New stories for a new, more beautiful, world

Claiming authorship of the climate story

Heidi Hendersson

LUCSUS

Lund University Centre for
Sustainability Studies

New stories for a new, more beautiful, world

Claiming authorship of the climate story

Heidi Hendersson

A thesis submitted in partial fulfillment of the requirements of Lund University International

Master's Programme in Environmental Studies and Sustainability Science

Submitted May 16, 2017

Supervisor: Karin Steen, LUCSUS, Lund University

Empty page

Prologue

This thesis topic came to me as a result of a personal story.

It was an ordinary Tuesday. The second day of my first full-time thesis work week. I met up with my thesis support group and we were supposed to discuss the topics we had settled on months beforehand. I had arrived feeling energized and enthusiastic, but with a knot slowly forming somewhere in my tummy. Standing in front of the whiteboard with a pen in hand, ready to give them an overview of the topic I had already invested a lot of time and effort into, the knot tightened and I found myself not being able to hold back my tears. I busted out crying. I had to confess. I had no clue anymore. I felt like a fraud. I was overwhelmed and frazzled by my own thoughts and couldn´t get a hold of them. I was losing my story and wondering if I even had one to begin with. Fortunately my thesis support group is as much an emotional support group as an academic one so there was enough space and love for me to fall apart. Sometimes all you need is a safe space, a good cry and some hugs. That could have been the end of it. But I was confused. I wanted to know where these emotions where coming from. What was the story?

So, I decided to sit down and tackle this overwhelming thesis anxiety that had me crumbling. I was in the midst of reading a book by one of my favorite authors, Brené Brown, which talks about how to feel your way back from a fall. And this sure felt like a tangible crash. So I sat down with pen and paper and resorted to Brown´s Rising Strong methodology of reckoning, rumble and revolution.

The goal of the method is to re-write your personal story. You do this by first walking into the story by reckoning with your emotions, then you rumble with them in order to own your story and finally you write a new ending – the revolution. This helped me uncover some deeply concealed emotions (like arrogance, insecurities and shame), owning the stories I was telling myself linked to these emotions (like "I am in too deep", "I am not good/smart enough" and an interesting combination of my super arrogant ego saying "if it´s not going to be excellent, don´t even bother" and my insecure 23-year old Heidi who epically butchered her bachelor thesis saying "Why even bother when you know you will fail?") and finally realizing that I am in charge of writing the ending to this story.

*This is the ending I chose. **"She was kind to herself, had fun and stayed curious".***

As I ventured back into my thesis, reading up on the two themes I was trying to interlink: stories and climate change, it hit me like a slap in the face. What if the same methodology could be applied to the story of climate change? What are the emotions we are dealing with, what are the stories we are

telling ourselves (are we telling ourselves any stories at all?) and could we possibly own this story, re-write the ending and ultimately revolutionize the story on climate change?

I had found my story.

Abstract: 398 words

Sustainability philosophers claim that we are at the impasse of stories, finding ourselves in a blank chapter between the old and the new. The old story, characterized by separation, technological arrogance and human superiority over nature, is unfolding in an ecological crisis giving space for a new narrative defined by inter being, cooperation and balance. It has been put forward that this crisis is climate change, a phenomenon that epitomizes the old as well as acts as a bridge to the new. In this thesis I argue that the climate crisis in all its destructive force also holds the potential to act as an imaginative resource around which we can create new narratives for a new world.

Seeing that stories are a key driver for change there is a growing realization within the sustainability field that we need to move beyond science to look at the narratives of the current ecological development. But we also need storytellers to lead the way forward. In this study I am engaging the ones I believe should pioneer the new story, sustainability students, to see whether or not they claim authorship of the story.

The research uses a novel approach in the pursuit of identifying and claiming ownership of the climate story called "Rising strong" which takes the form of exploratory workshops focused on emotional storytelling. Through this process I address the question of how sustainability students relate to the story on climate change and how they situate it within the bigger narratives as well as identify barriers and catalysts for authorship.

The research shows that there is no clear sense of personal authorship or connection to the climate story and a lack of confidence in any revolutionary endings, yet still a slight belief in co-authorship. Some of the catalysts for authorship identified in the research process were creativity, recognition of emotions, curiosity and group interaction. Barriers were restricting objectivity, lack of confidence in agency, complexity and shame. One of the most crucial findings was the re-occurring theme of cooperation which points to the story-transitioning being both an individual journey and a group effort.

In order to empower sustainability students to claim authorship of the climate story, create their revolutionary endings and embark on the new chapters for a more sustainable world it therefore seems like there should be an emphasis on the curious, collective and creative story-making framed by emotional recognition.

Keywords: Stories, climate change, authorship, co-authorship, storytelling, revolution

Word count (thesis): 13.989

Acknowledgements

Table of Contents

List of tables and figures

Chapter 1. The introduction

"It's all a question of story. We are in trouble just now because we do not have a good story.
We are in between stories." (Berry, 1988, p. 123)

Once upon a time there was a mankind who created a life through the spoken and, later on, the written word. Being culturally ubiquitous, stories are how we make sense and meaning of the world (Edwards, 2015; Fraser, 2004; Lejano, Tavares-Reager, & Berkes, 2013; Polkinghorne, 1988) and it is through stories we relate to other people, situations and phenomena (Edwards, 2015; Lejano et al 2013; Fraser). Stories are therefore a key driver of our human existence.

But our global story is reaching a devastating climax. This narrative is deemed unsustainable and has unfolded in an ecological crisis (Sahinidou, 2016) with planetary boundaries being breached (Steffen et al., 2015) and the concentrations of carbon dioxide in the atmosphere increasingly accelerating (EcoWatch, 2017) leading us to an ever warming and unstable existence. In order to change the deteriorating trajectory of the global ecological development, it is vital to look at pathways towards a more sustainable future (Swart, Raskin, & Robinson, 2004) and explore alternative ways of obtaining knowledge (Lang et al., 2012).

One way to look forward is through the lens of stories. It is argued that we are right now "collectively living between stories" (Edwards, 2015, p. 15), in a space defined by ecological instability. With stories fueling our development it goes without questioning that in order "to change our world, we need to change our stories" (Leinaweaver, 2015, p. 12).

In fact, there is a growing realization within the sustainability debate that it is increasingly less important to claim and portray data and facts, and more about owning and conveying "stories and languages of value, culture and ideology" (Leinaweaver, 2015, p. 66) as well as framing these through discourse (Dryzek, 2013). Seeing that science and scientific reasoning are only "a part of the story" (Frank, 2017, p. abstract) – with some even vilifying it as the cause of our environmental crisis (Herman, 2015; Plumwood, 2002; Sahinidou, 2016) - there has been a surging interest to find new lenses and modes of inquiry for sustainability, especially through integration of the subjective dimension (Frank, 2017). Here, the notion of stories and narratives, being the fundamental foundation of meaning- and sense making, have been re-discovered.

It has been put forth by sustainability philosophers that the crumbling of the old, unsustainable story, which is projected to end in a crisis, gives space for a new narrative. In this thesis I argue that this crisis is climate change, presenting a profound global challenge in which we realize that our story has

become "inadequate for meeting the survival demands of a present situation" (Berry, p. xi). There is a recognition that climate change is no longer so much a scientific issue or a knowledge-deficit problem as it is a social, cultural and ideological dilemma (Grundmann, 2016; Hoffman, 2012). Climate change is essentially *a problem of story.*

The climate crisis highlights the unsustainability of our current story but also provides a creative opportunity to bridge the gap between the old and the new, acting as an "imaginative resource" (Hulme, 2009) around which we can create new narratives for a new world. Climate change functions as a vehicle for bigger stories and carries with it the capacity of looking at the world differently (Hulme, 2009, p.13), stimulating us to scrutinize our ideologies, beliefs and perceptions (Hoffman, p 33). If we can change the climate story, we can change the grander sustainability story, seeing that it is within "narrative that new visions of sustainable living begin" (Frank, 2017, p. 312).

But in order to change our stories, we need storytellers who believe they have authorship and feel empowered to both scrutinize the stories that led us here as well as envision new ones for the future. Throughout the unfolding of the old story it has been said that the world-shaping stories and narratives drifted into oblivion and lost their power, deeming the role of the storyteller obsolete (Leinaweaver, 2015).

Leinaweaver (2015) points towards the importance and function of the storyteller in shaping society, challenging old stories and imagining new ones. He argues that alongside the need for new stories and insight into and knowledge of the grand, existing ones, we need storytellers, "selflessly acting as a new conduit for imagination, sense-making and a way forward." (Leinaweaver, 2015, p. 49). I believe we are told through and by stories and the notion of authorship is therefore essential for tackling climate change and changing the unsustainable story we find ourselves trapped in today. If we can own our stories and claim agency over them, we can "carry out our intentions and project in the world" (Burr, 2009, p. 212) and ultimately write new stories for the new world we desire.

Let´s re-claim the story. And empower the storytellers.

Chapter 2. Problem definition, research aim and structure

The problem, outlined in a broad context earlier, I address in my thesis is the perceived lack of understanding of the bigger stories underlining climate change and the absence of storytellers to illuminate the way from the old narratives to the new ones.

Within the scope of my thesis I therefore take an innovative look at three of the core aims of sustainability science:

i) "of how coupled human–environment systems have evolved (past),

ii) are currently functioning (present),

iii) and might further develop (future)" (Wiek et al., 2012, p. 6)

This is done through a narrative and qualitative filter, an approach that has been deemed to offer "texture, richness and insight" (Swart et al., 2004, p. 141) to sustainability research. In other words, I am looking at the stories of interaction between humans and environment in the past, present and future (Edwards, 2015) and seeing how these can be bridged through claiming authorship.

My study aims at scrutinizing the story on climate change through the narrative lens of sustainability students, targeting them as my main envisioned storytellers. By guiding them through an exploratory story-writing workshop, called Rising Strong, my wish was to explore a territory that could help them situate climate change into a bigger narrative and equip them with the tools needed to re-write the ending or claim ownership of the story on climate change. The assumption I build this research upon is in line with Monson´s thoughts on the topic, that "stories play a constitutive as well as a reflexive role in the social world: we tell them and are told by them" (Monson, 2015 p.16).

These are the research questions that will guide me along the way:

RQ1: How do sustainability students relate to the story on climate change?

RQ2: Can sustainability students claim authorship of the story and re-write the ending?

RQ3: What are barriers/catalysts for authorship?

RQ4: Can the process of Rising Strong help in claiming authorship of the story?

To situate my research I first introduce *the concept of story* as my main departure, serving as basis for both my ontology, epistemology and methodology. Then I outline the *conceptual framework of the old and the new story* wherein I position the story on climate change and my research. I

introduce my view of *authorship* which underpins the research, and briefly touch upon what I see as my goal of the process and then venture on to introducing my methodology, methods, analysis approach, findings, discussion and conclusion.

Chapter 3. Ontology and conceptual framework

3.1 Stories

We are soaked to the bones in story - Jonathan Gottschall

In this thesis I focus on the idea of stories and their capacity to hold realities and act as a vehicle for change. I mainly look at how stories serve as a link between old and new paradigms, and see how working through the lens of stories can be transformative and empowering by claiming authorship. My ontological departure in stories fits within a realist social constructionism in the sense that I see there is a structural reality to the world, one that we grasp and change through stories (Burr, 2015, p. 119).

The word *story* is defined as "an account of incidents or events" (Merriam-Webster, 2017). The almost synonymous word *narrative*, defined as "the representation in art of an event or story" (Merriam-Webster, 2017) is linguistically related to story and their joint etymological origins means "knowing, knowledge and wisdom" (Ferneley & Sobreperez, 2009, p. 123). Stories and narrative, which I use interchangeably, are therefore a way of knowing, of constructing and conveying knowledge and the two terms are said to be "two sides of the same coin" (Leinaweaver, 2015, p. 24).

Humans are storytellers. We are "wired for story", as Brown puts it (Brown, 2015b), and we have a need and thirst for stories (Rooney, Lawlor, & Rohan, 2016). It is how we make the abstract concrete, organize our thoughts, position ourselves in the world, relate to each other and express ourselves (Fraser, 2004; Polkinghorne, 1988; Rooney et al., 2016). Stories have an evolutionary purpose, through its meaning and sense making mechanisms (Bruner, 1990; Polkinghorne, 1988; Rooney et al., 2016) and is therefore a vehicle for development as well as a driver for human behavior (Bruner, 1990, p. 52). With stories creating, reflecting and also challenging our development it is of essence to look at the stories that have led us here today and find ways of how we can write better stories for tomorrow, an ambition underpinning this research.

3.2 Conceptual framework on the story of humanity

Without stories we would go mad. Even in silence we are living our stories – Ben Okri

Of course one can always say that every moment in time is important when they constitute the now, and that we are always in the impasse of the old and the new. But, when looking at the story of humanity I step away from *the temporal dimension* in the two meanings of the word. Both in the sense of *time* as "relating to the sequence of time or to a particular time" and as a *worldly thing*, as "relating to earthly life" (Merriam-Webster, 2017) (emphasis added) and take more of a philosophical approach to positioning ourselves in the book of life. I refer here to the "big or mythic stories" that Leinaweaver says serve the function of explaining "the mystery of life, appealing to our sense of awe and wonder of being" (2015, p. 17).

I base the assumption of the transition from the old to the new story, which underlies and justifies the aim of my thesis, on a conceptual theoretical framework built upon three pieces of literature on the topic; *The heart of sustainability* by Edward Andres (2015), *The more beautiful world our hearts know is possible* by Charles Eisenstein (2013) and *The Dark Mountain Manifesto* by Kingsnorth and Hine (2009).

Based on these three books I have, through a qualitative analysis procedure, constructed a conceptual framework which aims to paint a picture of the global story they depict. A conceptual framework is defined as a product "of qualitative processes of theorization" (Yosef, 2009, p. 50) and joins together concepts in order to better grasp a problem or a phenomena. In this case the concepts consist of varying understandings of the global story, as reflected by the authors in the three books. The components of the concept are here represented by the old and the new story, as well as the transition in between (Yosef, 2009). By cross-examining the concepts as portrayed in the three books and identifying common themes of the components of the stories, I have been able to build a "framework-specific philosophy" (Yosef, 2009, p. 51), illustrating the grand story of humanity and serving as the foundation for the analysis of my findings. The results will be laid out as a table further down for comparative analysis.

3.2.1 The old

"Everything is fine" (Eisenstein, 2013, p. 2)

The old story is said to be characterized by separation and alienation from nature, progressed by ecological destruction in the name of technology and science (Edwards, 2015; Eisenstein, 2013; Kingsnorth, 2009). Charles Eisenstein defines the old story as a "story of separation" (Eisenstein, 2013) and Kingsnorth and Hine sees it as the story of civilization or the "age of ecocide" (2009, p.13).

Living in the old story is deemed as residing in a bubble, where everything is 'fine', and the notion of progress and growth serves as the narrative foundation (Edwards, 2015; Eisenstein, 2013; Kingsnorth, 2009). In this bubble despair and denial thrives coupled with a sense of passiveness or complacency (Eisenstein, 2013; Kingsnorth, 2009). It is an era of materialism and consumption, paradoxically cultivated in a mindset of scarcity (Edwards, 2015; Eisenstein, 2013).

It is an age defined by a sense of looming evil or darkness and sets the stage for a global crisis, preparing us for a big upheaval. Both Eisenstein (2015) and Kingsnorth & Hine (2009) compare the old story holding together our current existence to a fabric slowly falling apart at the seams and all three authors conclude that there is a longing and desire for a new story, or as Eisenstein puts it, a calling for a "more beautiful world our hearts know is possible" (Eisenstein, 2013).

3.2.2 The transition

"It´s frightening, this transition between the worlds" (Eisenstein, 2013, p. 8)

The authors claim that the transition is characterized by an awakening to the fact that the world is not okay, the bubble bursts and people start asking questions, searching for answers (Edwards, 2015; Eisenstein, 2013; Kingsnorth, 2009). Kingsnorth and Hine refer to it as the crumbling of civilization, and in the chaos that follows a "desire for meaning" spurs (2009, p. 5), setting humanity on a journey for a new narrative of life.

The transition is framed by crisis and breakdown. Hine and Kingsnorth write: "It is the story of how that people will cope with the crumbling of their own myth. It is our story" (2009, p. 6). People realize that the current narratives are not favorable and as Eisenstein states "only with increasing self-delusion can we pretend they are sustainable" (Eisenstein, 2013, p. 3). He sees this understanding as crucial to building new narratives and entertains the idea that a collapse might be necessary for humanity to awaken from its delusions (Eisenstein, 2013).

This awareness not only highlights the unsustainability of our ways but also the tangibility and importance of stories (Eisenstein, 2013). Not just the realization that our progress is a story in itself, but also that this particular story, which seemed so promising, has actually failed us.

3.2.3 The new

"We, the choir, gather, and we learn to sing together" (Eisenstein, 2013, p. 31).

The collapse that the authors anticipate will be followed by a new era (Edwards, 2015; Kingsnorth, 2009), named by Eisenstein the Age of Reunion or the "Story of inter being" (Eisenstein, 2013, p. 15), characterized by an interconnectedness with nature (Edwards, 2015; Eisenstein, 2013). It is described as a reunion of spirit and matter as well an awakening to a global consciousness, referred to as a "wholesale metamorphosis" (Eisenstein, 2013, p. 89).

3.2.4 Summary

To sum it up, the authors argue that we need to address the problem of sustainability through the concept of story and that within this narrative we find ourselves right now in a transition phase, moving from the old to the new. Below you will find a table that gives an overview of the themes of the different stages of story as described in the conceptual framework. A more detailed thematization was used for analysis and can be found in Appendix A.

Table 1. Depiction of the global story. (Eisenstein, 2013; Edwards, 2015 and Kingston & Hine, 2009). Source: author.

The old story	Transition	The new story
Separation	Requires an awakening from and a deep questioning of the old story along with developing new perspectives and creative visions for a new story.	Inter-being
Mastery over nature		Harmony with nature
Individual consumerism		Collective co-creation
Scarcity		Abundance
Ecological destruction		Ecological balance
Growth		Post-growth
Struggle		Ease of being

3.3 Criticism of the concept of the 'global story'

This concept of story is part of a bigger debate on narratives and sustainability and the need for re-thinking our stories for a better world, but this particular view of the 'old and the new' story has also been criticized.

The critique especially pertains to the romantization of crisis as the only way to bring about change and the perceived passiveness it brings with it (Gray, 2009), but maybe most pertinent critique is the overall resemblance to New Age narrative - defined as when "humanity is entering a time of transition, at the end of which collective re-discovery of the divine will inspire a social and political renaissance unlike any other in human history" (Davis, 2002, p. 101).

I am aware that references to New Age-thinking raises opinions and criticism. Some brush it off as "inconsequential audience cult", but scholars do increasingly recognize that New Age-philosophies is a "movement of massive proportions" (Davis, 2002, p. 102), a movement that has also hit the environmental field. There has recently been a surge in holistic and spiritual ways of addressing environmental issues, portraying a "renewed interest in the human-nature connection" (Lockhart, 2011, p. 23) and a wide range of academics and philosophers argue that we need to start thinking differently about addressing sustainability issues, in a way that acknowledges and tackles the underlying, spiritual, drivers of unsustainability (Wamsler et al., 2017). Here I believe thinking in terms of stories is very useful and for that, these authors have outlined a good framework.

3.4 Authorship

Since the core of my thesis relies on the notion of claiming authorship, in this case of the climate story, it is necessary to outline the meaning of this concept. Authorship is defined as "the state or act of *writing, creating, or causing*" (Merriam-Webster, 2017). In this research all three aspects of authorship are covered and desired, that is, the aim is for the students to both physically take authorship, *in writing* the climate change story, as well as *creating* an imaginative ending. I also want them to feel like they are in some way *causing* the development of the story in real life. My view of authorship is also a form of ownership or entitlement, essentially *'being in charge'*. It is not only about being a part of producing something, but feeling that you *have the right* to the craft, in this case; feeling like you can contribute to the climate story.

The ontological bedrock upon which my view of authorship rests is inspired by personal construct psychology which sees that we have the capabilities to "change our own constructions of the world and thereby to create new possibilities for our own action", recognizing however that "this process if often difficult and challenging" (Burr, p. 22). This thesis is an attempt to tackle this process through the art of storytelling.

3.5 The story on climate change

Some say that science is a grand story – Jonathan Gottschall

I argue that in the midst of the global story I outlined earlier, we find the chapter on climate change. Climate change is the roaring symbol of the global chaos depicted by the authors in the transition stage of stories. It is establishing itself as one of the most crucial page-turners of our time and the Guardians former editor in chief, Rusbridger, refers to it as the "biggest story in the world" (Howard, 2015).

It is a story hitting a narrative peak, with carbon concentration detected in the atmosphere as of late April of 2017 reaching a record breaking 410 parts per million, meaning "that humanity is marching further and further past the symbolic red line towards climate chaos" (McCauley, 2017).

Climate change is however more than a physical phenomenon, it is also the eclipse of the human story and also functions as a carrier of ideology and meaning (Hulme, 2009, p. 18). Hulme calls the climate saga the "meeting of nature and culture" (Hulme, 2009, p. xxviii) and the origin of this story is linked to the old narrative in the sense that it is a product of that mindset and ideology, a consequence of the ambition to develop and modernize, a devastating reflection of human superiority over nature (Hulme, 2009, p. 21).

Andrew Hoffman refers to climate change as a 'flash point' in time (Hoffman, 2012) and Kingston and Hine says that this man-caused phenomenon "brings home at last our ultimate powerlessness" (2009, p.11). In short; climate change awakens us from the old story (Eisenstein, 2013) but is also a part of the story, something we need to remind ourselves of. Kingston and Hine argue that we disregarded the power of stories once we started to modernize and David Hulme concludes: "The full story of climate change is the unfolding story of an idea" (Hulme, 2009, p. xxviii). We have simply forgot that climate change is a story. And stories can be changed.

Chapter 4: Research philosophy and methodology

In the end all we have…are stories and methods of finding and using those stories.

—Roger C. Shank

I have thus far explained how stories function as both my ontology; the way I see the world being constructed, and epistemology; as a way to gain knowledge. Therefore it only seems natural that it would also be my methodology, here in the form of narrative inquiry.

4.1 Narrative inquiry

Narrative inquiry is considered to be both a phenomenon and a method (Clandinin, 2013) aiming at understanding people´s lives and worldviews through the framework of stories (Rooney et al., 2016). The ontological basis of this methodology lies in both realism, postmodernism and social constructionism (Clandinin, 2013), challenging notions of "rationality and universal truth, and the application of scientific empirical methods to problem solving" (Mitchell & Egudo, 2003 p. executive summary) as well as the notion that reality is given rather than explored and found (Bell, 2003). The narrative model has gained more popularity recently across a diverse range of fields (Mitchell & Egudo, 2003), denoted as the "narrative turn" (Davis, p. 3) and is broadly used as an umbrella term for any arts-inspired ways of obtaining knowledge (Leavy, 2009).

4.2 Applicability/ relevance

Leavy describes the narrative approach as "a collaborative method of telling stories, reflecting on stories and (re)writing stories" (Leavy, 2009, p. 27). Seeing that the aim of my research is to find ways of storytelling that illuminates the current stories, enabling a shift to the new one as well as a re-claiming of authorship, the purpose of narrative inquiry fits well.

When looking specifically at the topic of climate change, a narrative approach is extraordinarily valuable, due to its nature of being able to "address ambiguity, uncertainty (and) complexity" (Mitchell & Egudo, 2003, p.5). Ferneley and Sobreperez (2009) argue that thinking in stories can help uncover underlying drivers and is therefore good for understanding complex and wicked problems such as climate change (Jiazhe & Kaizhong, 2016). Stenmark in fact argues that "dealing with wicked problems" actually "*requires* stories and storytelling" (Stenmark, 2015, p. 932) (emphasis added).

4.3 Approach

A narrative approach is ingenious in the way that it tries to piece the puzzle together through interaction and meaning making. Fraser compares it to spinning a yarn "by weaving together the threads of different stories" (Fraser, 2004, p. 183). Using this metaphor is a way of making the practice of narrative research more tangible and also highlight its clear divergence from the rational, scientific field of certainty and linearity (Fraser, 2004). Narrative research is essentially a form of art or craft.

Chapter 5. Data collection

"People ask for data, but believe in stories" (Leinaweaver, 2015, p. 66)

The primary form of data collection consisted of workshops coupled with interviews and the research was complemented with secondary data; inquiring into a broad array of relevant literature touching on emerging themes.

5.1 Workshop outline

I carried out four main workshops, lasting between 1, 5-2 hours, as well as two pilot studies with 14 students representing four different sustainability oriented masters programs within Lund University, see Appendix B for participant information. Doherty & Clayton (2011) suggest that group "interventions to facilitate emotional expression and dialogue" (p.272) can be a way to deal with the threat of climate change and I therefore conducted the workshops in pairs or groups of three.

The structure of the workshop is based on the Rising strong framework (Brown, 2015b) (explained further in section 5.2.1 and in chapter 6), but has been adjusted to fit my research aim and purpose, see Appendix C.

5.2 Tools for data collection

As has been established, narratives can take many forms and is a "many-sided concept" (Joyce, 2008, p. 1). In my research I used multiple qualitative method tools, utilizing both free-writing assignments and interviews coupled with the Rising Strong framework. Below I will outline my tools and their relevance.

5.2.1 The Rising strong framework

The whole workshop is constructed around the emotional storytelling process developed by Brené Brown. It is a rather unconventional approach to use in sustainability science endeavors, but as Suddaby so eloquently puts it: "new discoveries are always the result of high-risk expeditions into unknown territory" (2006, p.633).

The framework integrates emotions into the storytelling process and I find that to be one of the most compelling reasons to use it. Emotions gives stories depth as well as "narrative legitimacy" (Rooney et al., 2016, p. 149) and I agree with Doherty & Clayton that climate change is "as much a psychological and social phenomenon as a matter of biodiversity and geophysics (2011, p. 266), therefore explorations into the emotional dimensions of our stories of climate change are important.

In short, the process of Rising Strong (Brown, 2015b) is applied to the workshop in three steps:

1) Writing the story on climate change as a form of *reckoning[1]*.

2) Listing emotions linked to the story and *rumbling* with them.

3) Writing a *revolutionary*, ideal ending to the story (see appendix X).

The process is explained more in detail in the analysis section. Below, I outline the main methodological tools of the workshop; creative writing and interviewing.

5.2.2 Creative writing

> *"Writing is a path to meet ourselves and become intimate" (Goldberg, 2005, p. xii)*

The creative writing was the biggest segment of the workshop (approximately 30-40 minutes) and was introduced after a short interview-section focusing on the concept of story.

The participants were asked to introduce the story with "*once upon*" and I chose this phrase because it "opens the mind and the imagination to infinite possibilities" (Rooney et al., 2016, p. 147). After discussion and *rumbling* with the emotions linked to the story, the whole session was wrapped up with another short creative writing exercise were they were asked to write their ideal ending to the climate change story.

I chose a more creative approach than Brown does by introducing the topic sentence and giving the participants time and space to engage in the story without much guidelines, seeing that "our imagination may be the greatest X-factor for change and our ability to flip the script on the story of an unsustainable world" (Leinaweaver, 2015, p. 14). Mark Johnson identifies imagination as "the capacity to … bring something new out of the old" (Johnson, 140), which is exactly the aim here. Here I also drew inspiration from the visionary process of scenario analysis used within sustainability science (Swart et al., 2004).

I see the writing segment as crucial to the process of *reckoning, rumble* and *revolution*, as writing per se is considered a profound tool for self-development and processing our lives, events and surroundings (Goldberg, 2005; Pennebaker, 1990) and helps to deal with difficult emotions as well as to make sense of thoughts and feelings (Brown, 2015b; Pennebaker, 1997, p. vii).

---

[1] The italizised *reckoning, rumble* and *revolution* are keywords taken from Browns methodology and is explained further in section 6.

When it comes to addressing the topic of climate change it is interesting to specifically look at how writing can help organize and situate ones thoughts around a complex topic (Pennebaker, 1990). Since writing is time demanding and stories require structure, putting pen to paper on climate change is more conducive to problem solving and understanding the issue than if one was to only think about it (Pennebaker, 1990).

The art of creative writing also became a way for me as an author to depict the findings from my data, as can be seen in the prologue.

5.2.3 Interviewing

As a means of delving deeper into the research, I pursued interviewing as a complementary method with the agenda of being a miner (Fraser, 2004) digging out extra information. Seeing that "the view of the human world [is] a conversational reality" (Kvale, 1996, p. 303), any intention of understanding a phenomenon or the stories surrounding it would be inadequate without talking about it.

Kvale calls the interview a "construction site of knowledge" (Kvale, 1996, p. 2) and conversations have historically been the optimal way of seeking out knowledge. Etymologically the word conversation comes from Latin and means "wandering together with" (Kvale, 1996, p. 4) and it is through this co-creation process that I wanted to conduct my research.

From a philosophy point of view I approached interviewing from a postmodern perspective, in order to unveil the social constructions of reality, characterized by a "disbelief in universal systems of thought" (Kvale, 1996, p. 41). The postmodern perspective goes in line with the critical stance of the conceptual framework. They are based on the same foundation of scrutinizing truths and narratives of the world. By making clear my philosophical foundation for the interview I could better conceptualize and frame the findings and my approach (Kvale, 1996, p. 57).

The interviews conducted were semi-structured and can be found in Appendix 3. Every participant signed an interview consent form in order to ensure them of the confidentiality of the information and every session was introduced with me asking the group to keep the workshop a "safe place" for sharing.

5.3 Limitations and reflexivity

When evaluating a qualitative method, such as narrative inquiry, one has to refrain from turning to positivist reference sheets. Since it is an exploratory, qualitative process, dependent on the aim and objective of the research, it does not lend itself to be analyzed through conventional standards of

validity or replicability (Bryman, 2016). If a narrative inquiry can be deemed fruitful and of use, it depends on how well it has been carried out and what insights it offers the research aims (Leavy, 2009).

Methods with a narratological purpose "are always exploratory, conversational, tentative, and indeterminate" (Hart, 2002, p. 141) and narrative research aims to provide "a meaning rather than truth" (Ferneley & Sobreperez, 2009, p. 123). I recognize that the scope of my study is relatively small in order to draw general conclusions, therefore, my work should be thought of as opening up a space for discussing this issue further, with my research functioning as informative background.

I also realize that my research has a very individual approach, positioning the student in charge of owning the story through a (New Age) focus on self-empowerment and "moments of personal sharing" (Davis, 2002, p. 103). That is the aim and scope of this research, but I acknowledge that there is also a structural reality framing the development of the global story, even though it is not specifically touched upon in this research.

5.3.1 The researcher as a storyteller

In terms of reflexivity, I am aware that doing qualitative research renders me a very big part of the process and the final product (Finlay, 2002). As a narrative researcher I know that in every turn of my process, from choosing my framework, my methods, aim and most importantly; in analyzing my findings I am also writing a story myself (Fraser, 2004). My role in this thesis has therefore been one of both researcher and storyteller, two roles that could seem incompatible due to their diverging natures of leaning towards objectivity versus subjectivity, but I see it as Finlay does, that this is more an opportunity than an issue (Finlay, 2002). My interest and engagement in stories has been imperative for both aim, scope and execution as well as the final product.

Throughout the process, however, I have had to reflect of my own voice (Bell, 2003) to make sure it does not drown out the voices of the participants. Helpful in this process has been my thesis group, consisting of two peers who both partook in the workshops and who have been giving me continuous feedback on the process and the finished texts, as well as my supervisor who has given me constructive feedback on tone and data-representation. I have also kept a work journal to help me reflect on my decisions.

Chapter 6. Analysis

Traveler, there is no path. The path must be forged as you walk it - Antonio Machado

I approached the analysis of the data in an iterative[2] way. I was inspired and partly guided by grounded theory [3](Charmaz, 2014) and also drew upon portraiture (Lawrence-Lightfoot, 2005) as a way of summarizing my results. I will below briefly outline and explain my analysis methods.

During the workshop I took notes and I considered this the first step of data-processing, sketching a rough picture of the answers, noting down keywords and quotes in order to unveil the meaning of the interviews (Kvale, 1996). In grounded theory this would be considered 'the bones' of the material, which I then built into a skeleton with the use of relevant literature, my conceptual framework and the emergent themes that arouse from the data and the analysis (Charmaz, 2014).

In processing the material I stayed aware of some of the basic rules of grounded theory coding; to remain connected with the data and keeping an open mind (Charmaz, 2014). Charmaz proposes to code swiftly after the data has been collected, and therefore I allocated time after each workshop to work through the material. For some parts, such as identifying roles, I used line-by-line coding with gerunds (Charmaz, 2014), or in this case going through it rather statement by statement to highlight describing categories (e.g 'resisting', 'destroying') as exemplified in figure 1, page 21. Throughout the process I have used my work journal as a form of memo-writing to capture ideas, thoughts and emerging themes from the analysis (Charmaz, 2014).

In the summary of the research I applied the concept of portraiture to paint a picture of the sustainability student´s view on the climate change story. Portraiture is a merge between science and art and aims to capture the essence of the research (Lawrence-Lightfoot, 2005). Portraiture prescribes to being "probing, layered and interpretive" (Lawrence-Lightfoot, 2005, p. 5) and offers the possibility to draw a portrait of rich data, often the case with qualitative studies, in an attempt to paint a picture that encapsulates all the findings. Lawrence-Lightfoot (2015) stresses the importance of listening *for* the story, not only *to* the story and this is a tactic that guided me through the analysis.

---

[2] Described as an "interplay between interpretation and theorizing, on the one hand, and data collection, on the other" (Bryman, 2016, p. 372).

[3] A "method of discovery" (Charmaz, 2014, p. 8) which aims to "generate theory out of (qualitative) research data" (Bryman, 2016, p. 694) building upon emergent categories.

6.1 Analysis, part 1

The first round of analysis is a run-through of the material, using *authorship* as a sensitizing concept[4], trying to identify a sense of ownership of the climate story amongst the participants and discussing it as I go along. Here, I stay close to the data and present it in a way that follows the structure of the workshops (see Appendix C).

It is a journey that starts off with a dive into the concept of stories, the students´ understanding of them and their perceived linkages to the field of sustainability. I then present the outcomes of the Rising Strong process.

6.1.1 Definition of stories

"Story is a recitation of life" (participant)

Most of the participants claimed that they had a basic understanding of the concept of stories. They are said to have "*been around for ages*"[5] and used to describe, understand and convey meaning. One of the participants described stories as "*recitation of life*" while another one claimed that our way of life is based on a story which provides justification for our actions. Only one participant at this stage already talked about the environment in relation to stories, in the sense that they convey "*understanding about society, the environment and yourself*." There was also a sense of agreement that stories are very flexible and does not necessarily have to follow a structure.

6.1.2 The importance of stories

"Sharing life is also about sharing a story" (participant)

When talking about the importance of stories all of the participants seemed to agree that they are vital, as they communicate knowledge as well as morals and ethics and help us remember, interpret and make sense of information. One of the workshop groups stressed that stories are intended to serve a purpose and are told with intention. Stories are also perceived to be a vehicle for understanding each other, helping us to communicate and connect, but also reproducing reality and a form of communication that stimulates the imagination.

---

[4] Sensitizing concepts are ideas you venture into the research with which guide you through both data collection and analysis (Charmaz, 2014).

[5] Citations in italics are derived from participant statements.

6.1.3 Stories and sustainability

"Our society is based on a particular story" (participant)

When talking about stories and sustainability, the two common purposes established in the groups were i) communication and ii) explanation. While stories are essential for conveying information and creating compelling narratives about sustainability issues such as climate change, they can also explain why we have these problems to begin with. It is the "*story of nature being under our control*", one of the participants stated and several others followed suit talking about ideologies, the story of growth and detachment from nature. "*The story of progress is so closely linked to the challenge of sustainability*", one said.

Here we see multiple references that align with what Eisenstein (2013), Edwards (2015) and Kingston & Hine (2009) describe as the old alienated story, with the notion of progress and growth serving as the narrative foundation. The result of acknowledging that sustainability issues are a part of a bigger story leads to seeing how stories legitimizes behavior, as stated by one of the participants; "*we internalize the logics of these stories*". "*Our society is based on a particular story and it legitimizes practices*", another participant said who also envisioned, like the authors in the conceptual framework, a new story, saying that "*there are other stories we can learn from*" and pointed towards for example indigenous ways of being. Another participant concluded "*it´s not just a matter of story, but which story?*", opening up the floor for a re-narrating of the story.

Another important point was the notion that stories are used for simplifying things, for communication reasons. This shows that our way of thinking of appealing stories might be very linear and shies away from complexity.

6.1.4 The Reckoning

"What are our old, current and future stories?" (Edwards, 2015, p. 8)

Having set the stage with talking about stories on a more theoretical level, we then ventured into the Rising strong process. This hands-on-experience is initiated by the Reckoning, described by Brown as "the process of calculating where you are" (2015, p.46).

The introductory phrase "once upon" seemed to both confuse and inspire the participants. One of them explicitly said that it helped releasing the imagination, "*I ended up framing it differently than I thought*", while another one was more critical of the approach in the sense that "*you can´t boil it down to a fairytale*". Overall, the process of writing a story on climate change was not familiar to any

of the participants and provided a new way of approaching the issue, as one said: "*quite illuminating*".

I analyzed the participants´ stories in relation to the themes of the conceptual framework as described in chapter 3.2 in and outlined more in detail in Appendix A. I noted the occurrence of relevant and crucial 'old story' themes of the stories and sorted them into a table, see full table in appendix D.

Table 2. Occurrence of old story – themes as depicted in the participants´ stories. Source: author.

Old story themes	Occurrence
Technology/tech-driven/ technological arrogance	///////
Separation/alienation	//////
Progress/growth	//////
Ecological destruction/ pollution/ degradation of the biosphere/ exploitation	//////
Conquering nature/ mastery over nature/nature domination	////

Technology, separation, nature domination and ecological destruction turned out to be the dominating themes.

What struck me with the stories however, were that so many of them started with themes relating to the 'new story', depicting a time of harmony, inter-being and cooperation. But then mans greed, competitiveness and need for progress turned the world into a grim place. In most cases, the story on climate change therefore became the story of humanity, with a starting point long before man-made greenhouse gas emissions ever became a problem.

If I were to draw a portrait (Lawrence-Lightfoot, 2005) of all the stories, drawing on the dominant themes, you could say that the sustainability student´s story on climate change is one where technological arrogance and alienation from nature has formed a sense of superiority which has, through the tools of capitalism and endless material acquisition, led to ecological destruction. This aligns well within the conceptual framework and shows that the sustainability students view of climate change fits into the narrative of what is to be considered 'the old story' and the stories all conveyed a sense of looming collapse, an inevitable turn in the story, which in many cases ended with questions or cliffhanger statements like: *"It is up to us", "is it too late?" "but resistance will*

ultimately, maybe, hopefully, save our existence", *"she decided she needed to change"* and *"climate change was upon us and the world needs to wake up to the reality … otherwise climate change will destroy us all"*. As put in one of the participants own words *"everyone could feel a change was coming"*, pointing towards that the students see us being in the transition phase of stories (see section 3.2.2), where the bubble has burst and we find ourselves faced with an unsustainable narrative, looking for ways out. And just as the transition phase denotes, there seems to be a longing and desire for a new story.

The perception of the creative writing task amongst the participant was that it was difficult and challenging, but also fun. The difficulty stemmed from the problem of conveying the full and entire story on climate change as well as making it accessible and entertaining. *"We know too much",* one of the participants stated and pointed out that he "*felt the burden of the audience*", a burden that was shared by other participants who said they were thinking a lot about who would read the text. The ones who stressed the creative possibility it gave were in general more positive and did not have the objective of trying to write the story for anyone else. This allowed them to more freely access their story.

6.1.4.1 The role

"Maybe I am one of the ones recognizing the past" (participant)

When identifying the roles the participants see as theirs in the story of climate change some referred back to abovementioned stories and pointed towards actors within that story they saw themselves being or would like to be, while others referred to the more general story on climate change when reflecting on their own role. Of the participants, a majority identified themselves as having a positive role (as exemplified in figure 1) even though it was often put in vague terms. They expressed that they *hoped* to be a part of the change-making/resisting/awareness-spreading group or that they *would like* to see themselves as having that role, or at least *trying* to pursue that. This was the first hint towards the lack of confidence in identifying authorship of the story. Even though most participants did express having some positive agency in the story, it was not a very firm belief, but more one framed by doubt, hope and wishful thinking. Two participants saw themselves as having a negative role, not actively, but by just being a part of humanity or the privileged people creating havoc on earth. Interestingly enough, the expression of the negative roles took the form of more specific and confident statements such as "*I play a big role in this story of ruining Gaia*" than the ones expressing wish or desire to be a positive contributor. Two participants saw themselves not having a

role at all, but more being the storyteller, one of them stressing the *"neutral"* and objective part of the storytelling.

Figure 1. Example of line-by-line coding based on selective transcribing. Source: author.

The red highlights the type of role derived from the statements and the bracketed words gerunds pertaining to the role as explained by the participants.

6.1.4.2 Life story and climate change

"Something that has actively shaped my path on earth" (participant)

Almost all of the participants expressed that climate change has had a big influence in shaping their lives, both in terms of career and education choices as well as behavior. It is "*something I think about everyday*", one of the participants stated. Two reflected back to formative moments in school or at a younger age when it became clear that this was their calling or their task, "*It´s the job of your generation*", one of them said the issue of climate change was being portrayed in school. One participant shared a sense of disconnect with climate change in a more tangible way, saying that "*Climate change still seems like a story to me, not in real life*".

Two participants also highlighted the restricting impact of climate change in their lives, one talking specifically about not being able to see the coral reefs one day and the other seeing climate change as prohibiting her from reaching her fullest happiness potential.

6.1.5 The Rumble

Your vision will become clear only when you can look into your own heart.
Who looks outside dreams; who looks inside, awakes – C.C. Jung

The rumble is the second stage of the Rising Strong process (Brown, 2015b) and aims at identifying feelings connected to a situation and exploring them deeper as well as acknowledging that they are linked to how we think and act (Brown, 2015b). The recognition of emotions is an integral part of the ownership-process, seeing that it "is where wholeheartedness is cultivated and change begins" (2015, p.41).

The participants were asked to list their feelings connected to climate change and discuss them. The most frequently experienced emotion was anger followed by fear, frustration, a sense of being overwhelmed, hope and anxiety, as shown in Table 4.

Table 4. The most frequent emotions expressed by participants.

Emotions	Anger	Fear	Frustration	Overwhelmed	Hope	Anxiety
Account	////////	/////	/////	////	////	////

In order to see how these emotions relate to authorship I have taken example from Ganz public narrative (Ganz, 2008). It is a theory that explicitly links emotions and stories and examines emotions as a catalyst for change, here used in the sense of claiming ownership. The framework identifies action barriers and action catalysts (figure 2) which I used for categorizing the emotions to get an indicator of how they could potentially cultivate or restrict authorship.

Within Ganz´s (2008) framework we can find three emotions that many of the participants experienced. Two of them, anger and hope, both act as catalysts for change, while fear acts as a barrier. However, the sense of feeling frustrated and overwhelmed could also be interpreted as self-doubt, impacting negatively the feeling that you can
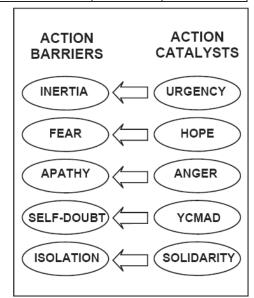

Figure 2. Action barriers and catalysts as used in public narrative. Source: (Ganz, 2008). YCMAD stands for ' You can make a difference'.

make a difference. Self-doubt re-occurred as a theme throughout the conversations, especially when talking about roles and explicit authorship. Seeing that anger was the main emotional driver, it shows positive tendencies towards authorship and being able to make a change, but the numerous accounts of fear, frustration and overwhelment hampers that positive action catalyst by muddling it with self-doubt and hopelessness.

However, not explicitly stated as an emotion, but re-occurring as a theme throughout the workshops was the notion of co-operation and collaboration, which could be interpreted as solidarity, and the new stories they had to write later in the process were mostly framed hopeful, indicating that there are more authorship-catalyzing emotions hiding underneath the surface, even though not specifically acknowledged.

6.1.5.1 Link to the story

"Sadness kind of got lost" (participant)

In this segment the participants had to see if their stories were framed by the emotions they listed. Most of them found their emotions reflected in the story, but not maybe as clearly as they had defined them for themselves. "*They are there, but not explicitly*" said one of the participants, while others identified some of the key personal emotions missing from their stories, "*Sadness is lacking, because I tried to make it objective*" said one. This points to an interesting finding that objectivity in stories sometimes comes at the expense of your own truth and that we conform our stories in the belief that it would make it more approachable. This technique however has its casualties, as the participant summed up: "*sadness kind of got lost*". One participant explicitly stated that the personal emotions were not reflected in the story; "*it´s the more negative side*".

6.1.5.2 Shame

Shame corrodes the very part of us that believes we are capable of change - Brené Brown

Almost all of the participants experienced feelings of guilt and shame to a certain extent related to climate change. A majority was linked to a general sense of guilt of belonging to a privileged group of people and growing up in a western society. *"I accepted happily all the privileges"*, one of the participants stated. Flying was brought up as driver of guilt and also the "*inherent historical guilt*". One of them expressed guilt affecting the choice of education; "*The moral guilt definitely influenced my life*".

According to Brown, shame robs you of your entitlement to the story (Brown, 2015b), and that is why I explicitly asked all the participants about their relation to shame and guilt once they completed the emotions part of the process.

6.1.5.3 Emotions and the sustainable revolution

"The rational debate" (participant)

The majority of the participants saw it important to address emotions, but there was also concern that they hamper action; "*The less you feel, the more you work*". The positive aspects of attending to emotions brought up was that they work as motivators, make people feel connected to the cause and drive our thinking and actions. They also were stated to reveal underlying notions of perception, as in "*facing your demons head on*". The negative aspects put forward of bringing too much emotions into the debate was that it might not sustain long-term change, change the structures or be constructive.

There was also discussion on whether or not the current debate on climate change even holds room for emotions, as "*the debate right now is a very rational one*" and there is a general belief that emotion equals weakness. This echoes concerns about the dichotomy of emotions and reason, seeing that the "the particular, the emotional (…) are seen as capricious and corrupting of rationality" and renders us "divorced from our actual living in the world (Herman, p. 165). If, as earlier stated, emotions work as the link between our thoughts and actions, then not being able to talk about them openly without being scorned as "irrational" would then hinder engagement on all levels with the story, including a sense of authorship.

6.1.6 Ownership of the story – is this your story?

"Kind of" (participant)

Here, the rift between the story on climate change and the participant's ownership of it deepened. As I asked them specifically if they felt the story they wrote on climate change was perceived to be 'their story' I was surprised at how many of the participants shrugged off the responsibility. The story on climate change and in some cases even the story they wrote was not deemed to be theirs. Here, again, the notion of the neutral storyteller came into play and the stories were said to be too objective ("*it is kind of a general history*") or too biased ("*it is my perspective*"/ "*it is very black and white*").

I am aware that the vast scope of climate change poses hindrances to a particular personal ownership of the story, but on a more abstract level at least three participants acknowledged the story as being similar to their own relation with climate change. "*Part of it is my journey*" one said and another one stated that part of that journey is to become "*aware, noticing the symptoms*" and the third said that it is a process of "*going from lack of knowledge to action*". One of the participants realized through the emotional reckoning, especially being surprised by the anger he felt, that the story he had written was not the story he wanted to portray, "*the story I see is very much the story on the fight and the struggle against the economic system that doesn't care*". The most thought provoking response however was when one of the participants said that "*It´s un-representational to write like a human who cares about the world*", indicating that he saw no way of engaging with the story on a personal level that does it justice or makes a difference.

6.1.7 The Revolution

"A miracle is the name we give to the light that shines through from a larger,

more radiant world" (Eisenstein, 2013, p. 238)

Seeing that most of the sustainability student's version of the story aligns with the conceptual framework on the old story, implying that our current narrative is coming to an end, there should be some imaginative space to re-write the ending.

Imagination is more important than knowledge – Albert Einstein

The imaginative, desired endings, or the 'revolution' that Brown (2015b) refers to, were also thematized according to the conceptual framework, but now cross-checked with the 'new story'-themes. In the revolution stories, cooperation/co-creation was the biggest theme, followed by harmony and new ways of thinking. All the stories ended on a positive note, with humanity still intact, more or less, but usually existing in a simpler and happier form. The common thread here is that people come together, either with each other or with nature and other animals and think of new ways of living and ultimately joining back into alignment with each other.

Table 5. Occurrence of new story – themes as depicted in the participants´ stories. Source: author.

New story theme	Interbeing/ alignment	New way of thinking / re-drawing the maps	Co-creating /cooperating	Truth / consciousness	Harmony / balance
Occurence	////	/////	///////	/	/////

6.1.7.1 Is it realistic?

When the participants were asked if they believed their endings to be realistic, the rift in authorship enlarged. No one believed in the imaginative ending to their own stories. Most of them bluntly stated that their endings were utopias and when thinking realistically they would not come true. "*Let´s be honest*", one of the participants stated. The ones who were more positive about their envisioned endings however said that there was a possibility, but they were very cautious and put a lot of emphasis on "*hoping*".

If I were to draw a parallel to the practice of visioning and put this in sustainability science terms, the scenarios would not be deemed either *possible* or *realizable*, but merely *desirable,* rendering them quite weak. (Mahmoud, p.801)

6.1.7.2 The role, part 2

"Being a part of the fight" (participant)

Interestingly enough, the roles in the envisioned ending weren't the same as the roles they perceived to have now. There were a few overlaps, but mostly there were more visionary and less concrete answers in how they thought their roles in the future might unravel, such as "*lead by inspiration*, "*being the change*" or "*being a part of the fight*". They were mostly positive, but one of them bluntly stated however, that it was not his story to have a role in. Others identified more active contributions such as being a caretaker or a consultant.

6.1.8 Maybe Co - Authorship

When confronted with the explicit question of authorship of the real climate story, it became clear that none of the participants felt a concrete sense of ownership. Almost everyone described their entitlement as one of 'c*o-authorship*', but also this was stated with a sense of careful doubt. "*Maybe* everyone has bits and pieces of it?" and "co-authorship, *maybe*?" (emphasis added). A few were very hesitant about claiming any power to the communal pen and one even stated "*The climate change story? My name is not going to be anywhere near that"* and another said "*it isn´t my story*".

6.2 Analysis, part 2

I will here return to my research questions and use these as a lens to look at the findings to sift out emerging themes from my material as well as summarize. I organized them as sub-headings under

each research question. Here I will also address relevant literature to back up and discuss the findings further.

6.2.1 RQ1: How do sustainability students relate to the story on climate change?

In many cases the participant's story on climate change went back to the origins of humanity and was therefore depicted as the epitome of the old story. The story on climate change therefore serves to illuminate the flawed old story. It is like the participants view climate change as a short story based on the novel of humanity.

The *Reckoning* showed that there is a need for a new story and the stories indicate that the students perceive themselves as being in the transition phase. They all reflected an unwanted, crisis state of being that ended with cliffhangers, serving up big questions to be answered and giving way for the notion of a new story to take place. This is important, since a need for a new story and the identification of the old story´s shortcomings precedes any new narrative and indicates a strong predicament for a new story to be born.

On a personal level there is a rift between the story and the sustainability students' own perceived role in it, a crucial factor for authorship. Even though many of the participants saw their life paths paved by the looming threat of climate change, deciding not just behavior and consumption but also career and education choices, they seemed reluctant to acknowledge their own part in the story. Two of the participant stated they saw themselves more as storytellers than actors and one of them said that if she were to play a role in the story she wrote, she would be cast as one of the "*bad guys*", due to her privileged status as a Westerner. Some of the participants also explicitly stated that the story they wrote was not "*their story*".

The participants who did see a connection to the story they wrote and answered yes to the question of "Is this your story", saw it in an abstract way. They expressed that the story on climate change and humanity´s response to it reflected their own journey from lack of awareness to an expanding knowledge about the issue.

The revolutionary endings written by the sustainability students aligned with the themes identified in the conceptual framework on what constitutes the new story, with an emphasis on cooperation, followed by harmony and new ways of thinking and inter being. However, the imagined endings were portrayed as utopias and the students did not have a clear vision of what their role in the unfolding of the story of climate change would be.

6.2.2 RQ2: Can they claim authorship of the story and re-write the ending?

None of the sustainability students wanted to claim authorship of the story and did not see how they would be able to re-write the ending in real life. If they acknowledged any authorship it was in a vague sense of co-authorship. This however correlates with what most of them recognized as the main theme of the new story; cooperation between men, but also cooperation between man and nature. This hints towards that it might not be an individual task, but rather a collective effort, to re-write the end to climate change, both in terms of action and entitlement.

6.2.3 RQ3: What are catalysts/barriers for authorship?

Through the second round of analysis I was able to identify eight key elements for authorship that emerged both implicitly and explicitly throughout the writing process and the interviews. I will first outline the main catalysts for authorship; *creativity, emotional sensitivity, curiosity and group setting,* and then discuss the hindrances; *limitations of objectivity, lack of confidence, complexity* and *shame.*

6.2.3.1 Creativity

The participants seemed to enjoy the creative writing process and the ones who allowed themselves the freedom of creativity also felt less restricted in their writing and found it easier to develop a story, hence developing a sense of authorship. Hulme stresses that there is "creative potential" (Hulme, 2009, p. 33) to be found in the climate crisis, a potential that was revealed in the workshop.

Creativity is closely linked to imagination and can help spur a new vision of ourselves and the world (Edwards, 2015, p. 65) as well as allow us to look at things from new perspectives. In this case it allowed the participants to step out of the objective scientist's role, the one who "*knows too much*", as one of the participants stated and take a more creative and subjective stance. Our rational thinking and logical approaches have served us well in addressing problems and advancing society this far, but as Edwards (2015) points out, our facts –based reasoning doesn´t always apply well to dealing with complex and overwhelming issues. Here we see the importance of creativity and imagination in creating a new vision for a new world.

The creative process became a bigger portion of the research than I thought, which actually is what Kingston and Hine (2009) argue is the pathway forward out of this crisis and into building new narratives. The free-writing task evolved past being a tool in the process of reckoning, to being a finding in itself, simply a new way for us to engage with climate change.

6.2.3.2 Emotional sensitivity

The emotions identified in the process provided both negative and positive pre-requisites to the ownership of the story but the portrayal of emotions in the stories were not very explicit and in some of the more 'objective' renderings of the phenomenon, the emotions were lost completely. The interviews on the topic revealed that:

i) Emotions are not seen as allowed in the scientific debate around climate change and are deemed illogical to a certain extent.
ii) There is a paradoxical attitude to talking about emotions, where they are seen as important but also to a degree action-hampering.
iii) Negative emotions are being pushed aside.

For some of the participants however, rumbling with the emotions made it easier to realize what their story was and what it wasn't.

The literature points to the crucial nature of emotions as functioning as either catalysts or barriers for change and action, enabling or disabling a sense of authorship. They are a way of connecting to our "actual living in the world" (Herman, 2015, p. 165) and serve as a translator and interpreter of events and situations and functions as drivers for action (Norgaard, 2011). Emotional vulnerability is, however, an aspect of the climate change discussion that tends to be overlooked (Milman, 2015) and this was quite evident during the discussions and also highlighted by the general 'uncomfortability' that the rumble entailed for the participants.

Hulme states that uncovering emotions linked to climate change can be used to "reveal the creative psychological, spiritual and ethical work that climate change can do and is doing for us" (Hulme, 2009, p. xxxvii) and Hoffman states that "to confront the emotionality of the issues and then address the deeper ideological values" is "key to engaging people in a consensus-driven debate about climate change" (2012, p. 35) and consequently crucial for imagining a new narrative for a new world.

6.2.3.3 Curiosity

An integral part of *Rumbling* is getting curious about your emotions. Curiosity paves the road for new innovations, underpins creativity and is linked to problem solving and creativity (Leslie, 2014), therefore essential for re-imagining a new story. Not only did the participants have to get curious about their emotions, but their participation in the study also prerequisited a sense of curiosity of the topic itself. This proves how important it is to allow space and opportunity for curiosity to thrive and let it lead us to a new future. I believe we cannot write new stories for a new world if don´t get curious about the existing ones and what could come next.

6.2.3.4 Group setting

The group setting proved conducive to the process in three ways, i) by providing a safe space for the participants to share and reflect, ii) by acknowledging the social function of storytelling and allowing people to build a "communicative relationship" with each other (Davis, 2002) and iii) by establishing a sense of comradery, realizing that there are other people with similar thoughts and ideas with whom we can "rope ourselves together for safety" with (Kingsnorth, 2009, p. 29). The positive outcome of the group setting mirrors the emergence of co-creation and co-operation as both the key theme for the new story as well as for the perceived sense of authorship. There is strength to be found in the collective.

And now we continue on to the key elements identified in restricting authorship to the story.

6.2.3.5 Limitations of objectivity

Maintaining a forced sense of objectivity and neutrality hinders connection and entitlement to the story. This was shown in the creative writing task where the participants were struggling with making the story as representative as they could and in the process losing their own twist on it. But it also emerged as a hindrance when we started looking at the emotions-part, seeing that "emotions are believed to be actively destructive to objectivity" (Monson, 2015, p. 29). The ones who were trying to make the story objective and neutral found it more difficult to see their own emotions framing the story, therefore losing a personal connection to it. If we flip the coin however, we can acknowledge that engaging with emotions might be a way of tackling this crippling objectivity.

6.2.3.6 Lack of confidence

When talking about the roles, authorship and faith in the revolutionary endings, there was a resonating lack of confidence, especially pertaining to the individuals´ agency and capacity to make a difference, exemplified in vague roles and the general feeling of hopelessness described by the participants. This is a real hindrance to both authorship and action, seeing that "personal myths (…) often stunt the ways we can create meaningful change" (Edwards, 2015, p. 3) and that self-doubt is a key hinderance for action (Ganz, 2008).

6.2.3.7 Complexity

The complex nature of climate change hampered the creative storytelling, as some of the participants struggled finding the story, because "*we know too much*". There was also an understanding that stories are used to simplify things, for communication reasons.

This shows that our way of thinking of stories might be very linear and shies away from complexity, making it hard to render complex issues into a personal story. Complexity therefore hampered authorship in two ways, i) by overwhelming the participants and making it hard for them to find a story (as exemplified by the emotional rumble where 'overwhelmed' was a frequently experienced feeling), and ii) by being counterintuitive to what was perceived as the definition of story (as a vehicle for simplified communication).

Complexity is a characteristic that defines many sustainability problems, such as climate change. Recognizing and attending to complexity is crucial for dealing with sustainability issues, but it can also paradoxically generate more complexity, as Tainter and Taylor state: "All that is needed for the growth of complexity is a problem that requires it" (Tainter & Taylor, 2014, p. 169). They further argue that "increased complexity carries a metabolic cost" (Tainter & Taylor, 2014, p. 169) and in terms of stories it seems to come at the expense of creativity, imagination and ultimately authorship.

Storytelling has however been put forth as an approach that renders complicated matters into graspable narrations (Baskin, 2005) and used properly could therefore be a tool that actually unravels complexity, that is if the storytellers can tackle the overwhelming feeling connected to climate change and re-assessing their previously held assumptions of how a story ought to look like.

6.2.3.8 Shame

Shame and guilt were feelings recognized by all the participants. Shame is deemed as a story stealer by the literature and guilt is an identity-related emotion considered difficult to address openly due to restricting cultural norms (Norgaard, 2011). Shame has been said to undermine vulnerability, and therefore makes it harder for us to engage emotionally with difficult subjects, such as climate change (Orange, 2017). Closely tied to the point on vulnerability, shame is also acknowledged as derived from a fear of being fully seen by others as well as having a paralyzing feature. In order to claim authorship, we need to step up with all of ourselves and engage in the story, without letting shame and guilt leave us speechless.

6.2.4 RQ4: Can the process of Rising Strong help in claiming authorship of the story?

The Rising Strong framework was the core of the research method and with the additions and provided a platform for engaging with the story on climate change in a new and multidimensional way.

I believe the Rising Strong approach to building new stories for climate change can work similarly as the use of storytelling is being used in psychoanalysis. By looking more closely at the personal stories while acknowledging emotions, we can scrutinize the stories, turn them on their heads and ultimately "transform these narrations into alternative narratives that are more adaptive, more coherent and functional" (Mitchell & Egudo, 2003, p.3).

I hope and wish that the workshops did have an effect on the participants' climate saga acknowledging that "a single story won't change the world. But the practice of storytelling might alter its course by a millimeter" (VanDeCarr, 2015, p. 3).

Chapter 7. Discussion and conclusion

The rise and fall of the storyteller´s voice expresses the heartbeat of the Earth Mother, Gaia.

- Michael Checkhov

Edwards states that "as the old story fades and the new emerges, we have two important tasks: story-making and storytelling" (Edwards, 2015, p. 22). We find ourselves at a turning point in time, at an eclipse of the global story, leaving yet another record-breaking warm year behind us and witnessing a world falling into ecological havoc. We have to turn the page and write a new story for a new world.

But why are we not seeing these new chapters being written as fast as they should? Psychoanalyst and philosopher Donna Orange enquires in her book "Climate crisis, psychoanalysis and radical ethics" (Orange, 2017) into why we are disregarding the catastrophical developments around us and keep going about our days as if nothing is happening. Is it because we can´t take in all the negative news? Are we environmentally depressed and have given up? Or are we just narcissists? These are some key questions pertaining to the climate debate, alongside the decade long discussion on information-deficits, skepticism and an exaggerated belief in technology and science to save us.

This may be all true and affecting our capability to address the issue at hand in different ways. But seeing that I view the ecological crisis and climate change as a problem of story, I argue, based on this research, that one of the core underlying problems on the personal level is the perceived lack of authorship, or agency. This might well tie into all the other areas of concerns, but highlights the importance of feeling the weight of the pen in your hand, getting curious and creative, and grasping the stories you are surrounded with as well as feeling connected to them. A good storyteller is knowledgeable, yet not objective in the sense that she allows herself to be invested and in touch with the story, feeling it and being in it as it unfolds before her.

Brown talks about the importance of leaning into the moments at hand, 'daring greatly' and being vulnerable (Brown, 2015a). Claiming authorship of a crisis like climate change is both a vulnerable and courageous act, because it entails acknowledging difficult emotions, such as shame and hopelessness, while also stepping up to the role one wishes to have in the utopian vision of a better world. Authorship could therefore be considered a way of actively living in the story as well as trying to narrate it towards brighter trajectories. It is a big task and a daunting one.

Taking authorship is however not to be confused with the superior 'master over nature' entitlement that led us to this crisis to begin with, it´s more of taking a stewards role, gently ushering the story

along with a confident narrators voice. It also forces us to look at the bigger picture, in order to combat said separation of self and nature, seeing how all of our stories are interlinked. I believe that engaging with the story in a creative and emotionally respectful way gives us paradoxically both the distance and the intimacy with climate change needed for transformational change.

But who should write that story? Of course there are multiple stakeholders that could be addressed when talking about climate change and sustainable development. In this thesis I positioned sustainability students as my envisioned storytellers for a new sustainable world because they are in the starting point of careers focused on addressing these issues and presumably live to a certain degree environmentally aware lives. They are therefore the epitome of who should be called upon to be an author, being both professionally and personally meshed into the stories.

I was initially concerned with the lack of authorship portrayed by the sustainability students who devote so much time, energy and passion to the field of climate change. However something more important, and interesting, emerged. Something that was a bit counterintuitive to my initial research aim, which had a very individual focus. One of the most crucial findings was the re-occurring theme of cooperation and collaboration. Both in the way the participants saw the happy endings play out as well as the theme being reflected in the discussions on authorship of the story.

I set out to empower individuals about claiming the right to the climate story, but it seems like there is a strong belief, want and need to pursue this in a group, together. Like one of the participants said "*We all hold one big pen*". Here I am bound to agree with Herman that "If the Anthropocene tells us anything, it is that the Age of the Individual is over" (2015, p. 174) and I view this finding to be the most heartwarming and inspiring take away from this research. Finding new pathways forward is not a one man (or womans) job and in envisioning a more sustainable future, "we need to turn to one another as our best hope for inventing and discovering the worlds we are seeking." (Wheatley, 2007). And in doing this we need to also share our stories with each other.

This finding aligns well with the themes of the new story as framed by the sustainability philosophers I took departure from. They claim that the transition is both an individual journey and a group effort. We must all work on our own awareness and realizations, but we need teammates to "hold each other in new beliefs" (Eisenstein, 2013, p. 31) and "rope ourselves together for safety" (Kingston and Hine, 2008, p. 29).

In order to empower sustainability students to claim authorship of the climate story, create their revolutionary endings and embark on the new chapters of a more sustainable story for the world it therefore seems like there should be an emphasis on the collective story-making, the collaborative

narration. By facilitating group discussions, framed by curiosity, creativity and recognition and acceptance of emotion while putting an emphasis on the joint effort of writing this new story, I believe we could see future climate storytellers emerge; confident, daring and hopeful.

> *"The end of the world as we know it is not the end of the world full stop. Together we will find the hope, the paths which lead to the unknown world ahead of us"* (Kingston & Hine, 2008, p. 35)

Chapter 8. Illuminating the way forward

" The sustainability story is in so many ways a story of the future, our capacity as storytellers is inextricably connected to our ability to use our imaginations" (Leinaweaver, 2015, p. 32)

I view my research on a theoretical level contributing to sustainability science in two ways. Firstly by acknowledging and furthering the debate on the importance of narrative and storytelling for sustainability; shedding light on alternative ways of engaging with and talking about sustainability that strays away from a purely facts-oriented and science-dominated discourse. Seeing that this particular field of science is in constant need of new visions (Wiek & Iwaniec, 2014), I think stories serve as an interesting research lens.

Secondly, I see my thesis adding to what many scholars have referred to as the fourth dimension of sustainability (Soini & Birkeland, 2014), the *pillar of spirituality* (Burford et al., 2013) or the *cultural pillar* (Soini & Birkeland, 2014), "variously described as a cultural-aesthetic, political-institutional**,** or religious-spiritual dimension" (Burford et al., 2013, p. 3036). This dimension of sustainability is by Burford et al. (2013) claimed to be the foundational and supporting element of the sustainability structure "rooted in the concept of an awakening global ethical and spiritual consciousness that underpins sustainability transitions" (Burford et al., 2013, p. 3037). I see this pillar, with its aim of advocating an awakening consciousness, being underpinned by a sense of authorship and ownership on behalf of the agent of change. I therefore see that my thesis adds to the increasing recognition of these issues when discussing and furthering both the sustainability discourse and sustainability science.

I however view my biggest substantial contribution to sustainability science to be the introduction of an arguably new sustainability term and concept, the notion of authorship, and the development of a methodology and an interactive process that aims to cultivate or at least address this authorship. Palamos argues that in order to meet the current ecological challenges, there needs to be "a call for research … to help shift the deeply imbedded reductionist, exploitive paradigm to an open acknowledgement of collective grief, inseparable interdependence, and open-mindedness toward change that aligns with sustainability" and proposes new methodologies and approaches for tackling these issues (2016, p.91). This process tackled all of these criteria's as it sought be emotionally probing while also reflecting on stories that might bring about 'interbeing' and imagining creative new endings for the current crisis.

Seeing that sustainability science needs to continuously evolve (Swart et al., 2004) I think my research, fits within this ever expanding and innovative field of studies. Sustainability research is to an extent considered to be '"trapped' in the safe space of descriptive– analytical knowledge production" and I view my research to be ushering the practice along "from complex systems thinking to transformational change" (Wiek et al., 2012, p. 7).

The territory of stories and emotions linked to sustainability has been traversed by both researchers and science communicators already, but it is a vast landscape that needs to be further explored and mapped out. Within this terrain I believe the concept of authorship would be of interest and importance to further develop, refine and define.

Epilogue

''Tell me the facts and I will understand. Show me the data and I will believe you.

But tell me a story, and it will live in my heart.'' – (Herman, 2015, p. 173)

In writing this thesis, I have myself been a storyteller. A storyteller with a dream of providing a space for new stories, allowing for a new world to be created. That space has been this thesis and for that I am humbled and grateful. To honor my dedication to stories and the belief that storytelling and narratives will see us through in creating the "more beautiful world our heart knows is possible", I will serve up a final summary as I started this journey. With a story.

Once upon a time there was a mankind who created a life through the written and, later on, the spoken word. But the story they were narrating was an increasingly unsustainable one and chapter by chapter it got more frightening and gloomy. How would the story end? And who was in charge of writing that ending? As the chapter of climate change hit the typewriter it inked the pages with words in bold. Technology, separation, nature domination and ecological destruction. Words highlighting the unsustainable stories of our world, painting them bright and daunting. There was a trembling that went through the storytelling community. There was a need for a new narrative. But someone needed to pick up the pen.

In a faraway kingdom, called Lund, there were a group of young academics, gathered from near and far to read and learn about the new world. They were very wise for their years and curious about stories. They could see how the world was shaped both through and by telling tales, but they had not yet fully immersed themselves in the stories they were so intensely studying. They had not yet claimed authorship. But so one day they crossed paths with a whimsical scientist who invited them into her lair in hopes and attempt of helping them uncover the secrets of stories.

They were presented with a story they were more than familiar with, a story which they had not only studied for years, but also a story that had shaped their lives. They sat down and reflected on the bolded words framing the climate saga. As they traced the letters with their fingers, they realized: they knew this story. It was a product of the bigger story wreaking havoc on earth and amongst their tribes scattered across the globe. And they equally instinctively knew: it was time for a new story. But in order to embark on a new narrative for the world, they had to claim authorship.

In order to do that, they were sent out on a journey to collect bottles of creativity, curiosity and a mirror that only reflected true emotions and feelings. This was all done together, as the young storytellers realized they needed each other as they ventured out in the dark woods of complexity.

They knew their task was important, so they mustered up the courage to defy the story-stealing demons of shame, objectivity and self-doubt that veered their ugly heads through the branches in the misty woods and they returned triumphantly to the lair of possibilities. They sat down, took a sip from the precious bottles, passed the mirror from hand to hand and together they reached for the pen and dipped its tip in the black ink. And so they started writing. A new story for the new world their hearts desired.

"Keyboards should be tapped by those with soil under their fingernails
and wilderness in their heads" – (Kingsnorth & Hine, 2008, p. 26)

And *(almost)* throughout it all she was kind to herself, stayed curious and had fun.

References

Authorship [Def. 4]. (n.d.). Merriam-Webster Online. In Merriam-Webster. Retrieved April 10, 2017, from http://www.merriam-webster.com/dictionary/authorship

Baskin, K. (2005). Complexity, stories and knowing. *Emergence: Complexity & Organization, 7*(2), 32-40.

Bell, A. (2003). A Narrative Approach to Research. *Canadian Journal of Environmental Education, 8*(1), 95-110.

Berry, T. (1988). *The dream of the earth*: San Francisco : Sierra Club Books, cop. 1988.

Brown, B. (2015a). *Mod att vara sårbar : i dina relationer, i ditt föräldraskap, i ditt arbete*: Örebro : Libris, 2015 (Falun : Scandbook). [Ny utg.].

Brown, B. (2015b). *Rising Strong. The Reckon. The Rumble. The Revolution.* United States. Spiegel & Grau.

Bruner, J. S. (1990). *Acts of meaning*: Cambridge, Mass. : Harvard Univ. Press, 1990.

Bryman, A. (2016). *Social research methods*: Oxford : Oxford University Press, 2016. Fifth edition.

Burford, G., Hoover, E., Velasco, I., Janousˇkova´, S., Jimenez, A., Piggot, G., . . . Harder, M. K. (2013). Bringing the "missing pillar" into sustainable development goals: Towards intersubjective values-based indicators. *Sustainability, 5*(7), 3035-3059. doi:.DOI: 10.3390/su5073035.

Charmaz, K. (2014). *Constructing grounded theory*: Thousand Oaks, CA : Sage Publications, cop. 2014. 2nd edition.

Clandinin, D. J. (2013). *Engaging in narrative inquiry*: Walnut Creek, California : Left Coast Press, Inc., 2013.

Davis, J. E. (2002). *Stories of change : narrative and social movements*: Albany : State University of New York Press, 2002.

Dryzek, J. S. (2013). *The politics of the Earth : environmental discourses*: Oxford : Oxford University Press, cop. 2013. 3. ed.

Edwards, A. R. (2015). *The heart of sustainability*. Canada. New Society Publishers.

Eisenstein, C. (2013). *The more beautiful world our hearts know is possible*: Berkeley : North Atlantic Books, 2013.

Ferneley, E., & Sobreperez, P. (2009). An investigation into extracting and analysing stories. *International Journal of Organizational Analysis*(2), 121. doi:10.1108/19348830910948968

Finlay, L. (2002). Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. *Qualitative Research, 2*(2), 209-230.

Frank, A. (2017). What is the story with sustainability? A narrative analysis of diverse and contested understandings. *Journal of Environmental Studies & Sciences, 7*(2), 310.

Fraser, H. (2004). Doing Narrative Research. *Qualitative Social Work, 3*(2), 179-201. doi:10.1177/1473325004043383

Ganz, M. (2008). What is public narrative? Retrieved February 2, 2017 from
http://chutzpahportfolio.yolasite.com/resources/WhatIsPublicNarrative08.pdf

Goldberg, N. (2005). *Writing down the bones : freeing the writer within*: Boston : Shambhala, 2005.
2nd ed.

Gottschall, J. (2012). *The storytelling animal*. New York: Houghton Mifflin Harcourt Publishing
Company.

Gray, J. (2009). Walking on lava. *New Statesman, 138*(4966), 42-43.

Grundmann, R. (2016). Climate change as a wicked social problem. *Nature Geoscience, 9*(8), 562-563.
doi:10.1038/ngeo2780

Hart, P. (2002). Narrative, Knowing, and Emerging Methodologies in Environmental Education
Research: Issues of Quality. *Canadian Journal of Environmental Education, 7*(2), 140-165.

Herman, R. D. K. (2015). Traditional knowledge in a time of crisis: climate change, culture and
communication. *Sustainability Science*, 14p. doi:10.1007/s11625-015-0305-9

Hoffman, A. J. (2012). Climate Science as Culture War. *Stanford Social Innovation Review, 10*(4), 30-
37.

Howard, E. (2015). The biggest story in the world: inside the Guardian's climate change campaign.
The Guardian. Retrieved March 20, 2017 from
https://www.theguardian.com/environment/keep-it-in-the-ground-blog/2015/mar/20/the-
biggest-story-in-the-world-inside-the-guardians-climate-change-campaign

Hulme, M. (2009). *Why we disagree about climate change : understanding controversy, inaction and
opportunity*: Cambridge ; New York : Cambridge University Press, 2009.

Jiazhe, S., & Kaizhong, Y. (2016). The Wicked Problem of Climate Change: A New Approach Based on
Social Mess and Fragmentation. *Sustainability, Vol 8, Iss 12, p 1312 (2016)*(12), 1312.
doi:10.3390/su8121312

Joyce, M. (2008). *An exploration of narrative as a research method*. Retrieved Access Date from
http://eprints.lincoln.ac.uk/1760/. University of Lincoln

Kingsnorth, P. H., Dougald. (2009). *Uncivilisation, The Dark Mountain Manifesto*: The Dark Mountain
Project.

Kvale, S. (1996). *Interviews : an introduction to qualitative research interviewing*: Thousand Oaks :
SAGE, cop. 1996.

Lang, D., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., . . . Thomas, C. (2012).
Transdisciplinary research in sustainability science: practice, principles, and challenges.
Sustainability Science, 7, 25.

Lawrence-Lightfoot, S. (2005). Reflections on portraiture: A dialogue between art and science.
Qualitative Inquiry, 11(1), 3-15. doi:10.1177/1077800404270955

Leavy, P. (2009). *Method meets art : arts-based research practice*: New York : Guilford Press, cop.
2009.

Leinaweaver, J. (2015). *Storytelling for Sustainability: Deepening the Case for Change. [Elektronisk resurs]*: DoSustainability 2015.

Lejano, R. P., Tavares-Reager, J., & Berkes, F. (2013). Climate and narrative: Environmental knowledge in everyday life. *Environmental Science and Policy, 31*, 61-70. doi:10.1016/j.envsci.2013.02.009

Leslie, I. (2014). *Curious: The Desire to Know and Why Your Future Depends on It*. London: Quercus Edition, ltd.

Lockhart, H. (2011). *Spirituality and nature in the transformation to a more sustainable world : perspectives of South African change agents.* (Master Thesis), University of Stellenbosch. Retrieved from http://scholar.sun.ac.za/bitstream/handle/10019.1/18075/lockhart_spirituality_2011.pdf?sequence=1 Available from EBSCOhost edsndl database.

McCauley, L. (2017). Planet Breaches 410 ppm for First Time in Human History. *EcoWatch*. Retrieved Access Date from http://www.ecowatch.com/410-ppm-climate-change-2376628163.html?utm_campaign=RebelMouse&utm_medium=social&utm_source=facebook&utm_content=EcoWatch

Milman, O. (2015). Naomi Klein on climate change: 'I thought it best to write about my own raw terror'. Retrieved Access Date from https://www.theguardian.com/books/2015/aug/27/naomi-klein-on-climate-change-i-thought-it-best-to-write-about-my-own-raw-terror

Narrative [Def. 2]. (n.d.). Merriam-Webster Online. In Merriam-Webster. Retrieved February 5, 2017, from http://www.merriam-webster.com/dictionary/authorshipNorgaard, K. M. (2011). *Living in Denial; climate change, emotions and everyday life*. U.S . Toppan Best-set Premiedia Limited.

Orange, D. M. (2017). *Climate crisis, psychoanalysis, and radical ethics*: Abingdon, Oxon ; New York, NY : Routledge, 2017.

Pennebaker, J. W. (1990). Expressive writing: words that heal. New York: The Guilford Press.

Pennebaker, J. W. (1997). *Opening up : the healing power of expressing emotions*: New York : Guildford Press, 1997. Rev. ed.

Plumwood, V. (2002). *Environmental culture : the ecological crisis of reason*: London : Routledge, 2002.

Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*: Albany : State University of New York Press, cop. 1988.

Rooney, T., Lawlor, K., & Rohan, E. (2016). Telling Tales: Storytelling as a Methodological Approach in Research. *Electronic Journal of Business Research Methods, 14*(2), 147-156.

Sahinidou, I. (2016). The Roots of the Ecological Crisis and the Way Out:1 Creation Out of 'no thing' God Being 'no thing'. *Feminist Theology: The Journal of the Britain & Ireland School of Feminist Theology, 24*(3), 291-298. doi:10.1177/0966735015627971

Soini, K., & Birkeland, I. (2014). Exploring the scientific discourse on cultural sustainability. *Geoforum, 51*, 213-223. doi:10.1016/j.geoforum.2013.12.001

Steffen, W., Rockström, J., Cornell, S. E., Fetzer, I., Biggs, R., Folke, C., . . . Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science, 347*(6223). doi:10.1126/science.1259855

Story [Def. 1]. (n.d.). *Merriam-Webster Online.* In Merriam-Webster. Retrieved February 5, 2017, from http://www.merriam-webster.com/dictionary/story

Stenmark, L. L. (2015). Storytelling and wicked problems myths of the absolut and climate change. *Zygon: Journal of Religion & Science, 50*(4), 922.

Swart, R. J., Raskin, P., & Robinson, J. (2004). The problem of the future: sustainability science and scenario analysis. *Global Environmental Change, 14*, 137-146. doi:10.1016/j.gloenvcha.2003.10.002

Tainter, J. A., & Taylor, T. G. (2014). Complexity, problem-solving, sustainability and resilience. *Building Research & Information, 42*(2), 168-181. doi:10.1080/09613218.2014.850599

Time [Def. 3]. (n.d.). *Merriam-Webster Online.* In Merriam-Webster. Retrieved February 15, 2017, from http://www.merriam-webster.com/dictionary/time

Wamsler, C., Brossman, J., Hendersson, H., Kristjansdottir, R., McDonald, C., & Scarampi, P. (2017). Mindfulness in sustainability science, practice and teaching. *Sustainability Science*. doi:10.1007/s11625-017-0428-2

VanDeCarr, P. (2015). Storytelling and Social Change. A guide for activists, organizations and social entrepreneurs. Second Edition. Retrieved May 2, 2017 from http://workingnarratives.org/story-guide/

Wheatley, M. (2007). Journeying to a new world. Retrieved May 9, 2017 from http://berkana.org/wp-content/uploads/2012/03/JourneyingtoaNewWorld.pdf

Wiek, A., & Iwaniec, D. (2014). Quality criteria for visions and visioning in sustainability science. *Sustainability Science, 9*(4), 497.

Wiek, A., Ness, B., Schweizer-Ries, P., Brand, F. S., & Farioli, F. (2012). From complex systems analysis to transformational change: a comparative appraisal of sustainability science projects. *Sustainability Science, 7*(1), 5-24. doi:10.1007/s11625-011-0148-y

Yosef, J. (2009). Building a Conceptual Framework: Philosophy, Definitions, and Procedure. *International Journal of Qualitative Methods, Vol 8, Iss 4, Pp 49-62 (2009)*(4), 49. doi:10.1177/160940690900800406

Appendices

Appendix A. The global story in themes

Elaborated thematization of the global story, based on Edwards (2015), Eisenstein (2013) and Kingston & Hine (2009). These tables are more detailed than the one presented alongside the conceptual framework. This is done in order to address more specific themes that emerged. The green themes highlighted are shared by all three pieces of literature and the ones indicated with yellow is shared by two.

The old	Transition	The New
Science	Questioning/Understanding/ new perspectives	Interbeing/ alignment /harmony / balance
Technology/tech-driven/ technological arrogance	Creativitity	New way of thinking / re-drawing the maps
Conquering nature/ mastery over nature/nature domination	Action?	Abundance
"Bubble"		Co-creating /cooperating
Separation/alienation		Truth / consciousness
Progress/growth		
"Everything is fine" / stories on indestructability		
Ecological destruction/ pollution/ devastation/ degradation of the biosphere/ age of ecocide/ exploitation		
Despair/ fear		
Denial (of our oneness)		
Consumerism/ over-consumption / consumer democracy		
Passiveness/ complacency		
Capitalism / endless material aqcuisition		
Struggle/crisis/tremendous upheaval		

Hate, evil /underlying darkness	55	
Scarcity		
Limits		

Appendix B. Participant information

I conducted the workshops with participants representing four different Masters program within Lund university, LUMES, Human Ecology, DRMCCA, EMP. Below is a brief description of the programs. The information is from respective faculty´s website, compiled and condensed by author.

LUMES (8 participants)

LUMES focuses on the important sustainability challenges facing humankind. The objective of LUMES is to prepare students with the knowledge and competencies to actively **contribute to long-term ecological and socio-economic sustainability.**

http://www.lumes.lu.se/

Master´s programme in Environmental management and policy - EMP (2 participants)

The Master's programme in Environmental Management and Policy aims to prepare students for a career in or with industry and public authorities. Subjects such as organisation and governance of companies, technical systems in companies and in society, environmental economics, environmental law, environmental policy and sustainable consumption are integrated.

http://www.iiiee.lu.se/education/emp

Human Ecology (3 participants)

The master's programme in Human Ecology provides trans-disciplinary perspectives and analytical tools for communicating about problems of sustainability. The programme represents an important complement to technological and natural science approaches to sustainability by focusing on the cultural dimensions of consumption and resource use, cultural perceptions of environment and economy, and social science perspectives on the global distribution of environmental problems.

http://www.lunduniversity.lu.se/lubas/i-uoh-lu-SAHEK

Disaster risk management and climate change adaptation - DRMCCA (1 participant)

The programme offers a mix of practical and theoretical learning with a strong focus on group work and interaction between students and teaching staff, as well as with important factors within this field of study. Examples of the latter are involvement of experts from national and international organisations in some of the courses and the possibility of taking an elective internship-based course.

http://www.lunduniversity.lu.se/lubas/i-uoh-lu-TAKAK

New stories for a new world

Welcome to this workshop called New stories for a new world, where we are going to explore the avenues of stories, specifically linked to climate change, and emotions.

Part 1. Pre-interview. *Personal reflections on stories.*

Questions to ask participants beforehand:

1. Why did you sign up?

2. Are you familiar with storytelling and creative writing? If so, how much and in what context?

3. How would you define a story?

4. What do you believe is the importance of stories?

5. Is there a link between sustainability issues/problems and stories? In what way?

Part 2. Creative reckoning. *Tell me about climate change.*

Please, take 30 minutes and write the story on climate change as you see it unfolding until today. Begin with "Once upon a time".

When you are done, give your story a name. And read it out loud.

Part 3. Impasse- interview. *Navigating ourselves.*

1. Did you find the task difficult?
2. How did you feel when writing?
3. Have you ever reflected on the story on climate change before? Why/why not?
4. What part are you playing in this climate story?
5. Do you see it as a part of your own life story?

Part 4. The rumble. *Getting curious.*

Again, resort to your pen and paper. How does climate change make you feel? Write down a few emotions it invokes in you.

When you are done writing down your emotions, connect a "story" to each emotions. It doesn´t have to be more than a sentence or two, just a brief explanation as to why you are feeling the way you are feeling. Mark the emotion and the connected story with a number.

Part 5. Impasse interview. *What do we have here?*
1. Any emotions surprised you?
2. Which is the dominating one?
3. How do you see these emotions link to the story you wrote?
4. Any sense of shame linked to CC?

Part 5. The revolution. *Re-claiming the story?*
Look back at the story you wrote and take into account the feelings you identified, is that an accurate representation of YOUR story on CC? If yes/no, why?

Please, write a short ending to YOUR story on CC. How would you like to see the story unfolding? It doesn´t need to be more than a few sentences. Finish with "The End".

- Do you think it´s realistic? Why/Why not?

Part 6. Post- Interview. *Reflection.*
1. Where do you see yourself in the story of climate change as it unfolds?
2. Do you feel you have ownership of the story?
3. What do you see as the importance of emotions when it comes to tackling climate change?
4. How do you view the link between stories/sustainability/emotions?

5. What did you think about the exercise? Any reflections?

Appendix D. Full thematization of the old story and noted occurences in the participants stories.

Old story themes	Occurrence
Science	
Technology/tech-driven/ technological arrogance	///////
Conquering nature/ mastery over nature/nature domination	////
"Bubble"	//
Separation/alienation	//////
Progress/growth	//////
"Everything is fine" / stories on indestructability	
Ecological destruction/ pollution/ devastation/ degradation of the biosphere/ age of ecocide/ exploitation	//////
Despair/ fear	/
Denial (of our oneness)	
Consumerism/ over-consumption / consumer democracy	//
Passiveness/ complacency	
Capitalism / endless material acquisition	///
Struggle/crisis/tremendous upheaval	/
Hate, evil /underlying darkness	/
Scarcity	/
Limits	//