 2020).

As mentioned in section 5.7 and Theme V, one relational value which played into this is the occupiers' high value of stewardship. Although this thesis did not analyse further in what way relational values were a motivational factor, it was a mix of different values, reasons, and sometimes personal contacts which brought the occupiers there.



*Figure 3 - Influence valuation and activism*

The second research question was about the forest occupiers' valuation of forests and their activism. In this research, I found a connection between the valuation of forests and the engagement in the occupation, which is depicted in Figure 3. The occupiers could connect with the forest through their time spent in the forest occupation. The time in the forest enabled them to develop a stronger appreciation and valuation of it.

When asking the occupiers, they clarified that the values intensified through their time in the occupation. Their values for forests, especially relational and intrinsic ones, were reinforced

## 6.1 Influence Between the Occupation and the Occupiers' Valuation of Forests

through their participation in the occupation. During the occupation, they spent time in the forest and built a connection to the occupied forests. This led to an intensified valuation.

When being in the forest occupation, they are actively involved in the activism and the community. Van Dam calls this “Bonding by Doing” (Van Dam, 2016: 141-142). Her findings

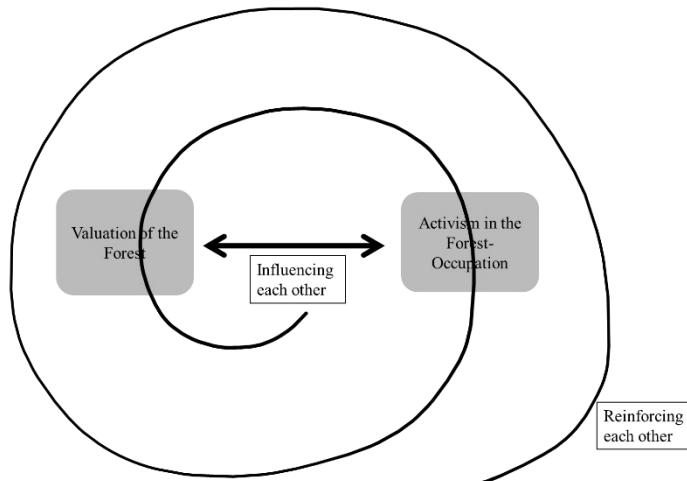


Figure 4 - Reinforcing spiral between valuation and activism

emphasise the significance of active citizenship and engagement, as the occupiers have demonstrated. Therefore, this influence can be depicted as a reinforcing spiral between the activism and the valuation of forests (see Figure 4). This strengthens the research findings of Riechers et al. (2019: 8) who attribute active involvement as an essential factor in “stopping a spiral of disengagement”.

As shown in the analysis, the group dynamics played a significant role and became a motivating aspect for the occupiers; hence in this spiral, community as part of the activism in the forest needs to be highlighted. As Van Dam (2016) showed, relations to land and relations with other humans influence and intensify each other significantly. Similar results are made by Goodwin, Brogaard and Krause (2019: 344). Especially, concepts like value pluralism and relational values enable to see the importance of the social context in valuation of nature (Chan et al., 2016: 1463). The communal feeling contests individualism, which for scholars like Escobar constitutes another paradigm of the dominant system (Escobar, 2016: 16).

Forest occupations as lived experiences in the forest seem to contribute immensely to the motivation and overall picture of forest occupation as shown. The importance of place, where time is spent together for bonding and developing shared values, becomes apparent. Like Van Dam (2016: 180) also, this thesis underlines the importance of place in activism. Due to the weakened pandemic, this should be possible again to meet in person to strengthen activist movements. It would be highly interesting to expand on this factor of lived experience in further research.

## 6.2 Challenging Dominant Paradigms in Germany

As shown, it is the combination of the forest and the occupation community influencing the occupiers' valuation of forests. The forest alone, or the occupation alone, would not be as impactful as the combination influencing valuation of forests. This shows a connection, rather than causality, as assessing causality was not part of the conducted research. To conclude, (relational) values can be influenced and the forest occupation affected by (relational) values. Furthermore, this research shows that values can be developed and strengthened through time in a particular ecosystem. Bullock also emphasises that values can change throughout time and context (2017: 7). Strengthened valuation of forests can lead to changes in our dealing with them (Mattijssen et al., 2020: 402). This underlines the role of plural values in transforming and challenging dominant paradigms of the current economic and political system.

## 6.2 Challenging Dominant Paradigms in Germany

In this section, the occupation and the plural valuation of forests will be considered to see how these two aspects challenge paradigms of the dominant economic and political system in Germany. As Mackay et al. (2021:12) summarise, appropriate actions by individuals to be more environmentally friendly are essential; however, the impact of these actions is limited when the system operates contrary to them, e.g., still focusing on economic growth instead of environmental protection (Kopnina et al., 2018). This line of thought emphasises the chosen philosophy of science base of this research of critical realism, which considers both sides, the individual and the system (Lawani, 2020).

As it becomes clear in Theme IV, even though the forest is the central pillar of the occupation, for some it is symbolic of a broader change in the economic and political system. As stated in 3.3, the dominant system in this thesis is understood as perpetuating paradigms of instrumental valuation and economic growth. Hence, this dominant system influences one's life in a certain way, e.g., living in cities with digital devices, working, and being alienated from nature. The latter, alienation from nature, is a "characteristic of life within modern (post)industrial society" according to Fletcher (2017: 226).

### 6.2.1 Contesting the Dominant Instrumental Valuation by Value Pluralism

This first section answers the third research question by drawing back on the theories of value pluralism. By articulating mostly relational and intrinsic values to forests (see 5.7 and table 2), the forest occupiers challenge the dominant language of instrumental valuation. Hence this

### 6.2.1 Contesting the Dominant Instrumental Valuation by Value Pluralism

research shows a plurality of values, e.g., multiple roles and values through the articulated therapeutic, spiritual, and stewardship values. "Recognising and respecting value pluralism is needed for nurturing sustainable human-nature relationships and human well-being" (Inglis and Pascual, 2021: 1). The research would not have been able to capture many of the occupiers' plural values, had it only focused on instrumental values. The occupiers wanted to resist the dominant visions that saw forests only instrumentally. Thus, the statements by the occupiers align with the criticism of the dominant instrumental language by scholars of ecological economics (Pirgmaier and Urhammer, 2015: 2). Despite the criticisms, most economic and political decisions are still based on applying instrumental values; "states municipalities, and companies often try to impose one single valuation language, – money" (Martinez-Alier and Anguelevski, 2014: 174). The Hambach case demonstrates that economic benefits for RWE are put above the forests' life (Brock and Dunlap, 2018). Politicians and corporations often have the power to impose the decision to clear-cut a forest (Martinez-Alier, 2002: 271). These decisions are connected to the reinforcement of the paradigm of economic growth, on which corporations such as RWE are dependent (Brock and Dunlap, 2021: 98).

The example of the occupation and the articulated values show the need for value pluralism. Value pluralism and the plural valuation of forests are aspects of a social-ecological transformation as they shift how forests are seen and consequently used (Horcea-Milcu et al., 2019: 1430), especially given the alarming crises of biodiversity and the climate (Watson et al., 2018). However, there is still a long way to go, as plural values are not often considered in designing forest policies, as the interviewees raised in the interviews, e.g., demanding a change in the treatment of forests (Theme IV). Further research examines how occupiers' valuation, or in general the public valuation of forests could be included into decision-making. Scholars have discussed how these changes might be realised. These debates around how to include values in policy making are mostly about whether nature's services should be monetised (Arias-Arévalo et al., 2018: 32)<sup>10</sup>. Another approach is to integrate plural values without breaking them down to values measured in monetary terms (see e.g., Mattijssen et al., 2020: 406). In both approaches, value incommensurability issues on different levels could hinder the process. The

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<sup>10</sup> To transfer these values and services into money would lead to value monism again. As a result, ecological economists must choose between "accepting the power of markets and playing their game to win environmental concessions versus a purist perspective of saying no to any hint of money or markets in environmental policy"(Kallis, Gómez-Baggethun and Zografos, 2013: 103).

## 6.2.2 Economic Growth and Powerful Actors – Economy, Companies, and the State

occupiers by themselves already indicated notions of value incommensurability when comparing different valuations of the forests e.g., when comparing fun in forests vs necessity of forests' vital functions (Theme 5.3). As shown in this section, value conflicts are not easily solvable. The German state can be located in such conflicts: acknowledging the intrinsic and recreation value of forests on the one side, and on the other side perpetuating the paradigm of economic growth (Brock and Dunlap, 2021: 110).

There is a need for a general transformation of the system, shifting from dominant instrumental valuation to new approaches for human-forest relations. Value pluralism could be framed as a part of the system change as it transfers the focus of valuation from instrumental to plural values, including more than economic benefits. The dominance of instrumental valuation becomes evident in the process of the commodification of forests, e.g., in CO2 commodification of the forests as carbon sinks (Delabre et al., 2020: 5). To conclude, the occupiers' plural valuation of forests challenges the dominant instrumental valuation. “[V]alues-as-relations approaches can provide a plural counterweight to economically focused agendas and languages” (Tadaki, Sinner and Chan, 2017: 8).

## 6.2.2 Economic Growth and Powerful Actors – Economy, Companies, and the State

When referring to debates of valuation, economic and state's structures must be examined, (Pascual et al. 2017: 10; Chapin et al., 2022: 3). As there is a connection between political and economic decisions and public valuation of nature (Pascual et al., 2017: 10; Chapin et al., 2022: 3). Even if this thesis mainly focuses on the actor's resisting deforestation, the forest occupiers, it is also important to reflect on the role of the German state and economic actors like RWE.

In 6.2.1, I looked at the procedural power and summarised that the occupiers can challenge state and economic instrumental valuation through their occupation and influence society (Martinez-Alier, 2002: 271). In this section, the power “to impose a decision on others” (Martinez-Alier, 2002: 271), will be discussed. This is done by examining the power of the state and private company in the Hambach case. RWE, as a company, relies on this idea of economic growth (Brock and Dunlap, 2018: 44; Brock and Dunlap, 2021: 98). Moreover, the state has been theorised as an economic actor (Jessop, 1982: 36) and Germany is no exception (Dunlap and

## 6.2.2 Economic Growth and Powerful Actors – Economy, Companies, and the State

Brock, 2021: 94). Hence, both, the state and the company play a crucial role in perpetuating economic growth (Dunlap and Brock, 2021: 94).

The decision about deforestation in Germany also needs to be seen as political arena, where dominant paradigms, such as economic growth, play out. The German state and its associated structures, e.g., federal states, are responsible for the forestry division. Delabre et al. (2020: 3) argue that the “assumptions about the neutrality and independence of the state from the forestry industries” are not applicable. In the Hambach case, the federal state of North Rhine-Westphalia, carries out economic-focused initiatives at the cost of allowing the logging a healthy forest. The entanglement of the state and the economy is complex, and this thesis cannot give a fair review of this topic. However, it is crucial to see how economic actors influence the state. RWE represents an economic actor which holds regional (e.g., in North Rhine Westphalia) and national power (in Germany) by actively engaging in lobbying (Brock and Dunlap, 2018: 37). As Brock and Dunlap (2018: 37) show, some members representing the German state and RWE seem to be highly entangled, e.g., politicians getting money from RWE or having a certain share hold. “There is a unique structural dependency of local municipalities in the Rhineland on RWE's financial wellbeing” (Brock and Dunlap, 2018: 37).

Activists challenge the dominant paradigm of economic growth by their diverse tactics<sup>11</sup>. RWE has an interest in portraying the occupiers as criminals to justify their eviction and to be able to continue its business as usual (Brock and Dunlap, 2018: 41). The occupiers experience these evictions as traumatic, furious how their positive action of protecting forests can be violently charged. Additionally, here the entanglement of police (as executive actors of the state) and private security ventures (hired by RWE) can be seen, like further confirming the connection between the political and economic dimensions of the system (Brock and Dunlap, 2018).

The paradigm of economic growth is furthermore contested by the occupiers’ subculture born out the occupation. The state’s top-down exertion of power is countered through the bottom-up approach emerging in forest occupations. By resisting the exertion of power through e.g., police evictions, they create their own spaces in the forest that allow collective empowerment. Furthermore, these spaces can be understood as “real utopias” (Wright, 2013). In this framing,

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<sup>11</sup> Besides forest occupation a major movement is Ende Gelände which occupies coal mines especially in this geographical area in the West of Germany (Brock and Dunlap, 2018: 37).

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“utopia” refers to developing alternatives to the existing system, while “real” means creating spaces in the direction of those alternatives (Wright, 2013: 167). “The goal is to elaborate utopian ideals that are grounded in the real potentials of humanity, utopian destinations that have accessible way stations” (Wright, 2013: 167). The occupiers implemented “real utopias” within the occupation e.g., setting up alternatives such as money-free shops and communal kitchens, creating a lived alternative to the dominant system of economic growth.

While establishing alternative spaces, the occupiers also contest the state’s power by protecting the forest through their forest occupation. By both creating alternatives to and confronting the system, the forest occupiers counter the critique of “communes” and other alternative spaces as sites for escape, rather than struggle. To elaborate on this critique, there are studies documenting how individuals withdrew from dominant living arrangements and “conventional arenas of political participation”, disengaging from the political and economic system (Wallmeier, 2017: 167), instead setting up their own subcultures. Contrary to these disengagements, the forest occupiers do both, not only creating a subculture and alternative spaces but also contesting and wanting to reform the dominant system.

The forest occupiers contest the current understanding of economy that does not see itself embedded in nature, by placing nature in the centre of their reasoning. This aligns with the base pillars of ecological economics, to see the economy embedded in nature (Martinez-Alier, 2002: 21; Bartkowski, 2016). Economic growth is often seen as the root cause of the current crisis, like climate and biodiversity (Böhme, Walsh and Wamsler, 2022: 5). It is thus important to rethink how economic growth is defined and see the need for re-evaluation of economic growth “by calling for more reflexivity on the values underpinning it” (Horcea-Milcu et al., 2019: 1432).

One could argue that relational values enable one to see nature other than instrumental, especially with relational values building a bridge between intrinsic and instrumental values. Thinking about the role of valuation-languages, shifting our focus away from instrumental value contests the dominant paradigm of economic growth. This research does not exclude instrumental valuation completely, but rather proposes that other forms of valuation are equally considered. Plural valuation of forests and the momentum of the occupation (including their subculture) opens new ways of seeing our role as humans, concentrating more on nature and our relationship with it, rather than only on the benefits it has for humans and economic growth.



In conclusion, the occupiers contest the paradigms of the dominant system, namely instrumental valuation and economic growth, through their activism during the occupation.

### 6.3 Reflections and Limitations

Certain subcategories of relational values were chosen based on the values for nature that were employed. However, it would be intriguing to include more relational values such as care (Riechers et al., 2021: 2). Furthermore, future research on the valuation of nature among political groups could include concepts such as politicized environmental identity (Mackay et al., 2021). Embodiment, emotions, and sensing represent likewise interesting linkages to investigate (Gravante and Poma, 2017; Pramova et al., 2021). Embodiment could be seen as dissolving the mind-body dualism (Böhme, Walsh and Wamsler, 2022: 7).

Furthermore, the study only investigated one group, the forest occupiers. To grasp a holistic picture of ideas for an improved forestry also foresters, forest scientists, local people and local government could be included. The forest occupiers showed great sense of community within their group. This could be analysed further as a contestation of the paradigm of individualism which is dominating Western society. Likewise, it could be intriguing to reflect dominant views on human-nature relations (3.1) and mainly the paradigm of nature-culture dualism with regard to value pluralism and the forest occupation. Do the occupiers see human-nature relations differently? How do they define nature?

As several actors are involved in these phenomena, it could also be interesting to investigate the local population, the actors of the state involved, and the police. Also, this thesis interview sample included white Germans speaking German. It might be compelling to see how more diverse actors are involved. It would be important to talk about the privilege of participating, as forest occupations are part of civil disobedience. However, investigating one group doing a niche activity can be insightful. In their latest report, IPCC underlines how activism by niche groups, such as the forest occupiers, impacts broader changes for the whole society by prompting “policy, infrastructure, and policy reconfigurations” (2022:5).

Finally, it should be noted that forest governance is a complex undertaking, and this thesis does not delve into enough detail of administrative structures or political entanglements.

## 7 Conclusion

Based on semi-structured interviews with forest occupiers in Germany, this research emphasised forests' multiple roles and plural valuation. The diverse articulated values of forest occupiers underlined the need for value pluralism.

Firstly, it was investigated whether forest occupiers articulated intrinsic, instrumental, and relational values for forests in Germany. The occupiers articulated substantial values, especially relational and intrinsic ones. Within relational values, the occupiers showed strong stewardship values, which are highly important to their identity. Especially stewardship of nature can change society by making humans reflect on the impacts of their actions on nature.

Second, I looked at how forest occupiers' valuation of forests affects their activism to protect the forest, and vice versa. Living in this subculture of the occupation, characterised by a tight-knit community, influenced their values of the occupiers towards the forests positively. This finding underlines how values of nature can change through such experiences, which are connected to more than only the protection of the forest.

Finally, this thesis explored how the forest occupiers challenged dominant paradigms of the economic and political system in Germany, explicitly instrumental valuation and economic growth. The occupiers created a new perspective on the valuation of the forest, which counterbalances the instrumental valuation of forests and land (Tadaki, Sinner and Chan, 2017: 8). Forest occupations are sites where collective action can unfold and where dominant paradigms are contested. They are spaces for implementation of alternative visions, as well as contestation of the dominant system. The powerful actors such as the state and private companies, however, do not easily yield for the occupiers' demands for change, instead perpetuating dominant paradigms.

The conducted research made clear that “economic growth damages the environment”, leading to “not only conflicts of interest, but also conflicts of values” (Martinez-Alier, 2002: 265). The German state within itself is caught up in value conflicts on the one hand by allowing to cut down forests for economic growth and the other hand its commitment to forest preservation. The German state should thus uphold and build upon its existing policies of seeing the plural valuation of forests besides recreation values (Delabre et al., 2020: 4).

The values and statements of the occupiers underline the need to see forests as a complex social-ecological system. As the occupiers highlight, we need to understand the dependency on the vital functions of forests and thus change the behaviour toward forests. The occupiers demonstrated that the government and the companies are not the only actors creating values in the public domain (Van Dam, 2016: 22). The occupiers' active engagement can inspire more people in Germany to use their agency to create the much-needed alternatives challenging the dominant economic and political system.

Social-ecological transformation requires many forms of activism and directions, e.g., bottom-up and top-down and transdisciplinary involvement. A narrow focusing on values is thus insufficient (Stålhammar, 2020: 72). Efforts need to be multifaceted and diverse. "Because no single intervention will transform the world, a key challenge is to align actions to be synergistic, persistent, and scalable" (Chapin et al., 2022: 1).

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## Appendix I - Definitions of Values retrieved from Literature

Value Category	Values I chose to use	Chosen value definitions derived from literature about values of nature	Example from the interview
<b>Relational values</b>	Aesthetic value	“I think nature is beautiful” (Riechers et al., 2021: 2)	“Yes, I find the forest very beautiful, whether in winter, summer, spring, autumn. I find the forest very beautiful.”
	Recreation value	“I value these Forests because they provide a place for my favourite outdoor recreation activities” (Clement and Cheng, 2011: 396)	“Then it's also about other things that I draw from the forest, so that's precisely things like relaxation, recreation.”
	Sense of place	“Nature helps me to feel home” (Riechers et al., 2021: 2)  “I feel strongly connected to the nature and landscape in my region” (BMUV, 2016: 62)	“When the forest was cleared further, intense emotions came up for many people, especially for those who had lived there for a longer time and for whom the forest was somehow even more of a home, I think, that is, even more who simply felt at home because they had really lived there.”
	Social relations	“How important is nature for you... as place to meet with other people” (BMUV, 2016: 53)	“You meet people in the forest, and the forest is simply a social place. I think that runs through everything from childhood to Corona walks.”
	Individual Identity	“The forest is important for my identity as a person” (Inglis and Pascual, 2021: 9)	“Of course, it [the forest] has a massive influence on my character and my soul and my behaviour. Intuitively, I would not have said such a strong yes.”
	Social/collective Identity	“Place is important to my people, who we are as a people” (Saito, Hashimoto and Basu., 2021: 3)  “Our landscape is a big part of our culture” (Riechers et al., 2021:5)	“But for the group itself, because we found each other through it and now function well as a group of reference and also travel together to other forests, it is important for us.”

## Appendix I - Definitions of Values retrieved from Literature

	Traditional/ culture value	“I value these Forests because they are a place for me to continue and pass down the wisdom and knowledge, traditions, and way of life of my ancestors” (Clement and Cheng, 2011: 396)	“Maybe traditions with German fairy tales. The dark forest often appears, but in my life, the forest had nothing to do with knowledge or traditions.”
	Therapeutic value	“I value these Forests because they make me feel better, physically and/or mentally” (Clement and Cheng, 2011: 396)	“Because the forest can slow down wonderfully and I really need that, that I can come down nicely.”
	Spirituality value	“I value these Forests because they are a sacred, religious, or spiritually special place to me or because I feel reverence and respect for nature there” (Clement and Cheng, 2011: 396)	“That everything is somehow connected with each other, maybe yes that's something deeper than our everyday life, and we do our work here or we do this and that somehow something beyond that which is somehow totally simple, totally simple but beautiful.”
	Stewardship	“I feel personally responsible to maintain nature” (BMUV, 2016: 66)  „Caring for [nature] [...] me, and helps me lead a good life (stewardship eudaimonic)” (Uehara, Sakurai and Tsuge, 2018: 1604)	“That is why I am also of the opinion that trees must be protected as an outside person, because they [trees] cannot speak, they [trees] cannot act on their own and that is why we, as normal rational beings, should take responsibility that these beings are also protected, they also have a right to life, they have a right to live.”
<b>Intrinsic Values</b>	Intrinsic	“object’s (nature) implicit value” (Chan et al., 2016: 1462)  “Intrinsic value (I)- I value these forests in and of themselves, whether people are present or not” (Clement and Cheng, 2011: 396)	“Yes, yes, definitely. [forest is] simply a part of nature. And I think everything that exists in nature somehow has its value simply because of its existence, otherwise it wouldn't be there.”



Appendix I - Definitions of Values retrieved from Literature

		<p>“Intrinsic value: This concept refers to inherent value, that is the value something has independent of any human experience or evaluation” (Pascual et al., 2017: 14)</p>	
<p><b>Instrumental Values</b></p>	<p>Instrumental</p>	<p>“the value of the object for a person” (Chan et al., 2016: 1462)</p> <p>“An instrumental value is the value attributed to something as a means to achieve a particular end“(Pascual et al., 2017: 14)</p> <p>“Nature is valuable because it produces resources, products, work and income for people” (Gale and Ednie, 2019: 9)</p>	<p>“I see the forest as an economic system that is partly important because people say that the forest is used as an economic area to store CO2, and they say that they build houses with the wood and then store the CO2.”</p>

## Appendix II - German Interview Guide for the Semi-structured Interviews

Für Teilnehmer\*innen. Danke für dein Interesse und deine Zeit!

1. Was fällt dir als erstes ein, wenn du hier, im Wald bist?
2. Was bedeutet der Wald für dich?
3. Kannst du beschreiben, warum der Wald für dich wichtig ist.

Werte für den Wald

4. Wie schätzt du den Wald wert?

4.1 Findest du den Wald schön?

4.2 Ist der Wald wichtig für dich als Ort der Erholung und Entspannung?

4.3 Fühlst du dich im Wald zuhause? Verbunden Fühlen/ Wohlfühlen

4.4 Ist der Wald für dich identitätsstiftend? Inwiefern?

Für dich als Individuum und als Gruppe?

4.5 Ist der Wald wichtig für dich, um dort Zeit mit anderen Menschen zu verbringen?

4.6 Schätzt du den Wald als Ort, an dem die Weisheit, das Wissen und die Traditionen deiner Vorfahren weitergegeben werden, wert?

4.7 Hat der Wald einen spirituellen Wert für dich?

4.8 Fühlst du dich durch die Zeit im Wald körperlich und geistig besser?

4.9 Ist das Beschützen des Waldes wichtig für dich?

4.1.1 Schätzt du den Wald an sich wert? (Ohne das Erfüllen menschlicher Bedürfnisse)

4.1.2 Schätzt du den Wald instrumentell wert? z. B. als Ressourcenlieferant (Holz), Arbeitgeber und Einkommen

4.1.3 Welche Werte sind am wichtigsten für dich?

4.1.4 Warum?

## Appendix III - Interview Guide for the Semi-structured Interviews translated into English

### Aktivismus im Wald

5. Kannst du mir etwas über deinen Aktivismus im Wald erzählen.
  - 5.1. Kannst du die Beziehung zwischen deinen Werten (für den Wald) und deinem Aktivismus beschreiben? Haben deine Werte (für den Wald) deinen Aktivismus beeinflusst?
  - 5.2 Welche Motivation steckt für dich hinter dem Aktivismus?
  - 5.3 Wie siehst du die Waldbesetzung im globalen „Kampf“ für eine bessere Welt?

### Generell zum Thema Wald

6. Was findest du sollte sich generell im Umgang mit dem Wald ändern?
7. Wenn du über den Wald redest, deine Werte dazu beschreibst, meinst du dann jeden Wald oder besonderen?
8. Möchtest du noch etwas hinzufügen?

## Appendix III - Interview Guide for the Semi-structured Interviews translated into English

The interview questions were translated from German into English for the sake of the representation in the appendix.

1. What is the first thing that comes to your mind when you are here in the forest?
2. What does the forest mean to you?
3. Can you describe why the forest is important to you?

### Valuation of forests

4. How do you value the forest?
  - 4.1 Do you think the forest is beautiful?
  - 4.2 Is the forest important to you as a place of recreation and relaxation?

## Appendix III - Interview Guide for the Semi-structured Interviews translated into English

4.3 Do you feel at home in the forest? Strongly connected/ Feeling good

4.4 Does the forest give you a sense of identity? In what way?

For you as an individual and as a group?

4.5 Is the forest important for you to spend time with other people?

4.6 Do you value the forest as a place where the wisdom, knowledge, and traditions of your traditions of your ancestors are passed on?

4.7 Does the forest have a spiritual value for you?

4.8 Does spending time in the forest make you feel better physically and mentally?

4.9 Is protecting the forest important to you?

4.1.1 Do you value the forest in itself? (Without fulfilling human needs)

4.1.2 Do you value the forest instrumentally? e.g., as a resource provider (wood), employer and income?

4.1.3 Which values are most important to you?

4.1.4 Why?

### Activism in the forest

5. Can you tell me something about your activism in the forest.

5.1 Can you describe the relationship between your values (for the forest) and your activism? Have your values (for the forest) influenced your activism?

5.2 What is your motivation behind activism?

5.3 How do you see forest occupation in the global "struggle" for a better world?

### General about forests

6. what do you think should change about the forest in general?

7. when you talk about the forest and describe your values about it, do you mean any forest or any or a particular one?

8. Do you want to add anything else?