Regenerating Land, Regenerating Self:

Towards a Care-full Regeneration Cycle of Inner-Outer Transformation

Degree of Master of Science (Two Years) in Human Ecology: Culture, Power, and Sustainability

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Abstract

The world needs rapid transformation if we are to shift towards more just and regenerative socio-ecological futures. In merging scholarly fields of transformation studies, regeneration and ethics of care this thesis explores the connection between inner-outer regeneration through the in-depth study of a transformative caring process. With a focus on lived experience and affects, this study conducted qualitative, ethnographic research at the place-based level of a land regeneration project in southern Spain. As such it finds that outer engagement in land regeneration (care-giving) not only regeneratively affects practitioners' inner worlds of well-being but also impacts their values and thinking around how to be, think and act with and in the world (care-receiving). Such regenerative capacities hold transformative potential for envisioning and enacting new socionatural relations. It introduces a novel framework of a 'care-full regeneration cycle' to discuss the transformative potential of the reciprocal caring process studied in place. With findings linked to emergence, reciprocity and self-organization the study contributes to a relational turn within sustainability transformations.

Keywords: Land Regeneration, Inner-outer Transformation, Ethics of Care, Regenerative Sustainability Transformations, Affirmative Political Ecology, Relational Turn, Care-full Regeneration Cycle, Emergence

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This thesis was enabled through the relations that constitute us. It reflects our love for the Earth and all those who work towards its thriving. It also represents the meeting point of our thinking-feeling, our active hope and our care for each other. Two years ago, we didn't know one another and by now this thesis represents a first, of hopefully many, future co-creations.

I'm deeply grateful to my family for always believing in me and my capacities. I owe you for all the love, strength and trust you give me in following my curiosity and idealism. My writing is as much yours as it is mine.

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To you, Clara. It's hard to imagine a better person to envision, reflect and think along-with about how to co-create more joyful, regenerative and just worlds. Thank you for cultivating this thesis and friendship with me. To many more years of transformative learning and praxis.

For *"there are no new ideas",* writes Audre Lorde,

"only new ways of making them felt."

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We're working and living in two worlds here: the one we were born into and the one we are trying to create.

– Tricia Hersey

Part I: Introduction

"Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing", writes Arundhati Roy, inspiring millions of readers' minds and hearts to believe in the unfolding of more flourishing worlds. All while fast-paced news cycles and disastrous imagery showcase the vast destruction that is simultaneously raveging the Earth's living systems. A 'Will to Believe in this World' and its openings, as Savransky (2022) puts it, must then coexist with a knowing of the exploitative systems that equally shape our realities. These not only affect lifeworlds by inducing ecological collapse onto peoples' life-sustaining conditions, but also by depleting their psychological, emotional and spiritual worlds (Kumar, 2002; Macy, 2012; Baker, 2018; Weber, 2017; Kimmerer, 2020).[1]

Metzner (1995) argues that "the entire culture of Western industrial society is dissociated from its ecological substratum" (p. 64 cited in Cashore, 2019, p. 13). Relatedly, Adams (2007) writes of such a "psychological/cultural/spiritual pathology" being "driven largely by three key constructs of the modernist world-view", namely ego-centric individualism, an "illusory separation (...) of humans and the rest of nature" and a largely anthropocentric worldview, values and lifeways (p. 26, cited ibid., pp.16-17). As such, Cashore (2019) conceives of the ecological crisis also as "a crisis of culture and of consciousness" (p. 17).

While undergoing such "ecological and civilizational collapse", Savransky (2022) notes that the question of the 'art of living' seems to reappear beneath the surface of modernity's broken promises. He asks, "what might it mean to reclaim the question of the art of living today, in a devastated present?" (p. 512). According to Paulson (2018) "a more radical cultural transformation is needed to generate (re)productive systems, politics, and human relations around a new set of

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[1] It feels important to note here that climate collapse and current socioecological crises affect diverse regions, peoples and lifeways differently, with the most devastating impacts affecting frontline and BIPOC communities within the Majority World. We thus want to acknowledge that while the region and people we investigate are affected in their own ways by the state of the world, one must note the regional and systemic privileges (in relation to place, research subjects and us as researchers) as a study undertaken in the Global North.

values and visions" (p. 103). In which the task at hand is to not only put focus and energy onto "what we are fighting against, but also what we are fighting for" (Singh, 2018, p. 2).

As such, scholars suggest that the ecological crisis requires deeper investigation into human–nature relationships (Jax et al., 2018, p. 22). Here, Paulson (2018) calls for paying attention to regenerative practices of "ecological and sociocultural wealth" as well as "non-commodified human activities", such as "reciprocal, and reproductive labor" (p.94). Rather than focusing on only critiquing current structures and mechanisms, it is worthwhile to expand affirmative inquiry into different kinds of practices and ways of being that offer horizons for "co-constructing alternatives" (p. 96). This links to what Escobar (2015) calls "imaginative transition discourses", which to him hold capacity in linking "aspects that have remained separate in previous imaginings of social transformation" – namely "ontological, cultural, politico-economic, ecological, and spiritual dimensions" of transformative processes (p.453).

Indeed, what sparked the opening of our research focus was an interest in how regenerating the Earth may be understood as a mutually beneficial relationship. We asked ourselves, 'What does it mean to be regenerating? How are we regenerated in return? And what implications does this hold for our thinking and acting in the world?' While it may be common knowledge that our lives deeply depend on thriving ecosystems, many people live a reality detached from nurturing relationships that actively sustain them. As such, Kimmerer (2020) suggests "we need acts of restoration, not only for polluted waters and degraded lands, but also for our relationship to the world" (p.195).

As Savransky notes, "it is never enough to think our way into other modes of living, but it is also necessary to live our way into other modes of thinking" (Savransky & Tironi, 2021, p.10). By focusing on a case study that highlights the lived experience and 'affective labor' of practitioners[2] that engage in land

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[2] Throughout the thesis, we refer to 'practitioners' as a way to speak of those people who at the time of our research were actively engaged in the practice of land regeneration at Danyadara. As the farm manager was on paternity leave during our time at the project, the practitioners we speak of refer to four volunteers and the interim farm manger.

regeneration, our research aims to investigate how such caring can offer pathways for different ways of being, thinking and acting in the world. It thus aims to respond to growing calls for further exploration into the relationship between inner-outer dimensions of transformative change.

Indeed, growing research within sustainability sciences, transformation studies and care call for further studies that look at how inner and outer realms of reality affect one another (see Part II). Particularly interior aspects of human existence, such as peoples' emotions, beliefs, values, thoughts and identities have been overlooked within mainstream sustainability sciences (Gosnell, 2021, p.2). Such neglects are criticized as scholars increasingly find evidence for how peoples' 'inner worlds' "lie at the heart of actions for sustainability, and have powerful transformative capacity for system change" (Ives et al., 2020, p.208). As our research investigates the transformative potential of the caring process that constitutes the engagement in land regeneration, we offer further insights into how inner-outer transformation may co-constitute one another.

Our study is hence concerned with answering the following research question and sub-questions:

To what extent does care-full engagement in land regeneration hold transformative potential for inner-outer regeneration?

- How are practitioners affected by engaging in land regeneration? In what ways can these affects be understood as regenerative?
- In what ways does this engagement foster new socionatural relations and imaginaries?

Through positioning caring as a vital component of sustainability transformations we aim to examine and conceptualize the relationship between 'caring' and 'regenerating', as well as 'transformation' and 'regeneration' processes. The central aim of this study is thus to explore the connection between inner-outer

transformation through the in-depth study of the (place-based) regenerative caring process. Through this we intend to highlight how practitioners' affect and are affected by care-full[3] engagement in land regeneration, as well as in what ways this holds transformative potential.

We intend to achieve these aims through the following objectives:

1. Understand how practitioners engage in land regeneration through identifying intentions towards and practices of land regeneration in the place-based context of Danyadara (care-giving)
2. Analyze affects of 'regenerating' on practitioner's inner dimensions of well-being and capacity building (care-receiving)
3. Discuss the transformative potential of caring through a focus on emergence, reciprocity and self-organization

With a focus on lived experience, affects and emotions, the study aims to contribute to the emerging relational and affective turn in sustainability transformations and political ecology. This third-generation political ecology not only engages complexity theory, relational ontologies, networks and emergence but also encourages a 'perspective of affects', which according to Singh (2018) "enables thinking about fostering careful or affective political ecology that is attuned to openness to being transformed by the world" (p.2).

Moreover, our research not only merges scholarship on transformation studies, regeneration and care, but also responds to Moriggi et al. (2020a) in calling for "more in-depth empirical accounts of practices of caring for both human and more-than-human, at the place-based level" (p. 294). This allows for highlighting "how actors care for and are cared for by place through acts of reciprocity" (Annmarie et al., 2023, p.6; Herman, 2015). By introducing a novel

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[3] We use the term 'care-full' as a play of words to describe something to be 'full of care'. With this we make a distinction between the common use of 'careful' as referring to 'attentive'. Through a procedural process we will establish that care is present in land regeneration at Danyadara and in our discussion it will become clear why we then also call our framework 'care-full regeneration cycle'.

framework called 'care-full regeneration cycle' we will conceptualize and discuss the transformative potential of the caring process studied in place. Our hope is that such research can provide not only new insights into the affects of engaging in land regeneration but also offer pathways to inspire renewed care-giving processes and regeneration cycles across different places.

The structure of the thesis is thus as follows.

Part II contextualizes current debates within sustainability transformations beginning with a discussion on the need to shift from the notion of sustainability to that of regeneration. This leads to a reconfiguration of transformative change as conceptualized through a process of inner-outer transformation. It ends with discussing the relevance of a care lens to understand and support such transformative processes.

Part III lays out our research approach, design and methodology. We introduce our case study, elaborate on the onto-epistemological 'grounds' we stand on and discuss the feminist and affective methodological approaches that informed our fieldwork. We highlight the use of a case-study approach for our research and review our ethnographic fieldwork. We end with a detailed account of our choice and process of data collection.

Part IV is where we present and analyze our data. It is divided into two main sections. We first analyze why and how practitioners engage in land regeneration and in what way this constitutes a form of care-giving. We then move onto analyzing the affects of such care-full engagement on practitioners' sense of well-being and capacity building. Lastly, we discuss in what way this process of care-giving and care-receiving holds transformative potential. Here we will introduce and discuss our framework of a care-full regeneration cycle and focus on emergence, reciprocity and self-organization.

Part V forms our conclusion where we return to our research questions and aims, highlight implications and limitations of our study and suggest alleys for further research.

I used to think the top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought with 30 years of good science we could address those problems. But I was wrong. The top environmental problems are selfishness, greed and apathy... And to deal with these we need a spiritual and cultural transformation - and we scientists don't know how to do that.

– James Gustave Speth

Part II: 'Creating Conditions Conducive To Life': Contextualizing Current Debates within Sustainability Transformations

The world needs rapid transformation if we are to shift towards more just and regenerative socio-ecological futures. What type of transformations are necessary, ethical or even desirable, as well as how, for and by whom these may be set in motion are questions of growing concern within public, policy and academic debates. In the following section, we therefore aim to provide relevant background information and discuss literature that helps contextualize our case study and research. We start by elaborating on the recent turn towards a more 'regenerative' sustainability paradigm and continue by discussing current debates in transformation research. We then discuss the relevance of care and a care-based approach to transformative change. In particular, this chapter is aimed at identifying current research gaps and highlighting the reasons for better understanding and conceptualizing regenerative and transformative processes within a place-based context.

II.I. From Sustainability to Regenerative Alternatives

Regenerative Cultures are ways of being that hold restoration and rejuvenation at their heart, aiming to breed societies that are based on care and resilience. Only through a cultural shift in how our societies and communities relate to the Earth can we achieve the systemic changes we so desperately need. Actions only change after minds have changed.

– Daze Aghaji

As the quest to cultivate flourishing and just socio-ecological futures continues, scholars among social and sustainability sciences, transformation studies, as well as systems design advocate for a direction that moves away from the notion of 'sustainability' towards one of 'regeneration' (Reed, 2007; Du Plessis, 2012; Mang & Reed, 2012; Gibbons, 2020, Camrass, 2022). This results from actively "questioning the limits of sustainability as a science, practice and movement" (Leitheiser et al., 2022, p. 709).

Since sustainability is a framework that seeks to primarily preserve and sustain current systems to ensure a livable future, often "addressing symptoms rather than causes" – critics argue that it's an insufficient approach (ibid.). More so, it seems counterproductive in a context where 'business as usual' sits at the core of degenerative, unsustainable, and extractive systems (Reed, 2007; Du Plessis, 2012; Gibbons, 2020; Leitheiser et al., 2022). Rather, our interlocking socio-ecological crises require a renewal of sorts, in which cultures, policies, infrastructures, values, economies, worldviews and industries are redesigned to ensure the thriving of *all* life (Reed, 2007; Gibbons, 2020). According to Camrass (2022), regeneration responds to this through "hopeful themes of renewal, revival, rebirth and restoration" and represents "an active, positive and continuous process". In the following, we'll explore how regeneration has been talked about within academic and public spheres, as well as what is still missing from the debate. This will help position our research at the intersection of regeneration, transformation and care research.

Towards a 'Regenerative' Sustainability Paradigm

The shift from 'sustainability' to 'regeneration' is framed by Du Plessis (2012) as the "beginning of a new paradigm, rooted in an ecological and living systems worldview" (p.53). Rather than "conserve the status quo or meet ill-defined human needs", such a regenerative paradigm aims at "strengthen[ing] the health, adaptive capacity, and evolutionary potential of the fully integrated global social-ecological system so that it can continue regenerating itself" (ibid). As such, it creates "conditions for a thriving and abundant future not only for the human species, but for all life" (ibid). In other words, it inextricably links ecological vitality and human well-being, trying to ensure "thriving living systems in which whole-system health and wellbeing increase continually" (Gibbons, 2020, p.1).

Du Plessis (2012) argues that what underpins this more 'regenerative' sustainability paradigm are themes of 'wholeness', 'relationship' and 'change' (p.53). These themes emerge from what Reed (2007) articulates as "whole systems thinking", a framework that acknoweldges the world as interconnected and thereby shifts us "beyond mechanics into a world activated by complex interrelationships" (p.675). At the core of such a paradigm shift thus sits a "transition from a 'mechanistic' to an 'ecological' or living systems worldview" (Mang & Reed, 2012, p.23). This holds new ontological, epistemological and ethical implications and can support a "rethinking and remaking of our role in the natural world" (Du Plessis, 2012, p.5; see also Capra 1997; Kumar 2002).

Neither "whole systems thinking" nor the emerging "regenerative" sustainability paradigm within social sustainability sciences can or should be credited as 'new' or 'revolutionary' ways of making sense of socionatural relations and promoting socio-ecological well-being. While they offer relevant critiques of the modern-industrial-mechanistic paradigm that has dominated scientific discourses and approaches within Western modernity, its logics and insights reflect back to onto-epistemologies that have existed for millennia, yet have historically been understudied and overlooked. The Andean cosmovision of

sumak kawsay is one such example, as it "explicitly foreground community and ecological wellbeing [and has] evolved over centuries among Andean cultures and cosmologies" (Paulson, 2018, p. 100).

In Escobar's words, such relational lifeways represent *'formas otras'* – other forms of knowing and being – that offer "other, if not better, chances to dignify and protect human and non-human life" (2010, p. 47). To write about any emerging regenerative lifeways and 'alternatives' thus needs to be rooted in the fact that such worlds are not only possible but *already exist.* (For more on this, see among others De Sousa Santos et al., 2008; Gudynas, 2011; Whyte, 2017; Nuñez, 2018; Escobar, 2020).

Regeneration as Process of Renewal and Restoration

Ogundiran (2019) notes that regeneration is commonly conceptualized as "a process of renewal and restoration", particularly in relation to times of crisis and destruction (p.154). Whereas sustainability "maintains" the status-quo, regeneration aims at "restoring what has been lost and improving what is currently there" (Gordon et al., 2020, p. 812). As such, it moves beyond principles of "doing no harm" towards strategies of restoration and revival (Camrass, 2022).

Regenerative processes are self-organizing and "can be accompanied by unpredictable new behaviors, structures, patterns, properties, and cultural economies" – known as 'emergence' within whole-systems thinking (Ogundiran, 2019, p.154). Such processes are adaptive, situational, and must be "rooted in place", especially when aiming to restore "a particular social world" (p.155). With environmental breakdown on the rise everywhere, scholars point towards an increased "need for community-led ecological restoration efforts" (DiEnno & Thompson, 2013, p. 63). Such efforts are "a powerful instrument to systematically address many of our destructive tendencies, and [...] to culturally transform society toward a saner, healthier relationship with the environment" (Leigh, 2005, p.11).

Gibbons (2020) argues that such regeneration "offers our best hope, thus far, to make the transformations needed to reverse the devastation, destruction, and degeneration that conventional and contemporary sustainability have been unable to slow, halt, or reverse" p.15). As such, "it is time to [...] step into a new way of thinking, being, and feeling in the world so that we might cocreate abundance and prosperity for all life" (ibid.).

Regenerative (Agri)cultures

One of the most known areas of regenerative inquiry is the science, practice and movement surrounding Regenerative Agriculture (RA) (Gosnell, 2021; Jonas, 2021; Gordon et al., 2023). Seeking to simultaneously revive ecosystems and transform food production, the approach "emerged over the past 3 decades in response to growing societal concern with modern industrial agriculture's role in climate change, soil depletion, and biodiversity loss" (Gosnell, 2021, p.3). The notion of RA was 'officially' coined by Robert Rodale in the 1980s in a quest to counter and reverse some of the socio-environmental harms caused by industrial food systems (ibid.).

Equally to what we've noted above, the philosophies and ideas mirrored in RA are much older than its modern concept, as regenerative land practices around caring for soils and restoring resilient food systems have existed for millennia. As noted by Gordon et al. (2023), "first Nations people have been practicing regenerative forms of land custodianship for tens of thousands of years" – a history that has largely been overlooked within the RA discourse (p.10). To avoid further cooptation of such practices, traditional ecological knowledge holders have called for an acknowledgement of their worldviews as well as the need for further inquiries into shifts in consciousness that can "support us to go from a dominant culture of supremacy and domination to one founded on reciprocity, respect, and interrelations with all beings" (Angarova et al. 2020, as quoted by Gordon et al., 2023, p.10).

Coming from an agroecological perspective, Jonas (2021) argues that the risk of "corporate capture" in relation to RA, lies in the movement's failure to adequately develop "a theory of change" that not only frames the 'how' but also the 'why' and 'what' of socio-ecological transformation (p. 7). Similarly, Gordon et al. (2023) note that greenwashing and cooptation of RA discourses happen when more radical approaches and storylines surrounding 'food democracy', 'ecological identity' and 'indigenous sovereignty' remain overlooked (p.12). Indeed, regeneration is not just concerned with restoring land but also reviving communal and cultural processes. As noted in the regenerative paradigm section above, regeneration discourses are "increasingly concerned with social equity as one and indivisible with ecological health" (Gosnell, 2021, p.3).

To showcase this intersection, the notion of 'regenerative culture' has emerged in recent years. As writes Wahl (2016) in *Designing Regenerative Cultures*, "a regenerative human culture is healthy, resilient and adaptable; it cares for the planet and it cares for life in the awareness that this is the most effective way to create a thriving future for all of humanity". The Extinction Rebellion movement, for instance, tries to implement internal strategies for cultivating regenerative cultures:

> "We build regenerative cultures to save ourselves from the insanity of a self-destructive civilization. Therefore, we try to reconnect with ourselves, friends, fellow activists, society, and the natural world." (Regenerative Culture, 2023)

Discussions around what constitutes regenerative cultures as well as how they can be brought about is where the concepts of 'care' and 'regeneration' have come to merge in public as well as scholarly debates. Paul Hawken, author of *Regeneration: Ending the Climate Crisis in One Generation,* for instance, articulates that "regeneration is innate to our awareness and sensibilities":

> "Every time we care about anything – our parents, our family, our friends, our community, our pets, our garden, or about the suffering of people we

don't even know – that's caring and that's regeneration. Regeneration is about promoting life – in children, farms, pollinators, forests, cities, and cultures." (Hawken, as quoted in Kerler, 2022).

In other words, 'regeneration' can be defined as a "holistic framework rooted in a paradigm of care, in which productive activity reproduces the conditions necessary for socio-ecological wellbeing" (Leitheiser, 2022, p.701). By promoting regenerative socio-natural relations, regeneration is thus a framework under which practices informed by diverse sciences, strategies and ideas (i.e. agroecology, permaculture, or RA) can help "produce conditions conducive to life" (Wahl, 2016; Leitheiser, 2022). Rather than a concept, Hawken argues that regeneration is "the default mode of life itself" and means "putting life at the center of every act and decision" (Kerler 2022).

Regenerative Design and Development

With a focus on regenerative design processes, Reed (2007) argues that both the human and non-human communities of a particular place are vital participants in shaping local conditions for life to thrive and co-evolve (p.677). It is through engaging all "key stakeholders and processes of the place – humans, other biotic systems, earth systems, and the consciousness that connects them – [that] the design process builds the capability of people and the 'more than human' participants to engage in continuous and healthy relationship" (ibid.).

From such a perspective, meaningful change happens most effectively "in place". Mang and Reed (2012) define place as "the unique, multi-layered network of living systems within a geographic region that results from the complex interactions, through time, of the natural ecology … and culture" (p.28). Each entity that partakes in its ecosystem, no matter its size, represents an important entry point for shaping the health, resilience and functioning of the whole (p.680).

Reed (2012) argues that this not only generates more "holistic" outcomes but also holds capacity for producing higher levels of satisfaction within those who engage in such regenerative processes. He writes:

> "We experience ourselves as part of a larger whole and adjust our needs, aspirations and values. We are increasingly able to play a meaningful role, one that evolves us at the same time that it evolves the living communities we are an integral part of. Inevitably this results in a deep sense of caring, appreciation, connectedness for all who choose to engage in a regenerative level of work." (ibid.)

Research Gap

To further expand our understanding of what constitutes regeneration, Gibbons (2020) points towards the need for actively studying the praxis and processes of thriving systems and communities. Rather than investigating the achievement of "fixed goals", research is needed in mapping "regenerative processes" as well as understanding what constitutes "regenerative capacity development" for transformative change (p.15). As writes the author:

> "Regenerative processes are crucial since they shift thinking and acting to align with life's principles and nurture the deep care necessary to motivate and perpetuate regenerative actions, enabling self-organization and emergence that lead to thriving communities." (ibid.)

How such a shift in thinking and acting happens in the case of Danyadara and in what way this constitutes a regenerative process will thus lie at the core of this thesis' analysis. By investigating the lived experience of those who actively engage in care-full regeneration work, our research aims to better understand the regenerative capacity of caring within a place-based context. As such, we'll be

able to study the transformative potential of engaging in regenerative work, merging the fields of regeneration, care and sustainability transformations.

II.II. Reconfiguring Transformative Change

We take part in a shift in consciousness when we pay attention to the inner frontier of change, to personal and spiritual development that enhances our capacity and desire to act for our world. In the past, changing the self and changing the world were often regarded as separate endeavors and viewed in either-or terms. Now they are becoming recognized as mutually reinforcing and essential to one another.

– Joanna Macy

Large-scale transformative change is said to be "more urgent than ever" (Arora, 2019, p. 1571). Such calls emerge from growing debates in sustainability sciences that frame 'incremental' change as insufficient for addressing today's interlocking socioecological crises (ibid.). Indeed, Termeer (2017) notes that 'incremental' and 'transformative' change are often framed in opposition, in which the latter is "associated with change that is in-depth (fundamental, truly new, revolutionary), large scale (the whole system), and/or quick (a discontinuous jump, achieved in a relatively short amount of time)", whereas the former "is often portrayed as shallow, partial, and slow" (p. 560-561).

Current academic discourses within sustainability sciences are thus not only undergoing a 'regenerative' turn (as discussed in section II.I.) but also a 'transformative' one (Blythe et al. 2018). Adding onto Termeer's definition, transformative change is moreover defined as "a complex process" that involves "a systemic or paradigm shift" and thus "open[s] up avenues to drastically different futures" (Grenni et al. 2020, p.413). The IPCC Special Report on Managing Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (2012) notes that transformative change can also "include shifts in

perception and meaning" as well as "changes in underlying norms and values", so as to allow for a "reconfiguration of social networks and patterns of interaction" (p.436). As such, transformative change refers to profound changes in "the way of looking, thinking, and acting", so as to shape socionatural relations, concepts and futures (Termeer, 2017, p. 562). Within sustainability literature, this has been framed as a "psycho-social process" that involves "the unleashing of human potential to commit, care and effect change for a better life" as well as "an internal shift that results in long-lasting changes in the way that one experiences and relates to oneself, others, and the world" (O'Brien & Sygna, 2013, p.16). Criticizing the dominance of techno-scientific approaches within the sustainability field and praxis, Arora (2019) also notes that effective transformative change should be targeted "towards social justice, economic equality and ecological regeneration" (p. 1571).

Integrating Inner-outer Transformations

Scholars investigating the "how" of transformative change processes thus increasingly emphasize systems change as happening from the bottom-up (Arora, 2019; Gosnell, 2022) as well as from the inside out (Moore et al., 2014; O'Brien, 2018; Shrivastava et al., 2020; Brown et al., 2019; Bainbridge & Del Negro, 2020; Ives et al., 2023). While bottom-up approaches to transformation have been studied in social movement theory for years, the relevance of inner shifts for lasting outer change is a relatively new focus point within sustainability and transformation research (ibid.). This emerges from a growing understanding – shared between academics, practitioners and activists – that "the fundamental reason sustainability efforts have failed to produce systemic change" comes from the fact that "inner dimensions of sustainability are largely ignored" (Gibbons, 2020, p.5; Ives et al., 2023). Inner realms – also framed as the area of 'inner sustainability' – represent "the deepest leverage points in systems", which "must change for lasting transformational change in the entire system to occur" (Gibbons, 2020, p.5.).

Such 'inner sustainability' or 'interiority' may be defined as the 'intangible' and 'unseen' aspects of peoples' individual and collective lives (Hochachka, 2021). This encompasses beliefs, mindsets, values, thoughts, ethics, worldviews as well as "associated cognitive, emotional and relational abilities and capacities" (Ives et al., 2023, p. 2). As writes Gosnell (2022), the inner is shaped by "individual epiphanies, paradigm shifts, new identities and values, empathy, sense of place, and efforts to rectify cognitive dissonance" (p. 606; Brown et al., 2019). As such, inner transformation is understood to include the "active cultivation of new practices and new meanings" that in turn shape and transform outer realms of existence (Grenni, 2020, p.412). Gibbons (2020) thus notes that a necessary step towards lasting transformational change is the active integration of both realms, meaning "consciously developing inner realms to manifest desired outer realms and vice-versa" (ibid.). Spiritual leaders from diverse wisdom traditions have since long called for "greater attention to our inner worlds" as shaping outer change (Ives et al., 2020, p. 209). The Dalai Lama, for instance, writes in *Ethics for a New Millennium* (1999) that developing our inner lives not only leads to "greater individual happiness" but also provides a more "sound foundation for a more ethical and sustainable global community" (ibid.).

Transformative Process as Emergence and Place-shaping

Termeer (2017) argues for overcoming the classic divide of thinking around systems change in either 'incremental' or purely 'transformative' terms (p. 562). As such, he calls forward the notion of 'continuous transformational change' that focuses on "how transformational change can be shaped through a series of small in-depth steps or small wins" (p. 564). Such a perspective relates to the notion of emergence, in which each shift creates further conditions for enabling inner-outer sustainability (ibid., p. 565). All this must be contextualized in an understanding of places and organizations as "continuously adapting, learning, and improvising" rather than being fixed or "stable" entities (ibid.). This relates to a perception of socio-ecological systems as transforming in "complex" and "non-linear" ways

(Ives et al., 2023, p.3) and can be seen as connecting to the understanding of regenerative change processes.

Similar to emergence, Grenni et al. (2020) put forward 'place-shaping' as a "useful way to understand transformation in a place-based way" (p.413). The transformative potential that 'place-shaping' processes bring into focus is that "every modification of a physical space not only affects the material landscape" but can also affect the inner realms of those who engage in them (ibid.). While the authors suggest that such affects emerge from reflexive and co-created engagement, Gibbons (2020) notes that we still need "to learn much more about the connection between inner and outer sustainability and how to develop inner sustainability" (p. 15). This includes the ways in which emergence of relational awareness, spiritual meaning-making, purpose and responsibility relate to inner-outer transformation (ibid.).

Research Gap

One of the reasons why inner realms of peoples' existence have been largely neglected and understudied in mainstream sustainability research is that "traditional scientific tools, approaches and terminologies" are inadequate in understanding them (Ives et al., 2020, pp.208-209). Within the next section, we'll thus explore what an ethics of care approach could bring to the study of inner-outer transformation and regeneration. In particular, we wish to respond to growing calls for "integrating inner transformation that take place in personal and cultural realms with behavioral and systemic change in social-ecological transformations" (Gosnell, 2021, p. 2). As noted by Ives et al. (2023) there still remains an "urgent need" to apply "more integrative approaches that link inner and outer dimensions of sustainability to support transformation across individual, collective and system levels" (p.1).

II.III. Why Focus on Care?

For the most part scholarship on care and care ethics has been largely absent from sustainability transformations research and debates (Moriggi et al., 2020a). As such, scholars like Moriggi et al., (2020a) have begun to explore "what further horizons could be investigated" through bridging care and transformation scholarship (p. 282). In their view, ideas of interdependence and relationality "intrinsic to the rationality of care" (ibid., p.283) hold important insights for the field of sustainability transformations by further understanding of "how we come to 'care for the earth'" (p.283).

In the following we will delineate a feminist approach to care ethics and explore how care has been conceptualized by different scholars, particularly in relation to studying and and understanding care in relation to transformation. This serves to later-on position our findings within scholarship of care.

Against the dominant view of care as production-oriented, one-sided and individualistic activity contained within human interaction, feminist care ethicists and scholars understand care as a relational ethic and practice shared and experienced by all living beings (Moriggi et al., 2020b; Puig de la Bellacasa , 2012; Moriggi et al., 2020a; Krzywoszynska, 2021). One of the most widely cited definitions of a feminist approach to care comes from Fisher and Tronto (1991) who define care as:

> "a species' activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web" (p. 40, cited in Tronto, 1995, p.142).

With such emphasis on repair and renewal, feminist approaches to care hold relevant overlaps with the study and notion of regeneration. As a multispecies 'inter-activity' (Moriggi et al., 2020b, p.3) such a conception of care goes "beyond the primary focus on individual sentiment or emotion" (Krzywoszynska, 2021, p.1) and instead places connection and interdependence at the center of caring (ibid; Moriggi et al., 2020b; Moriggi et al., 2020a; , Puig de la Bellacasa, 2010; 2012). As Puig de la Bellacasa notes, interdependence and relations are enacted through care (Krzywoszynska, 2021, p.2). She therefore sees "care as an ontological requirement of relational worlds" (Puig de la Bellacasa , 2012, p. 199). Recognising this, she argues, means becoming aware of how all of us, humans, nonhumans, more-than-humans, depend on and with each other (Puig de la Bellacasa, 2010, p.164). In this way, care can be understood "as a form of relationship" (ibid.) that holds the potential for creating relationality (ibid., Puig de la Bellacasa , 2012, p.198). She writes:

> "In worlds made of heterogeneous interdependent forms and processes of life and matter, to care about something, or for somebody, is inevitably to create relation. In this way care holds the peculiar significance of being a 'non normative obligation' (Puig de la Bellacasa, 2010): it is concomitant to life – not something forced upon living beings by a moral order; yet it *obliges* in that for life to be liveable it needs being fostered. This means that care is somehow unavoidable: although not all relations can be defined as caring, none could subsist without care." (Puig de la Bellacasa, 2012, p.198, original emphasis)

A feminist approach to care thereby holds potential to challenge the modern mechanistic paradigm that upholds independence, competition and survival based not on caring relations but on the ability 'to make it on your own' reflecting a relational conception of life that has been part of and practiced in many indigenous and traditional cosmologies for millenia (ibid.; Todd, 2016; Sundberg, 2014).

Puig de la Bellacasa (2012) furthermore defines caring as "a vital affective state, an ethical obligation and a practical labour" (p.197). Firstly, understanding care as an affective state, or as van Dooren (2014) explains, "an embodied phenomenon", means recognising that "to care is to be affected by another, to be emotionally at stake in them in some way" (van Dooren, 2014, p.291). As mentioned above, to care comes with an acknowledgement of interdependence, in which as members of a complex web of more-than-human relations one holds a duty "to look after another" (ibid.; Krzywoszynska, 2021). As an ethical obligation care thereby "obliges us to constant fostering, not only because it is in its very nature to be about mundane maintenance and repair, but because a world's degree of liveability might well depend on the caring accomplished within it" (Puig de la Bellacasa , 2012, p.198). Lastly, care is conceptualized as material doing(s); it is a "necessary practice, a life sustaining activity" (Puig de la Bellacasa, 2010, p.164) and a practical labor that requires to "get involved in some concrete way" (van Dooren, 2014, p.291-292).

Environmental Care as Affective Labor

In the context of environmental conservation and regeneration work, caring for nature and for earth is rooted in the understanding of "humans as attentive members of a living web, to which needs they respond through affective and curious interactions" (Moriggi et al., 2020b, p. 3). Jax et al. describe such care as "multifaceted" since it encompasses both the aspect of how humans can support nature but also the notion that to care for nature is "a constitutive part of what it means to live a good, really human life" and thereby contributes to human well-being (p. 27). As a fundamental attitude, they argue, care influences how humans make sense of their relation to self and community, while as a practice, care validates "commonality and reciprocity" between humans and more-than-human others (ibid., p.24). They warn however that using such a concept of 'caring for nature' too "strongly as a strategic tool to foster human well-being and nature conservation" risks "contradict[ing] the very idea that we

described as underlying most care concepts, namely them being non-instrumental, reciprocal and other regarding in the first place" (ibid., p. 27)

Meanwhile, for Singh (2015) the (material) practice of environmental care is a form of labor, more specifically an "affective labor", as she calls it (drawing on Hardt and Negri's term, p. 58). Labor, here, is understood as "a matter of self-expression" that is always connected to the person engaging in it (Singh, 2015, p.58-59). In caring for more-than-human worlds, humans not only involve their body, but also engage in cognitive and emotional labor (ibid.). This multifaceted engagement highlights the "capacity (…) to produce not only material outputs but also affects, and to allow new modes of being and forms of sociality to emerge" (Singh, 2015, p.58). As such, affective labor can be understood as a gift – both to those being cared-for and for those who are providing the care. In caring for nature through affective labor, Singh (2015) argues that different ways of being and relating in and to the world can emerge (p. 59).

It is nevertheless important to stress that care-full relations cannot guarantee harmonious relations. Instead it may help to view caring as "a complex and compromised practice" (van Dooren, 2014, p. 292). As Krøijer & Rubow (2022) write, "care can be both suffocating and paternalistic, intimate, and communal" (p. 379). Care can be oppressive or nurturing, it can be a practice of maintenance and tool for control (ibid., Krzywoszynska, 2021). As such, navigating this complexity requires "an ongoing critical engagement with the terms of its own production and practice" (van Dooren 2014: 292). Moreover, as "care unfolds in relations, [and] its 'goodness' can only be judged from within these relations" argues Krzywoszynska (2021, p. 2) which means "there is no absolute moral or practical blue-print for what constitutes good care" (ibid).

Moreover, caring is defined as a never complete and a "constantly ongoing process" (Moriggi et al., 2020b, p.3). To further discuss the overlaps between caring as a process within regenerative contexts, we'll bring Tronto's model of the five-stage caring process into discussion with our findings around care-full engagement in land regeneration. The relevance and conception of caring-about,

caring-for, care-giving, care-receiving and caring-with will thus be discussed in relation to what we will call 'care-full regeneration cycle', eventually highlighting the transformative potential of caring within our particular case study (see Section IV.III.I).

Research Gap

In the face of the unfolding socio-ecological crisis we urgently need to build "just, inclusive, and regenerative societies" (Moriggi et al., 2020b, p.17) that hold the capacity to respond and relate differently. Feminist care scholars therefore stress the importance of "shed[ding] light on human intentionality" and explore how subjects might be able to "enact alternative ways of relating" (ibid., p.3). Expanding research on how engaging in everyday place-based practices "produce[s] and reflect[s] human and non-human interactions and connections" (ibid.) can thus help to highlight "the transformative value of learning through caring practices" (ibid., p.17). However, so far the concept of care is largely absent from systems change analysis and scholarship and "an ethic of care lens remains bound to care-work practices" (Seymour & Connelly, 2022, p.243).

Through our study we aim to fill this gap by "bridging care and transformative change scholarship" (Moriggi et al., 2020a, p.282) and respond to the call for "more in-depth empirical accounts of practices of caring for both human and more-than-human, at the place-based level" (ibid., p.294; Moriggi et al., 2020b). Departing from the assumption that caring shapes and is shaped by inner dimensions of identity, wellbeing and emotions we aim to explore the practice and potential of care as "a vehicle of transformation" (Moriggi et al., 2020a, p. 294) through which "pathways for new mindsets [can] spread" (Seymour & Connelly, 2022, p. 242).

Like fungi and plants, we are co-becoming with our ecosystems. Ecosystems that are ruptured, polluted, and confused by our culture's deracinated idea that you can live without a root system. But if we are going to survive, we are going to need to tie our roots to other roots. Resilience ecology tells us that landscapes with more biodiversity, more overall connectivity, are better able to withstand natural disasters and climatological pressures. We are going to need to drop below human exceptionalism into the underworld of symbiotic co-creation.

– Sophie Strand

Part III: Research Design and Fieldwork

This section lays out our research approach, design and methodology. We introduce our case study, elaborate on the onto-epistemological 'grounds' we stand on and discuss the feminist and affective methodological approaches that informed our fieldwork. We highlight the use of a case-study approach for our research and review our ethnographic fieldwork. We end with a detailed account of our choice and process of data collection.

III.I. Positionality

With our writing we aspire to both be scholars and storytellers. Something that we, just like other scholars and thinkers that inform our thinking-feeling, see as mutually beneficial rather than oppositional or contradictory. We regard such roles as both responsibility and gift; a poetic encounter, in which "poetry does not speak about the world", but rather tries to speak "together with the world in the embrace of dialogue" (Margulies, 2017, p.338).

When we decided to join forces in co-authoring this thesis it came from a desire and responsibility to contribute something meaningful and valuable in face of our current socio-political and socio-ecological context; worlds we experience as simultaneously containing crisis *and* opportunity. We thus feel a dedication and duty for using our scholarly voices to study and report on everyday lived experiences that not only hold potential to *de-* but also *re*-construct our sociocultural worlds and futures.

We're hence inspired by scholars who have called for a 'scholarship of presence' in current times of urgency (Kaika, 2018). The aspiration here is to "add gravitas to local alternative practices" to help narrate them "as budding radical imaginaries, which can compete with capitalist-technocratic discourses about how socioecological problems and change should be understood and addressed" (Leitheiser et al., 2022, p.702). Such 'engaged scholarship', can thus be seen as 'a form of praxis' that is not only driven by "a desire to interpret and understand the world, but also to change it" (Franklin, 2022, p.3 as quoted by Leitheiser et al., 2022, p.702). Such engaged scholarship aligns with what Paulson (2018) calls for through 'affirmative political ecology':

> "(...) actors of change need to continue dreaming, practicing, and promoting these alternatives, for one day there will be an overwhelming demand for them, and it will be tragic if we would have meanwhile abandoned them because we thought they were an impossibility." (p.91)

The task, writes Paulson (2018), quoting activist-researcher Rocheleau (2007, p.723), is to show that "other worlds are possible and practical" (p.96) and to "recognize other ways of understanding and (re)creating worlds" (p.104).

We strongly believe that both on individual and collective levels, there are benefits in learning, supporting and strengthening capacities for collaboration. To join forces hence emerged from a place of knowing, that by allowing our minds and hearts to cross-pollinate, we would be able to contribute both with intention and intellect to a joint-thesis that embodies the collaborative and cooperative spirit we wish to see more of in the world.

During the fieldwork our collaboration enabled us to experiment with more creative methods and research approaches, as we were able to hold space for group exercises and discussions more safely and effectively. It also strengthened an active and explicit reflexivity practice throughout the process. At the same time we acknowledge that being two researchers also impacted how we were received and perceived at the field site. To be a team of two undoubtedly shifted the dynamic and we tried to be extra wary of creating a safe space during interviews where both of us were present. While we first thought about splitting up for the interviews, we soon realized how beneficial it was for both of us to attend and listen to each interview in person. This gave us the chance to have access to the same knowledge and information being shared thereby allowing us to grasp the full picture.

Most of the time, one of us was the dedicated interviewer keeping track of the interview guide while the other was responsible for asking follow-up and spontaneous questions. To further mitigate the imbalance of two interviewers vs one interviewee we also considered the seating arrangement during the interview, being careful not to 'oppose' or 'encircle' the interviewee with our physical presence.

Acknowledging our positionality as white European researchers, we carefully considered the ways in which we could ethically and meaningfully contribute to the field of regenerative alternatives under the given time constraints and circumstances. Rather than seeking out fareway places in a short amount of

time, we chose to focus on a context that is closer to our lived experience and background. As both of us have worked in several socioecological projects in Spain, we hence felt that Danyadara could be a relevant case study. Based in Andalucia, an area severely affected by desertification and industrial agriculture, the project works to address these issues through diverse land regeneration practices.

In order to maintain a balance between us as co-researchers, it was important to choose a project that neither of us had an existing relationship with. Due to different Spanish language skills on our side, it also felt necessary to choose a place where English was among the working languages. Equally, an openness and capacity of the project to host and collaborate with us in the specific time period played an important role in choosing Danyadara.

III.II. Locating Our Case Study: Introducing Danyadara

Danyadara[4] is a land regeneration, ecosystem restoration and agroforestry project located in the Province of Cádiz in the foothills of the Sierra de Grazalema in rural Andalusia, southern Spain. It is the non profit 'arm' of the *Suryalila[5]* retreat center, which hosts yoga teacher trainings, retreats and individual guests all year round. Danyadara aims to adapt to and mitigate desertification processes in the area through the use of permaculture principles and tools, water retention techniques, and sustainable land management practices.

The land on which both Danyadara and Suryalila operate measures roughly 20 hectares in total and was bought in 2012 by the founder and director of both entities. Legally, the land is owned by Suryalila SL and donated to the Danyadara association for stewardship. The land was deserted farmland where originally there had been a production of olives and wheat as well as livestock (cows). The main building of Suryalila used to be a mill. Most of the other

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[4] The project's name '*Danyadara*' is a simplified joining of the two Sanskrit words: 'Dhanya' and 'Dhara', which together mean 'Blessed Earth'.
[5] '*Suryalila*' is equally composed of two Sanskrit words: 'Surya', the ancient sun god and 'Lila', cosmic play (of the gods), which become 'Cosmic Play of the Sun'.

buildings and infrastructure were built by Suryalila/Danyadara. The surrounding environment is mainly (mono)agriculture, mostly in the form of olive plantations and populated by local villagers. The distance to the closest village, Prado del Rey is approximately 6 km and has a population of around 5500 people, the town of Villamartín is situated around 15 km to the north west and has a population of around 12000.

Fig. 1 Location of Danyadara

While Fig 1. showcases the location of Danyadara, Fig. 2 gives insights into how two thirds of Spain are under risk of desertification, Andalusia being severely affected. Under the Köppen-Geiger climate classification the climate of the area can be described as Hot-summer Mediterranean climate. The average annual rainfall in most of the province of Cádiz is over 600 mm. The average monthly/annual temperature lies at 17.9 °C, the average monthly/annual maximum at 24.7 °C and average monthly/annual minimum 11.2 °C. The hottest

month is August and the driest ist July. The coldest is January and the wettest December.[6]

Desertification in Spain
Nearly 75% of the Spanish territory is threatened by desertification

Very high risk High Medium Low Humid zone Urban zone
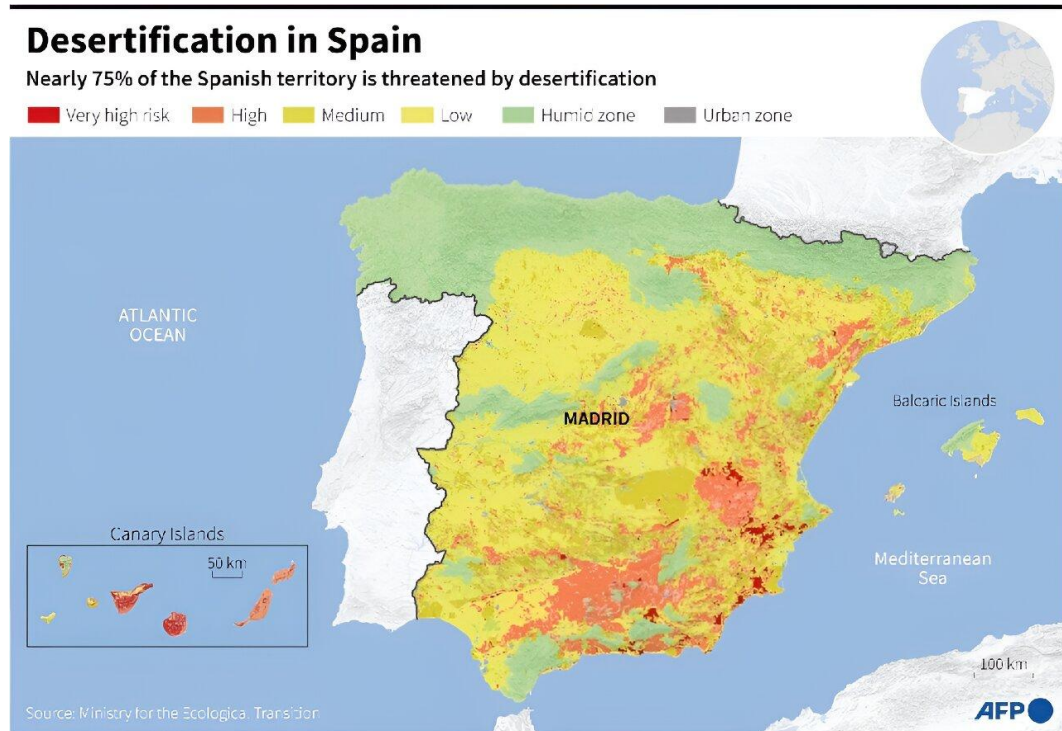
Fig. 2 Desertification in Spain (Source: Ministry for the Ecological Transition)

According to the founder, there were almost no trees there when they first bought the land aside from the olive grove which combined has a size of 13 hectares and a few older trees scattered around the main house. Reforesting the land was one of the first restoration implementations and to date they have planted over 5000 trees in an area with an approximate size area of 5 hectares. Tree species include mulberries, acacias, retamas, carobs and cypress. There's also chickens, three donkeys and two alpacas that graze in a designated animal area. The property has no 'proper' pasture land however, local shepherds bring their sheep to graze in the olive groves, reforestation and animal area.

The property has two main wells that both run dry in the summer months requiring them to buy truckloads of water between June and November. There's a third well at the far end of the property in an area called San Pedro that was

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[6] This data comes from an internal document shared with us privately.

discovered more recently and which has water all year round. The initial motivation for starting to regenerate the land was according to the founder the realization of the severity of the water problem coupled with a wish to make the land 'more beautiful'. While the tree planting had already begun and they were also harvesting the olives, the founder told us "we didn't really know what we were doing" (Interview, P8). They then realized "that we have a lot of land here, and we really need to take care of it properly. And, and I wasn't even sure how to do that, because I've never owned a big piece of land before" (Interview, P8).

Fig. 3 Views of Local Environment and Monocultures surrounding Danyadara/Suryalila

Following a first permaculture consultation to assess the state and needs of the land and suggest appropriate tools and approaches, three years after buying the land and starting Suryalila, they founded Danyadara as a separate non-profit entity to take care of all the regeneration, restoration, and reforestation tasks.

Around 20 people, mainly from Europe 'permanently' live at Suryalila/Danyadara (the number fluctuates throughout the year). The working

languages are English and Spanish. At the time of writing, Danyadara specifically, only employs three people: the farm manager (who was on paternity leave at the time of research), the interim farm manager and one person in the office management. Danyadara contracts experts and local workers/farmers for specific tasks or jobs but they heavily rely on the help of volunteers to manage the land. In the past, there would be up to 10 people or so volunteering at a time but due to multiple reason including the fact that it takes a lot of time and effort to manage volunteers as well as the associated costs for food and water, Danyadara now has a limit of around five volunteers at a time and ideally asks those to stay for a minimum of three months.

At the time of our research there were five and then four volunteers present, staying between two weeks to two months at the project. All of them were from central and northern European descent with varying academic/professional backgrounds. Three of the four that participated in our research had studied at University, two of which had worked in the corporate world, one had their own business. One person had just finished school before joining the project. As had the interim farm manager while the farm manager attended further studies before changing their career path and learning about permaculture and sustainable living. The office manager has a background in academia and research.

Volunteers are required to work five hours per day and in return are provided a bed/room in the volunteer house and three meals per day (breakfast and lunch is prepared for them while dinner they are required to cook for themselves but given the ingredients). All volunteers live in San Pedro where there's the main Danyadara vegetable garden, parts of the olive grove and the eco-houses where volunteers and the farm managers sleep. San Pedro also has a few 'normal' houses that are occupied by Suryalila staff. The area is connected to the grid with electricity and water. The showers are eco-showers that feed into the land and toilets are different types of compost toilets which provide humanure. These also exist in the Suryalila area but the house that hosts most retreat/hotel guests has regular bathrooms/toilets of which gray/black water is treated in a

septic tank. There are three composting stations in different places of the property. Suryalila/Danyadara tries to reuse/recycle all of their organic waste. This happens through the eco-toilets (humanure), organic material from food scraps and organic material from pruning, gardening etc.

Fig. 4 The Garden at San Pedro

Danyadara's main aim is land regeneration for which they experiment with many different techniques and approaches loosely related to permaculture[7] e.g. keylines[8], syntropic lines[9] mulching[10], Miyawaki tiny forest[11], spiral garden[12],

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[7] Originating from the term 'permanent (agri)culture', permaculture is a (landscape) design approach based on observing and mimicking how nature works. It is used to design regenerative systems at various scales ranging from home gardens and farms to larger bioregions. Permaculture has three core ethics: Earth Care; People Care; Fair Share.

[8] Keylines describe a landscape approach targeted towards water retention and management.

[9] Syntropic lines are tree lines planted according to syntropic agriculture which as a form of agroforestry mimics the function and structure of a natural forest.

[10] Mulching describes the practice of covering soil with organic material to protect it from pests and to retain moisture.

[11] Miyawaki tiny forests are composed of young native tree species planted closely together in a small area.

[12] A spiral garden uses stones, brick or wood to construct a spiral where different plant species are grown that benefit from the different variation of sunlight and moisture created by the structure.

composting[13], humanure[14], swales[15], check dams[16] etc. From time to time they have experts coming to do consultancy and teach them about certain techniques. Aside from the work directly related to land regeneration the Danyadara team also takes care of the vegetable garden which provides some of the food for the staff, volunteers and kitchen as well as general land management duties alongside the Suryalila maintenance team.

Food production is not a priority for the project due to the limited availability of water. While the olives are being harvested and pressed into oil and sold at the retreat in-house shop, they have not been able to expand the production as of yet again due to limited water. However, plans are to expand the olive grove as well as experiment when possible with other 'cash crops' that would help sustain the project financially. Right now the main focus is regenerating the soil (e.g. through reforestation) as well as limiting rainwater runoff through different water retention practices. For the latter Danyadara collaborates with experts from the Portuguese ecovillage and land regeneration project Tamera. Partnerships with similar projects and initiatives is another central aim of Danyadara.

> "I mean, I always said, in 20 hectares of land, we can't really, seriously change, you know, tackle desertification, even though we are doing lots of things, (...), like, you can't really change the environment of your area just in 20 hectares. So, it really means that we have to work with people and organizations that don't think like us necessarily, you know, they have different interests and kind of we live in different sort of realities in the sense of, (...), we have different motivations." (Farm Tour, P6)

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[13] Composting entails the breaking down of organic matter into fertile material used to enrich soils.
[14] Humanure is a form of composting using human manure.
[15] Swales are a type of land design that helps to prevent stormwater from running off the land.
[16] Check dams are built structures inside of a swale used for water retention on the land.

Fig. 5 Part of the Garden at Suryalila Main Site

Aside from that, Danyadara hosts and offers yearly Permaculture Design Courses, run by the Danyadara farm manager, hosts sustainable living retreats together with Suryalila and has held a water retention course in the past. This forms the main part of their educational approach to land regeneration. Financially, Danyadara couldn't exist without Suryalila which not only provides the land as mentioned above but also funds consultancies, pays for the salaries of employees, tools, machinery and living expenses of the volunteers.

> "This capacity of Suryalila to provide a level of economic stability and income, allows Danyadara to be more experimental in working with the land and to try different restoration efforts for regenerating the soil and land where possible. This is quite unique in the area, as neighboring farms retreat to much more 'conventional' farming methods, such as

monocultures. This is primarily due to the need to provide in economic terms and ensure a certain crop return" (excerpt from research diary).

When speaking about their relationship to neighboring farmers the Danyadara office manager shared:

> "[It's] almost non-existent. You know, we don't really have much, I mean, it's friendly, you know, we don't fight with any of the neighbors. But then, having said that, this is not to say that we are better and we know best (...). No. It's more about, okay, we have the luxury and the privilege of doing things, because we want to, I'm not really thinking about what's the return behind this, although we kind of have to start thinking more about that, because otherwise the project wouldn't be very sustainable." (Farm Tour, P6)

In a way, Danyadara also exists to 'offset' or compensate for some of the impact Suryalila (as a place that hosts up to 70 people at a time) has on the land. Within the Yogic philosophy that informs much of the workings of Suryalila this is framed as Karma Yoga. The office manager explained it to us as "it's kind of, the mixing of, you know, the practice of yoga with something [that's] more than just working on yourself (...). So it's definitely related to the yoga philosophy that is kind of the essence of this place" (Farm Tour, P6).

While legally they are two separate entities, in practice the business and the project are much more intertwined. During our farm tour the office manager explained:

> "So we have the same head for Suryalila and Danyadara, (...) everything is going to be intertwined. You know, you can't really separate [them]. Danyadara works in the land that is being bought by Suryalila, Suryalila

then kind of concedes the land to Danyadara to manage it. So even legally, you know, it's kind of [intertwined]."

(Farm Tour, P6)

Throughout the research process, our first person of contact was the Danyadara office manager who acted as our gatekeeper. They responded to our initial email and invited us to come to the project. We had regular check-in's with them during our time at the site as well as a follow-up call after we've left. As part of our collaboration we agreed to return our findings, in particular about questions they had put forth, to the project in a manner accessible to them and wider audiences.

When we speak of Danyadara throughout the rest of this study we speak of the project as made up of the people and practices that were present at the time of research, the community vision and place-in-the-making, not the organization in legal or official terms.

III.III. The Grounds We Stand On

Relational Ontologies

There are pluri-versal ways to conceptualize and understand relational ontologies, including notions such as 'relationality', 'complex living systems', or 'interbeing'. While we won't be able to reiterate *all* of the eloquent ways in which diverse poets, philosophers, scholars, communities and practitioners have shared about those worlds, we do want to try and provide a short overview of what constitutes the onto-epistemological stance that underpins this thesis.

The thread that binds different above-mentioned conceptualizations together is a shared understanding that the worlds we inhabit are constituted by a relational network, not separate entities. As such, Escobar (2020) defines relational ontology as a "dense network of interrelations", in which "nothing

pre-exists the relations that constitute it" (p.72). Similarly, buddhist monk Thich Nhat Hanh expresses this through his notion of interbeing and Martin Buber notes that "and all real life is meeting" (Margulies, 2017, p.339), Equally, many indigenous cultures engage in lifeways and "knowledge production practices" that are rooted in "more-than-human relational ontologies" (Todd 2016; Böhme et al., 2022, p.2066).

Yaka (2020) notes that for Merleau-Ponty (1968) relationality is expressed through the notion of 'flesh of the world', which we become part of through our own flesh (p.175). He writes:

> "We sense our bodies only in other, human and non-human, bodies and things. So, it is not only that we become part of the flesh of the world through our own flesh, but we also sense the flesh of our own body only within the flesh of the world. We sense, we feel, we act, we come to know ourselves only through our environments, through our connectedness with other bodies, organisms and things. The self, in this sense, is formed in relation to the other, within a world of encounters, not only with human but also with non-human bodies and entities." (Yaka, 2020, p.175)

Through the notion of 'ecology of love', biophilosopher and marine biologist Andreas Weber (2017) conceptualizes the world as a place of mutual belonging. He argues that ecosystems are not only bound together by the relations that constitute them but by a dialogue of love. Weber thus articulates a related ontology of 'poetic materialism' that describes reality as an interplay between physical (tangible) and meaningful (intangible) dimensions.

Relational ontologies hence understand the world as a relational network, as "an interconnected, complex, and adaptive socio–ecological system that is constantly in flux" (Böhme et al., 2022, p. 2067). This offers the ontological grounds for relational approaches to research, including whole systems thinking.

Relational and Whole Systems Thinking

Senge et al. (2005) note that "our normal way of thinking cheats us. It leads us to think of wholes as made up of many parts, the way a car is made up of wheels, a chassis, and a drive train. In this way of thinking, the whole is assembled from the parts and depends upon them to work effectively. If a part is broken, it must be repaired or replaced. This is a very logical way of thinking about machines. But living systems are different" (p.5).

Whole systems thinking, described through the authors above, is a form of relational thinking. Such thinking has gained prominence in various academic fields as it supports scholars to better understand, analyze and study "complex phenomena in terms of constitutive processes and relations" (Walsh et al., 2021, p.74). To facilitate a better understanding of 'emergence' Senge et al. (2005) write the following about living trees:

> "It's common to say that trees come from seeds. But how could a tiny seed create a huge tree? Seeds do not contain the resources needed to grow a tree. These must come from the medium or environment within which the tree grows. But the seed does provide something that is crucial: a place where the whole of the tree starts to form. As resources such as water and nutrients are drawn in, the seed organizes the process that generates growth. In a sense, the seed is a gateway through which the future possibility of the living tree emerges." (p.2)

As wholes are said to be greater than the sum of its parts, they are not only "mere assemblages" but "create themselves" continuously in relation to the elements that constitute them (p.5).

Despite academic interest in relationality growing in recent years, relational approaches are still marginalized within sustainability studies (Walsh et al., 2021, p.80). We see potential in such onto-epistemological grounding by helping analyze inner-outer regeneration through a focus on processes and emergence.

Such thinking focuses on subjects as entangled with the world they inhabit, thus "constantly being reconfigured through an interplay of the "in here" and the "out there" of the world" (Singh, 2015, p.59).

III.IV. Methodology

III.IV.I.   Feminist and Affective Research Approach

Our research is grounded in a feminist methodology that emphasizes the situated, partial and relational nature of knowledge and knowledge production (Haraway, 1988). Feminist methodologies also place emphasis on the validity of personal experience for research and center the body as a place/source of knowing and knowledge production (Fonow & Cook, 2005). We are particularly influenced and inspired by what Harris (2015) articulates as 'lived' Feminist Political Ecology. Such an approach puts special emphasis onto 'everyday needs', 'embodied interactions' and 'emotional and affective relations' as to push for "an alternative sensibility of what matters" (p. 158). Placing emphasis on the 'everyday', the 'embodied' and the 'emotions', a lived Feminist Political Ecology allows the study of alternative value creation as well as renewed socionatural relations, something that can offer a way beyond "market-based and capitalist logics of value" (pp.163-164).

Similarly, proponents of affect theory have called for "different forms of knowing" which highlight "a different sensitivity, different modes of attention, different ways of being attuned to what happens around us" (Jansen, 2016, p. 60). As such Nightingale et al. (2021) write:

> "We are motivated by the alarming observation that scientific facts are inadequate for generating the wide-spread social and political action

needed to address global environmental change. If scientific evidence is inadequate, then we postulate that emotional and affective relations are required." (p. 2)

Much has been written and theorized about 'affect' and what an 'affective turn' has and continues to offer to social science and the humanities. The most widely cited reference of 'affect' within these disciplines comes from Spinoza who defined affect as 'the capacity to affect and be affected' (cited in Jansen, 2016, p. 59). Strom and Mills (2021) explain it as "a force of some kind, an energy or intensity that moves us, animates us, affects us in some way" (p. 190). With a focus on social and natural relations and in favor of processes rather than static outcomes, Nightingale et al. (2021) argue that a turn to affect "opens up ways of knowing that are relational, embodied, experiential" (p. 6). Moreover they contend that "if affects are the result of encounters between bodies, they help elucidate how emotions translate into actions" (ibid., p. 7). Concurrently, Singh (2018) notes that an "attention on affects in nature-society studies enables thinking about liveliness and interconnection of the world" (p.2).

Departing from a feminist methodology also means being and thinking reflexively throughout the process of our research. This includes both reflexivity about the self and the interpersonal (Johnson & Madge, 2016) so as to make visible one's positionality while also continuously engaging in a process of "'unlearning' what one has already learned" (ibid., p. 73). Transparency and reflexivity are two key elements that contribute to the trustworthiness of qualitative research (Cope & Hay, 2016, p. 11). Recognising that a certain degree of bias is unavoidable in any research means becoming accountable to one's own positionality and situatedness. Furthermore, we see research practices and practitioners as always political that is entangled in complex socio-ecological webs fraught with both tangible and intangible power dynamics. Citing Kim England's (1994) understanding of reflexivity, Catungal and Dowling describe it "as a process of constant, self-conscious scrutiny of the self as researcher and of the research process" (2016, p. 25).

However, reflexivity cannot remain "an individualistic approach (...) of a researcher announcing their identities as their act of being reflexive" (ibid., p. 26). Rather than viewing reflexivity as 'an inward gaze' it's a practice that asks us, as researchers, to situate ourselves "in relation to people [and places] with whom we are in a research relationship" (ibid., p. 36). One way to navigate this and integrate a practice of critical self-reflexivity into the research process is through the use of a research diary. As a sort of "autobiography of the research process" a research diary offers "a space for a researcher's methodical account of their reflections, observations, and experiences of the research itself" (Catungal & Dowling, 2016, p. 29). We expand on our use of a research diary in section III.V.III. Moreover, as a team of two researchers we actively and continuously engaged in the collective sharing of our individual experiences and analysis. Thus very much like Catungal & Dowling (2016) suggest our practice of reflexivity thereby provided "a means to tap into each other for wisdom and resources on how to analyze specific experiences and to strategize to ensure a more responsible and ethical research practice" (p. 29).

III.IV.II. Engaged Scholarship

Exploring what an ethics of care approach could offer to understanding and stimulating sustainability transformation processes, Moriggi et al. (2020a) have developed a framework that is composed of three interconnected and mutually reinforcing dimensions: (i) ethically informed practices; (ii) relational response-ability; and (iii) emotional awareness. Together they encapsulate a care-based approach to transformative change.
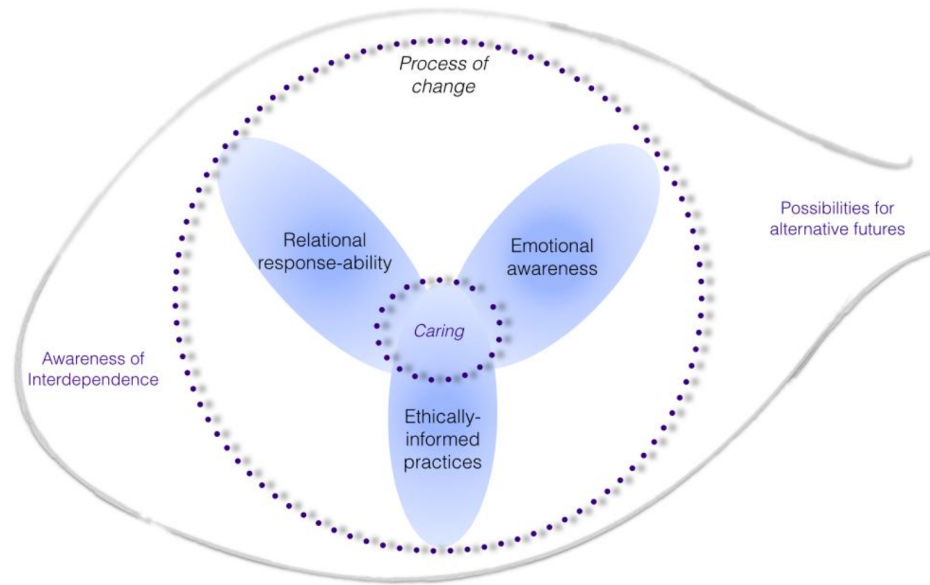
Fig. 6 Care-based Approach to Transformative Change (Moriggi et al., 2020a)

We conducted our research through a feminist ethics of care lens whereby we draw on Moriggi et al.'s (2020) framework both in our approach to research as a whole as well as in our understanding on what to look for, which methods we used and how to ask questions in the field. We were inspired by Moriggi (2022) who, responding to a call within the sustainability sciences for transformative research, explores how an ethics of care lens may help us understand and practice research that contributes to transformation(s). Drawing on the three dimensions of a care-based approach to transformative change, she highlights multiple conditions for each dimension that enable such transformative research.

Writing about the first dimension Moriggi (2022) lays out how "seeing research—and participatory engagement in particular—as an ethically-informed practice inspired by caring principles, implies three main conditions: (a) attentive engagement to context and its interdependencies; (b) willingness to experiment; (c) attention towards empowerment" (p. 134). We attempted to integrate this into our research approach by firstly spending time getting immersed into the research context. We worked together with the practitioners on the land, shared meals and conversations. This helped us to build trust and relations, and become attentive to place and people. Indeed, Moriggi (2022) emphasizes the role of embeddedness,

relationality and "fostering [of] deep relationships" to enable care-full research practices (p.134; 135).

Secondly, we experimented with different methods of data gathering and coming up with creative collaborative practices of co-producing knowledge in groups. Such "willingness to experiment", writes Moriggi (2022) "is based on the idea that caring is an iterative practice, grounded on intensified involvement and knowledge" (p.135). Our methodology of data gathering was highly iterative whereby we developed and adapted our methods continuously to be able to respond to what emerged and allow time to build trust.

Thirdly, our aim was to design our research process in a way that felt respectful and adaptive to the circumstances at hand, creating spaces of collaboration to support collective reflecting, exchanging of experiences and ideas and strengthening the sense of community within the group of practitioners. We also agreed on sharing our research in an accessible way, highlighting those findings that would be most helpful to the project (according to their own interpretation and suggestion). Our participation in the manual labor on the land also contributed to this reciprocity.

The second dimension of caring, relational response-ability is understood as "the ability to respond to the needs we see around us" (Moriggi, 2022, p. 136). Researchers can foster this in "close interactions and embodied experiences" (ibid.) with research participants and contexts. This means, training our capacity for attentiveness and "learning to be 'present' – in the moment – and also open to what is not yet known" (Foster, 2016, p. 129, in ibid.)   Throughout our fieldwork we tried to follow this in the way we approached our practitioners, how we moved and behaved in the place/space and by engaging in continuous and critical self-reflexivity (as described in Section III.V.III.).

And lastly, in the context of research, the third dimension of emotional awareness entails making space for both "emotional and rational dimensions in processes of collective co-creation" (Moriggi, 2022, p. 137). In this way, Moriggi suggests that "by engaging with emotions, people can foster imagination, creativity, and intuition, and project themselves into the future in hopeful and

liberating ways" (ibid.). During our research we placed a central focus on the affective dimension of land regeneration, we addressed emotions directly and indirectly in our questions and methods with the intention to explore and highlight the affective dimensions of regeneration (work).

Moreover, on the level of data collection we tried to incorporate the framework by focusing on all three dimensions at some point and some form. This helped us structure our interview questions, design the workshops and guide us during our participant observation. Data on the first dimension, ethically-informed practices, mostly came from our participant observation and participation in the farm/regeneration work but we also focused on practices in the second workshop. We tried bringing in the dimension of relational responsibility during our interviews as well as during the first workshop where we asked the volunteers about how the experience of working at the project changed their perspective of their positions and role in the world, why they chose to come to the project, what values and motivations underpinned their decision. Lastly, we included the dimension of emotional awareness into our research emphasizing the emotional affect of the participants' motivations and experiences both during the interviews and the workshops. Specifically, in the second workshop, we introduced an exercise around emotional reflection inspired by body mapping (for more on methods see Section III.V.).

III.IV.III. Case-study Approach

In our research we followed a case-study approach whereby we gathered all of the empirical data at one location, namely Danyadara. This made sense to us both in terms of the scope and time limitation of this thesis as well as methodologically, as it lends itself well to our qualitative approach.

Baxter (2016) explains:

> "A case study is perhaps most appropriately categorized as an approach to research design or methodology (...) rather than as a method (...) because there are important philosophical assumptions about the nature of research that support the value of case research. The primary guiding philosophical assumption is that *in-depth understanding about one manifestation of a phenomenon (a case) is valuable on its own without specific regard to how the phenomenon is manifest in cases that are not studied*. This depth of understanding may concern solving practical/concrete problems associated with the case or broadening academic understanding (theory) about the phenomenon in general, or a case study may do both of these things." (p. 110, our emphasis)

Using a case-study approach thereby allows for in-depth and place-based research that holds value on its own but has the potential to contribute to expanding understanding and knowledge about a specific phenomenon, in our case, the process of inner-outer regeneration. As such, in the context of Danyadara and this thesis, we were able to study the inner transformation that happens as a result of care-fully engaging in land regeneration at the specific place and through specific practices. This helps us link inner and outer dimensions of regeneration and develop an understanding of how this interplay holds transformative potential. In this way, we were able to bridge existing research gaps by expanding our understanding of what constitutes regenerative processes (Gibbons, 2020), apply "more integrative approaches that link inner and outer dimensions of sustainability" (Ives etal., 2023, p. 1; Gibbons, 2020) and contribute to "in-depth empirical accounts of practices of caring for both human and more-than-human, at the place-based level" (Moriggi et al., 2020a., p. 294).

III.IV.IV. Ethnographic Fieldwork

We spent three weeks at and with Danyadara in which we conducted in depth qualitative ethnographic fieldwork. The Emerald Publishing guide to ethnographic research methods describes these as: "qualitative, inductive, exploratory and longitudinal. They achieve a thick, rich description over a relatively small area" (Emerald Publishing, 2023). Ethnographic methods were therefore very well suited to our thesis as they provided detailed and in-depth data on a specific issue in a specific context. Through focusing on subjective knowledge and experiences this approach allowed us to center emotions and personal stories in our data collection process.

Moreover, in ethnographic research the researcher conducts "data gathering on an iterative basis, (...) taking on a "reflexive" role – in other words observing, reflecting, building up a theory and then going back into the field and testing it" (Emerald Publishing, 2023) which is in line with our feminist and reflexive methodology. Due to the scope and scale of our fieldwork, our research can be seen as a form of 'rapid ethnographies' (Vindrola-Padros, 2021). Vindrola-Padros defines rapid ethnographies along 5 characteristics:

> "(1) the research was carried out over a short, compressed or intensive period of time; (2) the research captured relevant social, cultural and behavioural information and focused on human experiences and practices; (3) the research engaged with anthropological and other social science theories and promoted reflexivity; (4) data were collected from multiple sources and triangulated during analysis; and (5) more than one field researcher was used to save time and cross-check data." (2021, p. 6)

While the use of such 'rapid ethnographies' carries challenges and limitations[17], the three weeks we spent in the field still allowed us to get *embedded* i.e. accustomed to place and people, move from outsider to insider, gather various types of data while also leaving space to experiment with more creative and collaborative methods.

We chose three different ethnographic methods to collect a range of different types of data as well as for triangulation purposes. These entailed in-depth semi-structured interviews, creative workshops/focus groups and what we call reflexive participant observation.

Interviews

As one of the most common and widely used qualitative research methods, interviews can produce rich data on opinions, beliefs, experiences, places or events that may vary greatly between person to person (Dunn, 2016). Maccoby & Maccoby (1954) define interviews as "a face-to-face verbal interchange in which one person, the interviewer, attempts to elicit information or expressions of opinion or belief from another person or persons" (p. 499 cited in Dunn, 2016, p. 148). In our research we used semi-structured interviews which allowed for a certain amount of flexibility while still following a set of pre-decided questions.

This method of data gathering is especially useful to understand complex behaviors, dynamics and motivations of a person, community or place (Dunn, 2016). It centers the perspective and lived experience of the interviewee ideally "show[ing] respect for and empower the people who provide the data" (ibid., 149-150) thereby providing the researcher with an opportunity "discover what is relevant to the informant and respond accordingly" (ibid., 150).

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[17] Vindrola-Padros (2021) outlines common challenges and critiques of rapid ethnographies including "tensions between the breadth and depth of data" (ibid., p.10), limited capacity "to capture changes over time" (ibid., p. 11) and issues of representation due to limited variety within the sample. For a more detailed discussion on the challenges and opportunities of rapid ethnographies see: https://www.cambridge.org/core/books/abs/rapid-ethnographies/introduction/4D480A819728052A1291CEB3849367BB

Focus Groups / Creative Workshops

Focus groups have been successfully used to disentangle the "multiple meanings that people attribute to places, relationships, processes and events" (Cameron, 2016, p. 204) As such, they offer an ideal tool for not only investigating "what people think and do but why people think and behave as they do" (ibid., p.206, original emphasis). Moreover, through a group dynamic also referred to as the "synergistic effect" a comment of one person may lead to an entire discussion and new chain of responses that not only provides a rich and diverse amount of data but also allows research participants to hear and learn from each other's ideas and understandings (ibid., p.201). We used this method both explanatory and generatively in our research that means to understand the motivations and ideas of our participants and as a way to co-produce new knowledge within the group.

The method of focus groups formed the basis for more collaborative and collective research where we experimented with some more creative practices reflecting which we'll elaborate on in section III.V.II.

Participant Observation

Reflexive participant observation throughout field work formed our third method. This qualitative research method allowed us to immerse ourselves in the field and generate more context-dependent data (Doolittle, 2015, p. 520). The aim was to get a better understanding of how the project operates and obtain insights into the socio-ecological context and tangible workings of the place and community. As writes Kearns (2016) "believable observation is the outcome of more than simply seeing; rather, it requires cognizance of the full sensory experience of being in place" (p.330-331). In the beginning of the field work we conducted participant observation in an inductive, exploratory way to give space to specific themes, questions or dynamics to emerge.

In this way we continuously revisited our research questions and aims adapting where necessary thereby responding to the circumstances and place around us. We followed a participatory approach to observation whereby it becomes "a method of seeing and feeling, but also a method of doing" (Watson, 2016, pp. 126-127). As Watson (2016) lays out this essentially involves 'trust-building' and oftentimes as well as in our case "living with other people - socializing, friend-making - " (ibid.). We also used participant observation as a means of triangulation.

III.V. Methods and Data Collection

We used three different ethnographic methods to collect our data as already mentioned in section III.IV.IV. This included in-depth semi-structured interviews, creative workshops/focus groups and reflexive participant observation. During the first week we only engaged in the observation practice to gather exploratory data while building trust and relationships with our participants. At the start of the second week we facilitated the first of two workshops/focus groups. We then conducted all our interviews and finished with the second workshop/focus group. We chose to do this intentionally so we could slowly build up trust (as the second workshop focused more on emotions).

The first workshop offered us a chance to ease into the research process with the participants. This first encounter coupled with the week (or longer) of us being there made the interview process less formal and more comfortable as we knew each other by then, had worked together in the land and had had conversations before (on and off the record). We also wanted to have all the interviews done before the second workshop to have a clearer picture of the participants' perspectives and insights before deciding on what exactly to focus on during the last workshop.

The table below shows an overview of the type and source of data/material we collected. It also serves as a guide for how we will refer to the practitioners in our analysis chapter to honor their confidentiality.

Reference Code	Practitioner's Role	Farm Tour	Workshop 1	Interview	Workshop 2
P1	Volunteer		X	X	X
P2	Volunteer		X	X	X
P3	Volunteer		X	X	X
P4	Volunteer		X	X	X
P5	Interim Farm Manager			X	X
P6	Office Manager	X		X	
P7	Farm Manager			X	
P8	Founder			X	

Fig. 7 Overview of the Type and Source of Data/Material in Relation to Practitioners

III.V.I.   Semi-Structured Interviews

We conducted 8 semi-structured interviews and one transect walk (farm tour). This provided us with in-depth personal accounts of each of the practitioners, their stories, motivation and drivers, perspectives, feelings and experiences. We interviewed everyone directly involved with Danyadara which included the office manager, the farm manager, the founder, the new interim farm manager who until recently had been a volunteer and the 4 volunteers that were present during our time.

We prepared interview guides for each interview except for the farm tour where we followed a more open approach and asked impromptu questions around

what we were being shown and explained. The same interview guide was used for the volunteers while the other guides varied from person to person to allow more focus on each of their different roles in the project. We recorded each interview with prior consent and transcribed them with the help of an AI tool called Otter. This would produce an initial transcript which we then went through and corrected and adjusted manually where necessary. This included correcting spelling and understandings, adding commas etc. as well as assigning names to the speakers and making sure everything was transcribed correctly and completely verbatim. One interview was conducted in German and was transcribed manually and partially translated for use in the analysis.

III.V.II. Creative Workshops

We facilitated two creative workshops with the volunteers and the interim farm manager that can be viewed as a more creative collaborative version of a focus group (see Appendix II for related material). The first workshop centered around *attentiveness and intentions* i.e. motivations and drivers for coming to the project as well as the participants' perspective of the state of the world and future visions of the world. The workshop employed a walking methodology/exercise followed by collective sharing as well as used a moodboard exercise[18]. In our field diary, we wrote:

> "We started the workshop with a short check-in. We asked everyone to share how their day was, how they are arriving to this space today. We also thanked them for taking time out of their day to be part of our research. (...) We then had a discussion on consent and whether it's okay to record the session. (...) We then proceeded with the workshop itself and Clara invited everyone to find a partner

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[18] Moodboard exercise describes a collage-based method that allows research participants to use symbolism in expressing their inner worlds, including thoughts, feelings and emotions. By assembling magazine clippings in silence for a certain amount of time, research participants are able to creatively showcase their beliefs and motivations without having to put them into words first (Dunn & Pimlott-Wilson, 2021, pp. 90-91).

and go on a ten minute walk. Here, everyone was invited to share about why they've decided to come, live and work at a project like Danyadara. When everyone came back, we had a sharing circle on what emerged from the discussion. (...) Clara and Rahel asked some follow up questions when people shared something interesting. (...) After this we moved to the second exercise of doing a mood board and collage. (...) We asked everyone to do the exercise in silence with the question of "*What do you feel is the state of the world and where are we headed, on a planetary and collective level'.*" After about 10-15 minutes we asked them to finish and then looked at the collage together. Rahel asked some questions to stimulate a sharing around what had emerged and how the experience had been."

The second workshop was focused on *practices and emotions.* Again, we used three different methods/techniques to stimulate reflection and conversation. The first was a personal reflection exercise around the question of why they (practitioners) cared about land regeneration. Each practitioner wrote their thoughts on one or multiple post-its that were then posted onto a big piece of paper and read aloud and collectively talked about. The second exercise was a popcorn-style[19] round of brainstorming around the different practices engaged in at the project. The third and final exercise was focused on the emotions and entailed individually reflecting and drawing/writing/verbalizing different emotions experienced or felt during the course of a typical day at the project. In our field diary, we wrote:

"(...) we began with a check in and of course the obligatory consent 'talk'. (...) We started the recording. We then explained the first exercise which entailed reflecting on the question "*Why do you care about (land) regeneration)?*". We had written the question on a big piece of paper and put it in the middle of the circle. Everyone was given a pen and a stack of post it and Rahel asked them to think about the question and write down what they feel/think/reflected on the

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[19] Popcorn Brainstorming is a classic brainstorming technique where everyone in the group/room contributes to the discussion simultaneously by (respectfully) speaking their ideas out loud in no specific order.

post-it in silence and then put the post-it onto the big piece of paper. (...) We gave them 5-7 minutes or so and when we felt like most people were done we suggested they finish their post-it(s) and asked if anyone would like to read out everything that had been written down. (...) One participant offered to read them and when they finished, We asked if someone would like to share about what they had written or if they resonated with what someone else had written. What ensued was an interesting reflection round. We were positively surprised at the conversation and in general had the feeling that everyone was at ease with the situation, them as a group but also with us as the facilitators. We noticed a big difference from the first workshop. Now there was way more trust and ease. It also seemed like they enjoyed talking to each other about these topics and hearing each other's opinions and insights. When we felt everything had been said for the moment we asked if we could move on and We explained the next exercise which was a round of popcorn-style brainstorming about all the different practices they've engaged in at the farm (and in general) at the place. (...) Everyone started sharing and we wrote down what was said on the piece of paper. (...) After we gathered their input we asked if this exercise and also their experience in the land had given them an understanding of how regeneration is understood and practiced at Danyadara. (...) After the sharing round we moved onto the last exercise. Everyone got a piece of paper and a pen as well as a print out of the emotion wheel. We explained that everyone should draw a spiral on their paper (and demonstrated it) that would represent the flow of a typical day. We then invited the group to individually reflect on a typical day at Danyadara and focus on the emotions they experience and write them down. Printouts of the emotion wheel were there to help them to verbalize different emotions. We also said they could draw, write or explain in some way if there are certain activities or things that caused the emotions (...) We gave them 5-10 minutes and played some music in the background. When they appeared to be finished we asked if anyone would like to share."

Both workshops were recorded with prior consent of all practitioners. We transcribed Workshop 1 with the help of Otter. The process was the same as for the interviews. Workshop 2 was transcribed manually.

III.V.III. Reflexive Participant Observation

Throughout the entire three weeks of fieldwork we engaged in what we term reflexive participant observation. This entailed observing, reflecting, experiencing and participating in the field site alongside the research participants/practitioners. This method helped us in the beginning to make sense of the place and dynamics and throughout our time in the field it provided a way for holding ourselves accountable as researchers and being aware and reflexive of what we were observing and experiencing. At the end of each day we wrote a research diary centered around two prompts:

- *How was the flow of the day, how did you feel, how do you feel you were perceived as a researcher – how did you feel about your own behavior, and responses by the research field, group, others?*
- *What is revealing today about the project or our topics of interest? Any new insights or reflections?*

We sometimes recorded our reflections and observations in a voice note on the spot and transcribed it for our research diary later. Throughout the process we consistently discussed our personal/individual observations with the other person and shared our thoughts and reflections continuously. We observed activities, dynamics, interactions, conversations, characters, practices, processes, climatic conditions, nonhuman nature and the surroundings. The following excerpt of our research diary illustrates how we reflected on our observation and participation as researchers:

"Overall, we were glad that we ended up doing the workshop and that we didn't postpone it. There were some great insights for our research. At the beginning, when concern came up about consent, we felt a bit worried and also a lot of

pressure to reassure people of our research ethics and intentions. That was an interesting moment of understanding power dynamics between researchers and those that feel that they're being researched. As much as we have tried to deconstruct such a dichotomy in the research process, it shows that it's difficult to completely escape such dynamics. Although all of the volunteers later re-assured us that it doesn't necessarily have something to do with us and how we've showed up and explained our research, but more with just the fact that it can be daunting to feel like 'lab rats' when someone says they want to do research on their 'everyday lives'. We feel a sense of accomplishment. After the workshop one of the feedback was that people feel more safe now that they've seen our research approach in action – the type of questions we're interested in and the way we're doing the research. It's a sign that in a way our approach of trying to be more participatory and subtle, does work and builds trust with participants in a short amount of time"

After returning from the field we structured/grouped/coded the field diary to separate personal reflections from observations, thoughts on methods and research questions for easier use in the analysis.

III.V.IV. Analysis of Material and Coding Process

In order to analyze and interpret our data, we were guided by a three step process of s*orting*, *reducing* and *arguing,* as elaborated by Rennstam and Wästerfors (2018). According to the authors, analytical work represents a form of "creative craftsmanship" that connects and honors both systemic and creative aspects of qualitative research (p.25). They emphasize a sense of "humility in research", in which "qualitative material should be read slowly and carefully" in order to find relevant and novel insights for social sciences (p.77).

Our first analytical step included reading and sorting through the material. Rennstam and Wästerfors (2018) note that sorting is a way of "spending time with the material", applying attentiveness and generosity to the task of familiarizing

oneself with the material and creating a sense of order through categorizing and identifying relationships (p. 84). More specifically we applied a form of "analytical induction" in our coding process (p.96). The aim of analytical induction is to create "favorable conditions for constructing excerpt-commentary units" (Emerson et al. 1995, p.182) as well as provide a step by step process to better understand and explain a social phenomenon (Rennstam and Wästerfors, 2018, p.97). Such an approach is exclusively qualitative and is commonly used to explore emerging and interactive components of a specific phenomena:

> "Analytical induction may, in other words, be useful for developing a procedural explanation for a selected phenomenon without losing any nuances and variations in the process. Each case becomes interesting, as it is given the potential of objecting to or improving the analyst's hypothesis" (p.100).

Throughout our sorting process, we were interested in exploring and better understanding the phenomenon of regeneration – how it plays out in the lived experience of practitioners, what constitutes its drivers, processes and felt outcomes both on a tangible and intangible level, and what type of potential it may hold for shaping socio-ecological futures. Keeping this research interest in mind, we nevertheless tried to let the material speak for itself – allowing patterns and similarities to emerge from and between the qualitative material. Sorting our data thus included an initial coding process, in which we tried to connect the material from different practitioners, interviews and workshops under the broad categories of 'motivations and drivers', 'outcomes and learnings', 'challenges' and 'regeneration imaginary'. Such initial categorization is a necessary step in moving from empirical data to theory, as, "we cannot come to grips with reality without arranging it" (p.104).

Despite adopting an open-minded and inductive approach in our sorting process, it is important to note that as researchers we cannot take ourselves and our own thinking-feeling completely out of the research encounter. As noted by

Rennstam and Wästerfors (2018) "the analyst's gaze is informed by theory, which means that it is characterized by deep interests and favorite concepts, previous reading (as well as a lack of reading) and influences from his or her colleagues" (p.104). We actively tried to be aware of this as researchers and avoid placing existing or stereotypical frameworks over the data.

The next stage of our analysis included actively dialoguing with the material through the analytical process of reducing. Here, we've chosen to take the path of 'illustrative reduction' rather than 'categorical reduction'. Illustrative reduction is a process of reduction that happens "on the basis of a desire to illustrate a chosen phenomenon in as much detail as possible" (p.108). On the one hand, this reduction legitimized an analytical focus on the practitioners rather than including all people who were involved with Danyadara. This changed the scope of material we included for our analysis section.

Within the chosen scope of our material we also reduced through the particular method of 'theoretical sampling'. Going through our initial coding results we tried to look for 'themes' within each of these fields in order to detect how different elements, themes and processes may interact within and between categories. The reducing stage required much re-reading of the material, for us to "discover new findings on the basis of the same material" (p.123).

The final stage of our analytical work included theorizing our material as a way of 'arguing' and contributing to our research fields. Indeed, theorizing can be seen as "empirically grounded argumentation" (p.144), in which one creates and discusses theory based on the empirical facts gathered. As noted by Rennstam and Wästerfors (2018), the word 'theorize' originates from Greek and means to 'observe' and 'contemplate'. As such, we tried to actively "think with our data", for it to become the material that informs our reasoning. Connecting data with theory is crucial in this final stage, as "empirical facts cannot be understood 'in themselves'" (p.145). Our theorizing around the 'care-full regeneration cycle' happened through connecting our material with one another as well as making sense of our data through language and theory. Here we both worked *creatively* as

well as *systematically*, adhering to the following rules articulated by Richard Swedberg (2012) and presented by Rennstam and Wästerfors (2018, p. 149):

Rule 1: Observe– and choose something interesting

Rule 2: Name the phenomenon and formulate a concept

Rule 3: Broaden the concept into a theory

Rule 4: Complete the theory so that it constitutes an explanation

We actively discuss the theoretical contributions of this new conceptual framework and theory around the phenomenon of inner-outer regeneration and regenerative caring process in the discussion section of this thesis (see Section lV.lll.).

Herein lies the sustaining power of activism – we act not out of fear, but out of love. As gravity holds all the material things together, love holds all the non-material things together – our idealism, our movements, our spirituality, our humanity. Love drives the regenerative activism which creates new energy within us.

– Satish Kumar

Part IV: Towards a Care-full Regeneration Cycle: Emergence, Reciprocity and Self-organization

As discussed in Part ll, the study of care is largely absent from scholarly literature on sustainability transformations and regeneration. While many academics, authors and practitioners do mention care as a vital component within regeneration efforts (i.e. cultivating regenerative cultures or restoring degraded land), its actual presence, role and affects remain largely unexplored. Such a research gap holds risks for care to be taken for granted rather than understood within regeneration and transformation studies. With this chapter, we thus aim to contribute to current literature in the field, by showcasing empirical findings around how care not only plays out in a place-based land regeneration context but also how it affects those who engage in it. As such, we aim to explore the potential of care-full engagement in fostering inner-outer transformation for regenerative sustainability.

While we will use similar terminology to existing care literature for describing and, at times, contextualizing our findings, we do not wish to impose any metaphysical assumptions onto our empirical material. Rather, we hope that in using similar language we are able to better bring our empirical findings into discussion with existing literature, as well as better understand the caring process in our particular research context. At the end we will highlight the relevance and insights of our particular findings in the discussion section, where we will showcase our findings through a framework coined 'care-full regeneration cycle'. This cycle not only helps in answering our research questions but could potentially form the basis for further research in all related fields.

IV.I. Care-full Engagement in Land Regeneration: Care-giving

The care of the Earth is our most ancient and most worthy, and after all, our most pleasing responsibility. To cherish what remains of it, and to foster its renewal, is our only legitimate hope.

– Wendell Berry

As established in the previous section (see III.II.), land regeneration is the main aim of Danyadara. By providing opportunities for people to join, live and work at the project, Danyadara offers a form of 'community-based restoration' in an area that suffers from the effects of desertification, monoculture practices and climate change. Through a grassroots approach, Danyadara actively brings people together to "demonstrate how working with nature and the return to personal interaction with the land is the way forward" (Danyadara, 2023). This can be seen as promoting "a conservation ethic", in which the project actively engages a community of practitioners to "heal a segment of an impaired earth" (Leigh, 2005, p.8). Being guided by permaculture philosophy and principles, such regeneration is primarily done by actively tending to and caring for the land.

Indeed, resting on the ethics of *Earth Care, People Care* and *Fair Share* (which some also call Future Care), permaculture goes beyond just being a design approach for regenerative ecosystems but actively integrates an ethics of care. Co-founder and editor of Permaculture magazine Maddy Harland writes: "Where permaculture stands out from the crowd as a design system is in its capacity to integrate the intellect with ethics. It can teach us to 'think' with the heart and respond with the head. By combining pragmatism with philosophy, we can create a greater synthesis" (Harland, 2023).

During the farm tour, the office manager explained how Danyadara experiments with a lot of different techniques and sees what works and what doesn't. This is an example of the first principle of permaculture 'observe and interact' (Farm Tour, P6). Similarly, the farm manager shared how change on the land happens slowly and it's all about "starting small", another permaculture

principle (Interview, P7). Meanwhile, when speaking about the aims of Danyadara, the office manager also expressed "an aspect of future generations" (Farm Tour, P6). Similarly, the farm manager shared a view of regeneration being a contribution towards the future:

> "We are not working for us, we are working for the next generation. This is something that I also learned. The things that I'm planting are not for me. And that took time for me to learn. That took years, and I still look at the trees and think 'Oh, when am I gonna take the fruit?' But this is not the mindset. It's about who is going to enjoy this ecosystem. I'm not going to see that, maybe my kids will"
>
> (Interview, P7)

As was mentioned previously (see Section III.II.) the philosophy of Karma Yoga also shapes the ethical approach of Danyadara. Speaking on how and why they created Danyadara alongside the yoga retreat center, the founder explained:

> "For me, regenerating the land is not separate from [yoga], because taking care of the planet is, for me, part of really living yoga. We have to take care of each other, of ourselves and also the planet. So I don't see it as a sort of separate thing, really."
>
> (Interview, P8)

Through reforestation and water retention techniques, the project aims to "restore the ecosystem" (Interview, P7). To them, this means increasing the fertility of the soil to bring back life in the ecosystem which then helps to regenerate the land. They see their role as "holding the process" and trying to speed it up so that life can come back by itself (Interview, P7). Besides their central purpose of regenerating the land, Danyadara also aims to "educate people about land regeneration" (Interview, P8). For the farm manager "showing another way of life" (Interview, P7) goes beyond formally sharing knowledge in a permaculture

design course but also includes inspiring visitors and guests staying at the retreat center to "see something different" (Interview, P7).

We thus see engaging in land regeneration at Danyadara as a form of 'care-giving' as it is underpinned by an ethics (of care) for the land, community and future. To truly understand how such care-giving plays out in the lived experience of practitioners, we first studied their intentions for coming to 'give care' as well as the place-based practices they engage in.

IV.I.I. Intention

Intention in our analysis encompasses the praxis of attentiveness, coalescing both care-about and care-for in the preparation for the active practice of care-giving[20]. While other scholars (Tronto, 2013; Moriggi et al. 2020b; Krzywoszynska, 2019) argue that attentiveness is the first stage of caring, followed by intention as the second stage, we found that caring-about couldn't be separated from caring-for.

Intention, as writes Moriggi et al. (2020b), can be understood as the outcome, or response to what is noticed, the 'unmet needs' within or around us. Since "the part of the brain that motivates us to action is the emotional part" (Coveny, 1993, p.4 in DiEnno & Thompson, 2013, p.64), such response can be seen as an emotional one. "Emotion helps us interpret, summarize and organize information" explain DiEnno and Thompson (2013, p.64). Thus formulating an intention is a moment of meaning-making of what we have been attentive to filtered through what we know the world to be (our identity, our values, our worldviews) that leads to a concrete course of action, towards what we can or want to *do*. In this way, intention forms the bridge between attentiveness and practice, between the more intangible and tangible aspects of care-giving.

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[20] According to Tronto's (2013) model of the five-stage caring process, caring begins with caring-about or attentiveness which here is defined as "the capacity to notice unmet needs around us, suspending self-interest, and adopting the perspective of others" (Moriggi et al., 2020b, p. 4). If unmet needs are noticed, attention becomes intention which transpires into action. Tronto calls this stage of the caring process 'caring for'.

To understand what practitioners were *attentive to* and how this may reflect their values, worldviews and identity we introduced a collective collage-making exercise during the first creative workshop. Here we asked practitioners 'What do you feel is the state of the world and where are we headed, on a planetary and collective level?'. The result of the exercise can be seen below.

Fig. 8 Moodboard Collage from Workshop 1

Themes that emerged from the exercise through a collective discussion about the collage[21]:

- mental and physical health / depression
- food and nutrition / processed food
- working against vs with nature

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[21] for more detail on the exercise and workshop 1 see Section III.V.II.

- wisdom vs exploitation
- technology
- aging and life
- yoga and wellbeing
- inequality
- billionaire's mars exploration - leaving our deteriorating planet
- apocalypse
- separation vs community
- culture and tradition
- freedom
- 'breaking free from the system"
- spirituality and meditation
- peace and love
- desertification
- "history repeating itself"
- "different walks of life"
- beauty standards, pressure

In our research, *intention* corresponds to the data that we collected and initially coded as *motivations and drivers* of practitioners for engaging in land regeneration. It is the 'why' we asked the practitioners about. In analyzing the material for 'intentions', four key themes emerged: Meaning and Purpose; Health; (Personal) Growth and Learning; and Connection. In the following, we'll share the findings of why practitioners have chosen to come to Danyadara and engage in care-giving.

Meaning and Purpose

Meaning and purpose are highly subjective to each practitioner, hence there are a variety of responses that can be gathered under this umbrella theme. However there are also a few commonalities that have emerged.

One practitioner shared a desire to "figure out if I can live in a different way" (Interview, P4). Following a bereavement in their family they began to "reevaluate everything" (ibid.). Wanting to experience more from life than just work and "get back to authenticity", they explained that they came to Danyadara with the question of "how can I cultivate a life that has meaning for me?" (ibid.). Similarly, another practitioner expressed that for them, coming to Danyadara is about "finding a way to live in another way" (Workshop 1, P3).

For one person, the intention to join the project was a result of finishing school and feeling unsure of what to do with their life. "I was super lost, because I didn't want to study and I didn't want to do a specific training", they recounted (Interview, P2). In living and working at Danyadara they hoped to find a sense of "freedom, purpose and responsibility" (Workshop 1, P2). Meanwhile, meaning for another person centered on the work of land regeneration. Sharing about their intention for being at the project and engaging in this work they explained: "I'm doing it for the land, trying to regenerate the land first and foremost" (Interview, P1).

Health

Another central theme that emerged is that of health, particularly shared amongst two practitioners for whom, engaging in land regeneration came from an intention of wanting "to get healthy again" (Workshop 1, P3). One of them shared that they had never taken a real break before and came with a suggestion from their doctor: "she said, I have to do something, [where] I get my hands into the ground, getting out of the head" they recalled (Workshop 1, P3). At first, this advice was

surprising for them but they understood the reason behind it: "I think intuitively I knew it was right and could be good" (Interview, P3).

For the other, coming to the project and engaging in land regeneration was about finding "this deep rest" but also about feeling alive and cultivating joy (Interview, P1).

> "Why I came to Danyadara is because five years ago, I was in South America, volunteering on different projects, mainly with permaculture and agroforestry. (...) and just being out in the land and working in all these different projects, I felt like, I'd found something that made me feel so alive, and it cleared my head, I felt so inspired creatively, all of a sudden, it just made me feel so alive."
>
> (Workshop 1, P1)

For another practitioner a central intention of joining the project and the work was to learn how to grow their own food that is healthy and organic: "I wanted to be more sustainable and better for my health" they explained (Interview, P5).

(Personal) Growth and Learning

Coming to Danyadara and engaging in land regeneration with the intention to learn and grow was for one practitioner the response to feeling "flat and very uninspired" (Interview, P1). "I felt like I'd lost touch with this kind of creative source" they recounted (Interview, P1).

> "I kept on thinking like, how can I reconnect with that feeling of [like] inspiration or just even a feeling that like, when it gets to next winter I'll still have that feeling.You know, that feeling that kind of keeps you going and keeps you motivated"

Another practitioner expressed that they didn't feel "optimistic about the state of the world" and wanted to expand their knowledge and skills of permaculture (Interview, P2). Similarly, for someone else, their intention was "to learn from nature" and deepen their practical knowledge of permaculture by "actually getting [their] hands dirty (Interview, P1). Meanwhile, for another practitioner, wanting to learn about sustainability and permaculture was a way of following their interest and passion of growing their own food (Workshop 2, P5; Interview, P5).

> "I didn't feel it was natural to actually live the way I was living, basically to eat everything from the supermarket and not grow any of my own food, I was thinking my ancestors used to actually grow all their own food. And if they were not growing their own food, they would get it from another community, from someone else that was growing it."
>
> (Interview, P5)

Another intention that was shared amongst some of the practitioners was the desire to experience something new and different, leaving their comfort zone, meeting new people, expanding their horizon. For one practitioner this was also connected to being out "in" nature, working on the land.

> "I just wanted to feel something different. And knowing that opening, you're being open to new experiences and seeing what comes through. So coming out here to be open to what comes through from nature."
>
> (Workshop 1, P1)

While for another the intention was more about exploring a new place and going on an 'adventure':

> "[For me it's also] an interest in traveling and seeing more of the world and meeting open minded people. (...) just widening the perspective in general"
>
> (Workshop 1, P3)

One person expressed their intention of seeing this experience as a chance for personal development: "I really wanted to start prioritizing inward" (Interview, P4). "I need to learn, I want to learn, I want to grow, that's gonna help me ultimately become a better person" they explained (ibid.)

Connection

Wanting to (re)connect to nature and other people was shared in some form by all practitioners. One person described feeling disconnected and alienated (from nature):

> "I guess it's that kind of connection to nature that I think we all lack in this modern day. That inspired me to come here as well."
>
> (Workshop 1, P1).

> "So the idea was to come here and try and reconnect to nature."
>
> (Interview, P1).

Speaking about the decision to volunteer, one practitioner explained that "a big part of it was the community part and being around people" (Workshop 1, P2). Similarly, two others shared that a curiosity of community living and the 'community sense' was a decisive aspect of joining the project (P5; P3). Meanwhile, another practitioner already knew Danyadara through their good friend who had lived there before. "So I was familiar with the area, I was familiar with her experience here. So that was definitely why I came here" they recalled (Workshop 1, P4).

In the discussion part of this chapter, we'll come back to the role and relevance of intentions within a 'care-full regeneration cycle' (see Section IV.III.I). As can be seen, intentions are a combination of attentiveness and our inner world, thus shaping our course of action. In the following we'll explore what type of action practitioners engage in to bring care to themselves and the land. This will help explore the 'what' of care-full engagement in land regeneration.

IV.I.II. Practice

Practice in this study describes the active part of care-giving, the enactment of regeneration involving the entirety of activities, approaches and techniques that the practitioners were engaged in to contribute to Danyadara's aim of restoring the land.

In the second workshop we used a collective brainstorming approach to gather all the different practices and activities practitioners had been engaged in during their time at the project that they considered to be related to (land) regeneration. The result of the exercise can be seen in Fig. 5.
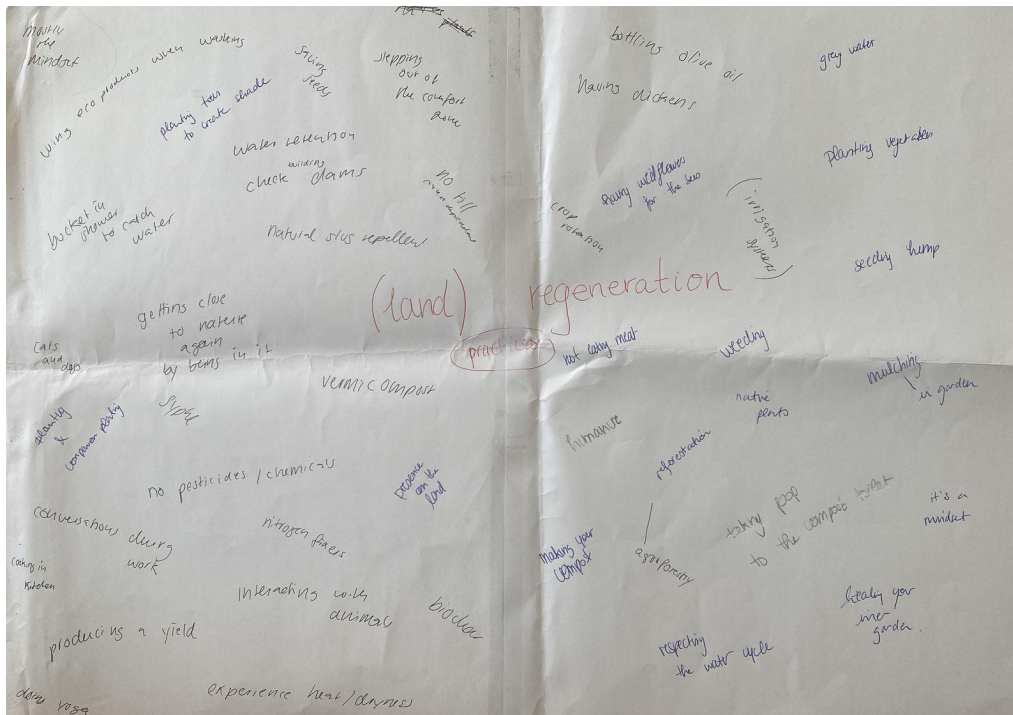
Fig. 9 Photo of Land Regeneration Poster from Workshop 2

Practices named and reflected on during workshop:

- *mostly the mindset*
- *using ecoproducts when washing*
- *planting trees to create shade*
- *sowing and saving seeds*
- *bucket in shower to catch water*
- *planting and companion planting*
- *conversations during work*
- *cooking in kitchen*
- *producing a yield*
- *doing yoga*
- *experience heat and dryness*
- *interacting with animals*
- *nitrogen fixers*

- *biochar - we're not making our own but we use it on the hemp project*
- *presence on the land*
- *getting close to nature again by being in it*
- *vermicompost*
- *not eating meat*
- *weeding*
- *humanure*
- *making your compost*
- *agroforestry and reforestation*
- *taking poop to the compost toilet*
- *it's a mindset*
- *healing your inner garden*
- *respecting the water cycle*
- *seeding hemp*
- *irrigation systems*
- *having wildflowers for the bees*
- *crop rotation*
- *no till - context dependent*
- *natural pest repellent*
- *water retention*
- *building check dams*
- *stepping out of your comfort zone*
- *bottling olive oil*
- *having chickens*
- *gray water*
- *planting vegetables*
- *mulching the gardens*

This illustrates the diversity of regeneration practices performed at Danyadara but it also shows the diversity of responses to what practitioners counted as 'regeneration' practices. Aside from specific techniques such as "agroforestry and

and reforestation", "nitrogen fixers" or "no till" the list also includes affective responses such as "presence on the land" or "getting close to nature again by being in it" and "it's a mindset". We'll explore how some of these conceptions around 'regeneration' shape the practitioners' understanding of and stance to regenerative being, thinking and acting in the section on building capacity for imagination (See Section IV.II.II).

A typical day for practitioners at Danyadara would start between 7.00 and 8.00 am. Most days, the first chunk of work stretched from 8.00 to 10 am followed by breakfast and then another 3 hours of work until lunch at around 1.00 or 1.30 pm. On days where specific things had to be done that required the cool of the early morning such as transplanting, work began at 7.30, or as the days got hotter even at 7.00 am. While volunteers had their afternoon off, the interim farm manager would continue to work after lunch. On some days, especially as the heat wave rolled in, the midday work was moved to the evening. Some tasks were allocated to individuals and some work was done more collectively.

During our fieldwork we observed and participated in a number of different regeneration practices ranging from reforestation (through syntropic agroforestry and Miyawaki tiny forests) over classic permaculture approaches such as mulching and no-till, to transplanting vegetable seedlings and harvesting. We also helped with water retention techniques, composting and humanure, as well as weeding and feeding the donkeys.

The following excerpts of our field diary give insights into the day to day engagement with land regeneration and care-giving:

> "When we arrived at the farm around 10.30 we first didn't know where to go and what the task would be but soon bumped into one practitioner and they said we could help with water retention. We left our stuff at the office and drove with them to San Pedro. There we picked up another practitioner and then drove down to where the rainwater (when it rains) accumulates. We left our proper shoes in our bags in the office so doing the work in Birkenstocks was a bit painful. The

environment was much cooler down there, under the shade of eucalyptus trees. The interim farm manager told us to rake the leaves and other debris from the gully / creek-like area so they can see how deep it is and then use stones and some of the material to make it more even, so that any rain water won't keep rushing off but stay there and be absorbed by the soil. The day before, when we weren't there, they had already started this work and one practitioner remembered that this practice (of water retention) would not necessarily benefit Danyadara directly but more their neighbor, since the water would be absorbed by the environment and not be drained into a well or some sort. So it's a somewhat communal practice with the hope that the neighbors will join in and in the end everyone benefits."

(Field Diary, 20.04)

Fig. 10 Putting Humanure around Miyawaki Tiny Tree (Forest)

"We arrived at the farm around 10. There, the volunteers were having breakfast still and we sat down with them for a while. Afterwards, we started shoveling horse manure onto beds before sowing sunflower seeds and then moving on to shoveling humanure around the tree saplings in the Miyawaki tiny forest. That took us all morning and we finished tired but with a feeling of accomplishment."

(Field Diary, 21.04.)

"We woke up at 7.30 and walked up to Suryalila where we met one practitioner at 8.00. They showed us how to pick flowers for the kitchen and after we did the compost. It was a bit disgusting but also funny. We then had to empty and rinse the compost loo buckets which was even worse but it didn't take too long and doing it with others made it a fun group experience."

(Field Diary, 29.04.)

Fig. 11 Wheelbarrow and Shovel

"We started work at 7.30 that day in the San P garden. We prepared beds, put mulching on them, transplanted and pruned them. The morning was cold. It was three practitioners and us two. We finished at 10.30 and midway through we got so hungry because we didn't have breakfast until 11. We finally had breakfast and then were off until the evening when we had to do more transplanting and mulching. At 7 pm we went back to the garden and worked until 9pm."

(Field Diary, 01.05.)

Fig. 12 Transplanting Lettuce

"Today we woke up super early to start work at 7.30am again. This time, we worked in the gardens up at Suryalila. It was quite tough getting up, since both of us felt tired and didn't feel like we received enough sleep. We were weeding a bed with chard, which felt a bit unintuitive to us, as we questioned why the chard isn't being used by the Suryalila kitchen. Then we proceeded to weed in between Calendula plants, which entailed removing some more chard. We took to the compost. (...) Afterwards we did some more weeding with two practitioners. It was super fun. It all felt like we were there as a team and very much part of the volunteering spirit and community. It now feels like we are totally integrated in the volunteering spaces, especially while working. We also did some weeding around trees that were planted in the reforestation area. It was super hot."

(Field Diary, 02.05.)

Fig. 13 Mulching

"Today we worked in the morning in the patch behind the small pagoda. We mulched the herb garden extensively and then did some more weeding at the reforestation area. One of the practitioners was working with us. We had breakfast outside and then walked back to continue mulching. It was very windy that day so the dust was flying into our eyes and we took a shower before lunch."

(Field Diary, 03.05.)

Fig. 14 Harvesting Fava Beans

"Today was our last full working day. We got up at 7am as usual and both felt very tired. We then went to the Chandra garden down in San Pedro to transplant some lettuce. One person, who works in the office of Suryalila joined us this time, which ended up being lots of fun. The work was much slower than the other days and since all of us love transplanting it ended up being a really wholesome session. We chatted, ate some strawberries, sang and danced to some Brazilian funk. We also got lots of work done and felt productive. One practitioner repeated many times at breakfast that it was such a nice work session, the best they've had so far at Danyadara."

<div align="right">(Field Diary, 04.05.)</div>

While this section focused more on the praxis of engaging in the day-to-day work of land regeneration, the following section will contextualize such care-giving through the study of affects and care-receiving. We'll not only explore practitioners' personal relationship to their own care-giving at the project, but more so focus on how the act of engaging in land regeneration seems to affect their sense of well-being and inner capacities. This section will help answer our first research question. As will be discussed in the 'care-full regeneration cycle', caring at Danyadara is primarily made up of two main dimensions: care-giving and care-receiving (see Section IV.III.I.) meaning it holds capacity for practitioners to both affect and be affected.

IV.II. Affects of Care-full Engagement: Care-receiving

For us to transform as a society, we have to allow ourselves to be transformed as individuals.

<div align="right">*– angel Kyodo williams*</div>

To better understand the ways in which practitioners are affected by their own care-giving and regeneration work, it is imperative to study the interior dimension of feelings. Weber (2017) articulates feelings as "the meaning of our inner life

circumstances" (p.145), in which "we are 'inwardly' shown whether our ecology of mutual exchange is fruitful" (ibid). For Weber, such fruitfulness is expressed through the notion of aliveness – a sensation that also emerged from participants' own reflections and sharings during our field research. Feelings, as writes Weber, are "the barometer of aliveness within us" (ibid.).

The affects of care-receiving at Danyadara can not *only* be understood at the level of emotional well-being. As writes Gosnell (2022), the inner is equally shaped by "individual epiphanies, paradigm shifts, new identities and values" (p. 606). This means inner transformation can be studied and perceived through the active creation of new meanings on the level of relating to self, community and land. Within this section we'll explore such meaning-making through both emotional and reflexive processes that happen at the level of well-being and inner capacity building.

IV.II.I. Well-being

At the level of well-being we thus analyzed what type of feelings and emotions were present during practitioners' everyday lives, and how in turn, practitioners made sense of their own felt experiences. According to Pearce (2018) the word emotion emerges from the term 'émouvoir', which is Old French and "means 'to stir up'" (p.170). In Pearce's eyes, restoring ecosystems is thus always an emotional endeavor, in which "practitioners engage in personal and palpable relationships with their local ecosystems" (p.167).

Overall, we've found that such care-giving produced more 'positive' than 'negative' emotions. To capture the complexity and range of emotions that participants go through during their everyday lived experiences at Danyadara, we asked them to individually reflect on their emotional states during the course of one full day with help of Putchik's wheel of emotions[22] (Workshop 2, Appendix

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[22] We used the wheel of emotions to create a sense of equity between participants holding a different mother tongue and thus provide equal access to terminology surrounding emotions. We

II). This particular exercise helped triangulate some of the more in-depth findings we received through the semi-structured interviews and participant observation.

The individual reflection exercise revealed that feeling 'inspired' and 'grateful/thankful' was present the most, followed by feeling 'content', 'joyful', 'tired', 'free' and 'curious' at some point during participants' daily endeavors (Workshop 2, P1, P2, P3, P4, P5). Negative emotions such as feeling 'frustrated', 'exhausted' or 'angry' were also present and mentioned particularly in relation to community challenges, such as internal politics, personal conflicts or team disagreements (ibid.). This is an important insight, as it indicates that the regenerative capacity of the caring process is, at least to some degree, dependent on social and group dynamics that affect peoples' personal well-being, which in the following we've analyzed as constitutive of a sense of aliveness and belonging.

Sense of Aliveness

All practitioners who've engaged in 'care-giving' and regenerating the land have expressed an overarching sense of aliveness that emerged from and through the work. Such aliveness was interpreted in different ways and connected to diverse feelings of joy, inspiration, embodiment, health, and connectedness. Such emotions were also followed by a sense of gratitude, which seems to have resulted from the above-mentioned feelings. These feelings and sensations at times seem to be mutually-constitutive and thus hard to disentangle. In the following we'll explore how these intersect and bring about a novel sense of well-being.

One practitioner mentioned that they have "definitely felt more alive" as well as "grounded" and "connected to the land" (Interview, P1). Another one expressed how their feeling of aliveness is related to "always" and "instantly" being immersed in nature (Interview, P3). Various practitioners also connected

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also offered them to write their emotions out in their own languages, as we could translate the writing later.

aliveness to a sense of vibrancy, community and being exposed to unexpected and changing circumstances (Interview, P1, P3, P4). This also relates to a sense of 'growth' being perceived on the land, as shared by the following practitioner:

> "I just felt very vibrant, very alive. (...) I think there's a lot of energy here, with people, animals, plants. You know, this land used to be like a desert. And now all of a sudden, it's got all of this kind of energy. It's been growing and it's still growing here."

> (Interview, P1).

Experiencing growth and nourishment on the land as a result of one's own care-giving also evoked a sense of aliveness in the following practitioner:

> "I feel the most full when I see things that are actually thriving on the land that I planted. Or you know, in the garden… like plants I planted months ago and then I realize how big they've become."

> (Interview, P5).

Joy

Many practitioners have expressed feeling joyful as part of their work at Danyadara. Such joy is evoked by a sense of "freedom" (Interview, P2, P3), "embodiment" (P1) as well as the capacity to spend a lot of time outside in nature (Interview, P1, P2, P3, P4, P5). For instance, "hearing the birds sing" or "feeling the heat on my skin" are sensations that produce a feeling of joy (Interview, P1). Doing the work "in community" also seemed to have an important impact on how the work affected practitioners' sense of well-being:

> "For me, it was very important that there was a sense of community and that really helped me to feel so alive, and I felt like I was experiencing a lot of joy. It was this kind of like you know back and forth with people that you really get along with that kind of keeps you going. Yeah I loved it."

Another practitioner also expressed that limiting digital exposure and being more immersed in nature created a daily sense of joyful nourishment:

> "Like showering and the moon is right there. It's like, constantly having that interaction; you notice the ants, you notice the birds, you notice the white butterfly that trickles across the sky. That definitely nourishes you to then go and be armored with that feeling and apply it to whatever tasks you may need to do for the day."

Moreover, the notion of "love" emerged from practitioners' reflections when talking about the practice of regenerating the land. For instance, one practitioner expressed that they "really love doing this every day" and that it's better for them "than just being locked in an office" (Interview, P5).

Such findings reflect some of Weber's (2017) insights, in which he articulates joy as an expression for "the experience of full being" – connecting it to the sensation of aliveness and the poetic experience of enlivenment (p.7). More so, Weber notes that "joy is the sign of love; and love is the principle of a fulfilling equilibrium between the individual and the whole" (ibid.). Love, rather than just being a pure feeling, can be understood as a "practical principle of creative enlivenment" that sits at the core of producing reciprocal relationships between life-forms (p.8). Both the feelings of love and joy are thus to be seen as "integral component parts of a flourishing ecosystem" (p.10).

Health

Limiting digital exposure not only resulted in a sense of joy for some practitioners, but was also perceived as beneficial to their sense of health (Interview, P1, P2, P3, P4, P5). For one practitioner, working on the land rather than on their computer really seemed to have affected their sleep pattern and levels of anxiety. To them, it has felt like "nature therapy" and "movement meditation":

> "So after working on the land all day, it's like my body is rewarding me by being like 'you can be really tired now and have a good night's sleep. So you're prepared for the next day."
>
> (Interview, P1)

The same participant also connected this to living a more cyclical rhythm, in which they report that their "nervous system is slowly slowly recalibrating":

> "To me, that is what being in nature is. Basically you're just following the circadian rhythm of the day, and going to bed feeling tired, not wired."
>
> (Interview, P1)

Feeling tired after or during a day of work is something that nearly all practitioners have reported on. However, such tiredness wasn't necessarily perceived as negative, rather it made them feel a sense of accomplishment at the end of the day (Workshop 2, P1, P2, P3, P5):

> "I need a lot more sleep. (...) I'm so exhausted that at the end of the day I fall to bed somehow more relaxed."
>
> (Interview, P3)

Being immersed in nature also seems to be impacting practitioners' health. One practitioner shared that having their hands dirty and working on the land makes them feel really healthy:

"I'm always barefoot and shirtless. Just being and working like this in nature feels super good. I think it's really super beneficial for your health, and I can definitely feel it. You know, I'm never ill, I'm never sick."

(Interview, P2)

Another practitioner reported a similar feeling related to working outside all day, saying that "it makes (them) very fit to actually do this every day." (Interview, P5).

Gratitude

Aside from feeling 'inspired', 'content', and 'joyful', practitioners have repeatedly talked about being 'grateful' (Workshop 2, P1, P2, P3, P4, P5). One practitioner shared that being able to work on the land has allowed them "to experience gratitude again", especially in relation to their body's capacity and functioning. They share that after a day of work they feel a sense of gratitude and appreciation for their body, something that hasn't always been the case:

"I think that for the last few years I've been so, almost angry at my body, being like, why aren't you working properly? Like, I hate you. You know, speaking to my body really badly. And being here and being able to be outside in nature and working on the land and then being fine the next day, I was like, oh my god, thank you to my body. That, for me, was like pure joy and aliveness."

(Interview, P1)

A sense of gratitude has also been brought up in relation to being outside and becoming more present with the more-than-human world. One practitioner shared

how by "just being in the land" they became more observant and began to value little moments like seeing "the grass in the fields (…) dancing in the wind" (Interview, P4). Similarly, the following practitioner mentioned feeling gratitude while harvesting:

> "It's really these small moments, where I just feel so connected to nature and am simply grateful that I can be here and have this precious experience."
>
> (Interview, P3).

Indeed, research suggests that "personal well-being is linked to a sense of feeling connected to nature" (Mayer & McPherson Frantz, 2004, as quoted by Hedlund-de Witt, 2012, p. 512). The authors comment that such "sense of connectedness is not limited to a physical–material interdependence, but includes a 'spiritual' sense of oneness" (Hedlund-de Witt, 2012, p. 479). How such connectedness is perceived and felt by practitioners in the caring context of Danyadara is further explored in the following section, in which well-being is explored and rooted in a sense of belonging.

Sense of Belonging

"I just felt very kind of held by nature in that sense, you know, you never really are alone, you've got the birds singing, you've got the animals."

(Interview, P1)

"A central problem facing humanity is that we have forgotten our sense of belonging" writes Baker (2018, p. 1). Under the modern paradigm, authentic connection to our human and nonhuman others and feeling ourselves *as part of* the web life has been replaced with "false experiences of belonging through the addictive qualities of materialism, narcissism, and rationalism" (ibid.). Belonging both creates and is an expression of relationship, of "being part of" something larger than ourselves.

"Through life's wide perspective, everything somehow belongs through natural order, that mysterious push and pull of ethereal hands stirring the night sea of the soul's vast interior, onto the land's changing seasons, and up into the expanding ocean of the cosmos. All of those seemingly chaotic parts are integrating into a harmonious whole, cycling as the processes of death and rebirth, creation and communion, and diversity and indivisible unity into and through belonging."

(Baker, 2018, p. 1)

Connection

As discussed earlier (see Section IV.I.I) some practitioners shared that they had felt lost and alienated and were seeking to reconnect to nature and community. For Baker (2018) this reflects the "human experience in our modern age" (p. 6). Having lost this fundamental understanding of existence he suggests that "maybe our primary task is to search out the truths of how and why we belong – to re-member ourselves in the greater whole" (ibid.).

Through living and working at Danyadara practitioners expressed 'remembering' such a sense of belonging and (re)connection to the more-than-human world.

"It's being out in nature, which I think that you know, back in the day, all of our ancestors were doing. We weren't [living] in these high rise skyscrapers and on our laptops all day, we were out in nature. And it's like a deep knowing inside of me that this is what I'm supposed to be doing. And it makes me feel amazing. Just using my body in that way, it feels super natural to me."

(Interview, P1)

Even during mundane activities such as walking through a field to get to work or having one of the cats join them on their tasks, being constantly immersed in

nature and crucially, through the body enabled practitioners to feel more connected and 'part of' nature.

> "It's about understanding, even just the little things like walking through the field, like my commute to work, even just attaching that language to this environment, and the fact that there are two birds there right now. It's that relationship with the natural world."

(Interview, P4)

Remembering past volunteers who had been at Danyadara, one practitioner suggested "some of them were maybe in a bad place in their life, and they just came here and they just learned to reconnect to nature a little bit more" (Interview, P5). Another practitioner expressed that even after a long day working on the land they felt "always kind of restored by being in nature" (Interview, P1).

One practitioner shared how experiencing a sense of community helped them "feel grounded" and "really enjoy the work" (Interview, P1). The same practitioner also explained how working and learning together with like minded people gave them a feeling of "I'm with my tribe and with my people" and being "looked after" (Interview, P1). Another practitioner expressed how much they had enjoyed creating new connections to people which made them realize that in their prior life they had lacked this community exchange (P3). They also remarked that they were touched by how quickly they had become part of the team: "everyone was like cool, you're part of the family now and they really used the word family" (Interview, P3).

Purpose

For some practitioners the feeling of doing something meaningful also contributed to a sense of belonging. One person shared that being around people they "love and like" was a profound experience of their time at the project:

"I think the major thing is that living in a place with [this] kind of a community, with people and everything, *that's just the thing I love and that I would like to do maybe in the future,* because I'm not going to stay here all my life. But it's a thing that I really enjoy. Everyone contributing to something together I feel like is a really beautiful thing and is for sure, something that I love here"

(Interview, P2)

Another person described "feeling really productive" and that engaging in land regeneration and "working close to nature" gives them a sense of purpose and meaning (Interview, P2). They feel happy knowing that in regenerating the land they are doing "something great" (Interview, P2.). "Joining this community and feeling like you're helping people and that everyone is helping each other is actually a really good feeling" they explained (Interview, P2). Another practitioner shared that working on the land makes them feel "super happy" and "proud" and like they are "in the right place" (Interview, P1). Just as "not being able to make sense of the world can decrease wellbeing", Böhme et al. (2022) note that "a sense of meaning" is in fact an important constituent of well-being and belonging (p.2071).

These experiences show that being surrounded by nature, integrated in the community and contributing to work that is meaningful lead to a feeling of connection and belonging that regeneratively affect the overall well-being of the practitioners. In the following section we'll further explore such transformative potential through the development of inner capacities and imagination.

IV.II.II. Response-ability

What emerged from this study is that engaging in care-giving practices also affected practitioners' inner abilities and capacities. According to Ives et al. (2023) building 'transformative capacities' such as "presence, intrinsic value-orientation, compassion, perspective-taking, and active hope" play an essential role in supporting sustainability (transformations) (p.4). We analyzed these affects on the levels of 'presence' and 'imagination' which together hold potential for shaping practitioners' capacity to respond (differently) to and in the world. As such, we see this relating to the notion of response-ability.

For Haraway (2016) response-ability is "the capacity to respond" (p. 78), the "cultivation through which we render each other capable" (Kenney, 2015, p. 256-257). Crucially, the notion of response-ability conceives of responsibility not as "an obligation, or as the ex-post accountability for what has been done" (Moriggi et al., 2020b, p. 4) but rather as a capacity to respond toward the future and "what can be done" (Moriggi et al., 2020a, p. 288). In this way, response-ability has a role in cultivating "transformative imagination" around better ways of responding now and in the future (ibid.). Moreover, response-ability goes beyond an answer to our own actions and instead describes our response to "something or somebody from the socio-ecological environment in which we are embedded" (ibid.).

Capacity for Presence

In *Presence: Exploring Profound Change in People, Organizations, and Society,* Senge et al. (2005) write about presence as the core capacity for accessing "the field of the future" (p.13). Rather than just "being fully conscious and aware in the present moment", presencing refers to "a deep listening" or a state of "being open

beyond one's preconceptions and historical ways of making sense" (ibid.). They write:

> "Ultimately, we came to see all these aspects of presence as leading to a state of 'letting come,' of consciously participating in a larger field for change. When this happens, the field shifts, and the forces shaping a situation can move from re-creating the past to manifesting or realizing an emerging future." (Senge et al. 2005, p.14)

We've found that the capacity for presence emerges in practitioners through a merging of self-awareness, reflexivity and inner learnings, which are concerned with matters of positionality, clarity towards the future, as well as adaptability and trust towards unpredictable changes.

Positionality

Our findings show that engaging in land regeneration has sparked reflections around practitioners' own positionality. This has led to more self-reflexivity around their own privileges and increased their levels of empathy and awareness for the lived reality of others (P1, P3). One practitioner reflected on their own ignorance in relation to the desertification issue of this area. They hence described their experience as "a learning curve" they didn't expect, leading to a renewed understanding and appreciation for "different ecosystems and different climates" (Interview, P1):

> "I think being here and seeing the fact that we have to literally import water in massive tanks from June to November has really made me realize that, you know, some parts of the world just really don't have it as easy as other places."

<div align="right">(ibid.)</div>

This, to them, has reinforced their sense of "gratitude for the rain and the weather" in their home country, including the privilege of experiencing four seasons. Similarly another practitioner felt "moved" by how much the climate crisis and desertification already affects this area and land. One of their first revelations was thus "how freaking privileged [they are]" to have continuous access to "good quality" water in their home country (P3):

> "I mean, of course, I knew about this before. But I somehow feel that my whole system has understood this now. And I really believe that when I go back home, I'll have another relation to water. I feel I can appreciate and value it a lot more."
>
> (ibid.)

Clarity

Another important learning practitioners shared about was gaining clarity over what kind of life they want to be living, what they value and how they see themselves to be acting anew. One practitioner reflected on how the extractive system they had lived and worked in was harmful to their health.

> "What's made me sick? So being here made me realize that (...) it was this being kind of driven to believe that you have to work like a dog. Otherwise, all hell breaks loose. And I think that being here, I've just learned that, being out in nature, we're on the right path."
>
> (Interview, P1)

Another practitioner explained how instead of the need to earn money, their motivation to engage in this type of work came from a different place and intention. For them, this experience "had a different energy and it felt good" (Interview, P3). Upon their own reflection the experience of working with the land

has changed their relationship to nature and gardening: "I think the next time I go into the garden [at home], I'll look at it differently" (ibid.).

One person felt that by being at the project they gained new "perspectives and opportunities" and learned a lot about themselves (Interview, P2). They also realized that "working close to nature" and being in community is really important to them, "I'm a really relationship-oriented person" they explained (Interview, P1). Similarly, another practitioner felt inspired to create "more of a sense of community back home that doesn't involve going to the pub and drinking" but rather finding people with whom they share similar values (Interview, P1).

Another person gained clarity around their life and future.

> "I definitely don't see myself going back to [my home town]. (...) I don't see the value in that anymore. Whereas I was such a girl about town, and I had all these membership to all these clubs, and now I just wanna live a good life, with good people and just be, you know, happy."

> (Interview, P4)

Adaptability and Trust

Being confronted with a very different style of living was for practitioners an exercise of adaptability. Showering outside, using a compost toilet and always being surrounded by various critters and animals took time getting used to but as the weeks went by they became more and more comfortable and at ease with their new environment. For one practitioner, being more adaptable also meant learning to trust their capacity for facing unpredictable changes. To "be like water", as they put it (Workshop 2, P3). This also reflects the practitioner's ambition to "overcome" their fears by leaving their comfort zone, and thus be more open to jump into "the unknown" (Interview, P3).

Another practitioner shared that through working on the land and in community they gained an understanding of "how ecosystems work and the ecosystem of yourself as well" and reflecting a sense of re-integrating the self into living systems (Interview, P1). Learning from permaculture they felt "inspired by the system" and how they could apply that to their life:

"I feel like I learned so much every day, not even just about transplanting plants or how to mulch or the systems but about life, about how I can really learn a lot from nature. (...) You have to live a sustainable life. And I don't mean sustainable, like just recycling, I mean, sustainable in all aspects of life"

(Interview, P1)

The same practitioner shared that this has made them gain more trust in life's processes and their own place in it. They shared that it has "reinforced this belief and knowing inside of [them] that [they're] on the right path." (ibid.) This to them is also accompanied by the realization that it's better to not get "wound up", "lose sleep" or "worry so much" about things that aren't that important (ibid.).

One practitioner expressed that in gaining practical skills of taking care of the land and growing food "you're learning to take responsibility" (Interview, P2). They felt that they learnt "a lot" and "know how nature works and how things grow" (Interview, P2). They also saw relevance in this knowledge for their future "I think probably later in my life I would like to have a garden and grow stuff and so for sure, I will take this [knowledge] with me" (Interview, P2).

By meaningfully connecting land and people, "hands-on ecological restoration brings social, cultural and ethical considerations to the foreground" (Pearce, 2018, p.169). Such phenomenological encounter and observation-based learning thus leads to the unfolding of new stories (ibid.). In the following we'll explore such unfolding at the level of imagination.

Capacity for Imagination

In reference to philosophers Amartya Sen and Martha Nussbaum, Moriggi et al. (2020a) note that imagination is a necessary capability for co-creating 'a good life', as it "allows us to deal with uncertainty and take the future in our hands" (p. 289). As the world is in constant flux, physicist David Bohm, equally argues that the future "can be shaped" by our "innate capacity for collective intelligence". Here, he points towards the fact that "we can learn and think together, and this collaborative thought can lead to coordinated action".

During our second workshop, we thus introduced a collective sharing exercise in which we attempted to capture practitioners' ethical underpinnings and emerging worldviews in relation to (land) regeneration[23]. By tapping into the 'collective intelligence' of the group we hoped to find new insights into some of the regenerative principles that could underpin a 'regenerative imaginary'. As notes Leitheiser (2022), 'imaginaries' provide "an orientation through which alternative concepts and visions can be formed and ultimately built and developed into real practices and institutions" (p.701). From such understanding, cultivating new imaginaries holds opportunities for renewed action and provides potential visions and strategies for "an alternative institutional framework of regeneration" (p.702).

We understand story-making of a regenerative imaginary at Danyadara as emerging across the dimensions of *being*, *thinking* and *acting*:

Regenerative *Being*: Re-integrating into the Web of Life

A first reflection that emerged towards a regenerative imaginary is an ethic of reconnecting to and re-integrating into natural cycles. For instance, one post-it read: "acting as real humans, being part of the nature around us rather than taking advantage of it" (Workshop 2) while another one said "I am, we are, part of

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[23] For a more detailed account of the workshop and exercise see Section III.V.II.

nature" (ibid.). One practitioner shared their reflection on the latter post-it, explaining that for them regeneration is only necessary as a terminology or movement because Western society has become so separate from the rest of nature and its cycles.

> "I like the one about 'I am, we are, part of nature' [as well]. I mean sometimes I think it's wild that we have to have the word regeneration. It's gotten to a point where we have to call it something, instead of just doing it."
>
> (Workshop 2, P1)

From the practitioners' viewpoint and imagination, regeneration should be understood as a "natural way of living" for humans, that offers a view of humans as an integral part of the web of life (Workshop 2, P2). As food is "one of the most necessary things", one practitioner noted that indeed by farming and growing one's own food, one can (begin) to actively integrate themselves back into the natural cycle (Workshop 2, P2).

The same person also expressed that they believe "it's important just to reconnect with nature", as they think this will become increasingly "important for a lot of people" (Interview, P2). This view was also shared by another practitioner for whom reconnecting to nature is about "[reconnecting to] this innate wisdom inside of us, which we've all lost a bit" and "everyone is innately trying to connect with" (Interview, P1). For them, "the opportunity to reconnect with that part of [them]selves" through being at the project and working in the land felt "like a privilege" (ibid.)

Regenerative *Thinking*: Shifting from Extractive to Regenerative Mindsets

Reflecting on the ethics of regeneration, one person expressed that through regenerating and "living in nature", humans can live their capacity of "contributing to nature and making it grow", something that connects them to the

ways of "every other animal and living being" (Workshop 2, P2). Similarly another practitioner expressed that regenerating the land on which you depend is simply "the most natural way to deal with the world" (Workshop 2, P5). This, to them, stands in opposition to an exploitative mindset in which "we only want to produce and take" (ibid).

In the minds of practitioners, regenerating is based on a principle of "giving back" to the Earth (P1, P2, P4):

> "It's taking care of their environment, my environment. And I think it's a really important thing… like the environment you live in is really important."
>
> (Interview, P2)

This also relates to the desire to "preserve and give back to the beauty and healing powers of nature" (Workshop 2, post-it). In the eyes of one practitioner, regenerating can then be seen as a process of mutual support, in which the purpose is "to help each other out" (Interview, P1). As a mindset it then goes "beyond just growing food" and refers to a wider "structure" aimed at harmonious coexistence. This reveals how permaculture (as the guiding philosophy of regeneration at Danyadara) to some extend holds an anti-capitalist sentiment:

> "It's kind of like: 'I want to grow as many different fruits and vegetables as possible, but I want them all to live in harmony with each other. And I also want to live in harmony as a community. And I don't want to be striving to be the best because in nature, it's not about survival of the fittest, it's all about the collective, and about how we can support each other."
>
> (Interview, P1)

One practitioner notes that regeneration must thus be thought of as an "integrated system" based on a "holistic" mindset rather than separate practices (Workshop 2, P5). As such, a regenerative mindset and imaginary entails "thinking for the future" (Workshop 2, P1, P4), in which emphasis also lies on providing healthy and thriving conditions "for future animals, humans, and ecosystems" (Workshop 2, post-it).

Regenerative *Acting:* Context and Place-specific Renewal

A final principle that emerged from the workshop and practitioners is an awareness around context-specific action for regeneration. For instance, one participant noted that "things need to be done at the right time" (Interview, P5), reflecting a sort of practice of 'listening' to the land. "What you need to do at the time of the year, it has nothing to do with the people around, but it's the land that is pressuring you, telling you, 'oh, we need to do that now'" they explained (ibid.). For them regeneration is "something that we can see happening" (ibid).

Similarly, one practitioner expressed that what form of regeneration practice is implemented should be reflecting the needs of the specific land and community. For example, "if there's people living [on the land], and they need to feed off the land, food is definitely important" (Workshop 2, P1) and thus acting regeneratively in this context should be about "how we can grow food which gives back to the soil" (ibid.). Relatedly, practitioners also shared an increased awareness of desertification and the effects of the climate crisis on the region and how this influences how regeneration should be approached and practiced at Danyadara:

> "[When I think about regeneration] particularly for Danyadara, I think of desertification. Because regeneration means different things in different places, right. Imagine you're somewhere where it rains all the time and you don't get a lot of sunshine, and you need to regenerate land, it would look a lot different than how it does here. Here, I think it's a lot about how

we can improve the soil health, how we can look at water retention. Obviously it's still really holistic, but when I think of regeneration here, that's what I think of"

<div align="right">(ibid.)</div>

Understanding regeneration as a context-specific process of renewal adds to a regenerative imaginary in which the primary attitude and approach towards acting is rooted in a practice of 'listening' to the needs of place.

Through the care-full engagement with land regeneration, practitioners seem to not only have cultivated capacities for self-reflection but also for collective story-making and, thus, a potential for what we call 'regenerative imaginary'. We argue that such imaginative capacity, emerging from a place of enactment and participation, not only holds transformative potential for new socionatural relations but can also be an essential component in affecting the care-full regeneration cycle and caring process towards renewal (more on this in Section IV.III.I)

IV.III. Discussing the Transformative Potential of Caring for Inner-outer Regeneration

All that you touch you change. All that you change changes you. The only lasting truth is change.
<div align="right">– Octavia Butler</div>

In the following we will discuss the transformative potential of caring at Danyadara through analyzing how the *emergence, reciprocity* and *self-organization* studied in place informs inner-outer regeneration.

The notion of 'emergence' helps capture and speak to the regenerative capacities that have emerged from the care-giving we've studied in place, namely the care-receiving area of inquiry. This leads to an understanding and potential of reciprocal caring, which relates to the notion of 'caring-with' at the intersection of inner-outer realms. At the level of 'self-organization', we will discuss the potential of a 'care-full regeneration cycle' to renew itself through inner capacity building. Our hope with this discussion is that it can merge different fields of inquiry and potentially lead to new research at the intersection of care and inner-outer regeneration.

Emergence as Regenerative Capacity of Caring

Weber (2017) notes that "all emotional encounters inevitably transform us" (p.79). Through this he means that "no encounter leaves us the same", especially when we engage in emotional contact with others and the more-than-human world (p.80). He writes:

> "We cannot be neutral. We are always already swept up. What we see or hear changes our perception – and our new way of engaging with things causes a change in the way we make contact with the world. We are never the same from one second to the next. We are constantly becoming – and the place in which we live changes along with us." (ibid.).

What Weber (2017) talks about here in philosophical terms, refers to what other authors in both transformation studies and sustainability sciences have coined 'emergence'. In fact, looking at our data, such academic reflections around understanding transformation as emergence within inner and outer realms of inquiry becomes more tangible. Having focused on feelings and affects as a barometer for studying the emotional impacts of engaging in care-giving at Danyadara, diverse regenerative affects in relation to practitioners' well-being have indeed emerged. The care-giving at Danyadara, something Singh (2015)

calls 'affective labor', has allowed a sense of aliveness to emerge through the feelings of joy, health and gratitude, and a sense of belonging through the emergence of connectedness and newfound meaning (see Section IV.ll.l.).

When analyzing the data and trying to find patterns for how these feelings emerged in place, we've found that three main 'enablers' seem to underpin such 'regenerative capacity' of caring. Although practitioners have shared diverse ways in which these feelings have come to show up as part of their lived experience, certain themes clearly overlap in practitioners' reporting of regenerative affects. Our findings in Section IV.II.I. thus illustrate how the main enablers that underpin care-receiving at the level of well-being are 'nature embeddedness,' a 'sense of community,' and 'embodied practice'. These are present in all practitioners' reflections and emerging affects surrounding aliveness and belonging. This suggests that care-receiving can be contextualized within relational processes, emphasizing "social interactions" and "relationships involved in the generation and maintenance" of such affects (Armitage et al., 2012, p.4). It thus holds potential for both research and praxis in highlighting "more than an individualistic notion of what it means to live well", by putting "emphasis on relational and collective processes" within well-being (p.1).

As such, well-being is not only understood as an "emergent property" but also "a state of being with others", in which our empirical data exemplifies that "what we need as individuals and communities, our capacity for meaningful action, and what satisfies us, are ultimately influenced by our relationships with others" (p.4). As well-being is both multidimensional and dynamic, further research could focus on whether similar enablers emerge as underpinning affects of care-giving within other contexts and case studies. This can provide complementary insights for both research and praxis into what type of conditions and strategies are necessary for enabling regenerative affects.

The affects of care-giving also impact practitioners' identities, values and worldviews at the level of 'response-ability'. As discussed in Section IV.II.II. practitioners have cultivated a sense of presence through self-awareness, reflexivity and inner learnings. According to Böhme et al. (2022) such renewed

embodied awareness, allows humans to develop capacity towards acknowledging "their relations to other human and nonhuman agents", particularly by "relearning to sense, listen, perceive, and respond in caring ways" (p. 2070). Ives et al. (2023) equally note that such capacity building changes "how people relate (or reconnect) to themselves, others, nature, and future generations in ways that can support further transformation" (p. 5). As such, new values and ethics around how to be, think, and act in the world have emerged at the level of 'regenerative imaginary'.

In a way, such capacity building relates to what Savrasky (2022) calls "revaluation of our values of living" (p. 513), in which he foregrounds that "the art of living can only be learned *livingly*, in the immanent movement of experimentation through which our own modes of living and dying with others become methods and objects of a radical revaluation" (p. 524). Through the emergence of 'regenerative being, thinking and acting', practitioners' offer a revaluation of what outer regeneration means for them in relation to place and the world at large. Such outer dimensions are ultimately based on inner regenerative learnings, as experienced through one's own care-giving. The story-making at the level of imagination holds transformative potential as it "evokes an openness to new and other ways of being a "we" and to how ethical commitment exists in dynamic and changing relationships" (Krøijer & Rubow, 2022, p. 381).

One way to interpret the opening that sits in practitioners' regenerative imaginaries is by bringing our findings into discussion with Böhme et al.'s (2022) relational lifestyle framework. To them, sustainability transformations towards *relational* being, thinking and acting emerge through particular patterns (p. 2066). As the imaginary of 'reintegrating into the web of life' relates to the pattern of *'interconnection'*, it holds potential for leading towards "caring for the well-being of the whole" (p. 2067). This relates to the pattern of acknowledging '*relational well-being'*, in which the imaginary of 'regenerative mindsets' entails an understanding that "individual well-being can mutually benefit ecological and collective wellbeing" (p. 2070). The last imaginary around 'context-specific renewal' is specifically sensitive to the pattern of *'emergence'*, in which aligning ones' action with living systems holds potential for systems' thrivability (p.

2069). This equally reflects Gibbons (2020), who notes that human beings hold capacity to be 'powerful agents' within living systems by acknowledging their interbeingness with the whole and letting such worldview shape their action.

The transformative potential, explored at different dimensions of practitioners' care-receiving, thus refers to shifts in feelings and perspectives that cultivate a more relational way of being, thinking and acting. Singh (2015) eloquently affirms this by writing that "our ways of describing the world are also ways of enacting it and bringing it into existence" (p.59). By actively strengthening the "connectedness between ourselves, others and the world we share", we can ultimately cultivate more "caring and compassionate" qualities of relatedness" (Ives et al. 2023, p.2). As such, care-full engagement in land regeneration can indeed mediate "a new relationship with the natural world" (Leigh, 2005, p.9).

Reciprocity as Regenerative Capacity of Caring

As members of Modern society we are faced with the immense challenge of (re)building relations with our more-than-human other's to ensure our common survival. Thinking through and with care (Puig de la Bellacasa, 2012) may offer a means to reflect on "the practical and ethical implications" of the *kind of relations* we want to build (Krzywoszynska, 2021, p.2). For Kimmerer (2020) "one of our responsibilities as human people is to find ways to enter into reciprocity with the more-than-human world. We can do it through gratitude, through ceremony, through land stewardship, science, art, and in everyday acts of practical reverence" (p.190).

What has emerged from our data is that the mutually constitutive process of care-giving and care-receiving taking place at Danyadara allowed practitioners to experience the reciprocal nature of regenerative caring. In other words, through regenerating/caring for the land practitioners felt themselves be regenerated/cared for. Regeneration thereby becomes a process by which we bring life back to our soils *and* ourselves. This implies "an ethics that focuses on the self as constituted by its relations to other beings, in which care for others becomes care for oneself"

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(Böhme et al., 2022, p. 2070). As such it reflects a feminist conception of care as "an inter-activity, located between subjects who shape the caring relation in a constantly ongoing process" (Morrigi et al. 2020b, p.3).

Moreover, through the enactment of reciprocal caring, practitioners also developed an understanding of regeneration based on an ethics of 'giving back', mutual support and harmonious coexistence (see Section IV.II.II.). This is transformative as such as it "foregrounds the notion that the relationship of humans to natural systems is not inherently extractive or harmful but can be generative in a symbiotic sense" (Leitheiser, 2022, p.709). As such, Ives et al. (2023) argue "it is the quality of our relationships— with ourselves, others and the biosphere—that creates (sustainable or unsustainable) cultures and structures" (p.3).

As has been seen in Section IV.II.I, practitioners expressed gratitude for the enablers of their well-being ('nature embeddedness,' 'sense of community,' 'embodied practice,' see above). This realization for what made their own care-receiving possible could be related to the principle of the gift. As writes Kimmerer (2020): "The essence of the gift is that it creates a set of relationships" (p.28) invoking "an obligation (...) to give, to receive, and to reciprocate" (p.25). As such, she argues "cultures of gratitude must also be cultures of reciprocity" (p.115). Through care-giving, practitioners cultivated a sense of gratitude and awareness of this gifting relationship: "there's nothing more rewarding than putting back into the earth you know?" (Interview, P1).

This holds transformative potential through nurturing an understanding of reciprocity as an existential component of life, in other words what you give, you receive in return. "Acknowledging the lives that support ours and living in a way that demonstrates our gratitude", writes Kimmerer (2020), "is a force that keeps the world in motion" (p. 186). This relates to an understanding of community-based restoration as holding capacity to "restore our connection with our planet", as it not only alters our physical world but also offers a "psychologically, emotionally, and spiritually" renewal (Leigh, 2005, p.13).

Within the care-full regeneration cycle this enactment of reciprocity through regenerative caring is represented as the notion of 'care-with'. Caring-with comes about through a process of care-full regenerating, where affecting and being affected happens simultaneously. The potential of this will be discussed further in Section IV.III.I. when introducing our framework of the care-full regeneration cycle.

IV.III.I. Towards a Care-full Regeneration Cycle
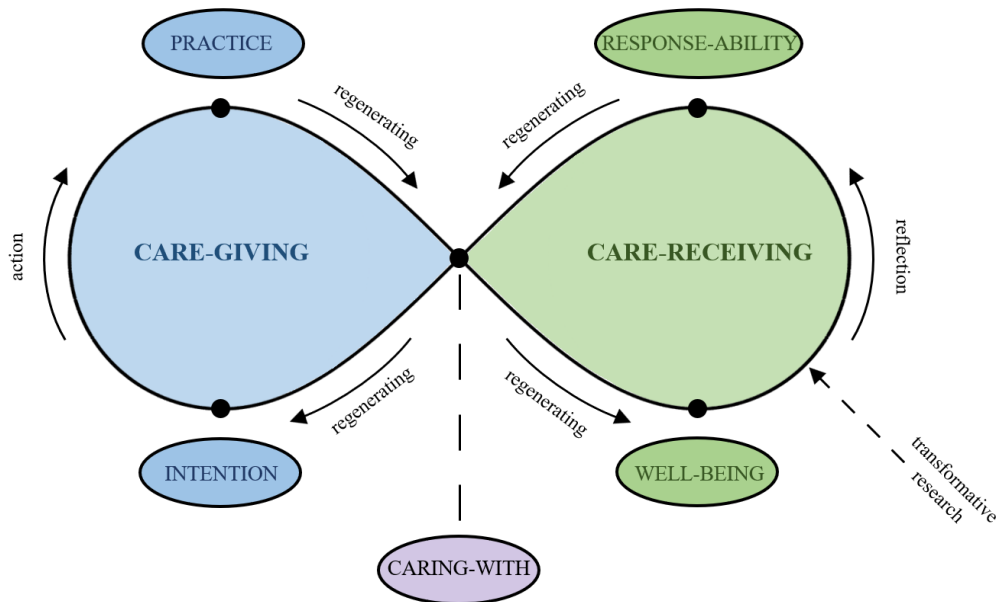
Fig. 15 Care-full Regeneration Cycle

In order to discuss and highlight the transformative potential of the caring process as an emergent, reciprocal and self-organizing cycle we have developed a novel framework of what we call 'care-full regeneration cycle'. To better understand and conceptualize how caring is practiced and experienced at Danyadara we had to analytically simplify and categorize the processes perceived and studied in place. As such, we've decided to distinguish the mutually constitutive process of caring through the notions of care-giving and care-receiving. Drawing on Tronto's

model of the five-stage caring process, Morriggi et al. (2020b) view 'care-giving' as the concrete and practical work of care. With Danyadara's main aim being 'land regeneration', we've framed care-giving as the more tangible aspect of 'regenerating'.

But unlike Tronto's model, which distinguishes the stage of caring-for/intentions from care-giving we've found that what constitutes the dimension of care-giving at Danyadara are both the 'intentions' that drive the care-giving and the material and physical 'practices' of actually tending to the land. Through practices Moriggi et al., argue "people construct their identity and their relational life in ways that are situated, unique, and embodied" (2020a, p.285). As such, it is also through practices that transformation can be enacted. In this way, practices "become sites of 'ethical creativity'" (ibid., p.286). In the care-full regeneration cycle the process between intention and practice is defined as action as we move from more 'passive' to 'active' stages of care-giving. Intention thereby forms preparation and prerequisite for practical care-giving by connecting thought to action.

According to Tronto's (2013) model, 'care-receiving' is the fourth stage of the caring process where care-receivers respond with feedback on the quality and effectiveness of the care provided (Moriggi et al., 2020b). In our case we perceive 'care-receiving' differently, whereby we still see it as a notion of 'responding' but through the experience and integration of being cared for, of being affected. Care-receiving then in the case of Danyadara is the more intangible aspect of 'regenerating' happening at the simplified levels of 'well-being' and 'response-ability'. It describes in what ways practitioners were themselves affected by engaging in the care-giving practices of land regeneration.

As such the process that happens between practice and well-being is one of regenerating, as we've found that in engaging in care-giving practices of regenerating the land, care-givers also, to some extent, are regenerated in return. In other words, engaging in land regeneration can affect well-being in a regenerative way. In our study the felt well-being manifests itself as a sense of aliveness and a sense of belonging.

Connecting the dimension of well-being with that of response-ability is a process of reflection. Here, the felt emotions and affective dimension of care-receiving are being reflected upon and set into context in relation to self and the world. This is also where we saw the role of our research practice as possibly having contributed to the cycle. By stimulating and creating space for the reflection process both individually during interviews and collectively during the workshops, our role as researchers could be seen as having extended beyond simple observation and investigation to attentive participation in the care-full regeneration cycle. Whereas in our case we primarily saw our contribution at this point of reflection, in other contexts and approaches, research practices could potentially support the cycle at different points.

Within the care-full regeneration cycle the outcome of the reflection process we studied was the cultivation of capacities for 'presence' and 'imagination' that we frame as response-ability. As such this dimension describes how care-giving affects the capacity to respond 'differently'. The notion of response-ability as discussed earlier (see Section IV.II.II.) conceives of responsibility as "a pro-active commitment toward the future" (p.288). This nurtures a sort of "transformative imagination" which according to Moriggi et al. "goes hand-in-hand with emotional awareness" (2020a, p.289). This is because emotions play a crucial role in facilitating cognitive shifts necessary to transform how people understand and show up in the world (ibid.).

As write Ives et al. (2023) cultivating so-called "transformative capacities" (p.4) including 'presence', 'intrinsic value-orientation', 'perspective-taking' and crucially "awareness of our deepest motivations and experiences" (p.12) is essential for aiding inner-outer sustainability transformations. Moreover, they argue that this may also "enabl[e] people to imagine alternative, diverse and sustainable futures" (ibid., p.6). Relatedly, Ives et al. (2020) bring up the question of what would happen when we include our inner sustainability into the aspirations and visions we have for the flourishing of the world at large. As such, they write that "exploring inner lives, and working towards sustainability from the

inside out, may reveal immaterial sources of lasting contentment and well-being, with positive flow-on effects for the world at large" (p.213).

While our study is limited in showcasing the ways in which the affects on practitioners' inner lives will ultimately reflect back on the flourishing of the land and world at large, we can see that through capacity building at the level of presence and imagination, practitioners have co-created a regenerative imaginary in the spheres of being, thinking and acting that could potentially shape a renewed care-full regeneration cycle. The regenerative imaginary around "what it means to be, and our role in the world" (Ives et al. 2023, p.4) has the power to influence a new cycle of attentiveness and thus can actively shape practitioners' intentions towards renewed action that regenerates.

Response-ability then could give rise to and shape renewed intentions through a process we also understand as a form of 'regenerating' – reviving and potentially renewing the care-full regeneration cycle. As Weber (2017) explains, when "our inner worlds are so irrevocably changed (...) nothing is as it was before" (pp. 86-87). As our inner world changes "our actions also change, which in turn affects the outer world" (ibid.). Such "regenerative processes are crucial" argues Gibbons (2020, p. 15), as they "shift thinking and acting to align with life's principles and nurture the deep care necessary to motivate and perpetuate regenerative actions" (ibid.).

In this way, the care-full regeneration cycle also holds transformative potential on the level of self-organization. Further studies could explore how exactly such a process of self-organization unfolds, what type of conditions underpin it, and how it plays out in different place-based contexts. Moreover, research could investigate which *new* emerging affects may happen on all four dimensions (intention, practice, well-being and response-ability) or whether new dimensions emerge as a result of the self-organization process.

The point in the middle where everything connects forms the space of 'caring-with'. Caring-with in Trono's model "encompass[es] the entire care process" (Moriggi et al., 2020b, p. 4). As an emergent property of the cycle, caring-with entails the simultaneous processes of affecting and being affected and

highlights the reciprocal nature of the care-full regeneration cycle. In line with a feminist approach to care, the care-full regeneration cycle frames caring as continuous and reciprocal. It is this continuity of reciprocal repair and maintenance that reflects "a lively world in which being is always becoming, becoming is always becoming-with" (van Dooren et al., 2016, p. 2).

Action on behalf of life transforms. Because the relationship between self and the world is reciprocal, it is not a question of first getting enlightened or saved and then acting. As we work to heal the Earth, the Earth heals us. No need to wait. As we care enough to take risks, we loosen the grip of ego and begin to come home to our true nature. For, in the co-arising nature of things, the world itself, if we are bold to love it, acts through us.

– Joanna Macy

Part V: Conclusion

Without effort and change, human life cannot remain good. It is not a finished Utopia that we ought to desire, but a world where imagination and hope are alive and active.

— Bertrand Russell.

In the face of the unfolding ecological crisis it is clear that "we need better concepts and new stories that position us as part of nature; not as sustainers of nature, but as active participants in an integrated cycle of regeneration" (Leitheiser, 2022, p.709). This is precisely where we hope this thesis has its contribution.

In our study we have explored the relationship between inner-outer transformation, noting how outer action of land regeneration not only regeneratively affects practitioners' inner worlds but in turn impacts their values and thinking around how to engage with and in the world. As notes Savransky (2022), "spiritual exercises are also, fundamentally, planetary experiments, engendering a metamorphosis of habits that might perhaps make perceptible a possible transformation of our habitats, a metamorphosis of our modes of earthly habitation" (p.518). As such, inner transformation can be seen as highlighting the "role of inner phenomena in relation to systemic contexts" (Ives et al., 2023, p.3).

With our research question investigating the extent to which 'care-full engagement in land regeneration holds transformative potential for inner-outer regeneration', we provide a procedural answer by revisiting our sub-questions and objectives in the following. As such, our study firstly identified the intentions that brought practitioners to Danyadara as well as described the specific practices of land regeneration taking place at the project (Objective 1). This helped us

understand how practitioners' engagement in land regeneration happens through 'intentive practices' that can be conceptualized as a form of care-giving. Encompassing the dimensions of caring-about and caring-for such care-giving or 'affective labor' thereby postulates the engagement in land regeneration at Danyadara as care-full.

In order for us to understand how practitioners are affected by such care-full engagement in land regeneration we analyzed the affects of care-giving on practitioners' sense of well-being (Objective 2). Here, the studied affects give initial insights into the transformative potential. Our findings show that practitioners experienced feelings of joy, health and gratitude which contributed to a sense of aliveness. Concurrently, we've found that engaging in care-giving practices allowed practitioners to experience connectedness and newfound meaning, thus creating a sense of belonging. In discussing how these affects emerged we identified three main enablers that underpin the affects of care-receiving at the level of well-being: 'nature embeddedness', a 'sense of community', and 'embodied practice'.

In not only restoring practitioners' sense of well-being but also through the emerging inner shift in which practitioners began to conceive of well-being as relational, these affects can be understood as regenerative. Through regenerating the land, practitioners regenerated themselves enacting a reciprocal caring-with. This holds transformative potential for fostering different socio-natural relations. As Kimmerer (2020) writes:

> "Restoration is imperative for healing the earth, but reciprocity is imperative for long-lasting, successful restoration. Like other mindful practices, ecological restoration can be viewed as an act of reciprocity in which humans exercise their caregiving responsibility for the ecosystems that sustain them. We restore the land, and the land restores us." (p.336)

In regards to capacity building (Objective 2) and response-ability, care-giving affected practitioners on the level of 'presence' through gaining self-awareness,

reflexivity and inner learnings and on the level of 'imagination' by producing new values and ethics around how to be, think, and act in the world.

Such emerging capacities show how our inner worlds are affected by outer worlds and how in turn inner transformation can affect outer change. As Margulies (2017) argues:

> "We cannot transform our inner lives without transforming the lives of relationships we engage in with the whole of existence. We do not start with ourselves and we do not start with the other, we start between I and you. For nothing will be transformed, not in ourselves and not in the world, if we do not engage in the transformation of both the world and our own inner selves." (pp. 339-340)

It is through this interplay of inner-outer regeneration at Danyadara that new socionatural relations and imaginaries emerge. Such newly found understanding thus helped discuss and summarize the transformative potential of caring along the themes of emergence, reciprocity and self-organization (Objective 3). We have argued that emergence in relation to practitioners' inner well-being and capacities offers renewed ways of responding to the world and future and can foster a self-organization process.

As living systems "continually recreate" themselves, Senge et al. (2005) note that social systems can do the same, yet to do so, depend on our "individual and collective level of awareness". By becoming aware of their caring-with, transformative potential also lies in how the process of self-organization holds capacity to affect new forms of care-giving and care-receiving. Future studies could thus focus on particularly this renewal process between response-ability, caring-with and renewed intentions, as time and scope limited our research findings in this regard.

We also need more diverse accounts of how emergence happens in relation to a 'care-full regeneration cycle' in other place-based regeneration contexts. As future research takes on this study and framework, we see it as beneficial to both research and praxis to further investigate the enablers and conditions in relation to

the cycle. In particular, further research is needed to investigate how internal politics and power dynamics influence and, potentially, interfere with practitioners' capacity to regenerate in place. Our study only offers limited insights in this regard, as such complex analysis requires more time for in-depth and investigative fieldwork. As every place-based context and practitioners' are different, our hope for the care-full regeneration cycle is to be understood as an analytical research tool rather than a universalist explanation of regenerative caring processes.

Through our study we were able to highlight "how actors care for and are cared for by place through acts of reciprocity" (Ryan et al., 2023, p. 759; Herman, 2015). Moriggi et al. (2020a) understand this capacity as 'learning to care' which they explain "is the result of manifold dynamics, where the material, cognitive, emotional and moral reconnection of humans and more-than-human all contribute to effective action in the present toward better futures" (p. 291).

Our will to believe in this world and its openings, as writes Savranzky (2022), "may engender a reorganization of our habits and habitats; perhaps it may enable us to learn how to generatively make lives worth living and deaths worth living for in the ongoing and unfinished history of this precarious Earth" (p. 525). Through these words he speaks to the essence of a 'care-full regeneration cycle' and self-organization process that can only happen through our active and reflective collaboration. By tapping into our agency to be, think and act relationally we can transform ourselves and the world towards more regenerative futures.

Active Hope is not wishful thinking.

Active Hope is not waiting to be rescued… by some savior.

Active Hope is waking up to the beauty of life on whose behalf we can act.

We belong to this world.

The web of life is calling us forth at this time.

We've come a long way and are here to play our part.

With Active Hope we realize that there are adventures in store, strengths to discover, and comrades to link arms with.

Active Hope is a readiness to discover the strengths in ourselves and in others; a readiness to discover the reasons for hope and the occasions for love.

A readiness to discover the size and strength of our hearts, our quickness of mind, our steadiness of purpose, our own authority, our love for life, the liveliness of our curiosity, the unsuspected deep well of patience and diligence, the keenness of our senses, and our capacity to lead.

None of these can be discovered in an armchair or without risk.

– Joanna Macy

References

Anderson, B. (2006) 'Becoming and being hopeful: towards a theory of affect', *Environment and planning D: society and space*, 24(5), pp.733-752.

Angarova, G., T. Ruka, S. Mitambo, B. Guri, K. Frederick, R. Haslett-Marroquin, M. Nelson, N. Kelley, and K. Chayne. (2020) 'Whitewashed hope: A message from 10+ Indigenous leaders and organizations: Regenerative agriculture and permaculture offer narrow solutions to the climate crisis', *Cultural Survival*, 23 November [online] Available at: https://www.culturalsurvival.org/news/whitewashed-hope-message-10-indigenous-leaders-and-organizations [Accessed 3 August 2023].

Armitage, D., Béné, C., Charles, A.T., Johnson, D. and Allison, E.H. (2012) 'The interplay of well-being and resilience in applying a social-ecological perspective', *Ecology and Society*, 17(4).

Arora, S. (2019) 'Admitting uncertainty, transforming engagement: Towards caring practices for sustainability beyond climate change', *Regional Environmental Change,* 19, pp.1571-1584.

Bainbridge, A. and Del Negro, G. (2020) 'An Ecology of Transformative Learning: A Shift From the Ego to the Eco', *Journal of Transformative Education*, 18(1), pp. 41–58.

Baker, M. R. (2018) 'The Phenomenon of Belonging,' *Counseling and Family Therapy Scholarship Review*: 1(1), pp.1-7.

Baxter, J. (2016). 'Chapter 7: Case Studies in Qualitative Research', in Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp. 109-124.

Blythe, J. et al. (2018) 'The Dark Side of Transformation: Latent Risks in Contemporary Sustainability Discourse', *Antipode,* 50(5), pp. 1206–1223.

Böhme, J. *et al.* (2022) 'Sustainable lifestyles: towards a relational approach', *Sustainability Science,* 17, pp.2063–2076.

Brown, K.W. and Kasser, T. (2005) 'Are Psychological and Ecological Well-Being Compatible? The Role of Values, Mindfulness, and Lifestyle', *Social Indicators Research,* 74(2), pp.349–368.

Capra, F. (1997) *The Web of Life: A New Scientific Understanding of Life.* New York: Anchor.

Cameron, J. (2016). 'Chapter 11: Focusing on the Focus Group', in Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp.200-221.

Camrass, K. (2022) 'Regenerative futures: eight principles for thinking and practice', *Journal of Futures Studies*.

Cashore, D. (2019) *Listen for the Desert: An Ecopsychological Autoethnography*. Doctoral dissertation. Duquesne University.

Catungal, J. P. and Dowling, R. (2016). 'Chapter 2: Power, Subjectivity, and Ethics in Qualitative Research', Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp.18-38.

Cope, M. and Hay, I. (eds.) (2016). *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press.

Cope, M. and Hay, I. (2016). 'Chapter 1: Where Are We Now? Qualitative Research in Human Geography', in Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp.3-17.

Danyadara (2023) 'About Danyadara', Danyadara [online] Available at: https://danyadara.com/about/ [Accessed 25 May 2023].

Davies, Charlotte Aull. (2008) *Reflexive Ethnography*. Oxon and New York, NY: Routledge.

De La Bellacasa, M.P. (2012) 'Nothing comes without its world': thinking with care. *The sociological review*, *60*(2), pp.197-216.

De Sousa Santos, B. et al. (2008) 'Opening up the Canon of Knowledge and Recognition of Difference' in De Sousa Santos, B. (ed.) *Another Knowledge is Possible. London: Verso*, pp.x-lxii.

DiEnno, C.M. and Thompson, J.L. (2013) 'For the love of the land: how emotions motivate volunteerism in ecological restoration', *Emotion, Space and Society*, 6, pp.63-72.

Doolittle, A. (2015). 'The best of many worlds: methodological pluralism in political ecology', in Bryant, R. (ed.) *The International Handbook of Political Ecology*. Cheltenham: Edward Elgar Publishing, pp.515-529.

Dunn, K. (2016). 'Chapter 9: Engaging Interviews', in Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp.148-185.

Dunn, J.K. and Pimlott-Wilson, H. (2021) 'Moodboards and LEGO: principles and practice in social research' in Von Benzon, N., Wilkinson, S., Wilkinson, C. and Holton, M. (eds.) *Creative methods for human geographers*. London: SAGE. pp. 87-100.

Du Plessis, C. (2012) 'Towards a Regenerative Paradigm for the Built Environment', *Building Research & Information*, 40(1), pp.7–22.

Emerald Publishing (2023) 'How to...Use ethnographic methods & participant observation' [online] Available at: https://www.emeraldgrouppublishing.com/how-to/observation/use-ethnographic-methods-participant-observation [Accessed 4 June 2023].

Escobar, A. (2020) 'Sentipensar with the Earth: Territorial Struggles and the Ontological Dimension of the Epistemologies of the South', in Escobar, A. (ed.) *Pluriversal Politics*. New York: Duke University Press, pp.67–83.

Esteves, A.M. (2020) '"Systemic thinking", "regenerative culture", and new forms of prefigurative politics: challenges for the global left', *Globalizations,* 17(2), pp.*232–236.*

Fonow, M. and Cook, J.A. (2005) 'Feminist methodology: New applications in the academy and public policy', *Signs: Journal of women in culture and society*, 30(4), pp.2211-2236.

Gibbons, L.V. (2020) 'Regenerative—The new sustainable?', *Sustainability*, 12(13), p.1-19.

González-Hidalgo, M. and Zografos, C. (2020) 'Emotions, power, and environmental conflict: Expanding the "emotional turn" in political ecology', *Progress in Human Geography*, 44(2), pp.235–255.

Gordon, E., Davila, F. and Riedy, C. (2022) 'Transforming landscapes and mindscapes through regenerative agriculture', *Agriculture and Human Values: Journal of the Agriculture, Food, and Human Values Society,* 39(2), pp.809–826.

Gordon, E., Davila, F. and Riedy, C. (2023) 'Regenerative agriculture: a potentially transformative storyline shared by nine discourses', *Sustainability Science*, 18(4), pp.1833–1849.

Gosnell, H. (2022) 'Regenerating soil, regenerating soul: an integral approach to understanding agricultural transformation', *Sustainability Science*, 17(2), pp.603-620.

Gudynas, E. (2011) 'Buen Vivir: Today's tomorrow', *Development (Society for International Development),* 54(4), pp.441–447.

Grenni, S. *et al.* (2020) 'The inner dimension of sustainability transformation: how sense of place and values can support sustainable place-shaping', *Sustainability Science,* 15(2), pp.411–422.

Haraway, D.J. (2016) *Staying with the Trouble : Making Kin in the Chthulucene*. Durham, N.C.: Duke University Press.

Harland, M. (2023) 'What is Permaculture: Part 1 – Ethics', *Permaculture UK* [online] Available at: https://www.permaculture.co.uk/articles/what-is-permaculture-part-1-ethics/ [Accessed 7 June 2023].

Harris, L. M. (2015) 'Hegemonic waters and rethinking natures otherwise', in Nelson, I. L. and Harcourt, W. (ed.) *Practising feminist political ecologies: moving beyond the 'green economy*. Zed Books. pp.157-177.

Hawken, P. (2021) *Regeneration: ending the climate crisis in one generation*. New York, NY: Penguin Books.

Hedlund-de Witt, A. (2012) 'Exploring worldviews and their relationships to sustainable lifestyles: Towards a new conceptual and methodological approach', *Ecological Economics,* 84, pp. 74–83.

Herman, A. (2015) 'Enchanting resilience: Relations of care and people–place connections in agriculture', *Journal of Rural Studies,* 42, pp. 102–111.

Hesse-Biber, S.N. (ed.) (2011). *Handbook of feminist research: Theory and praxis*. Thousand Oaks, CA: SAGE.

Hochachka, G. (2021) 'Integrating the four faces of climate change adaptation: Towards transformative change in Guatemalan coffee communities', *World Development*, 140.

IPCC, (2012) 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation', *A special report of working groups I and II of the intergovernmental panel on climate change* [Lavell, A., Oppenheimer, M., Diop, C., Hess, J., Lempert, R., Li, J. and Myeong, S. (eds.)] Cambridge: Cambridge University Press.

Ives, C. D., Freeth, R., and Fischer, J. (2020) 'Inside-out sustainability: The neglect of inner worlds', *Ambio,* 49(1), pp.208–217.

Ives, C.D., Schäpke, N., Woiwode, C. and Wamsler, C. (2023) 'IMAGINE sustainability: integrated inner-outer transformation in research, education and practice', *Sustainability Science,* pp.1-10.

Jansen, S. (2016) 'Ethnography and the choices posed by the 'affective turn'', *Sensitive objects: Affect and material culture,* 2, p.55.

Jax, K., Calestani, M., Chan, K.M., Eser, U., Keune, H., Muraca, B., O'Brien, L., Potthast, T., Voget-Kleschin, L. and Wittmer, H. (2018) 'Caring for nature matters: a relational approach for understanding nature's contributions to human well-being', *Current opinion in environmental sustainability*, 35, pp.22-29.

Johnson, J.T. and Madge, C. (2016). 'Chapter 4: Empowering Methodologies: Feminist and Indigenous Approaches' , in Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp.60–78.

Jonas, T. (2021) 'Regenerative agriculture and agroecology—what's in a name?', *Food Ethics,* 24(6).

Kaika, M. (2018) 'Between the frog and the eagle: Claiming a 'Scholarship of Presence' for the Anthropocene', *European Planning Studies,* 26(9), pp.1714–1727.

Kenney, M. (2015) 'Anthropocene, Capitalocene, Chthulhucene: Donna Haraway in conversation with Martha Kenney' in Davis, H. and Turpin, E. (eds.) *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*. London: Open Humanities Press. pp. 255-270.

Kerler, W. (2022) 'Regeneration is the default mode of life itself', *Twenty Thirty*, 21 November [online] Available at: https://twentythirty.com/article/regeneration-is-the-default-mode-of-life-itself [Accessed: 1 August 2023].

Kearns, R.A. (2016) 'Placing observation in the research toolkit' in Hay, I. (ed.) (2016) *Qualitative research methods in human geography*. Fith edition. Oxford: Oxford University Press. pp.313-333.

Kimmerer, R.W. (2020) *Braiding sweetgrass: indigenous wisdom, scientific knowledge and the teachings of plants*. New York: Penguin Books.

King, M.F., Renó, V.F. and Novo, E.M. (2014) 'The concept, dimensions and methods of assessment of human well-being within a socioecological context: a literature review', *Social indicators research,* 116, pp.681-698.

Kircher, J., Seunghoon, L., Tazim, J., and Donaldson, J.P. (2022) 'Regenerating Tourism with an Ethic of Care and Empathy', *Travel and Tourism Research Association: Advancing Tourism Research Globally,* 10, pp.1-7.

Krzywoszynska, A., (forthcoming) 'Soil care: understanding soil needs, responsibilities, and attentiveness through the concept of care', Preprint.

Krzywoszynska, A. (2019) 'Caring for soil life in the Anthropocene: the role of attentiveness in more‑than‑human ethics', *Transactions of the Institute of British Geographers*, 44(4), pp.661-675.

Krøijer, S. and Rubow, C. (2022) 'Introduction: Enchanted Ecologies and Ethics of Care', *Environmental Humanities*, 14(2), pp.375-384.

Kumar, S. (2002) *You Are Therefore I Am: A Declaration of Dependence.* Cambridge: Green Books.

Leigh, P. (2005) 'The ecological crisis, the human condition, and community-based restoration as an instrument for its cure', *Ethics in Science and Environmental Politics,* pp.3-15

Leitheiser, S., Horlings, I., Franklin, A. and Trell, E.M. (2022) 'Regeneration at a distance from the state: From radical imaginaries to alternative practices in Dutch farming', *Sociologia Ruralis*, 62(4), pp.699-725.

Mang, P. and Reed, B. (2012) 'Designing from place: a regenerative framework and methodology', Building Research & Information, 40(1), pp.23–38.

Macy, J. (2012) *Active Hope: How to Face the Mess We're in Without Going Crazy.* Novato, CA: New World Library.

Margulies, H. (2017) *will and grace: meditations on the philosophy of martin buber.* Rotterdam: Sense Publisher.

Merleau-Ponty, M. (1968) *The Visible and the Invisible. Evanston, IL: Northwestern University Press.*

Moore, M.L., Tjornbo, O., Enfors, E., Knapp, C., Hodbod, J., Baggio, J.A., Norström, A., Olsson, P. and Biggs, D. (2014) 'Studying the complexity of change: toward an analytical framework for understanding deliberate social-ecological transformations', *Ecology & society*, 19(4), p.54.

Moriggi, A. (2022) 'An ethos and practice of appreciation for transformative research: Appreciative inquiry, care ethics, and creative methods', *Co-Creativity and Engaged Scholarship: Transformative Methods in Social Sustainability Research,* pp.131-164.

Moriggi, A., Soini, K., Franklin, A. and Roep, D. (2020a) 'A Care-Based Approach to Transformative Change: Ethically-Informed Practices, Relational Response-Ability & Emotional Awareness', *Ethics, Policy and Environment*, 23(3), pp.281–298.

Moriggi, A., Soini, K., Bock, B.B. and Roep, D. (2020b) 'Caring in, for, and with Nature: An Integrative Framework to Understand Green Care Practices', *Sustainability*, 12(3361), p.3361.

Nightingale, A. J., Gonda, N., & Eriksen, S. H. (2022) 'Affective adaptation = effective transformation? Shifting the politics of climate change adaptation and transformation from the status quo', *Wiley Interdisciplinary Reviews: Climate Change*, 13(1), pp.1-16.

Nuñez, A.J. (2018) 'Mother Earth and climate justice: indigenous peoples' perspectives of an alternative development paradigm', in Jafry, T. et al. (ed.) *Routledge Handbook of Climate Justice.* London: Routledge, pp.420–430.

O´Brien, K. and Sygna, L. (2013) 'Responding to climate change: The three spheres of transformation', *Proceedings of Transformation in a Changing Climate,* 19- 21 June 2013, Oslo, Norway. University of Oslo. pp.16-23.

O'Brien, K. (2018) 'Is the 1.5 degrees C target possible? Exploring the three spheres of transformation', *Current Opinion in Environmental Sustainability,* 31, pp. 153–160.

Ogundiran, A. (2019) 'Rituals and economics of regeneration', *Economic Anthropology*, 6(1), pp. 153–156.

Ozanne, J. L., and Saatcioglu, B. (2008) 'Participatory action research', *Journal of consumer research*, 35(3), pp.423-439.

Pearce, L.M. (2018) 'Affective ecological restoration, bodies of emotional practice', *International Review of Environmental History*, 4(1), pp.167-189.

Reed, B. (2007) 'Shifting from "sustainability" to regeneration', *Building Research & Information,* 35(6), pp.674–680.

Regenerative Culture (2023) 'What are Regenerative Cultures?', *Regenerative Culture* [online] Available at: https://xr-regenerativecultures.org/#:~:text=What%20are%20regenerative%

20cultures%3F,%2C%20empathy%2C%20and%20equality%20anew
[Accessed 20 July 2023].

Rennstam, J. and Wästerfors, D. (2018) *Analyze!: crafting your data in qualitative research*. First edition. Lund: Studentlitteratur.

Rocheleau, D.E. (2007) 'Political ecology in the key of policy: from chains of explanation to webs of relation', *Geoforum,* 39, pp.716–727.

Ryan, A., Geiger, S., Haugh, H., Branzei, O., Gray, B.L., Lawrence, T.B., Cresswell, T., Anderson, A., Jack, S. and McKeever, E. (2023) 'Emplaced Partnerships and the Ethics of Care, Recognition and Resilience', *Journal of Business Ethics*, 184(4), pp.757-772.

Savransky, M. (2022) 'The Will to Believe in this World: Pragmatism and the Arts of Living on a Precarious Earth', *Educational Theory*, 72(4), pp.509–527.

Savransky, M. and Tironi, M. (2021) "Decolonizing the Imagination in Times of Crisis. Gestures for Speculative Thinking-Feeling: Interview with Martin Savransky", *Diseña*, (19), p.1- 23. Interview.2.

Senge, P., Scharmer, O. C., Jaworski, J. and B.S. Flowers. (2005). *Presence: Exploring Profound Change in People, Organizations, and Society.* New York, NY: Currency.

Seymour, M. and Connelly, S. (2023) 'Regenerative agriculture and a more-than-human ethic of care: a relational approach to understanding transformation', *Agriculture and Human Values*, 40(1), pp.231-244.

Shrivastava, P. and Zsolnai, L. (2022) 'Wellbeing‑oriented organizations: Connecting human flourishing with ecological regeneration', B*usiness Ethics, the Environment & Responsibility,* 31(2), pp.386-397.

Singh, N. M. (2015) 'Payments for ecosystem services and the gift paradigm: Sharing the burden and joy of environmental care', *Ecological Economics*, *117*, pp.53-61.

Singh, N.M. (2018) 'Introduction : Affective Ecologies and Conservation', *Conservation and Society*, 16(1), pp.1–7.

Strom, K. and Mills, T. (2021) 'Affirmative ethics and affective scratchings: A diffractive re-view of posthuman knowledge and mapping the affective turn', *Matter: Journal of New Materialist Research,* 3, pp.200-223.

Sundberg, J. (2014) 'Decolonizing posthumanist geographies', *Cultural geographies*, 21(1), pp.33-47.

Susan Paulson (2019) 'Pluriversal learning: pathways toward a world of many worlds', *Nordia Geographical Publications,* 47(5), pp.85-109.

Termeer, C.J., Dewulf, A. and Biesbroek, G.R. (2017) 'Transformational change: governance interventions for climate change adaptation from a continuous change perspective', *Journal of Environmental Planning and Management*, 60(4), pp.558-576.

Todd, Z. (2016) 'An indigenous feminist's take on the ontological turn: 'Ontology' is just another word for colonialism', *Journal of historical sociology,* 29(1), pp.4-22.

Tronto, J. C. (2012) 'Partiality Based on Relational Responsibilities: Another Approach to Global Ethics', *Ethics and Social Welfare*, 6(3), pp. 303-316.

Tronto, J. C. (2013) *Caring Democracy: Markets, Equality, and Justice* New York, NY; London: New York University Press.

Van Dooren, T., Kirksey, E. and Münster, U. (2016) 'Multispecies Studies Cultivating Arts of Attentiveness', *Environmental Humanities,* 8(1), pp.1-23.

Van Dooren, T. (2014) 'Care' , Environmental Humanities Living Lexicon, pp. 291-294.

Vindrola-Padros, C. (2021) *Rapid ethnographies: A practical guide*. Cambridge: Cambridge University Press.

Von Benzon, N., Wilkinson, S., Wilkinson, C. and Holton, M. (eds.) (2021). *Creative methods for human geographers*. London: SAGE.

Wahl, D.C. (2016) *Designing Regenerative Cultures.* Charmouth: Triarchy Press.

Walsh, Z., Böhme, J. and Wamsler, C. (2021) 'Towards a relational paradigm in sustainability research, practice, and education', *Ambio* 50, pp. 74–84.

Watson, A. (2016). 'Chapter 8: "Placing" Participant Observation', Cope, M. and Hay, I. (eds.) *Qualitative research methods in human geography*. Fifth edition. Oxford: Oxford University Press. pp.125-145.

Weber, A. (2017) *Matter and Desire: An Erotic Ecology.* White River Junction, VT: Chelsea Green Publishing.

Whyte, K.P. (2017) 'Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene', *English Language Notes,* 55, pp.153-162.

Yaka, Ö. (2020) 'Justice as relationality: Socio-ecological justice in the context of anti-hydropower movements in Turkey', *Erde,* 151(2–3), pp.167–180.

Appendices

Appendix I : Interview Guides

Interview Guide - Danyadara Volunteers

1. Looking back to the workshop, we talked about your motivations and drivers, I know you shared a little bit already but can you share a bit more on what your daily life was like and how you felt before you decided to come here?

2. What do you think led to you feeling that way ?

3. In the workshop we also spoke about what you were looking for coming here. Can you explain a bit more about what your intention or intentions were with this experience?

4. How has this experience been for you? (What stood out in your time here?)

5. Do you see contradictions in your way of being here and your life at home?

6. What impacts does this work have on you, how do you feel after a day working on the land?

7. What do you feel are the hardships / difficulties and what are the benefits / rewards of working with the land?

8. What do you feel about this way of life and/or this work makes you feel aliveness/freedom/purpose/ simplicity?

9. What will you take with you, what learnings have been profound for you?

10. How do you want to implement these in your life?

11. How do you see the relationship between Suryalila and Danyadara? Are there any contradictions?

12. Do you think the fact that these two places co-exist together had any influence in your decision to come here?

13. Do you feel Danyadara and the work of Danyadara is in any way political? If so, how?

14. What would you like to see more or differently for Danyadara?

15. What skills did you gain here that you feel like are relevant for the future?

16. Do you also envision the future in any different way since being here?

17. Has your understanding of the state of the world and your role in it changed since being here? If so, how?

Interview Guide - Danyadara Interim Farm Manager

1. Why did you come here? What were your motivation and drivers at the time? Why this place, the south of Spain, this environment…

2. How was your journey with this place? What is it about this place that makes you come back?

3. What does Danyadara represent to you personally?

4. What are the biggest lessons and learnings that you got from working on the land of Danyadara?

5. Have you perceived any changes in the way that you approach and understand things?

6. How has the work here and you being here impacted how you see the world and your place in it?

7. What in your opinion are the aims of Danyadara? And how do you put them into practice?

8. What changes have you noticed in the land of Danyadara and the surroundings?

9. What kind of solutions is Danyadara trying to offer? To what issues and what crisis?

10. What are the biggest challenges of Danyadara?

11. What in your mind is the relationship between Suryalila and Danyadara ? Do you see any contradictions between the two? If so, what kind? How do you navigate these?

12. What do you think Danyadara can offer to Suryalila?

13. How did your relationship to the land and the project as a whole change when you transitioned from volunteer to farm manager?

14. What do you get from working in the land? What does it give to you? How do you feel, what impressions are you left with?

15. What are your hopes and visions for the project?

16. How do you take the learnings from this place and working here with you?

Interview Guide - Danyadara Farm Manager

1. Can you tell us a little bit about your background?

2. Where did you learn about permaculture / regeneration / restoration?

3. What is your role / position in the project?

4. What in your mind are the aims of Danyadara? What is the project trying to do?

5. What is the role of education in the project ?

6. What solutions is Danyadara offering? To what issues and what crisis?

7. How do you feel the climate crisis is impacting this region?

8. What is the impact of the monocultures surrounding Danyadara?

9. What is Danyadara's approach and philosophy of land regeneration? What methods and practices are central to this? How much land has been regenerated? Is it possible to even say this ?

10. What is the potential of the volunteer scheme in your opinion?

11. What kind of people come here as volunteers?

12. How would you describe the relationship between Suryalila and Danyadara ? Do you see any contradictions between the two? If so, what kind? How do you navigate these?

13. Do you feel that the work of Danyadara and Danyadara as a whole is in any way political?

14. What in your mind are the biggest challenges and biggest rewards of working in a Regeneration like Danyadara?

15. In what way is Danyadara part of a wider network of similar initiatives and projects especially in this region?

16. Are there any obstacles you face in building these kind of networks?

17. What is your aim of building networks?

18. What are your hopes and visions for the project?

Interview Guide - Danyadara Office Manager

1. Can you tell us a little bit about your background?

2. Where did you learn about permaculture / regeneration / restoration?

3. What is your role / position in the project?

4. What in your mind are the aims of Danyadara? What is the project trying to do?

5. What is the role of education in the project ?

6. What solutions is Danyadara offering? To what issues and what crisis?

7. How do you feel the climate crisis is impacting this region?

8. What is the impact of the monocultures surrounding Danyadara?

9. What is Danyadara's approach and philosophy of land regeneration? What methods and practices are central to this? How much land has been regenerated? Is it possible to even say this ?

10. What is the potential of the volunteer scheme in your opinion?

11. What kind of people come here as volunteers?

12. What do you think attracts people from Northern Europe to come to this place/this part of the world and work on the land?

13. How would you describe the relationship between Suryalila and Danyadara ? Do you see any contradictions between the two? If so, what kind? How do you navigate these?

14. Do you feel that the work of Danyadara and Danyadara as a whole is in any way political?

15. What in your mind are the biggest challenges and biggest rewards of working in a Regeneration like Danyadara?

16. In what way is Danyadara part of a wider network of similar initiatives and projects especially in this region?

17. Are there any obstacles you face in building these kind of networks?

18. What is your aim of building networks?

19. What are your hopes and visions for the project?

Interview Guide - Danyadara Founder

1. When and why did you start Suryalila here in Andalucia?

2. Why did you choose this area and place?

3. When did you think of bringing Danyadara to life? What were your hopes for the project at the time?

4. What's the specific relationship between Danyadara and Suryalila and what do you feel is the purpose of them coexisting together?

5. What are the specific aims of Danyadara?

6. What challenges have you faced with Danyadara over the years? What challenges are you facing now?

7. When and why did you start to create a volunteer scheme for Danyadara? How do you feel this relates to the overall aims of the project?

8. What do you hope for the project moving forward? Any future plans in sight?

9. How do you understand regeneration?

*Appendix II : Workshop Material*

Workshop 1

For the moodboard / collage-making exercise in Workshop 1 we used the following three magazines: Integral, Spanish Women's magazine; National Geographic; ABC, local newspaper.

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<u>Workshop 2</u>

Exercice 1

During Workshop 2 we introduced an exercise where we asked practitioner's to individually reflect on why they cared about land regeneration. Responses were written on post-its and gathered on a big piece of paper for everyone to see and discuss afterwards. The result of the exercise can be seen in this photo:
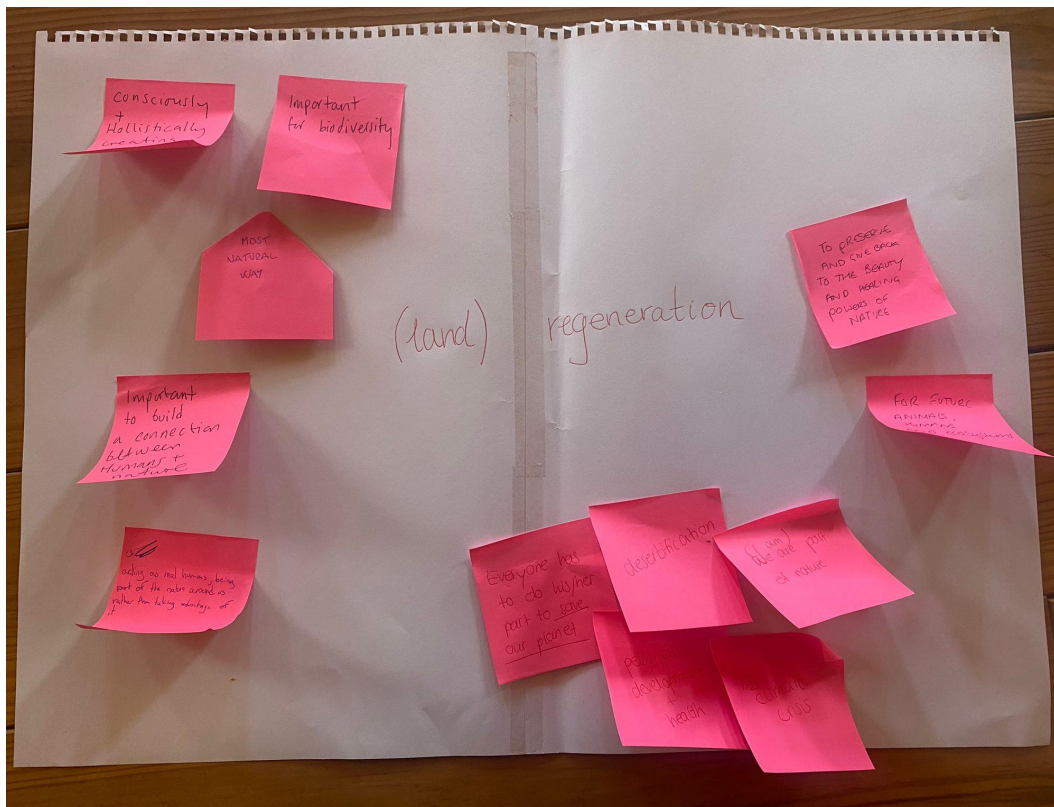
Exercice 3

We used the following version of 'The Wheel of Emotions' in Workshop 2 for the exercise where we asked practitioners to reflect the emotions they feel during a typical day in their life at Danyadara:
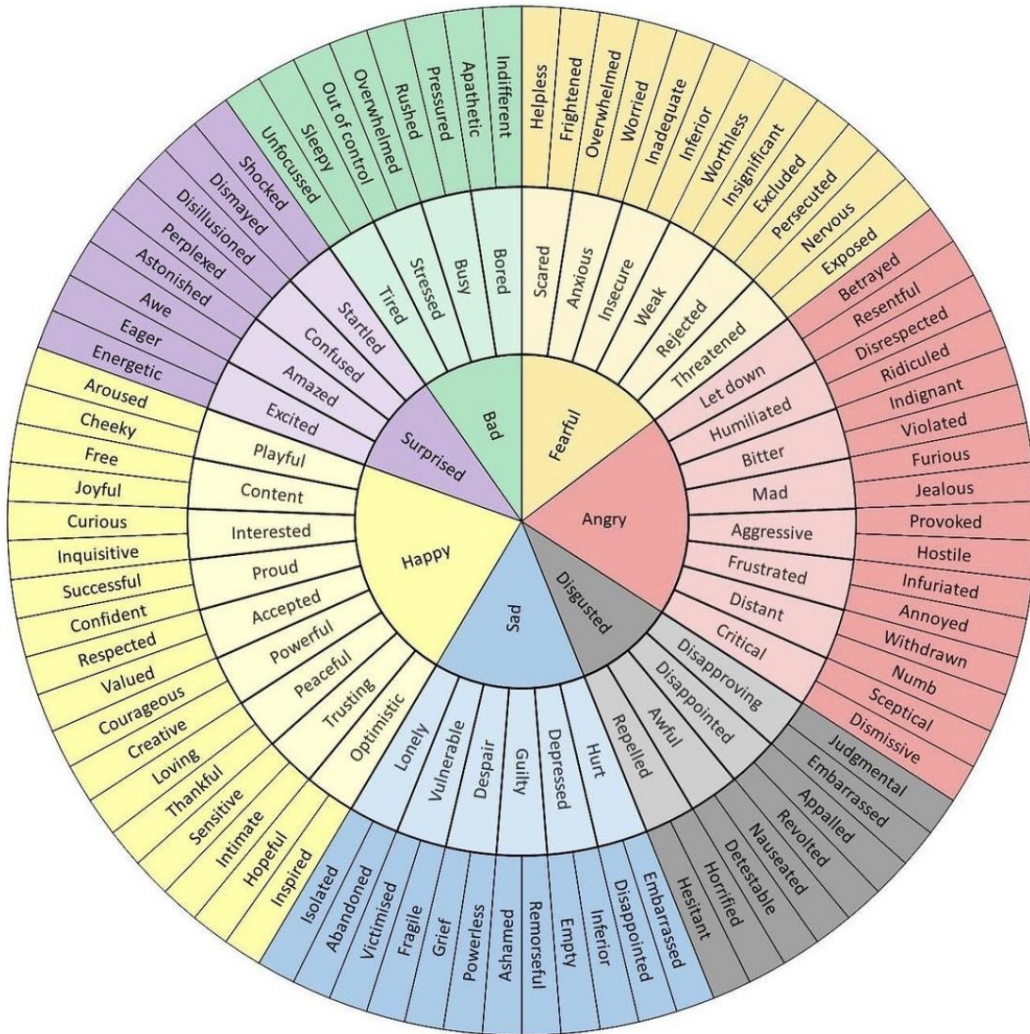
Outcomes

The following are the result of the above-mentioned exercise. The spiral drawings represent the 'complexity of emotions' experienced by each practitioner during the course of a day:

Everyday was different

Joyful / grateful / loving (sitting together, conversations, laughter, community) → inspired

Grateful / curious / loving (sitting together, conversations) → inspired

DINNER — Hungry

LUNCH — Hungry

Angry (team disagreement, chaos)

BREAK-FAST

Joyful (flowers picking) Grateful

Joyful (weeding)

bloated ☺

Stressed / Joyful (kitchen work)

WAKING UP — Optimistic — Tired

BREAKFAST

Free / relaxed (freetime yoga, pool)

Overwhelmed (bc days run by so fast)

Tired / sometimes exhausted

Disgust (compost toilets)

Happy / sad about my org

GOING TO BED

Surprised

Unfocussed

Distant

Joyful

Grateful

Inspired

Trusting

Peaceful

Bored

Busy

Scatty

pressured

excited

Playful

Anxious

Nervous

Exposed

Fragile

Tearful

Full

Content

Embodied

Focussed